

WIRE MANAGEMENT PRODUCTS

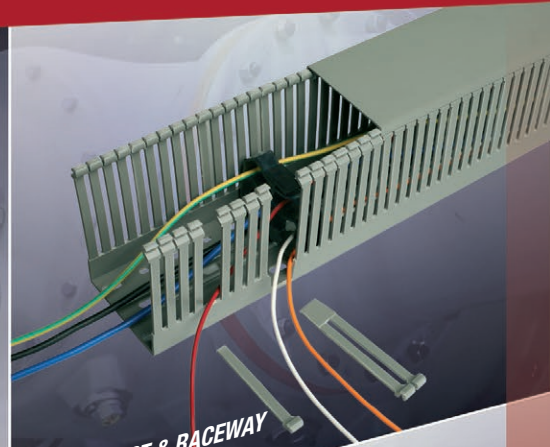
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TERMINALS



CABLE TIES



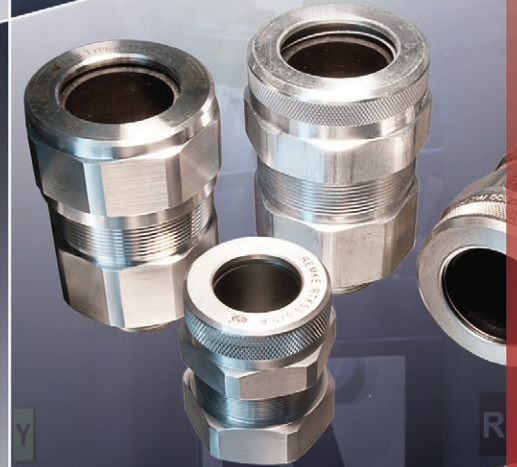
WIRE DUCT & RACEWAY



CORD GRIPS



HEAT SHRINK



TECK CONNECTORS



LUGS AND SPLICES



WIRE I.D.



SWITCHES



WHY YOU CHOOSE TECHSPAN...

We're a Privately Owned Canadian Company that understands the needs of Independent Canadian Customers...

Like you!



- 1. Orders shipped same day to your local distributor*
- 2. One day delivery to Ontario, B.C., Alberta, QC*
- 3. 16,000 spec-grade sku's in stock - including B, C, and D items.*
- 4. Over a Quarter Century of delivering Quality products*
- 5. Unique delivery and application solutions to meet any project requirement*

Our Story

In 1989, free trade was about to have a profound impact on the Canadian scene. There were dozens of excellent U.S. manufacturers with no presence in Canada. They had class leading products and cost base, but no knowledge of the Canadian electrical industry. Enter Techspan Industries. The concept was to form joint venture agreements with these companies to act as their Canadian head office. The model was unique at the time, but very successful. Most of the products required sub-assembly, modification, and repackaging to suit Canadian customers. But the market was open to a new brand and alternative design and price points. Since then, Techspan has developed dozens of strategic partnerships worldwide. To quote the June 2010 Electro Federation survey of mid-sized electrical

contractors...“Lower cost foreign brands did not generate high interest.” But they are looking for good quality options. “We knew early on that quality was the most important cornerstone” said Dunnigan. “Canadian contractors would never sacrifice quality for price. But they would accept new brands with equivalent or better features and benefits. Even today, 80% of Techspan products are produced in our North American or European factories. CSA, UL and ISO certifications satisfy the most discerning OEM’s, panel builders, and contractors.”

Frank Dunnigan
President & CEO



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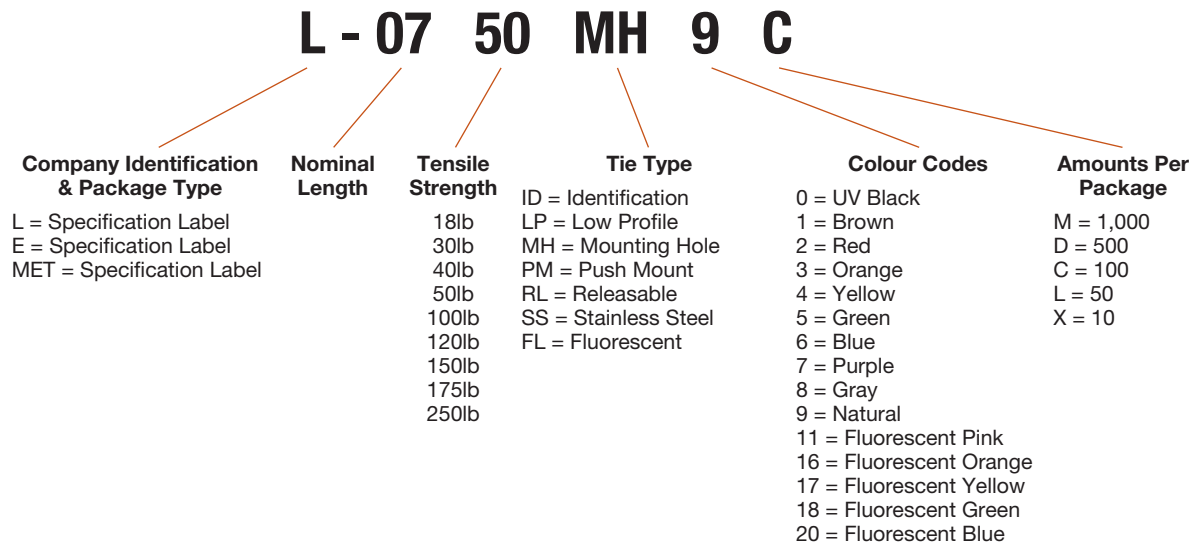
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Miniature 18lb Cable TiesA-3
 Intermediate 30lb & 40lb Cable TiesA-4
 Standard 50lb Cable TiesA-4
 Heavy Duty 120lb Cable TiesA-5
 Extra Heavy Duty 175lb Cable TiesA-5
 ME.T Metal Tooth Cable TiesA-6
 K-Spec Cable TiesA-18

Techspan cable ties are manufactured from high quality nylon 6/6. The angled tail features finger grips for easy handling and alignment. The one-piece design, transition rails, and teeth provide a low insertion force while maintaining a high tensile strength, ensuring ease of use and durability. The 36" and 48" applications include HVAC duct straps, and are UL 181 B Listed.

- **Operating Temp. Rating Nylon Cable Ties:** -40°C to +85°C
- **UL Flame Rating:** 94 V-2
- **Minimum Installation Temp.:** "L" Ties -20°C, "E" Ties 0°C
- **Plenum Rating:** AH-2

READING TECHSPAN CABLE TIE PART NUMBERS

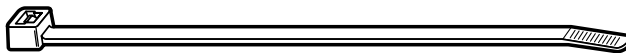
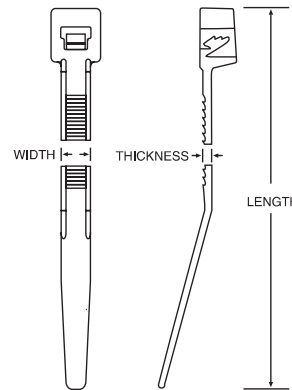
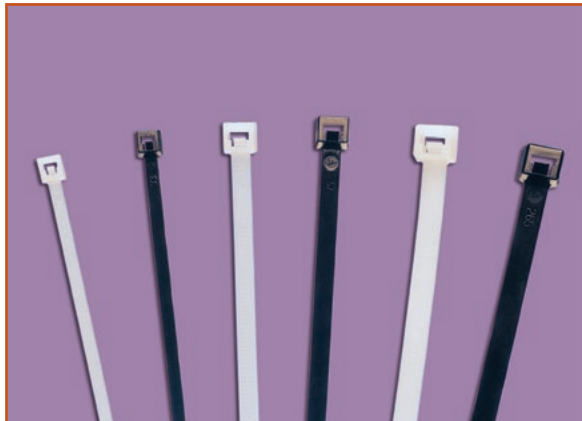


ANSI/UL
62275
TYPE 21
AH-2
POSITIONING
DEVICE

ANSI/UL
62275
TYPE 21S
AH-2
SUPPORTING
DEVICE

STANDARD CABLE TIES

- **Faster** - low insertion and pull through force
- **Stronger** - high tensile strength achieved from one piece design
 - advanced pawl and teeth design
 - manufactured from filtered nylon reducing particle contamination
- **Easier** - angled tail provides quicker initial insertion alignment
 - tail finger grips allow easier handling and tightening
- **Safer** - rounded edges provides added safety and eliminates insulation damage
- **Consistent** - formulated molding processes



Miniature 18lb Natural, UV Black

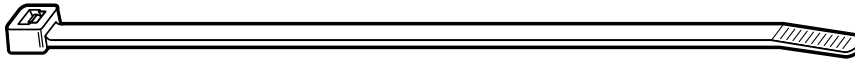
Per Bag	Part no.	Colour & Material	Length Inch/mm	Width Inch/mm	Thickness Inch/mm	Tie Tensile	Diameter Inch/mm	UL-CSA Mil-Spec	Per Case	ANSI/UL 62275 TYPE
1,000	L-4189M	Natural Nylon	4.12/104.77	.095/2.413	.042/1.066	18lb	.875/22.225	UL-CSA MS3367-4*	10,000	21
100	L-4189C									
1,000	L-4180M	UV Black Nylon	6.18/157.14	.095/2.413	.042/1.066	18lb	1.50/38.10	UL-CSA	10,000	21
100	L-4180C									
1,000	L-6189M	Natural Nylon	8.18/207.94	.095/2.413	.042/1.066	18lb	2.187/55.562	UL-CSA	10,000	21
100	L-6189C									
1,000	L-6180M	UV Black Nylon								
100	L-6180C									
1,000	L-8189M	Natural Nylon								
100	L-8189C									
1,000	L-8180M	UV Black Nylon								
100	L-8180C									

Tolerance: .XXX = ±.005, .XX = ±.015, Fraction = ±1/32"



STANDARD CABLE TIES

A

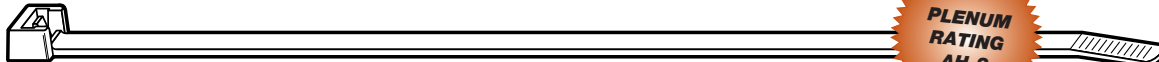


See page A-32 for mil-specs

Intermediate 30lb, 40lb Natural, UV Black

Per Bag	Part no.	Colour & Material	Length Inch/mm	Width Inch/mm	Thickness Inch/mm	Tie Tensile	Diameter Inch/mm	UL-CSA Mil-Spec	Per Case	ANSI/UL 62275 TYPE
1,000	L-5409M	Natural Nylon	5.84/148.33	.140/3.556	.049/1.244	40lb	1.437/36.512	UL-CSA MS3367-S*	10,000	21
100	L-5409C									
1,000	L-5400M	UV Black Nylon								
100	L-5400C									
1,000	L-8409M	Natural Nylon	8.875/225.42	.140/3.556	.049/1.244	40lb	2.375/60.325	UL-CSA	10,000	21
100	L-8409C									
1,000	L-8400M	UV Black Nylon								
100	L-8400C									
100	L-11409C	Natural Nylon	11.56/293.67	.140/3.556	.058/1.473	40lb	3.375/85.72	UL-CSA	5,000	21
100	L-11400C	UV Black Nylon								
100	L-14409C	Natural Nylon	14.50/368.30	.140/3.556	.058/1.473	40lb	4.00/101.60	UL-CSA	5,000	21
100	L-14400C	UV Black Nylon								

Tolerance: .XXX = ±.005, .XX = ±.015, Fraction = ±1/32"



Standard 50lb Natural, UV Black

Per Bag	Part no.	Colour & Material	Length Inch/mm	Width Inch/mm	Thickness Inch/mm	Tie Tensile	Diameter Inch/mm	UL-CSA Mil-Spec	Per Case	ANSI/UL 62275 TYPE
1,000	L-7509M	Natural Nylon	7.56/192.07	.180/4.572	.052/1.320	50lb	1.875/47.625	UL-CSA MS3367-1*	10,000	21S
100	L-7509C									
1,000	L-7500M	UV Black Nylon								
100	L-7500C									21S
500	L-11509D	Natural Nylon	11.25/285.75	.180/4.572	.052/1.320	50lb	3.062/77.787	UL-CSA MS3367-7*	5,000	21S
100	L-11509C									
500	L-11500D	UV Black Nylon								
100	L-11500C								21S	
500	L-14509D	Natural Nylon	14.56/369.87	.180/4.572	.052/1.320	50lb	4.125/104.775	UL-CSA MS3367-2*	5,000	21S
100	L-14509C									
500	L-14500D	UV Black Nylon								
100	L-14500C								21S	
100	L-17509C	Natural Nylon	17.09/434.16	.187/4.749	.060/1.524	50lb	4.75/120.65	UL	5,000	21
100	L-17500C	UV Black Nylon								

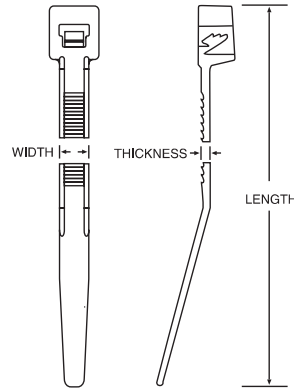
NOW 21S!

Tolerance: .XXX = ±.005, .XX = ±.015, Fraction = ±1/32"

MADE IN U.S.A.



STANDARD CABLE TIES



Heavy Duty 120lb Natural, UV Black

Per Bag	Part no.	Colour & Material	Length Inch/mm	Width Inch/mm	Thickness Inch/mm	Tie Tensile	Diameter Inch/mm	UL-CSA Mil-Spec	Per Case	ANSI/UL 62275 TYPE
100	L-81209C	Natural Nylon	8.70/220.98	.300/7.620	.076/1.930	120lb	2.06/52.38	UL-CSA	3,000	21S
100	L-81200C	UV Black Nylon								21S
100	L-141209C	Natural Nylon	15.09/383.36	.300/7.620	.076/1.930	120lb	4.06/103.18	UL-CSA MS3367-3*	2,000	21S
100	L-141209C									21S
100	L-141200C	UV Black Nylon								21S
100	L-141200C									21S
50	L-181209L	Natural Nylon								17.70/449.58
50	L-181200L	UV Black Nylon	21S							
50	L-241209L	Natural Nylon	24.43/620.69	.302/7.670	.083/2.108	120lb	UL-CSA	500	21S	
50	L-241200L	UV Black Nylon							21S	
50	L-301209L	Natural Nylon	30.6/781.00	.302/7.670	.083/2.108	120lb	UL-CSA	500	21S	
50	L-301200L	UV Black Nylon							21S	



Tolerance: .XXX = ±.005, .XX = ±.015, Fraction = ±1/32"



Extra Heavy Duty 175lb Natural, UV Black, & Gray

Per Bag	Part no.	Colour & Material	Length Inch/mm	Width Inch/mm	Thickness Inch/mm	Tie Tensile	Diameter Inch/mm	UL-CSA Mil-Spec	Per Case	ANSI/UL 62275 TYPE
50	L-241759L	Natural Nylon	25.25/641.35	.340/8.636	.090/2.286	175lb	7.18/182.56	UL-CSA UL 181B-C MS3367-10	500	21
50	L-241750L	UV Black Nylon								21
50	L-361759L	Natural Nylon	37.25/946.15	.340/8.636	.090/2.286	175lb	11.00/279.40	UL-CSA UL 181B-C MS3367-13	500	21
50	L-361750L	UV Black Nylon								21
50	L-481759L	Natural Nylon	48.50/1231.9	.340/8.636	.090/2.286	175lb	14.50/368.30	UL-CSA UL 181B-C MS3367-16	500	21
50	L-481758L	Gray Nylon								21
50	L-481750L	UV Black Nylon								21

Tolerance: .XXX = ±.005, .XX = ±.015, Fraction = ±1/32"

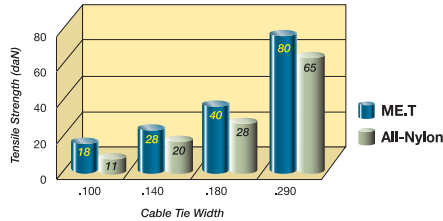


MET METAL TOOTH CABLE TIES

Performs Better at Lower Temperatures Stronger and More Flexible

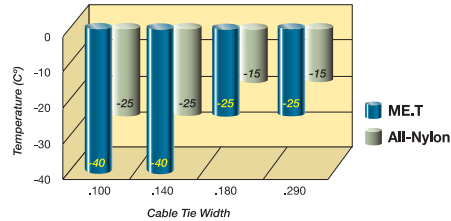
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COMPARATIVE TENSILE TESTS
(ME.T vs All-Nylon)



Up to 25% stronger than all-nylon ties.

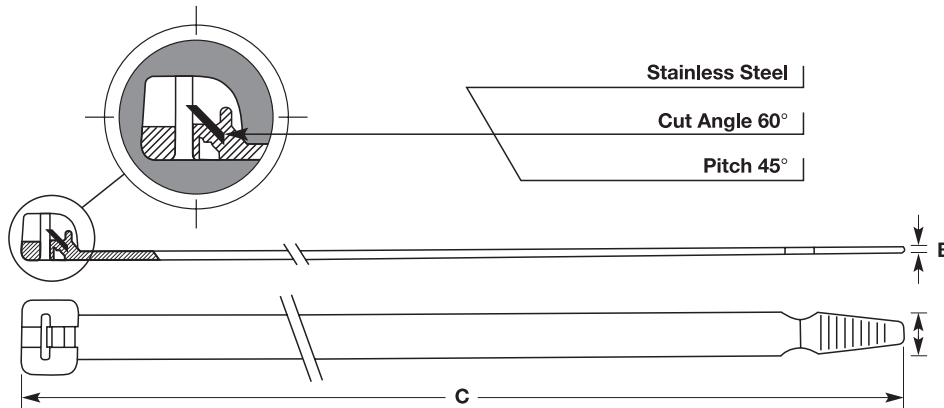
COMPARATIVE TEMPERATURE TESTS
(ME.T vs All-Nylon)



Performs better at lower temperatures than all-nylon ties.

TECHNICAL CHARACTERISTICS

Characteristics	SAPISELCO Method	Unit	Cable Ties Width: Inches			
			.100	.140	.180	.290
Opening Load/Tensile Strength	MAF/06	daN/lbs	18/39.7	28/61.7	40/88.2	80/176.4
Fragility	MAF/02-b	°C	-20	-20	-20	-20
Minimum Application Temperature	MAF/03	°C	-40	-40	-25	-25
Resistance Time to an Applied Flame	MAF/08	SEC	5	5	10	20
Self-extinguishing	MAF/05 with reference to UL94 classification	/	V2	V2	V2	V2



NOMINAL DIMENSIONS

Size	Units	Dimensional Tolerance	Data			
A - Width	Inches	± 5%	.1000	.1400	.1800	.2900
B - Thickness		± 5%	.0340	.0345	.0425	.0620
C - Length		± 2%	4"	5"	7.5"	8"
			8"	8"	11"	14"
				11"	14"	

- All size and diameters in this chart are expressed in inches. The opening loads are expressed in daN (1 daN=1 Kg/2.20462lbs.).
- The figures given are mean values at 23°C and 50% R.H.
- Data are subject to changes.

ME.T METAL TOOTH CABLE TIES

21S
Approval
late 2017!



A

MET METAL TOOTH CABLE TIE PART NUMBERS

Part no.	Description	Width (Inches)	pcs/pack	ctn qty	Colour	Approx Length	u/m	ANSI/UL 62275 TYPE
*MET-4180C	MetTie 4" 18lb	0.100	100 Bag	15	Black†	4"	pk	21
*MET-4189C	MetTie 4" 18lb	0.100	100 Bag	15	Natural	4"	pk	21
*MET-4180M	MetTie 4" 18lb	0.100	1000 Bag	15	Black†	4"	pk	21
*MET-4189M	MetTie 4" 18lb	0.100	1000 Bag	15	Natural	4"	pk	21
*MET-5300C	MetTie 5.5" 30lb	0.140	100 Bag	10	Black†	5.5"	pk	21
*MET-5309C	MetTie 5.5" 30lb	0.140	100 Bag	10	Natural	5.5"	pk	21
*MET-5300M	MetTie 5.5" 30lb	0.140	1000 Bag	10	Black†	5.5"	pk	21
*MET-5309M	MetTie 5.5" 30lb	0.140	1000 Bag	10	Natural	5.5"	pk	21
MET-8180C	MetTie 8" 18lb	0.100	100 Bag	10	Black†	8"	pk	21
MET-8189C	MetTie 8" 18lb	0.100	100 Bag	10	Natural	8"	pk	21
MET-8180M	MetTie 8" 18lb	0.100	1000 Bag	10	Black†	8"	pk	21
MET-8189M	MetTie 8" 18lb	0.100	1000 Bag	10	Natural	8"	pk	21
MET-8400C	MetTie 8" 40lb	0.14	100 Bag	6	Black†	8"	pk	21
MET-8409C	MetTie 8" 40lb	0.14	100 Bag	6	Natural	8"	pk	21
MET-8400M	MetTie 8" 40lb	0.14	1000 Bag	6	Black†	8"	pk	21
MET-8409M	MetTie 8" 40lb	0.14	1000 Bag	6	Natural	8"	pk	21
*MET-7500C□	MetTie 7.5" 50lb	0.18	100 Bag	5	Black†	8"	pk	21
*MET-7509C	MetTie 7.5" 50lb	0.18	100 Bag	5	Natural	8"	pk	21
*MET-7500M□	MetTie 7.5" 50lb	0.18	1000 Bag	5	Black†	8"	pk	21
*MET-7509M	MetTie 7.5" 50lb	0.18	1000 Bag	5	Natural	8"	pk	21
MET-11400C	MetTie 11" 40lb	0.14	100 Bag	6	Black†	11"	pk	21
MET-11409C	MetTie 11" 40lb	0.14	100 Bag	6	Natural	11"	pk	21
MET-11400M	MetTie 11" 40lb	0.14	1000 Bag	6	Black†	11"	pk	21
MET-11409M	MetTie 11" 40lb	0.14	1000 Bag	6	Natural	11"	pk	21
*MET-11500C□	MetTie 11" 50lb	0.18	100 Bag	5	Black†	11.5"	pk	21
*MET-11509C	MetTie 11" 50lb	0.18	100 Bag	5	Natural	11.5"	pk	21
*MET-11500M□	MetTie 11" 50lb	0.18	1000 Bag	5	Black†	11.5"	pk	21
*MET-11509M	MetTie 11" 50lb	0.18	1000 Bag	5	Natural	11.5"	pk	21
*MET-14500C□	MetTie 14" 50lb	0.18	100 Bag	4	Black†	14"	pk	21
*MET-14509C	MetTie 14" 50lb	0.18	100 Bag	4	Natural	14"	pk	21
*MET-14500M□	MetTie 14" 50lb	0.18	1000 Bag	4	Black†	14"	pk	21
*MET-14509M	MetTie 14" 50lb	0.18	1000 Bag	4	Natural	14"	pk	21
*MET-141200L□	MetTie 14" 120lb	0.29	50 Bag	1.5	Black†	14"	pk	21
*MET-141209L	MetTie 14" 120lb	0.29	50 Bag	1.5	Natural	14"	pk	21
*MET-141200D□	MetTie 14" 120lb	0.29	500 Bag	1.5	Black†	14"	pk	21
*MET-141209D	MetTie 14" 120lb	0.29	500 Bag	1.5	Natural	14"	pk	21

*Identified items are MIL-SPEC cable ties "MS 3367"

†Black Cable ties are **NOT** UV resistant



Reach

MIL-STD

□ Coming Soon (release date TBA, certification pending) Black UV Stabilized/Resistant, Self-extinguishing (V2: UL 94), Type 21S Cable Ties.

SPECIALTY CABLE TIES

- Colour & Fluorescent Cable TiesA-8
- Arctic Ties Cable TiesA-9
- Mounting Hole Cable Ties.A-10
- Identification Cable TiesA-11
- Metal Detectable Cable Ties.A-12
- Push Mount Cable Ties.A-13
- Stainless Steel Cable Ties and Banding.A-14



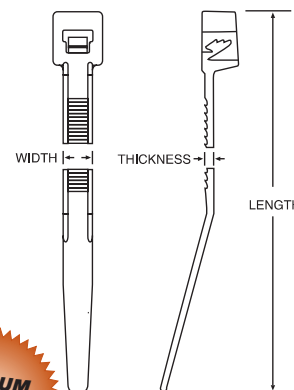
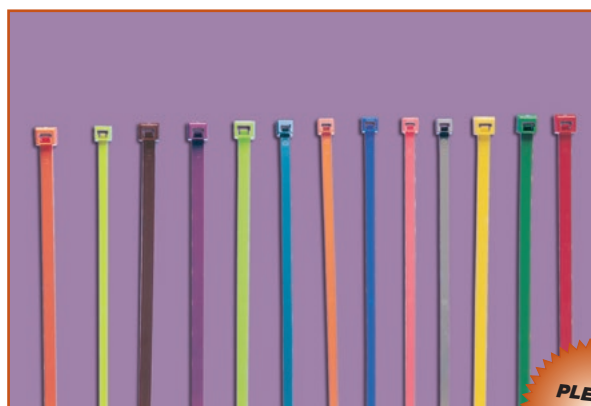
Techspan offers a wide array of specialty cable ties to satisfy a multitude of application solutions.

COLOUR & FLUORESCENT CABLE TIES

- **High Quality Colour Concentrates** produce colour consistency time after time
- **Ideal Applications:** colour coding, identification, packaging continuity, and bundling aesthetics

Colour Codes

- 1 = Brown
- 2 = Red
- 3 = Orange
- 4 = Yellow
- 5 = Green
- 6 = Blue
- 7 = Purple
- 8 = Gray
- 11 = Fluorescent Pink
- 16 = Fluorescent Orange
- 17 = Fluorescent Yellow
- 18 = Fluorescent Green
- 20 = Fluorescent Blue



18lb, 40lb, & 50lb Colour & Fluorescent

Per Bag	Part no.	Colour & Material	Length Inch/mm	Width Inch/mm	Thickness Inch/mm	Tie Tensile	Diameter Inch/mm	UL-CSA Mil-Spec	Per Case	ANSI/UL 62275 TYPE
100	L-418#C	Standard Colour	4.12/104.77	.095/2.413	.042/1.066	18lb	.875/22.225	UL-CSA MS3367-4*	10,000	21
100	L-418##C	Fluorescent								
100	L-540#C	Standard Colour	5.84/148.33	.140/3.556	.049/1.244	40lb	1.437/36.512	UL-CSA MS3367-5*	5,000	21
100	L-540##C	Fluorescent								
100	L-840#C	Standard Colour	8.875/225.42	.140/3.556	.049/1.244	40lb	2.375/60.325	UL-CSA	5,000	21
100	L-840##C	Fluorescent								
100	L-750#C	Standard Colour	7.56/192.07	.180/4.572	.052/1.320	50lb	1.875/47.625	UL-CSA MS3367-1*	5,000	21S
100	L-750##C	Fluorescent								
100	L-1150#C	Standard Colour	11.25/285.75	.180/4.572	.052/1.320	50lb	3.062/77.787	UL-CSA MS3367-7*	5,000	21S
100	L-1150##C	Fluorescent								
100	L-1450#C	Standard Colour	14.56/369.87	.180/4.572	.052/1.320	50lb	4.125/104.775	UL-CSA MS3367-2*	5,000	21S
100	L-1450##C	Fluorescent								

Tolerance: .XXX = ±.005, .XX = ±.015, Fraction = ±1/32"

*Mil-Spec does not apply to fluorescent colours

To specify colour, replace "#" in part number with colour code listed above



ARCTIC TIE CABLE TIES

Superior Ice & Sun Performance

- Special polymer additive prevents breakage in sub-zero temperatures
- UV additive for superior sunlight resistance
- Higher strength rating than regular ties (e.g. 80 lbs vs. 50 lbs) resistance
- Distinctive "ICE BLUE" colour
- Exclusive to Techspan!



ARCTIC TIE™

Cable Ties – Ice Blue (100pc/PK)

Part No.	Length Inch / mm	Tie Tensile Strength	Colour	Width Inch / mm	Max. Bundle Dia. Inch / mm	U/M
ICE-780C	7.5" / 190.5mm	80 LB	ICE BLUE	0.180" / 4.57mm	1.875" / 47.63mm	100pc/PK
ICE-1180C	11" / 279.4mm	80 LB	ICE BLUE	0.180" / 4.57mm	3.062" / 77.77mm	100pc/PK
ICE-1480C	14" / 355.6mm	80 LB	ICE BLUE	0.180" / 4.57mm	4.125" / 104.77mm	100pc/PK
ICE-14160C	14" / 355.6mm	160 LB	ICE BLUE	0.300" / 7.62mm	4.060" / 103.12mm	100pc/PK

Tested for application performance at -20°C
Material rated at -40°C per ISO180

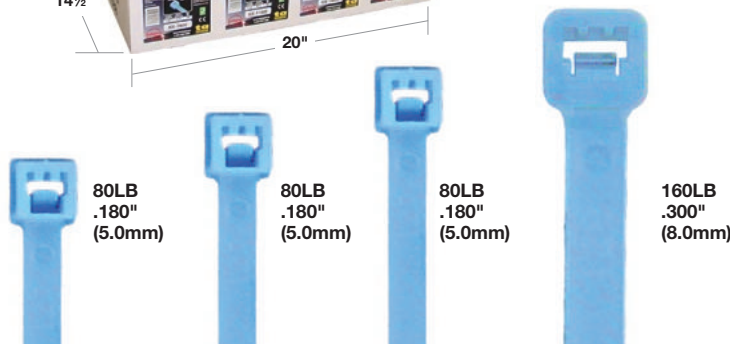
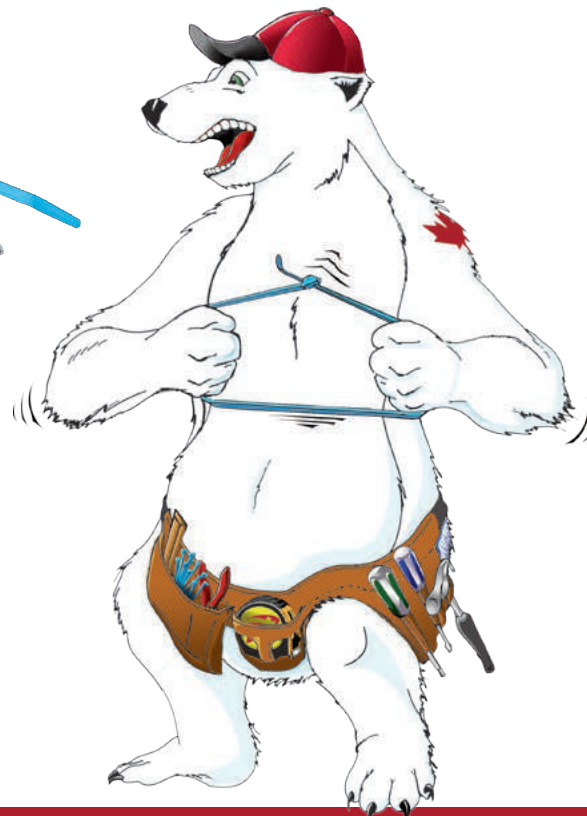
Arctic-Pak Display

ICETIEPOP Contains 38 packs of 100 of Techspan's Arctic Cable Ties in a carton that can be used as a display box for increased POP sales. Carton Dimensions: 20"W x 14-1/2"D x 15"H (Background sign provides an additional 12"H)

Breakdown as follows:

- 10 Pkg x **ICE-780C** 10 Pkg x **ICE-1480C**
- 10 Pkg x **ICE-1180C** 8 Pkg x **ICE-14160C**

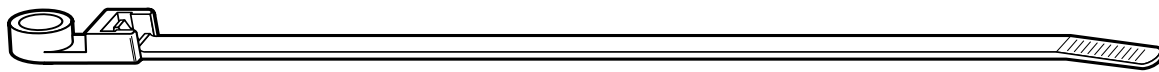
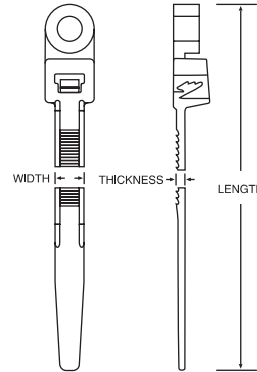
DESIGNED TO PERFORM IN ADVERSE WEATHER CONDITIONS, THESE TIES WILL WITHSTAND SUB-ZERO TEMPERATURES, SNOW, ENVIRONMENTAL POLLUTION, ACIDITY IN THE AIR AND ULTRAVIOLET LIGHT.



MOUNTING HOLE CABLE TIES

A

- **One Piece Design** allows for quicker mechanical mounting and reduced cost
- **Secures and Positions** wire bundles, cables, hoses, etc. to panels or other surfaces with one mechanical fastener



Mounting Hole 50lb, & 120lb Natural & UV Black

Per Bag	Part no.	Colour & Material	Length Inch/mm	Width Inch/mm	Thickness Inch/mm	Tie Tensile	Screw Size	Diameter Inch/mm	UR CSA	Per Case
1,000	L-750MH9M	Natural Nylon	8.0/203.2	.177/4.495	.052/1.320	50lb	#10	1.75/44.45	UR CSA	5,000
100	L-750MH9C									
1,000	L-750MH0M	UV Black Nylon	8.0/203.2	.177/4.495	.052/1.320	50lb	#10	1.75/44.45	UR CSA	5,000
100	L-750MH0C									
100	L-1150MH9C	Natural Nylon	11.7/298.4	.191/4.851	.061/1.549	50lb	#10	3.00/76.20	UR	5,000
100	L-1150MH0C	UV Black Nylon								
100	L-1450MH9C	Natural Nylon	14.5/368.3	.186/4.724	.060/1.524	50lb	#10	4.00/101.60	UR	5,000
100	L-1450MH0C	UV Black Nylon								
100	L-14120MH9C	Natural Nylon	15.7/398.7	.298/7.569	.075/1.905	120lb	1/4"	4.06/103.12	UR CSA	2,000
100	L-14120MH0C	UV Black Nylon								

Tolerance: .XXX = ±.005, .XX = ±.015, Fraction = ±1/32"



IDENTIFICATION CABLE TIES

- **One Easy Step** to identify and bundle items
- **Flag Ties** extend from bundle to be easily seen when identification is critical
- **Identification Ties** reduce snags while providing support to the bundle

A



Marker Cable Ties

- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F~+185°F)



Type A
Type B
Type C



RoHS PAHs Reach

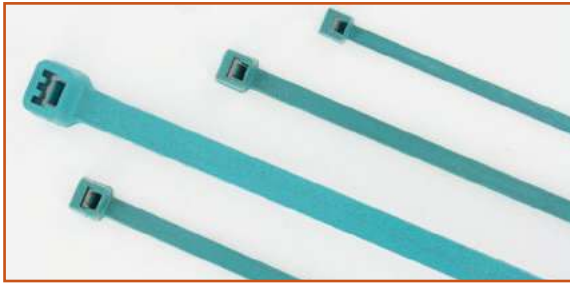
Part No.	Type	Width mm [Inch]	Length mm [Inch]	Max Bundle Diameter mm [inch]	Min Loop Tensile Kgs [lb]	Write Area mm [Inch]	Std. Pk. Qty.
L418ID9C	A	2.5 [.095]	100 [4.0]	22.0 [0.86]	8 [18]	7.75x24.5 [.30x.95]	100
L418ID9M	A	2.5 [.095]	100 [4.0]	22.0 [0.86]	8 [18]	7.75x24.5 [.30x.95]	1000
L750ID9C	B	4.8 [.189]	190 [7.0]	50.9 [2.00]	22 [50]	12.9x27 [.50x1.05]	100
L750ID9M	B	4.8 [.189]	190 [7.0]	50.9 [2.00]	22 [50]	12.9x27 [.50x1.05]	1000
L418TID9C	C	2.5 [.095]	110 [4.3]	22.6 [0.89]	8 [18]	9.0x20 [.35x.78]	100
L418TID9M	C	2.5 [.095]	110 [4.3]	22.6 [0.89]	8 [18]	9.0x20 [.35x.78]	1000

Tolerance: ±.03"/.76 mm

METAL DETECTABLE CABLE TIES



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- Used in the Food Processing, Beverage, Pharmaceutical, Cosmetic Industries
- Don't let unwanted material end up where it shouldn't be

Per Bag	Part no.	Colour & Material	Length Inch/mm	Width Inch/mm	Thickness Inch/mm	Tie Tensile	Diameter Inch/mm	Per Case
100	L-418MD6C	Teal Nylon	4.12/104.77	.095/2.413	.042/1.066	18lb	0.874/22.199	100
100	L-840MD6C	Teal Nylon	8.875/225.42	.140/3.556	.049/1.244	40lb	2.375/60.325	100
100	L-750MD6C	Teal Nylon	7.56/192.07	.180/4.572	.052/1.320	50lb	1.875/47.625	100
100	L-1150MD6C	Teal Nylon	11.25/285.75	.180/4.572	.052/1.320	50lb	3.062/77.787	50
100	L-1450MD6C	Teal Nylon	14.25/361.95	.180/4.572	.052/1.320	50lb	4.00/101.60	50
100	L-14120MD6C	Teal Nylon	15.09/383.36	.300/7.620	.076/1.930	120lb	4.06/103.18	20

Tolerance: .xxx = +/-0.005, .xx = +/-0.015, Fraction = +/-1/32"

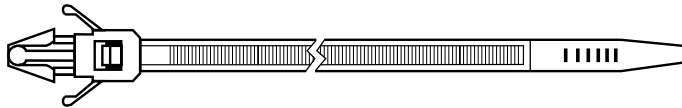
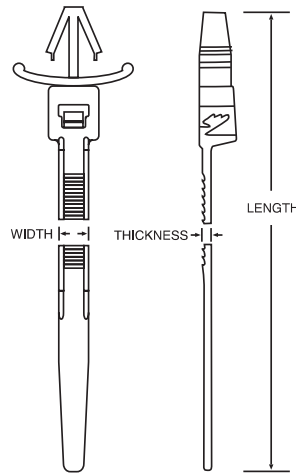
Disclaimer: The use of metal detectable products demonstrates due diligence and precautionary measurements have been taken to prevent contaminants in your product. The user of the metal detectable cable tie is liable to adjust all settings on their detection equipment to determine the suitability of use.



PUSH MOUNT CABLE TIES

- **Quick Mounting** one piece-design securely attaches bundle to panel
- **Extra Stability** is created from the tensioning wings
- **Thickness Variations** in materials is easily overcome with tension wings

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Wing 50lb Natural & Black

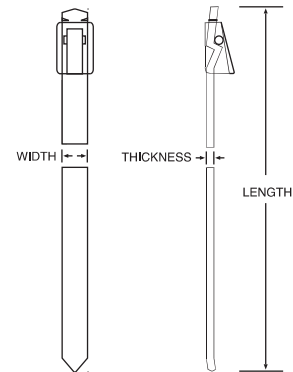
Per Bag	Part no.	Colour & Material	Length Inch/mm	Width Inch/mm	Thickness Inch/mm	Tie Tensile	Diameter Inch/mm	Hole Size Inch/mm	Panel Inch/mm	Per Case
100	L-750PM9C	Natural Nylon	7.8/200.0	.189/4.80	.062/1.574	50lb	1.969/50.00	.236/6.00	.14/3.55	5,000
100	L-750PM0C	Black Nylon								
500	L-750PM9D	Natural Nylon	7.8/200.0	.189/4.80	.062/1.574	50lb	1.969/50.00	.236/6.00	.14/3.55	5,000
500	L-750PM0D	Black Nylon								

Tolerance: ±.03"/.76 mm

STAINLESS STEEL CABLE TIES

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- **Ideal Applications:** harsh, corrosive, and salt-water environments, chemical and radiation exposure, temperature extremes, food processing, and vibrating equipment
- **Ball Locking** mechanism provides ease of insertion and high tensile strength
- **Temperature Resistance:** -80°C to 538°C
- **Resistance Against Chemicals:** Acid and Alkali Resistant



Dimensions for Roller Ball Ties

Tensile	Width	Thickness
150lb	0.181"	0.010"
300lb	0.311"	0.010"

- Ideal for high corrosion areas
- Excellent resistance to temperature and moisture variations.
- Operating Temperature: -60°C to 300°C



Ball Lock-Uncoated 316 Stainless Steel 150lb & 300lb

Part no.	Description	Length/Size	U/M	QTY/PK	CSA 62275 DSG TYPE
L-8150SSC	Ball Lock-Uncoated-SS316, 150lb Tensile	8"	PK	100	2
L-14150SSC	Ball Lock-Uncoated-SS316, 150lb Tensile	14"	PK	100	2
L-20150SSC	Ball Lock-Uncoated-SS316, 150lb Tensile	20"	PK	100	2
L-24150SSC	Ball Lock-Uncoated-SS316, 150lb Tensile	24"	PK	100	2
L-27150SSC	Ball Lock-Uncoated-SS316, 150lb Tensile	27"	PK	100	2
L-8250SSC	Ball Lock-Uncoated-SS316, 300lb Tensile	8"	PK	100	2
L-14250SSC	Ball Lock-Uncoated-SS316, 300lb Tensile	14"	PK	100	2
L-24250SSC	Ball Lock-Uncoated-SS316, 300lb Tensile	24"	PK	100	2

Tolerance: ±.037"/.76 mm

Sold in bag quantities

Check with Customer Service for other sizes and availability.



L-8150SSC 316 Stainless Steel 150lb



L-8250SSC 316 Stainless Steel 300lb

STAINLESS STEEL CABLE TIES



Ball Lock-Coated and Color Coated 316 Stainless Steel 150lb & 300lb

• Operating Temp.: -60°C to +150°C

Part no.	Description	Length/Size	U/M	QTY/PK	CSA 62275 DSG TYPE
LC-10150SSC	Ball Lock-Coated-SS316, 150lb Tensile Black	10"	PK	100	21
LC-20150SSC	Ball Lock-Coated-SS316, 150lb Tensile Black	20"	PK	100	21
LC-10250SSC	Ball Lock-Coated-SS316, 300lb Tensile Black	10"	PK	100	21
LC-20250SSC	Ball Lock-Coated-SS316, 300lb Tensile Black	20"	PK	100	21
LC-8150SS0C	Ball Lock-Color Coated-SS316, 150lb Tensile Black	8"	PK	100	21
LC-8150SS2C	Ball Lock-Color Coated-SS316, 150lb Tensile Red	8"	PK	100	21
LC-8150SS4C	Ball Lock-Color Coated-SS316, 150lb Tensile Yellow	8"	PK	100	21
LC-8150SS6C	Ball Lock-Color Coated-SS316, 150lb Tensile Blue	8"	PK	100	21
LC-8150SS5C	Ball Lock-Color Coated-SS316, 150lb Tensile Green	8"	PK	100	21
LC-14150SS0C	Ball Lock-Color Coated-SS316, 150lb Tensile Red	14"	PK	100	21
LC-14150SS2C	Ball Lock-Color Coated-SS316, 150lb Tensile Red	14"	PK	100	21
LC-14150SS4C	Ball Lock-Color Coated-SS316, 150lb Tensile Yellow	14"	PK	100	21
LC-14150SS6C	Ball Lock-Color Coated-SS316, 150lb Tensile Blue	14"	PK	100	21
LC-14150SS5C	Ball Lock-Color Coated-SS316, 150lb Tensile Green	14"	PK	100	21



LC-10150SSC
316 Stainless Steel Black 150lb



LC-10250SSC
316 Stainless Steel Black 300lb



316 Stainless Steel Color Coated 150lb
available in 8 inch and 14 inch lengths.

Spring Ball Lock Uncoated 316 Stainless Steel 150lb & 300lb

• Operating Temp.: -60°C to +300°C



Part no.	Description	Length/Size	U/M	QTY/PK	CSA 62275 DSG TYPE
LS-10150SSC	Spring Ball Lock Uncoated-SS316, 150lb Tensile	10"	PK	100	2
LS-20150SSC	Spring Ball Lock Uncoated-SS316, 150lb Tensile	20"	PK	100	2
LS-14250SSC	Spring Ball Lock Uncoated-SS316, 300lb Tensile	14"	PK	100	2
LS-24250SSC	Spring Ball Lock Uncoated-SS316, 300lb Tensile	24"	PK	100	2



LS-10150SSC
Spring Ball Lock Uncoated-SS316,
150lb Tensile



LS-14250SSC
Spring Ball Lock Uncoated-SS316,
300lb Tensile



STAINLESS STEEL CABLE TIES & ACCESSORIES

Releasable Coated Black 316 Stainless Steel 450lb

- Operating Temp.: -60°C to +150°C



Part no.	Description	Length/Size	U/M	QTY/PK	CSA 62275 DSG TYPE
RC-12450SSC	Releasable-PPA 571 Coated-SS316, 450lb Tensile Black	12"	PK	100	21
RC-24450SSC	Releasable-PPA 571 Coated-SS316, 450lb Tensile Black	24"	PK	100	21

Releasable Coated Black 316 Stainless Steel 440lb available in 14 inch and 24 inch lengths.

Stainless Steel Straps for High Tensile Applications

- Operating Temp.: -60°C to +300°C



B-50SS201 in 100 ft roll

Part no.	Description	Length/Size	U/M	QTY/PK
B-50SS201	Stainless Steel Straps for High Tensile Applications SS201	1/2" 100' roll	ROLL	100 FT
B-50SS316	Stainless Steel Straps for High Corrosive Applications SS316	1/2" 100' roll	ROLL	100 FT
B-75SS201	Stainless Steel Straps for High Tensile Applications SS201	3/4" 100' roll	ROLL	100 FT
B-75SS316	Stainless Steel Straps for High Corrosive Applications SS316	3/4" 100' roll	ROLL	100 FT
BC-50SS316	PPA 571 Coated Stainless Steel Straps for Extra High Corrosive applications SS316	1/2" 100' roll	ROLL	100 FT



B-75SS201 in 100 ft roll

STAINLESS STEEL CABLE TIES & ACCESSORIES

Stainless Steel Jaw Type Clips



Part no.	Description	Length/Size	U/M
JC50SS201	Jaw Type Clips SS201	1/2"	EA
JC50SS316	Jaw Type Clips SS316	1/2"	EA
JC75SS201	Jaw Type Clips SS201	3/4"	EA
JC75SS316	Jaw Type Clips SS316	3/4"	EA

A

MiniBracket With Bolt & Washer



Part no.	Description	Length/Size	U/M
RM50MFA	MiniBracket w Bolt & Washer	1/2" flare	EA
RM50MSA	MiniBracket w Bolt & Washer	1/2" str	EA
RM75SFA	1 Bolt Bracket w Bolt & Wash	3/4" flare	EA
RM75SSA	1 Bolt Bracket w Bolt & Wash	3/4" str	EA
RM75TSA	2 Bolt Bracket w Bolt & Wash	3/4" str	EA



Stainless Steel Cable Ties Tools



TOOL-SS



BAND-SS

Part no.	Description	U/M
TOOL-SS	Tie Plier	EA
BAND-SS	Band Tool	EA

K-SPEC® CABLE TIES

Before you source cable ties or related nylon products, please make a correct choice due to different application purpose

A

The Cable Ties will be applied to:	Material	Function	Flam Class	Main Material Type	Application Temp.
General Purpose	Nylon 66 (PA66)	General	UL-94V2	Dupont 101F, Ascend 21 SPF(C)	-40°C~+85°C (-40°F~+185°F)

How to choose the right cable tie

The most important characteristics of a cable tie are:

- the raw-material they are made of (chemicals, weather, and heat resistance, low temperature resistance, the flammability rating)
- the tensile strength they can stand
- the max diameter they can bundle
- the shape of the tie in case of particular applications

Chemicals resistance

please ask for information about the chemical resistance, if you need to apply the cable ties into a special area

UV (Weather resistance)

All polymers including the polyamides used for the production of cable ties are sensitive to UV radiation.

The most common additive used for protecting polyamides from UV radiation is carbon powder commonly known as "carbon black".

Natural Cable Ties have low resistance to UV radiation, but natural color usually can reflect the sunlight, so it could be used for general purpose outdoor. But not suggested for outdoor application

Black Cable Ties are additivated with carbon black. They have improved weather and UV radiation resistance and are better suitable for outdoor applications, but this is not enough to protect the material from the damage due to the UV-radiation for a long time. For these needs the weather resistance cable ties could be used.

And if for a long term of outdoor use, and we strongly suggest you to choose Strong UV resistance (weather resistance) material and our strong UV resistance material, it has been tested by UL as an available long term outdoor application.

Temperature resistance

Polymers are also sensitive to temperatures.

All the material type above mentioned (except for Dupont MT409 & Ascend 41(47)), application of polyamide 6.6 cable ties is possible -10°C (26°F), the polyamide becomes very brittle at temperatures below -40°C (-40°F). So for continuous use of low temperature, suggested with -10°C (26°F). But Dupont MT409 & Ascend 41(47) could be applied with -40°C(-40°F) for a long term. The polyamide which can resistant and be applied with a high temperature, please read the related characters, and application temperature from the above table.

Flamability

The UL 94 test, the Standard for Safety of Flammability of Plastic Materials for Parts in Devices and Appliances testing

The classifications relate to materials commonly used in manufacturing enclosures, structural parts and insulators found in consumer electronic products (V-0, V-1, V-2, HB, from the highest level to the lowest)

Some Instructions for new UL standard 62275, and for your right choose of a cable ties.

• Loop tensile strength

Type 1 or 11 based,

No individual value shall be less than 50 % of the loop tensile strength declared after After heat aging,

After temperature cycling.

Type 2 or 21 based,

No individual value shall be less than 100 % of the loop tensile strength declared after After heat aging,

After temperature cycling.

• Minimum installation temperature and Operation temperature test

According to the new standard of UL62275, the minimum installation temperature, and operation temperature test should be made.

Different factory they will declare different minimum installation temperature, and operation temperature as well. so new UL will show such information and to show the quality of the products, and the characters of the products.

• Smoke and heat generation

AH-1: Suitable for use in air-handling spaces — 1 (plenums) (for Metallic component, like stainless steel cable ties)

AH-2: Suitable for use in air-handling spaces — 2 (plenums) (for Non-metallic component and Composite component, like nylon cable ties, cable ties fixing, coated stainless steel cable ties)

Tensile Strength, max bundle diameter, and other characteristics are listed in each table.



K-SPEC® CABLE TIES

Standard Nylon Cable Ties (General Purpose)

- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F ~+185°F)
- Suggested Installation temp. -10°C~+85°C (14°F~185°F)
- Products listed with:



A



RoHS PAHs Reach



Part no.	Colour	Width mm [Inch]	Length mm [Inch]	Max Bundle Diameter mm [inch]	Min Loop Tensile Kgs [lb]	Std. Pk. Qty.	
M	E4180C	Black	2.5 [.095]	100 [4.0]	20.5 [0.80]	8 [18]	100
	E4180M	Black	2.5 [.095]	100 [4.0]	20.5 [0.80]	8 [18]	1000
	E4189C	Natural	2.5 [.095]	100 [4.0]	20.5 [0.80]	8 [18]	100
	E4189M	Natural	2.5 [.095]	100 [4.0]	20.5 [0.80]	8 [18]	1000
	E6180C	Black	2.5 [.095]	150 [6.0]	36.5 [1.43]	8 [18]	100
	E6180M	Black	2.5 [.095]	150 [6.0]	36.5 [1.43]	8 [18]	1000
	E6189C	Natural	2.5 [.095]	150 [6.0]	36.5 [1.43]	8 [18]	100
	E6189M	Natural	2.5 [.095]	150 [6.0]	36.5 [1.43]	8 [18]	1000
	E8180C	Black	2.5 [.095]	200 [8.0]	52.5 [2.06]	8 [18]	100
	E8180M	Black	2.5 [.095]	200 [8.0]	52.5 [2.06]	8 [18]	1000
	E8189C	Natural	2.5 [.095]	200 [8.0]	52.5 [2.06]	8 [18]	100
	E8189M	Natural	2.5 [.095]	200 [8.0]	52.5 [2.06]	8 [18]	1000
	E14180C	Black	2.8 [.110]	380 [15.0]	109.8 [4.32]	8 [18]	100
	E14180M	Black	2.8 [.110]	380 [15.0]	109.8 [4.32]	8 [18]	1000
E14189C	Natural	2.8 [.110]	380 [15.0]	109.8 [4.32]	8 [18]	100	
E14189M	Natural	2.8 [.110]	380 [15.0]	109.8 [4.32]	8 [18]	1000	
I	E5400C	Black	3.6 [.014]	140 [5.5]	33.0 [1.30]	18 [40]	100
	E5400M	Black	3.6 [.014]	140 [5.5]	33.0 [1.30]	18 [40]	1000
	E5409C	Natural	3.6 [.014]	140 [5.5]	33.0 [1.30]	18 [40]	100
	E5409M	Natural	3.6 [.014]	140 [5.5]	33.0 [1.30]	18 [40]	1000
	E8400C	Black	3.6 [.014]	200 [8.0]	52.5 [2.06]	18 [40]	100
	E8400M	Black	3.6 [.014]	200 [8.0]	52.5 [2.06]	18 [40]	1000
	E8409C	Natural	3.6 [.014]	200 [8.0]	52.5 [2.06]	18 [40]	100
	E8409M	Natural	3.6 [.014]	200 [8.0]	52.5 [2.06]	18 [40]	1000
	E11400C	Black	3.6 [.014]	280 [11.0]	78.0 [3.07]	18 [40]	100
	E11400M	Black	3.6 [.014]	280 [11.0]	78.0 [3.07]	18 [40]	1000
	E11409C	Natural	3.6 [.014]	280 [11.0]	78.0 [3.07]	18 [40]	100
	E11409M	Natural	3.6 [.014]	280 [11.0]	78.0 [3.07]	18 [40]	1000
	E14400C	Black	3.6 [.014]	370 [14.5]	106.0 [4.17]	18 [40]	100
	E14400M	Black	3.6 [.014]	370 [14.5]	106.0 [4.17]	18 [40]	1000
E14409C	Natural	3.6 [.014]	370 [14.5]	106.0 [4.17]	18 [40]	100	
E14409M	Natural	3.6 [.014]	370 [14.5]	106.0 [4.17]	18 [40]	1000	

NEW
NEW
NEW

K-Spec® Part No. Instructions:

E20175



Pack Qty	Code
50	L
100	C
500	D
1000	M

Colour	Code	Colour	Code
Natural	9	Blue*	6
White*	WH	Purple*	7
UVB Resistant Black	0	Gray*	8
Brown*	1	FL. Orange*	16
Red*	2	FL. Yellow*	17
Orange*	3	FL. Green*	18
Yellow*	4	FL. Blue*	20
Green*	5		

* 100,000 Piece Minimum Order for Coloured Ties

K-SPEC® CABLE TIES

Standard Nylon Cable Ties (General Purpose)

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	Part no.	Colour	Width mm [Inch]	Length mm [Inch]	Max Bundle Diameter mm [inch]	Min Loop Tensile Kgs [lb]	Std. Pk. Qty.	
S	E5500C	Black	4.6 [.181]	120 [4.7]	23.8 [0.93]	22 [50]	100	NEW
	E5500M	Black	4.6 [.181]	120 [4.7]	23.8 [0.93]	22 [50]	1000	NEW
	E5509C	Natural	4.6 [.181]	120 [4.7]	23.8 [0.93]	22 [50]	100	NEW
	E5509M	Natural	4.6 [.181]	120 [4.7]	23.8 [0.93]	22 [50]	1000	NEW
	E7500C	Black	4.8 [.189]	200 [8.0]	49.5 [1.94]	22 [50]	100	
	E7500M	Black	4.8 [.189]	200 [8.0]	49.5 [1.94]	22 [50]	1000	
	E7509C	Natural	4.8 [.189]	200 [8.0]	49.5 [1.94]	22 [50]	100	
	E7509M	Natural	4.8 [.189]	200 [8.0]	49.5 [1.94]	22 [50]	1000	
	E11500C	Black	4.8 [.189]	300 [11.8]	81.0 [3.18]	22 [50]	100	
	E11500D	Black	4.8 [.189]	300 [11.8]	81.0 [3.18]	22 [50]	500	
	E11509C	Natural	4.8 [.189]	300 [11.8]	81.0 [3.18]	22 [50]	100	
	E11509D	Natural	4.8 [.189]	300 [11.8]	81.0 [3.18]	22 [50]	500	
	E14500C	Black	4.8 [.189]	370 [14.5]	103.5 [4.07]	22 [50]	100	
	E14500D	Black	4.8 [.189]	370 [14.5]	103.5 [4.07]	22 [50]	500	
	E14509C	Natural	4.8 [.189]	370 [14.5]	103.5 [4.07]	22 [50]	100	
	E14509D	Natural	4.8 [.189]	370 [14.5]	103.5 [4.07]	22 [50]	500	
	E17500C	Black	4.8 [.189]	430 [17.0]	122.5 [4.82]	22 [50]	100	
	E17509C	Natural	4.8 [.189]	430 [17.0]	122.5 [4.82]	22 [50]	100	
	E24500C	Black	4.8 [.189]	610 [24.0]	179.9 [7.08]	22 [50]	100	NEW
	E24509C	Natural	4.8 [.189]	610 [24.0]	179.9 [7.08]	22 [50]	100	NEW
E36500C	Black	4.8 [.189]	920 [36.0]	278.6 [10.97]	22 [50]	100	NEW	
E36509C	Natural	4.8 [.189]	920 [36.0]	278.6 [10.97]	22 [50]	100	NEW	
HD	E81200C	Black	7.6 [.300]	220 [8.6]	57.2 [2.25]	55 [120]	100	
	E81209C	Natural	7.6 [.300]	220 [8.6]	57.2 [2.25]	55 [120]	100	
	E111200C	Black	7.6 [.300]	300 [11.8]	82.8 [3.25]	55 [120]	100	
	E111209C	Natural	7.6 [.300]	300 [11.8]	82.8 [3.25]	55 [120]	100	
	E141200C	Black	7.6 [.300]	380 [15.0]	108.0 [4.25]	55 [120]	100	
	E141209C	Natural	7.6 [.300]	380 [15.0]	108.0 [4.25]	55 [120]	100	
	E181200L	Black	7.6 [.300]	450 [18.0]	130.5 [5.13]	55 [120]	50	NEW
	E181209L	Natural	7.6 [.300]	450 [18.0]	130.5 [5.13]	55 [120]	50	NEW
	E201200L	Black	7.6 [.300]	540 [21.0]	159.0 [6.25]	55 [120]	50	NEW
	E201209L	Natural	7.6 [.300]	540 [21.0]	159.0 [6.25]	55 [120]	50	NEW
	E221200C	Black	7.6 [.300]	550 [21.6]	162.5 [6.39]	55 [120]	100	
	E221209C	Natural	7.6 [.300]	550 [21.6]	162.5 [6.39]	55 [120]	100	
	E241200L	Black	7.6 [.300]	610 [24.0]	181.5 [7.14]	55 [120]	50	NEW
	E241209L	Natural	7.6 [.300]	610 [24.0]	181.5 [7.14]	55 [120]	50	NEW
	E301200L	Black	7.6 [.300]	750 [29.5]	226.1 [8.90]	55 [120]	50	NEW
E301209L	Natural	7.6 [.300]	750 [29.5]	226.1 [8.90]	55 [120]	50	NEW	

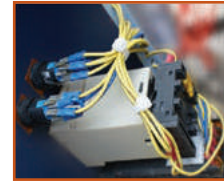
K-SPEC® CABLE TIES

Standard Nylon Cable Ties (General Purpose)

- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F ~+185°F)
- Suggested Installation temp. -10°C~+85°C (14°F~185°F)
- Products listed with:



RoHS PAHs Reach



A

	Part no.	Colour	Width mm [Inch]	Length mm [Inch]	Max Bundle Diameter mm [inch]	Min Loop Tensile Kgs [lb]	Std. Pk. Qty.
EHD	E201750C	Black	8.8 [.345]	500 [19.7]	146.5 [5.76]	80 [175]	100
	E201759C	Natural	8.8 [.345]	500 [19.7]	146.5 [5.76]	80 [175]	100
	E221750L	Black	8.8 [.345]	550 [21.6]	163.5 [6.43]	80 [175]	50
	E221759L	Natural	8.8 [.345]	550 [21.6]	163.5 [6.43]	80 [175]	50
	E241750L	Black	8.8 [.345]	610 [24.0]	181.5 [7.14]	80 [175]	50
	E241759L	Natural	8.8 [.345]	610 [24.0]	181.5 [7.14]	80 [175]	50
	E281750C	Black	8.8 [.345]	710 [28.0]	213.3 [8.40]	80 [175]	100
	E281759C	Natural	8.8 [.345]	710 [28.0]	213.3 [8.40]	80 [175]	100
	E301750C	Black	8.8 [.345]	780 [30.5]	235.5 [9.27]	80 [175]	100
	E301759C	Natural	8.8 [.345]	780 [30.5]	235.5 [9.27]	80 [175]	100
	E321750C	Black	9.0 [.350]	810 [32.0]	245.0 [9.64]	80 [175]	100
	E321759C	Natural	9.0 [.350]	810 [32.0]	245.0 [9.64]	80 [175]	100
	E361750L	Black	9.0 [.350]	920 [36.0]	280.0 [11.0]	80 [175]	50
	E361759L	Natural	9.0 [.350]	920 [36.0]	280.0 [11.0]	80 [175]	50
	E411750L	Black	9.0 [.350]	1020 [40.1]	312.0 [12.2]	80 [175]	50
	E411759L	Natural	9.0 [.350]	1020 [40.1]	312.0 [12.2]	80 [175]	50
E481750L	Black	9.0 [.350]	1220 [48.0]	375.5 [14.7]	80 [175]	50	
E481759L	Natural	9.0 [.350]	1220 [48.0]	375.5 [14.7]	80 [175]	50	
HSD	E202500C	Black	12.4 [.490]	530 [20.9]	156.0 [5.90]	110 [250]	100
	E202509C	Natural	12.4 [.490]	530 [20.9]	156.0 [5.90]	110 [250]	100
	E242500C	Black	12.4 [.490]	650 [25.6]	195.0 [7.60]	110 [250]	100
	E242509C	Natural	12.4 [.490]	650 [25.6]	195.0 [7.60]	110 [250]	100
	E322500C	Black	12.4 [.490]	880 [34.6]	263.9 [10.4]	110 [250]	100
	E322509C	Natural	12.4 [.490]	880 [34.6]	263.9 [10.4]	110 [250]	100

NEW
NEW
NEW
NEW
NEW
NEW

- Item with “ * ”, the tooling is not available yet

Cable Ties Tension Tool

- Use the right tool for the job
- Help install cable ties to the correct tension



QC100
For ties up to 4.8mm (50Lb)



L200
For ties up to 4.8mm (50Lb)



L300
For Heavy Duty ties up to 9.0mm (175Lb)

K-SPEC® CABLE TIES

Velcro Cable Ties

- Self-locking head and body design
- Provides a fast and easy way of application
- Nylon material
- Water Resistance. If immersed in water, it still could work, but with 50% reduction of the tensile
- Available in Black, White, Green, Yellow, Red, Blue



Part no.	Ball Diameter mm [Inch]	Length mm [Inch]	Max Bundle Diameter mm [Inch]	Std. Pk. Qty.
VCT500_X	12.5 [.500]	130 [5.1]	35.0 [1.38]	10
VCT800_X	12.5 [.500]	205 [8.0]	59.0 [2.32]	10
VCT1200_X	17.0 [.670]	310 [12.0]	92.0 [3.60]	10

Mount Head Cable Ties

- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F~+185°F)



RoHS PAHs Reach



Part no.	Colour	Width mm [Inch]	Length mm [Inch]	Max Bundle Diameter mm [Inch]	Min Loop Tensile Kgs [lb]	Fastener	Std. Pk. Qty.
E540MH0C	Black	3.6 [.140]	150 [6.0]	35.5 [1.40]	18 [40]	M4 [8#]	100
E540MH0M	Black	3.6 [.140]	150 [6.0]	35.5 [1.40]	18 [40]	M4 [8#]	1000
E540MH9C	Natural	3.6 [.140]	150 [6.0]	35.5 [1.40]	18 [40]	M4 [8#]	100
E540MH9M	Natural	3.6 [.140]	150 [6.0]	35.5 [1.40]	18 [40]	M4 [8#]	1000
E750MH0C	Black	4.8 [8.0]	200 [8.0]	49.8 [1.96]	22 [50]	M5 [10#]	100
E750MH0M	Black	4.8 [8.0]	200 [8.0]	49.8 [1.96]	22 [50]	M5 [10#]	1000
E750MH9C	Natural	4.8 [8.0]	200 [8.0]	49.8 [1.96]	22 [50]	M5 [10#]	100
E750MH9M	Natural	4.8 [8.0]	200 [8.0]	49.8 [1.96]	22 [50]	M5 [10#]	1000
E1150MH0C	Black	4.8 [12.0]	305 [12.0]	82.8 [3.26]	22 [50]	M5 [10#]	100
E1150MH0D	Black	4.8 [12.0]	305 [12.0]	82.8 [3.26]	22 [50]	M5 [10#]	500
E1150MH9C	Natural	4.8 [12.0]	305 [12.0]	82.8 [3.26]	22 [50]	M5 [10#]	100
E1150MH9D	Natural	4.8 [12.0]	305 [12.0]	82.8 [3.26]	22 [50]	M5 [10#]	500
E1450MH0C	Black	4.8 [14.5]	370 [14.5]	103.8 [4.09]	22 [50]	M5 [10#]	100
E1450MH0D	Black	4.8 [14.5]	370 [14.5]	103.8 [4.09]	22 [50]	M5 [10#]	500
E1450MH9C	Natural	4.8 [14.5]	370 [14.5]	103.8 [4.09]	22 [50]	M5 [10#]	100
E1450MH9D	Natural	4.8 [14.5]	370 [14.5]	103.8 [4.09]	22 [50]	M5 [10#]	500
E14120MH0C	Black	7.6 [15.7]	400 [15.7]	109.2 [4.30]	55 [120]	M6 [1/4#]	100
E14120MH9C	Natural	7.6 [15.7]	400 [15.7]	109.2 [4.30]	55 [120]	M6 [1/4#]	100

NEW
NEW
NEW
NEW
NEW
NEW
NEW

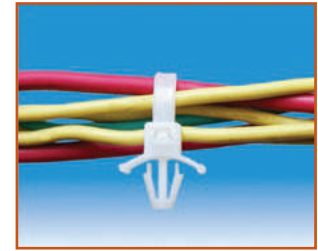
K-SPEC® CABLE TIES

Wing Push Mount Cable Ties

- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F ~+185°F)



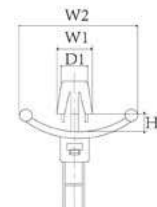
RoHS PAHs Reach



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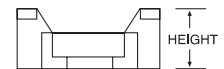
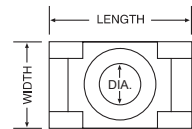
Part no.	Colour	Width mm [Inch]	Length mm [Inch]	Max Bundle Diameter mm [inch]	Min Loop Tensile Kgs [lb]	Std. Pk. Qty.
E750WPM0C	Black	4.8 [.189]	200 [8.0]	49.6 [1.96]	22 [50]	100
E750WPM9C	Natural					

Part no.	Colour	W1 mm [inch]	W2 mm [inch]	D1 mm [inch]	H (max Panel Thickness) mm [inch]	Min Hole Size mm [inch]
E750WPM0C	Black	7.60 [.299]	17.8 [.700]	4.50 [.177]	2.50 [.098]	5.90 [.232]
E750WPM9C	Natural					



K-SPEC® SCREW MOUNTS

- Secure Support** deep cradle design provides maximum support for larger bundles and tubing
- Easy Insertion of Cable Ties** deep recessed screw hole allows cable ties to pass over screw head



Standard Screw Mounts Natural & UV Black

- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F ~+185°F)

Part no.	Colour	(L) Length mm [Inch]	(W) Width mm [Inch]	(H) Height mm [Inch]	(D) Diameter mm [inch]	For Cable Ties width up to mm [inch]	Std. Pk. Qty.
KSNY0010C	Black	15.2 [.600]	9.4 [.370]	6.80 [.267]	3.30 [.130]	4.8 [.189]	100
KSNY0019C	Natural						NEW
KSNY0010D	Black	15.2 [.600]	9.4 [.370]	6.80 [.267]	3.30 [.130]	4.8 [.189]	500
KSNY0019D	Natural						NEW
KSNY0030C	Black	17.8 [.700]	12.7 [.500]	8.20 [.320]	4.31 [.170]	4.8 [.189]	100
KSNY0039C	Natural						NEW
KSNY0030D	Black	17.8 [.700]	12.7 [.500]	8.20 [.320]	4.31 [.170]	4.8 [.189]	500
KSNY0039D	Natural						NEW
KSNY0020C	Black	22.0 [.870]	16.2 [.640]	9.60 [.385]	5.20 [.205]	7.6 [.300]	100
KSNY0029C	Natural						NEW
KSNY0020D	Black	22.0 [.870]	16.2 [.640]	9.60 [.385]	5.20 [.205]	7.6 [.300]	500
KSNY0029D	Natural						NEW
KSNY0040C	Black	25.4 [1.00]	16.2 [.640]	10.80 [.425]	5.20 [.205]	9.0 [.354]	100
KSNY0049C	Natural						NEW
KSNY0040D	Black	25.4 [1.00]	16.2 [.640]	10.80 [.425]	5.20 [.205]	9.0 [.354]	500
KSNY0049D	Natural						NEW



Tolerance: ±.03"/.76 mm

K-SPEC® CABLE TIES

Push Mount Cable Ties

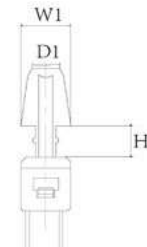
- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F ~+185°F)



RoHS PAHs Reach

Part no.	Colour	Width mm [Inch]	Length mm [Inch]	Max Bundle Diameter mm [inch]	Min Loop Tensile Kgs [lb]	Std. Pk. Qty.
E750PM0C	Black	4.8 [.189]	200 [8.0]	50.8 [2.00]	22 [50]	100
E750PM9C	Natural					

Part no.	Colour	W1 mm [inch]	D1 mm [inch]	H (max Panel Thickness) mm [inch]	Min Hole Size mm [inch]
E750PM0C	Black	7.00 [.275]	4.30 [.169]	3.90 [.153]	4.90 [.193]
E750PM9C	Natural				



Releasable Cable Ties (Trigger type)

- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F ~+185°F)

RoHS PAHs Reach



Part no.	Colour	Width mm [Inch]	Length mm [Inch]	Max Bundle Diameter mm [inch]	Min Loop Tensile Kgs [lb]	Std. Pk. Qty.
E550R0C	Black	7.6 [.300]	150 [6.0]	40.3 [1.59]	22 [50]	100
E550R9C	Natural					
E850R0C	Black	7.6 [.300]	200 [8.0]	55.6 [2.19]	22 [50]	100
E850R9C	Natural					
E1450R0C	Black	7.6 [.300]	370 [14.5]	109.9 [4.33]	22 [50]	100
E1450R9C	Natural					

K-SPEC® CABLE TIES

Double Loop Cable Ties

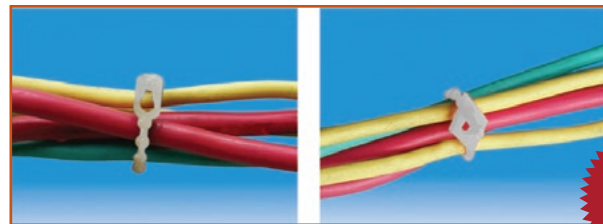
- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F ~+185°F)



Part no.	Colour	Width mm [Inch]	Length mm [Inch]	Max Bundle Diameter mm [inch]	Min Loop Tensile Kgs [lb]	Std. Pk. Qty.
E750DL0C	Black	4.8 [.189]	200 [8.0]	57.1 [2.15]	22 [50]	100
E750DL9C	Natural					

Beaded Cable Ties

- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F ~+185°F)



Type A

Type B



Part no.	Ball Diameter mm [Inch]	Length mm [Inch]	Max Bundle Diameter mm [inch]	Head Type	Std. Pk. Qty.
BT4089M	2.5 [.095]	100 [4.0]	25.0 [0.98]	A	1000
BT8089C	2.5 [.095]	200 [8.0]	51.9 [2.04]	B	100

650 Jar Pack

- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F ~+185°F)
- Tube Size: Diameter 11.5 cm [4.52"], Height 31cm [12.00"]
- Tube material: PET / Lid Material: PP
- Total of 650 Cable Ties

Part no.	Contents	Colour	Qty.
JAR650	2.5x100mm [4" 18lb]	Natural	100 pcs
	2.5x100mm [4" 18lb]	Red	50 pcs
	2.5x100mm [4" 18lb]	Green	50 pcs
	2.5x100mm [4" 18lb]	Blue	50 pcs
	2.5x100mm [4" 18lb]	Yellow	50 pcs
	4.8x200mm [8" 50lb]	Natural	300 pcs
	4.8x280mm [11" 50lb]	Natural	50 pcs



JAR650

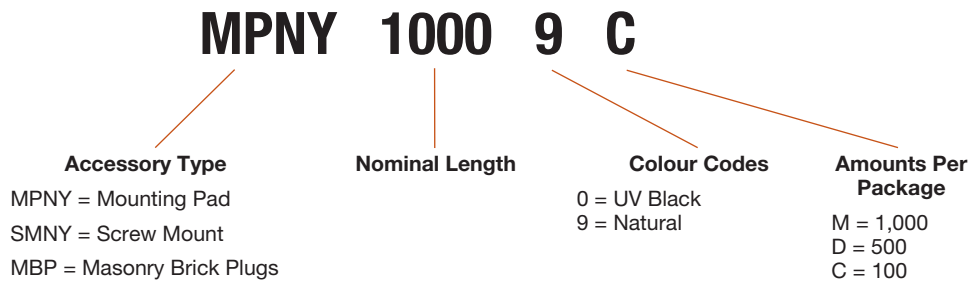
CABLE TIE ACCESSORIES

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Mounting PadsA-27
 Screw MountsA-28
 Cable Tie AssortmentA-29
 Cable Tie Installation Tools.....A-29
 Cable Tie Clamps and ClipsA-30
 Marking PensA-30
 Wire Protection ProductsA-31
 MIL-Spec Cable Ties.....A-32
 Expandable Monofilament SleevingA-33
 Heat Treated Fibreglass Sleeving.....A-34

Techspan offers a wide array of cable tie accessories for identifying or mounting items to metal panels, powder coated panels, walls, masonry, and a large variety of other substrates.

READING TECHSPAN CABLE TIE ACCESSORY PART NUMBERS



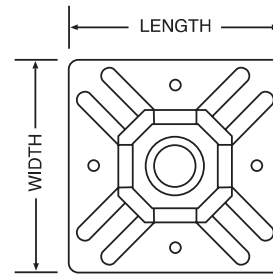
MOUNTING PADS

- **Easy Insertion of Cable Ties** lead-n-feature funnels cable ties into position and countersunk screw hole allows cable tie to easily pass over screw head
- **Saves Positioning Time** with the 4 sided entry and center screw hole

A



PLENUM
RATING
AH-2



Rubber Adhesive Natural & UV Black Cable Ties Mount (4Ways)

- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F ~+185°F)

Part no.	Colour	Width mm [Inch]	Length mm [Inch]	Screw Size	For Cable Ties width up to mm [inch]	Std. Pk. Qty.
MPNY7500C	Black	19 [3/4]	19 [3/4]	#4	3.6 [.140]	100
MPNY7509C	Natural					
MPNY7500D	Black	19 [3/4]	19 [3/4]	#4	3.6 [.140]	500
MPNY7509D	Natural					
MPNY1000C	Black	28 [1.1]	28 [1.1]	#6	4.8 [.189]	100
MPNY1009C	Natural					
MPNY1000D	Black	28 [1.1]	28 [1.1]	#6	4.8 [.189]	500
MPNY1009D	Natural					
MPNY1500C	Black	40 [1-1/2]	40 [1-1/2]	#6	9.0 [.354]	100
MPNY1509C	Natural					
MPNY1500D	Black	40 [1-1/2]	40 [1-1/2]	#6	9.0 [.354]	500
MPNY1509D	Natural					

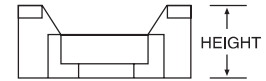
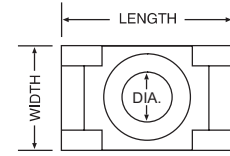
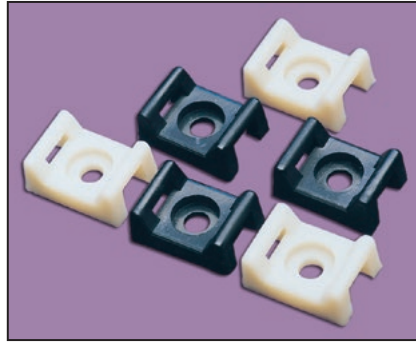
Tolerance: .XXX = ±.005, .XX = ±.015, Fraction = ±1/32"



SCREW MOUNTS

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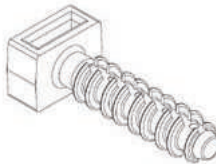
- **Secure Support** deep cradle design provides maximum support for larger bundles and tubing
- **Easy Insertion of Cable Ties** deep recessed screw hole allows cable ties to pass over screw head



Standard Screw Mounts Natural & Black

Part Number	Colour & Material	Height Inch/mm	Length Inch/mm	Width Inch/mm	Slot Height Inch/mm	Slot Width Inch/mm	Mount Method Inch/mm	Per Bag	Per Case
SMNY0019C	Natural Nylon	.280/7.11	.600/15.24	.385/9.77	.060/1.52	.200/5.08	#4-#6 Screw	100	1,000
SMNY0029C	Natural Nylon	.390/9.90	.875/22.22	.625/15.87	.090/2.29	.325/8.26	#12-1/4 Screw	100	1,000
SMNY0010C	Black Nylon	.280/7.11	.600/15.24	.385/9.77	.060/1.52	.200/5.08	#4-#6 Screw	100	1,000
SMNY0020C	Black Nylon	.390/9.90	.875/22.22	.625/15.87	.090/2.29	.325/8.26	#12-1/4 Screw	100	1,000
SMNY0019D	Natural Nylon	.280/7.11	.600/15.24	.385/9.77	.060/1.52	.200/5.08	#4-#6 Screw	500	1,000
SMNY0029D	Natural Nylon	.390/9.90	.875/22.22	.625/15.87	.090/2.29	.325/8.26	#12-1/4 Screw	500	1,000
SMNY0010D	Black Nylon	.280/7.11	.600/15.24	.385/9.77	.060/1.52	.200/5.08	#4-#6 Screw	500	1,000
SMNY0020D	Black Nylon	.390/9.90	.875/22.22	.625/15.87	.090/2.29	.325/8.26	#12-1/4 Screw	500	1,000

Tolerance: ±.03"/.76 mm



Cable Ties Plug

- Material with Pure Nylon 6.6, UL 94V-2, Operation temp. -40°C~+85°C (-40°F ~+185°F)

Part no.	Diameter mm [Inch]	Length mm [Inch]	For Cable Ties width up to mm [inch]	Std. Pk. Qty.
MBP15000C	8.1 [.318]	38.1 [1.5]	7.6 [.300]	100
MBP17000C	10.6 [.417]	43.6 [1.7]	7.6 [.300]	100

CABLE TIE

ASSORTMENT

A

Three
Compartments
with Resealable
Access Doors



Total Ties	Part no.	Cable Tie Part no.	Ties Per Pac	Colour & Material	Tie Length		Tie Tensile	Bundle Diameter	UL-CSA	Military Specification	Per Case	ANSI/UL 62275 TYPE
					Inch	Pac						
400	TECHPAC4009	L-11509	100	Natural Nylon	11.2	285	50lb	1/16 - 3	UL-CSA	MS3367-7-9	20	21
Clam Shell Dimensions: 14 x 7-1/8" x 2" PVC		L-7509			7.5	190		1/16 - 1-3/4		MS3367-1-9		
		L-4189			4.0	102		1/16 - 7/8		MS3367-4-9		
400	TECHPAC4000	L-11500	100	UV Black Nylon	11.2	285	50lb	1/16 - 3	UL-CSA	MS3367-7-0	20	21
Clam Shell Dimensions: 14 x 7-1/8" x 2" PVC		L-7500			7.5	190		1/16 - 1-3/4		MS3367-1-0		
		L-4180			4.0	102		1/16 - 7/8		MS3367-4-0		

- Sold in case quantities only
- 20/case

CABLE TIE INSTALLATION TOOLS



QC100

A lightweight tool for least critical applications. Cinch tie to desired bundle and twist tool to remove excess strap. Recommended for use with 18 – 50 pound ties.



L400

Tool for use with 18 – 50 pound ties. Automatic cut-off and adjustable tensioning for dependable use in assembly applications.



L200

Tool for use with 18 – 50 pound ties. Automatic cut-off removes excess strap flush against cable tie head. Tool is equipped with adjustable tensioning.



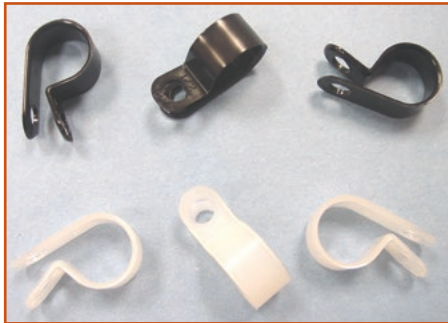
L300

Rugged construction makes this tool ideal for use with our 120 – 175 pound ties. Cinch tie to desired bundle and pull trigger to cut excess flush at Cable Tie head.

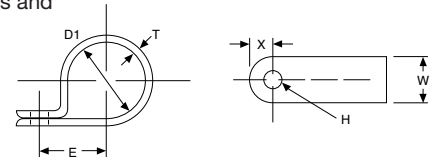
Field proven durability.

CABLE CLAMPS & CLIPS

A



- Fully Radiused Inside Edges with Size Markings in Inches and Millimeters for Easy Identification
- Stocked in Natural White and Black 6/6 Nylon 94 V-2
- 11 Diameters and 5 Widths with Mounting Holes for #4 through #10 Screws
- Non-Conductive, Non-Corrosive; Resistant to Fuels, Lubricants and most Chemicals

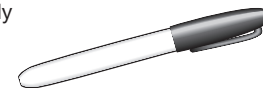


Part no.		D1 Closed Diameter		E		T Thickness		W Width		H Hole Diameter		X		Per Package
White	Black	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	
766046C	767046C	.126	(3.2)	.355	(9.0)	.060	(1.5)	.512	(13.0)	.205	(5.2)			100
766500C	767500C	.170	(4.3)	.414	(10.5)	.060	(1.5)	.414	(10.5)	.205	(5.2)			
766076C	767076C	.248	(6.3)	.414	(10.5)	.060	(1.5)	.374	(9.5)	.189	(4.8)			
766053C	767053C	.300	(7.6)	.414	(10.5)	.060	(1.5)	.374	(9.5)	.189	(4.8)			
766054C	767054C	.343	(8.7)	.493	(12.5)	.060	(1.5)	.488	(12.4)	.189	(4.8)			
766047C	767047C	.496	(12.6)	.591	(15.0)	.060	(1.5)	.473	(12.0)	.189	(4.8)			
766077C	767077C	.622	(15.8)	.709	(18.0)	.060	(1.5)	.473	(12.0)	.189	(4.8)			
766078C	767078C	.764	(19.4)	.709	(18.0)	.060	(1.5)	.473	(12.0)	.189	(4.8)			
766079C	767079C	1.000	(25.4)	.866	(22.0)	.060	(1.5)	.473	(12.0)	.189	(4.8)			
766050C	767050C	1.252	(31.8)	1.024	(26.0)	.060	(1.5)	.473	(12.0)	.189	(4.8)			
766503C	767503C	1.445	(36.7)	1.187	(30.0)	.060	(1.5)	.473	(12.0)	.189	(4.8)			
Tolerance ±		.010	.030	.005	.015	.010	.030							
		(.254)	(.762)	(.127)	(.381)	(.254)	(.762)							

MARKING PENS

MKR-PEN-2	Red Marking Pen
MKR-PEN-6	Blue Marking Pen
MKR-PEN-0	Black Marking Pen

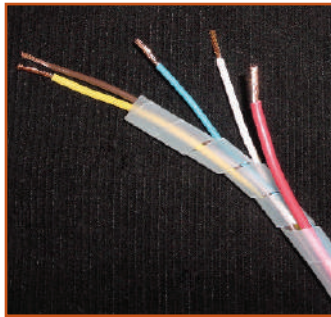
Ideal for marking applications. Permanently marks most materials, including plastics. Quick drying; fine point.



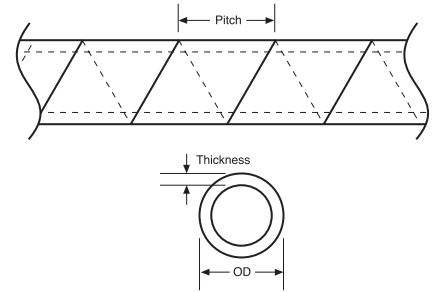
WIRE PROTECTION PRODUCTS



SPIRAL WRAP



- For Protection of Bundles from .059" to 7"
- Install Gapped for Greater Flexibility or Butted for Maximum Abrasion Resistance, Insulation and Rigidity.
- a.k.a.: Reverse Cut, Left-Hand Cut, Counter Clockwise Cut
- Use Cutting Tool WT-1
- Contact Factory for Availability of Custom Colours
- Temp -43°C to 177°C (-45°F to 350°F)



THIN WALL POLYETHYLENE

PART NO. NATURAL	PART NO. UV BLACK	Diameter		Pitch		Nominal Wall Thickness Inch	Min./Max. Bundle Range				UL Flammability	SPOOL LENGTH	
		Inch	(mm)	Inch	(mm)		Inch	(mm)	Inch	(mm)			
SRPE1259C	SRPE1250C	.125	(3.17)	.300	(7.6)	.030	.063	(1.60)	to	.250	(6.35)	Not Rated	100'
SRPE1879C	SRPE1870C	.187	(4.75)	.400	(10.2)	.030	.125	(3.17)	to	1.00	(25.40)		
SRPE2509C	SRPE2500C	.250	(6.35)	.500	(12.7)	.040	.188	(4.75)	to	2.00	(50.80)		
SRPE3759C	SRPE3750C	.375	(9.52)	.550	(13.9)	.050	.313	(7.95)	to	3.00	(76.20)		
SRPE5009C	SRPE5000C	.500	(12.70)	.600	(15.2)	.050	.375	(9.55)	to	4.00	(101.60)		
SRPE6259C	SRPE6250C	.625	(15.87)	.650	(16.5)	.055	.625	(15.87)	to	4.50	(114.30)		
SRPE7509C	SRPE7500C	.750	(19.05)	.850	(21.6)	.062	.750	(19.05)	to	5.00	(127.00)		
SRPE10009C	SRPE10000C	1.00	(25.40)	1.500	(38.1)	.065	1.00	(25.40)	to	7.00	(177.80)		
Tolerance ±		.030	(.762)	.010	(.254)	.005	.015						

- Stocked in 100 foot rolls

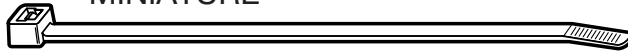


WT-1 Cutting Tool

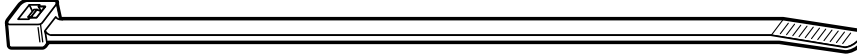
MIL-SPEC CABLE TIES

A

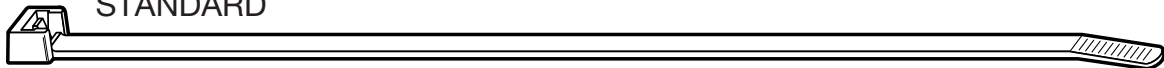
MINIATURE



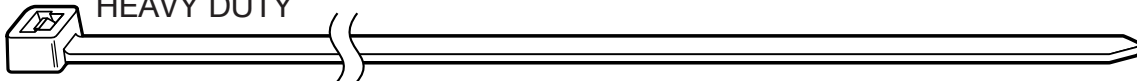
INTERMEDIATE



STANDARD



HEAVY DUTY



RECOGNIZED

Per Bag	Mil-Spec	Part no.	ME.T Ties	Material	ID Code	Tool Setting
100	MS-3367-1-0	L-7500C	MET-7500C	UV Black Nylon	STD	6 to 8
	MS-3367-1-2	L-7502C	MET-7502C	Red Nylon		
	MS-3367-1-3	L-7503C	MET-7503C	Orange Nylon		
	MS-3367-1-4	L-7504C	MET-7504C	Yellow Nylon		
	MS-3367-1-5	L-7505C	MET-7505C	Green Nylon		
	MS-3367-1-6	L-7506C	MET-7506C	Blue Nylon		
	MS-3367-1-7	L-7507C	MET-7507C	Purple Nylon		
	MS-3367-1-8	L-7508C	MET-7508C	Gray Nylon		
	MS-3367-1-9	L-7509C	MET-7509C	Natural Nylon		
	MS-3367-2-0	L-14500C	MET-14500C	UV Black Nylon		
500	MS-3367-2-0	L-14500D	MET-14500D	UV Black Nylon		
100	MS-3367-2-6	L-14506C	MET-14506C	Blue Nylon		
	MS-3367-2-9	L-14509C	MET-14509C	Natural Nylon		
500	MS-3367-2-9	L-14509D	MET-14509D	Natural Nylon		
100	MS-3367-3-0	L-141200C	MET-141200C	UV Black Nylon	HVY	5 to 8
	MS-3367-3-2	L-141202C	MET-141202C	Red Nylon		
	MS-3367-3-5	L-141205C	MET-141205C	Green Nylon		
	MS-3367-3-9	L-141209C	MET-141209C	Natural Nylon	MIN	1 to 3
	MS-3367-4-0	L-4180C		UV Black Nylon		
	MS-3367-4-9	L-4189C		Natural Nylon	INT	3 to 5
	MS-3367-5-0	L-5400C	MET-5400C	UV Black Nylon		
	MS-3367-5-1	L-5401C	MET-5401C	Brown Nylon		
	MS-3367-5-2	L-5402C	MET-5402C	Red Nylon		
	MS-3367-5-3	L-5403C	MET-5403C	Orange Nylon		
MS-3367-5-4	L-5404C	MET-5404C	Yellow Nylon			
MS-3367-5-5	L-5405C	MET-5405C	Green Nylon			
MS-3367-5-6	L-5406C	MET-5406C	Blue Nylon			
MS-3367-5-8	L-5408C	MET-5408C	Gray Nylon			
MS-3367-5-9	L-5409C	MET-5409C	Natural Nylon			
50	MS-3367-6-9	L-301209L		Natural Nylon	HVY	5 to 8
	MS-3367-6-0	L-301200L		UV Black Nylon		
100	MS-3367-7-0	L-11500C	MET-11500C	UV Black Nylon	STD	6 to 8
500	MS-3367-7-0	L-11500D	MET-11500D	UV Black Nylon		
100	MS-3367-7-2	L-11502C	MET-11502C	Red Nylon		
	MS-3367-7-9	L-11509C	MET-11509C	Natural Nylon		
500	MS-3367-7-9	L-11509D	MET-11509D	Natural Nylon		

- CSA 213040
 - UL File No. E303945
- Recognized Components
Wire Positioning Devices
Mounting Pads
Cable Ties



Use L-300 Tool

EXPANDABLE MONOFILAMENT SLEEVING

In convenient 100 ft spools

Part no.	Nominal I.D. (inches)	Size Range (inches)
EMFS-250-0-C	1/4	1/8 – 3/8
EMFS-375-0-C	3/8	3/16 – 5/8
EMFS-500-0-C	1/2	1/4 – 3/4
EMFS-750-0-C	3/4	1/2 – 1-1/4
EMFS-1250-0-C	1-1/4	3/4 – 1-3/4
EMFS-1750-0-C	1-3/4	1 – 2-1/2
EMFS-2000-0-C	2	1-1/4 – 2-3/4
EMFS-2500-0-C	2-1/2	1-1/2 – 3-1/4

- Rated for continuous use from -70°C to 125°C but can withstand intermittent operation up to 150°C.
- RoHS and WEEE compliant.
- **Colors:** Standard color is Black.



DESCRIPTION

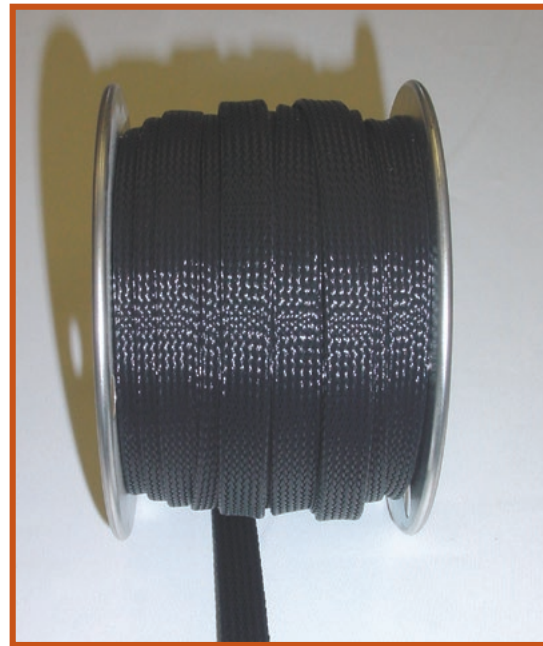
- Made of specially formulated Polyethylene Terephthalate (PET)
- Provides excellent abrasion and cut-through resistance protection, excellent chemical and fungus resistance and good mechanical properties.
- The flexible open weave construction allows for ease in pulling over irregular shapes and also provides for dissipation of heat and moisture, preventing condensation, and allowing for complete drainage.

USES

Expandable monofilament braided sleeveings provide a tough, durable protection over tubing, hoses, wire, wire bundles, wire harnesses, cable assemblies and flat ribbon cable without adding critical weight, bulk and extra cost. The resistance of the polyester monofilaments to most oils, salt water, fuels, cleaners, solvents and chemicals makes it ideal for applications in harsh environments and in electronics, marine, and industrial wire harness applications. Exhibits excellent stretch and flexibility even at low temperatures making it ideal for applications in machine tools, robotics, automated equipment and wherever exposure to extreme weather conditions is a concern.

FLUID RESISTANCE

Testing verifies that there is virtually no effect on the tensile strength and maybe only a slight reduction (approximately 5%) in elongation when exposed to the following fluids: cleaning fluid, de-icing fluid, fuel oil, gasoline, hydraulic fluid, lubricating oil, salt water and solvents.



E316646

A

HIGH TEMPERATURE FIBERGLASS SLEEVING

In convenient 100 ft spools

A



Heat Treated Fiberglass Sleeving is a very good solution for bundling applications where there is a requirement for high temperatures but low voltage levels. Its flexibility and expandability makes it easily fit irregular shapes. It also provides abrasion and flame resistance.

High Temperature Fiberglass Sleeving can be used in high temperature, low voltage applications and wherever severe, repeated flexing or temperature extremes prohibit the use of other materials. Its expandability and flexibility enables it to slip over irregular shapes and electrical connections to provide effective thermal, mechanical and electrical protection.

APPLICATIONS:

This kind of fiberglass sleeving is widely used in heating components, carbon brushes, toasters, coffeemakers etc.

- **Colours:** natural (silver-grey) only.
- **Cut through resistance:** Excellent
- **Oil resistance:** No swelling or disintegration
- **Fungus resistance:** Inert, requires no fungicide additives.
- **Rate of Burning:** Meets UL VW-1 flammability rating

TECHNICAL DATA

- Material:** Fiberglass fiber
- Maximum Temperature:** 600°C
- Breakdown Voltage:** 700v
- Flammability:** VW-1
- Standard Colour:** White, Black
- Certificate:** RoHS
- Cutting Tool:** Cutting machine, Scissor

Part no.	Size Nominal ID
THERM012001/4	1/4"
THERM012003/8	3/8"
THERM012001/2	1/2"
THERM012005/8	5/8"
THERM012003/4	3/4"
THERM012001	1"



MATERIALS FOR MOLDED ASSEMBLY HARDWARE

A

Property	ASTM Method	Test Condition	Units	Molded 6/6 Nylon	Nylon
Tensile Strength	D638	+73°F; 50% RH	kpsi	11.2	9
Elongation at Break	D638	+73°F; 50% RH	%	≥300	200
Yield Strength	D638	+73°F; 50% RH	kpsi	8.5	9
Shear Strength	D732	Dry As Molded (DAM)	kpsi	9.6	10.5
Deformation Under Load	D621	2,000 psi +122°F; DAM	%	1.4	1.2
IZOD Impact	D256	+73°F; 50% RH	ft lb/in	2.1	2
Tensile Impact Strength	D1822	+73°F; Long Specimen; DAM	ft lb/in ²	240	N.R.
Melting Point	D789	Fisher-Johns	°F	491	491
Thermal Linear Expansion	D696	DAM	in/in/°F	4 x 10 ⁻⁵	N.R.
Thermal Conductivity	–	DAM Conche-Fitch	BTU - in/ h • ft ² • °F	1.7	1.7
Brittleness Temperature	D746	50% RH	°F	-85	-62
Oxygen Index	D2863	DAM 50% RH	%O ₂	28 31	25 31
UL Flammability	UL 94	DAM 50% RH	– –	V-2 V-2	V-2 V-2

- Material data as provided by our suppliers.
- Tests conducted on 1/4" specimens.
- N.R. = Not Reported

NBS Smoke Generation For 6/6 Nylon

Sample Thickness	UL Flammability	Energy Source	Specific Optical Density	
			at Maximum Smoke Accumulation	at 2 Minutes
1/16"	94 V-2	Radiant (2.5 watts/sq cm)	13	0
1/8"	94 V-2	Radiant Plus Flaming Gas Jets	26	1

- Results as provided by National Bureau of Standards (NBS). Results may not be directly correlated with larger fires, such as burning buildings. Materials should be tested to your application.

Temperature Index For Molded Nylons

Material	Minimum Thickness (in)	Temperature Index		Hot Wire Ignition (sec)
		Electrical (°C)	Mechanical w/o Impact (°C)	
6/6 Nylon	0.028	125	65	11.8
UV Black Nylon	0.058	125	85	15.0
	0.120	125	85	35.0
	0.240	125	85	35.0
Heat Stabilized Nylon	0.028	130	95	9.0
	0.058	130	105	11.0
	0.120	130	110	20.0

- Temperature Index is the temperature at which the specific property will decrease to one-half its original value after 60,000 hours exposure at that temperature.

About Nylon...

Nylon possess an outstanding balance of properties combining strength, moderate stiffness, high service temperature and a high level of toughness. Nylon is particularly resistant to repeated impact, has a low co-efficient of friction and excellent abrasion resistance.

Nylon is resistant to fuels, lubricants and most chemicals, but is attacked by phenols, strong acids and oxidizing agents. Contact your Techspan Customer Service Representative or your Techspan Distributor for chemical data relative to your application.

Nylon is inherently susceptible to environmental conditions. Techspan Cable Ties are moisturized to optimum performance levels at machine-side and should be stored in cool dry areas out of direct sunlight. Cable Ties are packaged in plastic bags to contain moisture and should remain sealed until ready for use.

HOW TO SELECT THE PROPER CRIMP TERMINAL

Part #	R	4	B	6	S
Example	Tongue	Barrel Type	Wire Range	Stud Size	Special

Tongue

R = Ring	CFR = Female Disconnect, fully insulated	MT = Male Tab	P = Parallel Splice
BS = Block Spade	FR = Female Disconnect	FLFR = Female Flag Disconnect	PG = Piggy Back Female/Male Disconnect/Tab
B = Butt Splice	CM(X)T = Male Tab, fully insulated	LS = Locking Spade	

Barrel Type 1 Butted Seam

Pure electrolytic copper, annealed, electro-tin plated for corrosion resistance, designed with deep internal serration for firm wire grip

2 Brazed Seam

Same as type 1, except with a brazed seam to ensure maximum strength of wire terminators

4 Vinyl Insulation

Same as type 1 with a NEMA colour-coded, funneled, vinyl insulating sleeve which when crimped, grips the wire insulation to avoid flexing at point of crimps. UL rated at 90°C, 600V

4N Nylon Insulation (No Brass Sleeve)

Same as type 1 with a colour-coded nylon insulating sleeve without brass sleeve. UL rated at 105°C, 600V

6 Nylon Insulation (With Brass Sleeve)

Same as type 1 with NEMA colour coded, nylon insulating sleeve or over a tin plated brass sleeve which offers maximum crimp strength where extreme vibration and flexing are encountered. UL rated at 105°C, 600V

7 Seamless Tube

Pure electrolytic copper, seamless, annealed and electro-tin plated for extra strength in a crimp

8 Nylon Insulation Seamless Tube

Same as type 7 with a nylon insulation for use where excessive vibration will be encountered.

9 High Temperature

Nickel-plated, cold rolled steel, butted seam terminals for temperatures up to 900°F

Wire Range

Code	A	B	C	E	F	G
Range (AWG)	22-18	16-14	12-10	8	6	4

Stud Size

Code	6	8	10	14		
Stud Size	#6	#8	#10	1/4"		
Code	56	38	50	110	187	250
Stud Size	5/16"	3/8"	1/2"	.110 NEMA Tab	.187 NEMA Tab	.250 NEMA Tab

Special

-- Standard S Small/Narrow Tongue F Fully Insulated

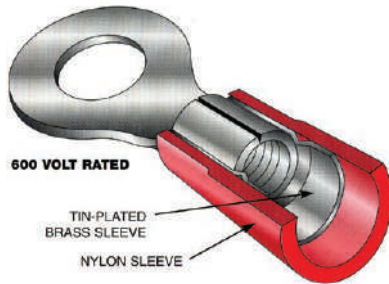
Packaging

Pro Pack	Retail Pack	Bulk Pack
Qty varies by product	100 Qty	1,000 Qty

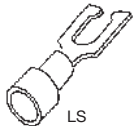


Nylon Insulated Support Sleeve

Nylon insulated colour coded barrel styles offer the ultimate in high-performance terminal design and construction. Tin-plated brass sleeve strengthens barrel and secures wire to protect against stress and high vibration. Permanently-attached colour-coded Nylon insulating sleeve extends beyond the metal support sleeve. Funnel ferrule wire entrance into electrical barrel eliminates wire strand 'hang-up', increases crimping rates and wire termination reliability. Operating Temperature Range: continuous duty from -67°F to 221°F (-55°C to 105°C).



Copper Solid and Stranded Wire Only



For Locking Styles contact Techspan

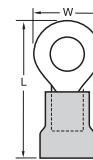


22-18 WIRE RANGE

.032 Stock

600 Volts

Stud Size	Part Number	Stud Size	Part Number
4-6	R6A6S	4-6	BS6A6S
4-6	R6A6		Seamless Butt B8A
6-8	R6A8		
8-10	R6A10		
12-1/4	R6A14S		
1/4-5/16	R6A56S		
5/16-3/8	R6A38		
4-6	BS6A6 Block Spade		
6	BS6A8		
10	BS6A10		



DIMENSIONAL CHART		
Part Number	W	L
B8A		1.014"
BS6A10	0.301"	0.785"
BS6A6	0.294"	0.896"
BS6A6S	0.253"	0.886"
BS6A8	0.294"	0.907"
R6A14S	0.460"	1.130"
R6A38	0.538"	1.363"
R6A56S	0.460"	1.112"
R6A6	0.311"	0.916"
R6A6S	0.249"	0.902"
R6A8	0.313"	0.972"
R6A8S	0.313"	0.906"

Terminals accept .140" Max. Wire Ins. Dia.; Splices – .120"

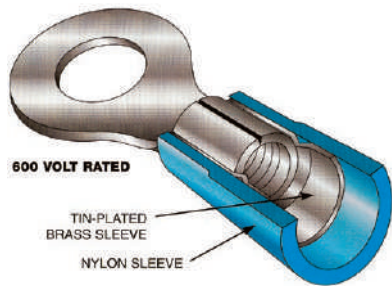
Add suffix "M" for 1000 pack
Add suffix "P" for Pro Pack (Quantities vary by Part #)

Approved installation tool: See tool chart pages E-2,3,4
Economy installation tools: RAT-NYL, 453, HTS1000
See pages E-2 to E-4 for installation tools.

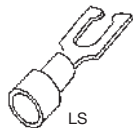


Nylon Insulated Support Sleeve

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Copper Solid and Stranded Wire Only








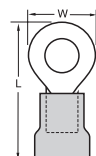







For Locking Styles contact Techspan



16-14 WIRE RANGE

.032 Stock

600 Volts

Stud Size	Part Number	Stud Size	Part Number																																							
4-6	 R6B6S	10	 BS6B10																																							
4-6	 R6B6	 Seamless Butt B8B																																								
6-8	 R6B8	 DIMENSIONAL CHART <table border="1"> <thead> <tr> <th>Part Number</th> <th>W</th> <th>L</th> </tr> </thead> <tbody> <tr><td>B8B</td><td></td><td>1.058"</td></tr> <tr><td>BS6B10</td><td>0.299"</td><td>0.880"</td></tr> <tr><td>BS6B6</td><td>0.299"</td><td>0.897"</td></tr> <tr><td>BS6B6S</td><td>0.246"</td><td>0.885"</td></tr> <tr><td>BS6B8</td><td>0.298"</td><td>0.897"</td></tr> <tr><td>R6B10</td><td>0.342"</td><td>1.033"</td></tr> <tr><td>R6B38</td><td>0.530"</td><td>1.201"</td></tr> <tr><td>R6B56S</td><td>0.464"</td><td>1.165"</td></tr> <tr><td>R6B6</td><td>0.313"</td><td>0.980"</td></tr> <tr><td>R6B6S</td><td>0.255"</td><td>0.935"</td></tr> <tr><td>R6B8</td><td>0.313"</td><td>0.983"</td></tr> <tr><td>R6B8S</td><td>0.252"</td><td>0.886"</td></tr> </tbody> </table>		Part Number	W	L	B8B		1.058"	BS6B10	0.299"	0.880"	BS6B6	0.299"	0.897"	BS6B6S	0.246"	0.885"	BS6B8	0.298"	0.897"	R6B10	0.342"	1.033"	R6B38	0.530"	1.201"	R6B56S	0.464"	1.165"	R6B6	0.313"	0.980"	R6B6S	0.255"	0.935"	R6B8	0.313"	0.983"	R6B8S	0.252"	0.886"
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4-6	 BS6B6																																									
8	 BS6B8																																									

Terminals are NOT Actual Size See Sizing Chart on B-38, B-39

Terminals accept .170" Max. Wire Ins. Dia.; Splices - .150"

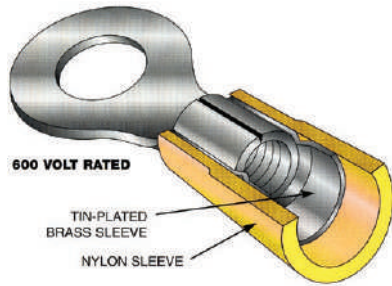
Add suffix "M" for 1000 pack
Add suffix "P" for Pro Pack (Quantities vary by Part #)

Approved installation tool: See tool chart pages E-2,3,4
Economy installation tools: RAT-NYL, 453, HTS1000
See pages E-2 to E-4 for installation tools.

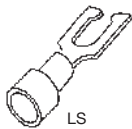


Nylon Insulated Support Sleeve

Nylon insulated colour coded barrel styles offer the ultimate in high-performance terminal design and construction. Tin-plated brass sleeve strengthens barrel and secures wire to protect against stress and high vibration. Permanently-attached colour-coded Nylon insulating sleeve extends beyond the metal support sleeve. Funnel ferrule wire entrance into electrical barrel eliminates wire strand 'hang-up', increases crimping rates and wire termination reliability. Operating Temperature Range: continuous duty from -67°F to 221°F (-55°C to 105°C).



Copper Solid and Stranded Wire Only



For Locking Styles contact Techspan

Terminals are NOT Actual Size See Sizing Chart on B-38, B-39

12-10 WIRE RANGE

.032 Stock

600 Volts

Stud Size	Part Number	Stud Size	Part Number
4-6	R6C6S	4-6	BS6C6
4-6	R6C6	8	BS6C8
6-8	R6C8S	10	BS6C10
6-8	R6C8	14	BS6C14
8-10	R6C10	Seamless Butt B8C	
12-1/4	R6C14S		
1/4-5/16	R6C56S		
1/4-5/16	R6C56		
5/16-3/8	R6C38		
7/16-1/2	R6C50		

DIMENSIONAL CHART		
Part Number	W	L
B8C		1.240"
BS6C10	0.323"	1.117"
BS6C14	0.352"	1.010"
BS6C6	0.323"	1.160"
BS6C8	0.322"	1.163"
R6C10	0.374"	1.071"
R6C14S	0.531"	1.332"
R6C38	0.589"	1.434"
R6C50	0.747"	1.655"
R6C56	0.589"	1.433"
R6C56S	0.532"	1.336"
R6C6	0.375"	1.174"
R6C6S	0.292"	1.047"
R6C8	0.375"	1.047"
R6C8S	0.287"	1.131"

Terminals accept .225" Max. Wire Ins. Dia.; Splices - .210"



Add suffix "M" for 1000 pack
Add suffix "P" for Pro Pack (Quantities vary by Part #)

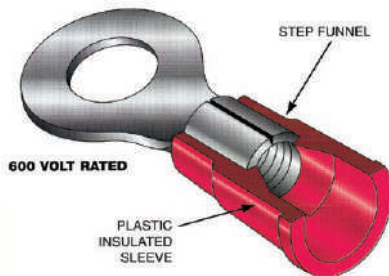
Approved installation tool: See tool chart pages E-2,3,4
Economy installation tools: RAT-NYL, 453, HTS1000
See pages E-2 to E-4 for installation tools.

P.V.C. Plastic Insulated Sleeve

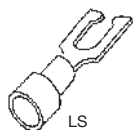
PVC (Butted Seam) terminals and splices feature a rigid Polyvinyl Chloride (PVC) insulation sleeve permanently attached to butted seam barrel (in #22-10) or brazed-seam PVC (in #22-2). Attaches to wire with one quick crimp. Insulation sleeve prevents vibration damage by not allowing wire flex at point of crimp. Funnel wire entrance into electrical barrel eliminates wire strand "hang-up", increases crimping rates and wire termination reliability*. Operating Temperature Range: continuous duty from -67°F to 221°F (-55°C to 105°C).

* Step construction provides ideal locator for proper crimping.

** Temp Rating 75°C



Copper Solid and Stranded Wire Only



For Locking Styles contact Techspan

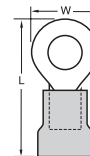


22-18 WIRE RANGE

.032 Stock

Stud Size	Part Number	Stud Size	Part Number
4-6	R4A6S	10	BS4A10
4-6	R4A6		P4A Parallel
6-8	R4A8		B4A** Buttsplice
8-10	R4A10		
12-1/4	R4A14S		
1/4-5/16	R4A56S		
5/16-3/8	R4A38		
4-6	BS4A6S Block Spade		
4-6	BS4A6		
8-10	BS4A8		

Terminals are NOT Actual Size See Sizing Chart on B-38, B-39



DIMENSIONAL CHART		
Part Number	W	L
B4A		0.969"
BS4A10	0.294"	0.820"
BS4A6	0.298"	0.823"
BS4A6S	0.248"	0.814"
BS4A8	0.293"	0.827"
P4A		0.697"
R4A10	0.312"	0.900"
R4A14S	0.465"	1.092"
R4A38	0.535"	1.303"
R4A56S	0.466"	1.096"
R4A6	0.255"	0.844"
R4A6S	0.225"	0.747"
R4A8	0.313"	0.897"
R6A10	0.314"	0.974"

Terminals & Splices accept .145" Max. Wire Ins. Dia.

Add suffix "M" for 1000 pack

Add suffix "P" for Pro Pack (Quantities vary by Part #)

Approved installation tool: See tool chart pages E-2,3,4

Economy installation tools: RAT-PVC, 453, HTS1000

See pages E-2 to E-4 for installation tools.

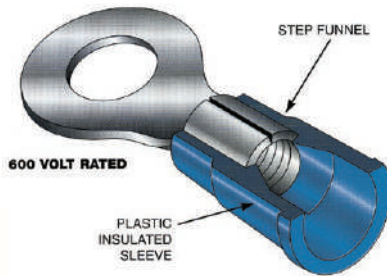


P.V.C. Plastic Insulated Sleeve

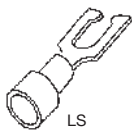
PVC (Butted Seam) terminals and splices feature a rigid Polyvinyl Chloride (PVC) insulation sleeve permanently attached to butted seam barrel (in #22-10) or brazed-seam PVC (in #22-2). Attaches to wire with one quick crimp. Insulation sleeve prevents vibration damage by not allowing wire flex at point of crimp. Funnel wire entrance into electrical barrel eliminates wire strand "hang-up", increases crimping rates and wire termination reliability*. Operating Temperature Range: continuous duty from -67°F to 221°F (-55°C to 105°C).

* Step construction provides ideal locator for proper crimping.

** Temp Rating 75°C



Copper Solid and Stranded Wire Only



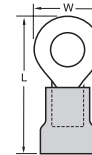
For Locking Styles contact Techspan

Terminals are NOT Actual Size See Sizing Chart on B-38, B-39

16-14 WIRE RANGE

.032 Stock

Stud Size	Part Number	Stud Size	Part Number
4-6	R4B6S	8	BS4B8
4-6	R4B6	10	BS4B10
6-8	R4B8		P4B Parallel
8-10	R4B10		B4B** Buttsplice
12-1/4	R4B14S		
1/4-5/16	R4B56S		
5/16-3/8	R4B38		
4-6	BS4B6S		
4-6	BS4B6		



DIMENSIONAL CHART		
Part Number	W	L
B4B		0.948"
BS4B10	0.300"	0.823"
BS4B6	0.291"	0.942"
BS4B6S	0.247"	0.807"
BS4B8	0.299"	0.826"
P4B		0.679"
R4B10	0.342"	0.952"
R4B14S	0.468"	1.097"
R4B38	0.535"	1.290"
R4B56S	0.469"	1.093"
R4B6	0.313"	0.909"
R4B6S	0.248"	0.811"
R4B8	0.313"	0.909"

Terminals & Splices accept .175" Max. Wire Ins. Dia.



Add suffix "M" for 1000 pack
Add suffix "P" for Pro Pack (Quantities vary by Part #)

Approved installation tool: See tool chart pages E-2,3,4
Economy installation tools: RAT-PVC, 453, HTS1000
See pages E-2 to E-4 for installation tools.

P.V.C. Plastic Insulated Sleeve

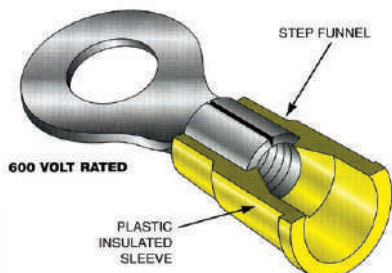
12-10 WIRE RANGE

.040 Stock

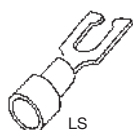
PVC (Butted Seam) terminals and splices feature a rigid Polyvinyl Chloride (PVC) insulation sleeve permanently attached to butted barrel (in #22-10) or (in #22-2). Attaches to wire with one quick crimp. Insulation sleeve prevents vibration damage by not allowing wire flex at point of crimp. Funnel wire entrance into electrical barrel eliminates wire strand "hang-up", increases crimping rates and wire termination reliability*. Operating Temperature Range: continuous duty from -67°F to 221°F (-55°C to 105°C).

* Step construction provides ideal locator for proper crimping.

** Temp Rating 75°C



Copper Stranded Wire Only



For Locking Styles contact Techspan

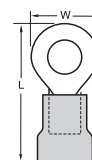
Terminals are NOT Actual Size See Sizing Chart on B-38, B-39

Stud Size Part Number

- 4-6 **R4C6S**
- 4-6 **R4C6**
- 6-8 **R4C8S**
- 6-8 **R4C8**
- 8-10 **R4C10**
- 12-1/4 **R4C14S**
- 1/4-5/16 **R4C56S**
- 1/4-5/16 **R4C56**
- 5/16-3/8 **R4C38**

Stud Size Part Number

- 4-6 **BS4C6**
- 8 **BS4C8**
- 10 **BS4C10**
- 12 **BSF4C10**
- B4C****
- P4C Parallel**



DIMENSIONAL CHART		
Part Number	W	L
B4C		1.069"
BS4C10	0.323"	1.062"
BS4C14	0.356"	0.998"
BS4C6	0.321"	1.051"
BS4C8	0.323"	1.060"
P4C		0.831"
R4C10	0.377"	1.056"
R4C12	0.757"	1.513"
R4C14S	0.531"	1.221"
R4C38	0.589"	1.327"
R4C56	0.589"	1.320"
R4C56S	0.531"	1.224"
R4C6	0.376"	1.056"
R4C6S	0.286"	1.012"
R4C8	0.378"	1.053"
R4C8S	0.284"	1.022"

Terminals accept .250" Max. Wire Ins. Dia.



Add suffix "M" for 1000 pack
Add suffix "P" for Pro Pack (Quantities vary by Part #)


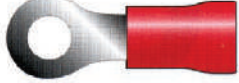
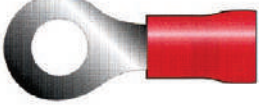




Approved installation tool: See tool chart pages E-2,3,4
Economy installation tools: RAT-PVC, 453, HTS1000
See pages E-2 to E-4 for installation tools.

P.V.C. Plastic Insulated Sleeve


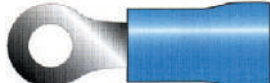
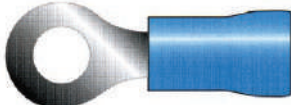
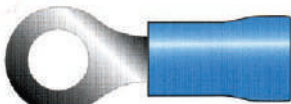
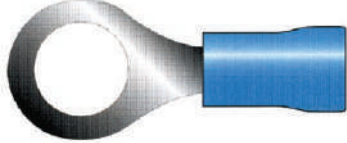
8 WIRE RANGE

.050 Stock

Stud Size		Part Number
8-10		761603
12-1/4		761600
1/4-5/16		761602
5/16-3/8		761601
7/16-1/2		761604

6 WIRE RANGE

.057 Stock

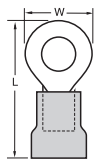
Stud Size		Part Number
8-10		761605
12-1/4		761610
1/4-5/16		761612
5/16-3/8		761611
7/16-1/2		761023

Terminals are NOT Actual Size See Sizing Chart on B-38, B-39

B

Terminals & Splices accept .385" Max. Wire Ins. Dia.

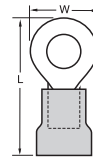
600 Volt Rated 105°C Temperature Rating



DIMENSIONAL CHART		
Part Number	W	L
761603	0.603"	1.421"
761600	0.603"	1.421"
761602	0.603"	1.421"
761601	0.603"	1.421"
761604	0.825"	1.718"

Terminals & Splices accept .440" Max. Wire Ins. Dia.

600 Volt Rated 105°C Temperature Rating



DIMENSIONAL CHART		
Part Number	W	L
761605	0.645"	1.673"
761610	0.645"	1.673"
761612	0.645"	1.673"
761611	0.645"	1.673"
761023	0.837"	1.861"



Copper Stranded Wire Only

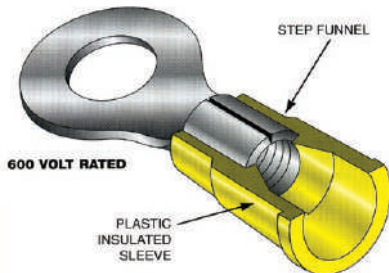
Approved installation tool: See tool chart pages E-2,3,4
 Economy installation tool: LUG-8-2-INS
 See pages E-2 to E-4 for installation tools.



P.V.C. Plastic Insulated Sleeve

PVC (Butted Seam) terminals and splices feature a rigid Polyvinyl Chloride (PVC) insulation sleeve permanently attached to butted barrel (in #22-10) or (in #22-2). Attaches to wire with one quick crimp. Insulation sleeve prevents vibration damage by not allowing wire flex at point of crimp. Funnel wire entrance into electrical barrel eliminates wire strand "hang-up", increases crimping rates and wire termination reliability*. Operating Temperature Range: continuous duty from -67°F to 221°F (-55°C to 105°C).

* Step construction provides ideal locator for proper crimping.



Copper Stranded Wire Only

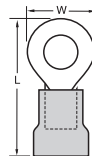
4 WIRE RANGE

.075 Stock

Stud Size		Part Number
12-1/4		761041
1/4-5/16		761042
5/16-3/8		761043
7/16-1/2		761044

Terminals & Splices accept .515" Max. Wire Ins. Dia.

Terminals are NOT Actual Size See Sizing Chart on B-38, B-39



DIMENSIONAL CHART		
Part Number	W	L
761041	0.680"	1.840"
761042	0.680"	1.840"
761043	0.680"	1.840"
761044	0.680"	1.840"

Approved installation tool: See tool chart pages E-2,3,4
 Economy installation tool: LUG-8-2-INS
 See pages E-2 to E-4 for installation tools.

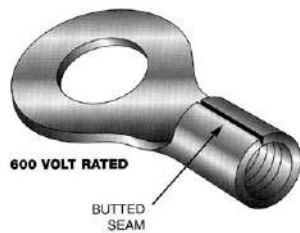


Butted Seam Barrel

22-18 WIRE RANGE








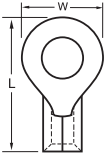






.032 Stock

Stamped out of the finest quality electrolytic copper, the terminal barrel is rolled and the seam is butted. Terminals employ the full barrel length that eliminates costly and time consuming location when crimping. Non-insulated and using a one-piece design, it is the most economical style and is ideal for the greatest variety of applications, where special features are not required.



Copper Solid and Stranded Wire Only



Stud Size	Part Number	Stud Size	Part Number
4-6	 R1A6S	10	 BS1A10
4-6	 R1A6		 Parallel P1A
6-8	 R1A8		 Butt B1A
8-10	 R1A10		 Terminals are NOT Actual Size See Sizing Chart on B-38, B-39
12-1/4	 R1A14S		
1/4-5/16	 R1A56S		
5/16-3/8	 R1A38		
4-6	 BS1A6S Block Spade		
4-6	 BS1A6		
8	 BS1A8		

DIMENSIONAL CHART		
Part Number	W	L
B1A		0.570"
BS1A10	0.314"	0.615"
BS1A6	0.293"	0.619"
BS1A6S	0.246"	0.625"
BS1A8	0.312"	0.642"
R1A10	0.310"	0.697"
R1A14	0.530"	0.943"
R1A14S	0.460"	0.907"
R1A38	0.530"	0.940"
R1A56	0.531"	0.938"
R1A56S	0.460"	0.906"
R1A6	0.254"	0.642"
R1A6S	0.224"	0.545"
R1A8	0.313"	0.702"

Add suffix "M" for 1000 pack
Add suffix "P" for Pro Pack (Quantities vary by Part #)

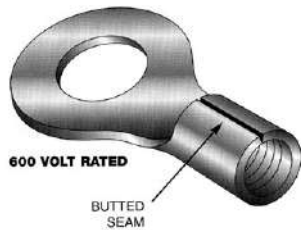
Approved installation tool: See tool chart pages E-2,3,4
Economy installation tools: RAT-NINS, 453, HTS1000
See pages E-2 to E-4 for installation tools.

Butted Seam Barrel

16-14 WIRE RANGE










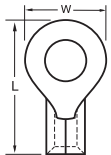




.032 Stock

Stamped out of the finest quality electrolytic copper, the terminal barrel is rolled and the seam is butted. Terminals employ the full barrel length that eliminates costly and time consuming location when crimping. Butted seam is the basic barrel style. Non-insulated and using a one-piece design, it is the most economical style and is ideal for the greatest variety of applications, where special features are not required.



Copper Solid and Stranded Wire Only

Terminals are NOT Actual Size See Sizing Chart on B-38, B-39

Stud Size	Part Number	Stud Size	Part Number
4-6	 R1B6S	4-6	 BS1B6
4-6	 R1B6	10	 BS1B10
6-8	 R1B8		 Parallel P1B
8-10	 R1B10		 Butt B1B
12-1/4	 R1B14S		
1/4-5/16	 R1B56S		
5/16-3/8	 R1B38		
4-6	 BS1B6S		
8	 BS1B8		

DIMENSIONAL CHART		
Part Number	W	L
B1B		0.566"
BS1B10	0.301"	0.611"
BS1B6	0.299"	0.610"
BS1B6S	0.249"	0.619"
BS1B8	0.298"	0.610"
P1B		0.311"
R1B10	0.343"	0.755"
R1B14	0.535"	1.089"
R1B14S	0.468"	0.897"
R1B38	0.529"	0.941"
R1B56	0.525"	0.926"
R1B56S	0.459"	0.899"
R1B6	0.310"	0.703"
R1B6S	0.252"	0.618"
R1B8	0.312"	0.714"



Add suffix "M" for 1000 pack
Add suffix "P" for Pro Pack (Quantities vary by Part #)

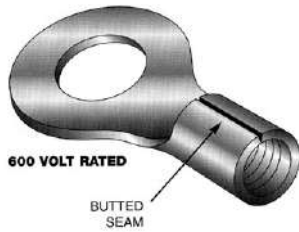
Approved installation tool: See tool chart pages E-2,3,4
Economy installation tools: RAT-NINS, 453, HTS1000
See pages E-2 to E-4 for installation tools.

Butted Seam Barrel

12-10 WIRE RANGE

.040 Stock

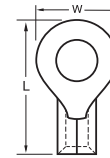
Stamped out of the finest quality electrolytic copper, the terminal barrel is rolled and the seam is butted. Terminals employ the full barrel length that eliminates costly and time consuming location when crimping. Butted seam is the basic barrel style. Non-insulated and using a one-piece design, it is the most economical style and is ideal for the greatest variety of applications, where special features are not required.



Copper Stranded Wire Only

Terminals are NOT Actual Size See Sizing Chart on B-38, B-39

Stud Size	Part Number	Stud Size	Part Number
4-6	R1C6S	4-6	BS1C6
4-6	R1C6	8	BS1C8
6-8	R1C8S	10	BS1C10
6-8	R1C8		Parallel P1C
8-10	R1C10		Butt B1C
12-1/4	R1C14S		
1/4-5/16	R1C56S		
5/16-3/8	R1C38		
7/16-1/2	R1C12		



DIMENSIONAL CHART		
Part Number	W	L
B1C		0.560"
BS1C10	0.325"	0.772"
BS1C6	0.314"	0.731"
BS1C8	0.324"	0.767"
P1C		0.311"
R1C10	0.377"	0.772"
R1C12	0.760"	1.280"
R1C14S	0.530"	0.936"
R1C38	0.592"	1.040"
R1C56S	0.529"	0.936"
R1C6	0.377"	0.765"
R1C6S	0.283"	0.686"
R1C8	0.376"	0.716"
R1C8S	0.295"	0.686"



Add suffix "M" for 1000 pack
Add suffix "P" for Pro Pack (Quantities vary by Part #)

Approved installation tool: See tool chart pages E-2,3,4
Economy installation tools: RAT-NINS, 453, HTS1000
See pages E-2 to E-4 for installation tools.

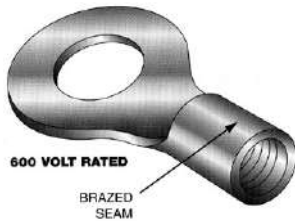
B

Silver Brazed Barrel

22-18 WIRE RANGE

.032 Stock

The silver brazed barrel style terminals and connectors are the basic butted seam style with a brazed barrel seam. Bonded with a special silver brazing alloy, this seam cannot possibly open under any conditions of stress or wire pull. The silver brazed barrel is guaranteed not to split and may be crimped from any direction. It is truly versatile. It can be crimped by many different methods and many different kinds of tooling. Ideal for both difficult-to-crimp solid wires and for stranded wires.



HEAVY DUTY TERMINALS made from 0.50" stock are designed to resist fractures under HEAVY vibration. Here is the best line of terminals for those extra difficult applications where RUGGEDNESS really counts!

Copper Solid and Stranded Wire Only



Stud Size	Part Number	Stud Size	Part Number
4-6	 R2A6S	10	 BS2A10
4-6	 R2A6		 Butt B7A
6-8	 R2A8		 <p>Terminals are NOT Actual Size See Sizing Chart on B-38, B-39</p>
8-10	 R2A10		
12-1/4	 R2A14S		
1/4-5/16	 R2A56S		
5/16-3/8	 R2A38		
4-6	 BS2A6S Block Spade		
4-6	 BS2A6		
8	 BS2A8		

DIMENSIONAL CHART		
Part Number	W	L
B7A	0.660"	0.660"
BS2A10	0.312"	0.645"
BS2A6	0.292"	0.644"
BS2A6S	0.247"	0.626"
BS2A8	0.312"	0.653"
R2A10	0.312"	0.703"
R2A14S	0.460"	0.899"
R2A38	0.529"	0.950"
R2A56	0.530"	0.937"
R2A56S	0.477"	0.835"
R2A6	0.256"	0.646"
R2A6S	0.225"	0.550"
R2A8	0.313"	0.700"
R2A8S	0.264"	0.582"

Add suffix "M" for 1000 pack
Add suffix "P" for Pro Pack (Quantities vary by Part #)

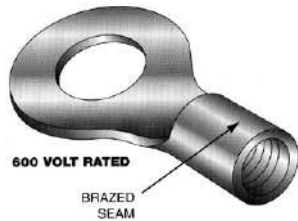
Approved installation tool: See tool chart pages E-2,3,4
Economy installation tools: RAT-NINS, 453, HTS1000
See pages E-2 to E-4 for installation tools.

Silver Brazed Barrel

16-14 WIRE RANGE

.032 Stock

The silver brazed barrel style terminals and connectors are the basic butted seam style with a brazed barrel seam. Bonded with a special silver brazing alloy, this seam cannot possibly open under any conditions of stress or wire pull. The silver brazed barrel is guaranteed not to split and may be crimped from any direction. It is truly versatile. It can be crimped by many different methods and many different kinds of tooling. Ideal for both difficult-to-crimp solid wires and for stranded wires.



HEAVY DUTY TERMINALS made from 0.50" stock are designed to resist fractures under HEAVY vibration. Here is the best line of terminals for those extra difficult applications where RUGGEDNESS really counts!

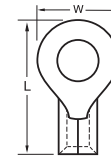
Copper Solid and Stranded Wire Only

Terminals are NOT Actual Size See Sizing Chart on B-38, B-39



Stud Size	Part Number	Stud Size	Part Number
4-6	R2B6S	4-6	BS2B6
4-6	R2B6	10	BS2B10
6-8	R2B8		Butt B7B
8-10	R2B10		
12-1/4	R2B14S		
1/4-5/16	R2B56S		
5/16-3/8	R2B38		
4-6	BS2B6S		
8	BS2B8		

DIMENSIONAL CHART		
Part Number	W	L
B7B		0.656"
BS2B10	0.298"	0.607"
BS2B6	0.299"	0.606"
BS2B6S	0.251"	0.617"
BS2B8	0.313"	0.656"
P7B		0.293"
R2B10	0.344"	0.756"
R2B14S	0.469"	0.896"
R2B38	0.535"	1.084"
R2B56	0.530"	0.944"
R2B56S	0.462"	0.903"
R2B6	0.313"	0.704"
R2B6S	0.260"	0.560"
R2B8	0.313"	0.705"
R2B8S	0.251"	0.606"



Add suffix "M" for 1000 pack
Add suffix "P" for Pro Pack (Quantities vary by Part #)

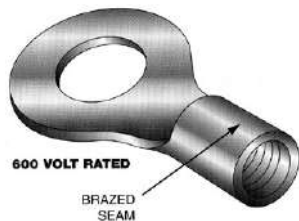
Approved installation tool: See tool chart pages E-2,3,4
Economy installation tools: RAT-NINS, 453, HTS1000
See pages E-2 to E-4 for installation tools.

Silver Brazed Barrel

12-10 WIRE RANGE

.040 Stock

The silver brazed barrel style terminals and connectors are the basic butted seam style with a brazed barrel seam. Bonded with a special silver brazing alloy, this seam cannot possibly open under any conditions of stress or wire pull. The silver brazed barrel is guaranteed not to split and may be crimped from any direction. It is truly versatile. It can be crimped by many different methods and many different kinds of tooling. Ideal for both difficult-to-crimp solid wires and for stranded wires.



HEAVY DUTY TERMINALS made from 0.50" stock are designed to resist fractures under HEAVY vibration. Here is the best line of terminals for those extra difficult applications where RUGGEDNESS really counts!

Terminals are NOT Actual Size See Sizing Chart on B-38, B-39

Copper Stranded Wire Only

Stud Size	Part Number	Stud Size	Part Number
4-6	R2C6S	4-6	BS2C6
4-6	R2C6	8	BS2C8
6-8	R2C8S	10	BS2C10
6-8	R2C8		Butt B7C
8-10	R2C10		
12-1/4	R2C14S		
1/4-5/16	R2C56S		
1/4-5/16	R2C56		
5/16-3/8	R2C38		

DIMENSIONAL CHART		
Part Number	W	L
B7C		0.812"
BS2C10	0.312"	0.724"
BS2C6	0.330"	0.784"
BS2C8	0.315"	0.739"
R2C10	0.377"	0.772"
R2C14S	0.532"	0.933"
R2C38	0.591"	1.038"
R2C56	0.613"	0.984"
R2C56S	0.598"	1.056"
R2C6	0.376"	0.777"
R2C6S	0.282"	0.676"
R2C8	0.376"	0.761"
R2C8S	0.296"	0.688"



Add suffix "M" for 1000 pack
Add suffix "P" for Pro Pack (Quantities vary by Part #)

Approved installation tool: See tool chart pages E-2,3,4
Economy installation tools: RAT-NINS, 453, HTS1000

See pages E-2 to E-4 for installation tools.



Silver Brazed Barrel

8 WIRE RANGE

100
Pack Only

6 WIRE RANGE

.050 Stock

.057 Stock

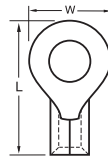
Stud Size	Part Number
8-10	R2E10 R2E10S
12-1/4	R2E14S
5/16-3/8	R2E38
7/16-1/2	R2E50
	Parallel P7E
	Butt B7E

Stud Size	Part Number
12-1/4	R2F14S
1/4-5/16	R2F56
5/16-3/8	R2F38
7/16-1/2	R2F50
	Parallel P7F
	Butt B7F

Terminals are NOT Actual Size See Sizing Chart on B-38,B-39

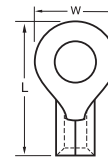
600 Volt Rated

Copper Stranded Wire Only



DIMENSIONAL CHART		
Part Number	W	L
B7E		0.832"
P7E		0.378"
R2E10	0.470"	0.962"
R2E10S	0.377"	0.925"
R2E14S	0.469"	0.951"
R2E38	0.590"	1.078"
R2E50	0.859"	1.336"
R2E8SS	0.377"	0.936"

600 Volt Rated



DIMENSIONAL CHART		
Part Number	W	L
B7F		1.022"
P7F		0.477"
R2F14	0.635"	1.249"
R2F14S	0.451"	1.163"
R2F38	0.634"	1.246"
R2F50	0.827"	1.447"
R2F56	0.645"	1.268"



Approved installation tool: See tool chart pages E-2,3,4
 Economy installation tools: LUG-12-4, LUG-8-4
 See pages E-2 to E-4 for installation tools.

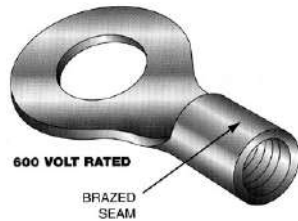
B

Silver Brazed Barrel

4 WIRE RANGE

.075 Stock

The silver brazed barrel style terminals and connectors are the basic butted seam style with a brazed barrel seam. Bonded with a special silver brazing alloy, this seam cannot possibly open under any conditions of stress or wire pull. The silver brazed barrel is guaranteed not to split and may be crimped from any direction. It is truly versatile. It can be crimped by many different methods and many different kinds of tooling. Ideal for both difficult-to-crimp solid wires and for stranded wires.



HEAVY DUTY TERMINALS made from 0.50" stock are designed to resist fractures under HEAVY vibration. Here is the best line of terminals for those extra difficult applications where RUGGEDNESS really counts!

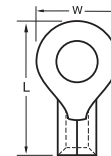
Stud Size		Part Number
12-1/4		R2G14
1/4-5/16		R2G56
5/16-3/8		R2G38
7/16-1/2		R2G50

Terminals are NOT Actual Size See Sizing Chart on B-38, B-39

	Parallel P7G
	Butt B7G

Copper Stranded Wire Only

100 Pack Only



DIMENSIONAL CHART		
Part Number	W	L
B7G		1.123"
P7G		0.547"
R2G10	0.656"	1.329"
R2G10S	0.476"	1.234"
R2G14	0.663"	1.340"
R2G38	0.669"	1.337"
R2G50	0.680"	1.357"
R2G56	0.659"	1.342"



Approved installation tool: See tool chart pages E-2,3,4
Economy installation tools: LUG-12-4, LUG-8-4
See pages E-2 to E-4 for installation tools.

QUICK DISCONNECTS



FEMALE

Wire Range	Tab Size	Non-insulated	P.V.C.	Nylon
22-18	.110X.020	FR1A 110	FR4A 110	FR6A 110
	.187X.020	FR1A 187	FR4A 187	FR6A 187
	.250X.032	FR1A 250	FR4A 250	FR6A 250
16-14	.110X.020	FR1B 110	FR4B 110	FR6B 110
	.187X.020	FR1B 187	FR4B 187	FR6B 187
	.250X.032	FR1B 250	FR4B 250	FR6B 250
12-10	.250X.032	FR1C 250	FR4C 250	FR6C 250

FEATURES: The tin plated brass connector features the rolled edge design for maximum spring-like insertion/withdrawal force. Protruding lip and beveled floor with detent aid in insertion and retention of tab and a wire stop prevents over-insertion of stripped wire. Other sizes and styles available. Check with factory for .187 x .032 size parts.

MALE

Wire Range	Tab Size	Non-insulated	P.V.C.	Nylon
22-18	.187X.020	MT1A 187	MT4A 187	MT6A 187
	.250X.032	MT1A 250	MT4A 250	MT6A 250
16-14	.187X.020	MT1B 187	MT4B 187	MT6B 187
	.250X.032	MT1B 250	MT4B 250	MT6B 250
12-10	.250X.032	MT1C 250	MT4C 250	MT6C 250

FEATURES: Pure copper tab plated with zinc chromate for maximum insertion/withdrawal values affording greater corrosion resistance. Lip for easier insertion. NOTE: Consult factory for .187 x .032 size parts.

Add suffix "M" for 1000 pack

Add suffix "P" for Pro Pack (Quantities vary by Part #)

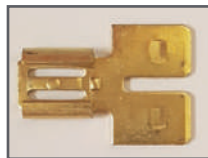
P.V.C. & Nylon disconnects rated -55°C to 105°C

Approved installation tool: See tool chart pages E-2,3,4

Economy installation tools: 453, HTS1000, RAT-NINS,

RAT-DISC (insulated)

DUAL ADAPTERS



Part Number **MMFA** Converts one .250 x .032" male tab to two male tabs. Dual Male-Female Adapter.

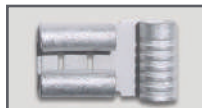
Also Available in .187 x .020 Part Number **MMFA187**

Material: Brass



Copper Stranded Wire Only
(All items listed on this page)

FLAG DISCONNECTS



Wire Range	Tab Size	Non-insulated
22-18	.187X.020	FLFR1A 187†
	.250X.032	FLFR1A 250†
16-14	.187X.020	FLFR1B 187†
	.250X.032	FLFR1B 250†
12-10	.250X.032	FLFR1C 250**††

Add suffix "M" for 1000 pack

Add suffix "P" for Pro Pack
(Quantities vary by Part #)

†Approved installation tool:

See tool chart pages E-2,3,4

††Economy installation tool: HTS2000

* Not CSA or UL Listed

RECEPTACLES

INSULATED TAB RECEPTACLE



Part No. **MDT250** For connecting two .250 x .032 Female Quick Disconnects



FULLY INSULATED FEMALE DISCONNECTS NYLON SINGLE CRIMP

For use with Copper Stranded Wire Only

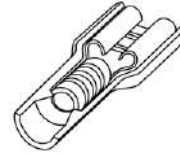
Rated at 105°C



B

Part #	AWG	COLOUR	TAB SIZE
CFR4NA250F	22-18	RED	.250"
CFR4NA187F	22-18	RED	.187"
CFR4NB250F	16-14	BLUE	.250"
CFR4NB187F	16-14	BLUE	.187"
CFR4NC250F	12-10	YELLOW	.250"

600V



Add suffix "M" for 1000 pack

Add suffix "P" for Pro Pack (Quantities vary by Part #)

Approved installation tool: See tool chart pages E-2,3,4

Economy installation tools: RAT-FIDISC, 453, HTS1000



FULLY INSULATED MALE DISCONNECTS NYLON SINGLE CRIMP

For use with Copper Stranded Wire Only

Rated at 105°C



600V

Part #	AWG	COLOUR	TAB SIZE
CM4TNA250F	22-18	RED	.250"
CM4TNA187F	22-18	RED	.187"
CM4TNB250F	16-14	BLUE	.250"
CM4TNB187F	16-14	BLUE	.187"
CM4TNC250F	12-10	YELLOW	.250"



Add suffix "M" for 1000 pack

Add suffix "P" for Pro Pack (Quantities vary by Part #)

Approved installation tool: See tool chart pages E-2,3,4

Economy installation tools: RAT-FIDISC, 453, HTS1000

FULLY INSULATED FEMALE FLAG DISCONNECTS - NYLON SINGLE CRIMP

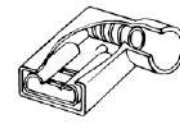
For use with Copper Stranded Wire Only

Rated at 105°C



600V

Part #	AWG	COLOUR	TAB SIZE
*FLFR6A250F	22-18	RED	.250"
*FLFR6B250F	16-14	BLUE	.250"
FLFR6C250F	12-10	YELLOW	.250"



Add suffix "M" for 1000 pack

Add suffix "P" for Pro Pack (Quantities vary by Part #)

Approved installation tool: See tool chart pages E-2,3,4

Economy installation tools: RAT-FLAG (Red, Blue)

FULLY INSULATED FEMALE FLAG DISCONNECTS - NYLON DOUBLE CRIMP

For use with Copper Stranded Wire Only

Rated at 105°C



600V

Part #	AWG	COLOUR	TAB SIZE
*FLFR6A250F	22-18	RED	.250"
*FLFR6B250F	16-14	BLUE	.250"
FLFR6C250F	12-10	YELLOW	.250"



Add suffix "M" for 1000 pack

Add suffix "P" for Pro Pack (Quantities vary by Part #)

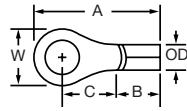
Approved installation tool: See tool chart pages E-2,3,4

Economy installation tools: -RAT-FLAG (Red, Blue)



Copper Stranded Wire Only

TYPE 9 HIGH TEMPERATURE TERMINALS



One piece, steel construction, nickel plated for protection. Capable of providing reliable circuitry in temperature ranges up to 900 degrees Fahrenheit. Structural features of all Type 9 terminals are identical to the Type 1, which proves that they will provide the highest quality connection.

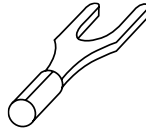
RING TERMINALS

BUTTED SEAM

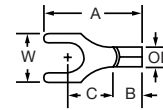
Rated at 600V

Part #	Copper Cond. Range	Stud Size	Stock Size (in)	Approx. Dimen. in Inches				
				A	W	C	B	OD
R9A6S	22-18	6	0.028	0.66	0.290	0.260	0.25	0.133
R9A8	22-18	8	0.028	0.66	0.324	0.250	0.25	0.133
R9A10	22-18	10	0.028	0.66	0.324	0.250	0.25	0.133
R9A14S	22-18	1/4	0.028	0.89	0.470	0.405	0.25	0.133
R9B6S	16-14	6	0.030	0.66	0.295	0.260	0.25	0.152
R9B8	16-14	8	0.030	0.71	0.324	0.295	0.25	0.152
R9B10	16-14	10	0.030	0.71	0.340	0.295	0.25	0.152
R9B14S	16-14	1/4	0.030	0.89	0.470	0.405	0.25	0.152
R9C6S	12-10	6	0.038	0.72	0.342	0.297	0.25	0.217
R9C8	12-10	8	0.038	0.72	0.342	0.297	0.25	0.217
R9C10	12-10	10	0.038	0.72	0.342	0.297	0.25	0.217
R9C14S	12-10	1/4	0.038	0.99	0.558	0.469	0.25	0.217
R9C56	12-10	5/16	0.038	0.99	0.558	0.469	0.25	0.217
R9C38	12-10	3/8	0.038	0.99	0.558	0.469	0.25	0.217

For use with Copper Solid and Stranded Wire Only



SPADE TERMINALS

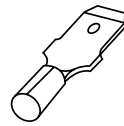
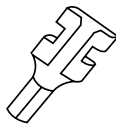


BUTTED SEAM

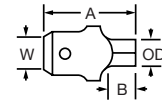
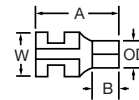
Rated at 600V

Part #	Copper Cond. Range	Stock Size (in)	A	W	C	B	OD	
S9A10	22-18	10	0.028	0.73	0.312	0.321	0.25	0.07
S9B10	16-14	10	0.030	0.73	0.344	0.303	0.25	0.09
S9C10	12-10	10	0.038	0.72	0.35	0.294	0.25	0.13

For use with Copper Solid and Stranded Wire Only



MALE AND FEMALE DISCONNECTS



BUTTED SEAM

Rated at 600V

Part #	Copper Cond. Range	Stock Size (in)	A	W	B	OD
FR9B250	16-14	.032 x .250	0.650	0.30	0.25	0.133
MT9B250	16-14	.032 x .250	0.690	0.25	0.25	0.152
FR9C250	12-10	.032 x .250	0.660	0.30	0.25	0.175
MT9C250	12-10	.032 x .250	0.705	0.25	0.25	0.217

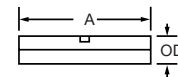
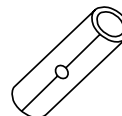
For use with Copper Stranded Wire Only

BUTT CONNECTORS

BUTTED SEAM

Rated at 600V

Part #	Copper Cond. Range	A	OD
B9A	22-18	0.560	0.133
B9B	16-14	0.560	0.152
B9C	12-10	0.625	0.212



For use with Copper Solid and Stranded Wire Only

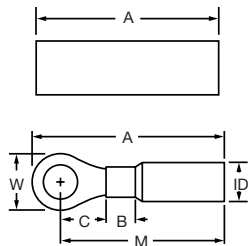
Add Suffix "M" for 1000 pack
Standard Pack - 100 pack

Installing Tools (22-10AWG): RAT-NINS, HTS1000, 453, RHT-1992

B

PRE-INSULATED HEAT SHRINKABLE TERMINALS AND SPLICES

Terminals are NOT Actual Size See Sizing Chart on B-38, B-39



These heat shrinkable products provide a tough, environmentally sealed wire termination. These terminals and splices insulate and protect the electrical connections from wire pull-outs, abrasions and mechanical abuse. They also resist water, salt and other contaminants.

B



RING TERMINALS

BUTTED SEAM

Rated at 600V, 105°C

Part #	Wire Size	Stud Size	Colour Insul.	Approx. Dimen. in Inches			
				A	W	C	M
761648	16-14	8	Blue	1.150	0.310	0.144	0.932
761649	16-14	10	Blue	1.275	0.394	0.225	1.035
761650	16-14	1/4	Blue	1.306	0.474	0.284	1.080
761651	16-14	3/8	Blue	1.548	0.706	0.414	1.207
761652	12-10	10	Yellow	1.417	0.394	0.225	1.035
761653	12-10	1/4	Yellow	1.467	0.474	0.284	1.080
761654	12-10	3/8	Yellow	1.829	0.706	0.414	1.207

For use with Copper Solid and Stranded Wire Only



FEMALE DISCONNECTS (FOR .250 X .032 TABS)

BUTTED SEAM

Rated at 600V, 105°C

Part #	Wire Size	Stud Size	Colour Insul.	Approx. Dimen. in Inches	
				A	W
761655	16-14		Blue	1.14	0.253

For use with Copper Stranded Wire Only



MALE DISCONNECTS

BUTTED SEAM

Rated at 600V, 105°C

761656	16-14		Blue	1.227	0.25
--------	-------	--	------	-------	------

For use with Copper Stranded Wire Only



BUTT CONNECTORS

SEAMLESS

Rated at 600V, 105°C

Part #	Copper Cond. Range	Stock Size (in)	Colour Code (ins)	Max. Insul. Diam.	A	ID
761244	22-18	0.03	Red	0.12	1.50	0.055
761245	16-14	0.03	Blue	0.155	1.50	0.09
761246	12-10	0.04	Yellow	0.215	1.625	0.142

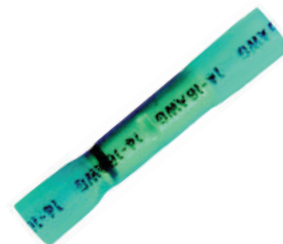
For use with Copper Solid and Stranded Wire Only

*Consult factory for other possible sizes and styles.

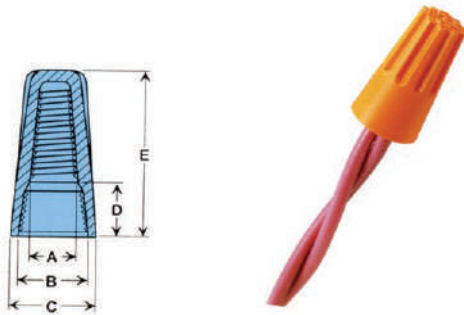
Add Suffix "B" for 500 pcs bulk pack

Standard Pack – 25 pcs/pack

Installing Tools: RAT-HS, Heat Shrink Gun (see page E-7), or Butane Mini Torch (see page E-7)













SCREW-ON WIRE CONNECTORS



DIMENSIONS:

Model	A		B		C		D		E	
	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
TN29	3.80	0.150	6.70	0.264	8.60	0.339	5.80	0.228	15.20	0.598
TN30	4.10	0.161	7.00	0.276	9.80	0.386	5.90	0.232	17.60	0.693
TN31	5.00	0.197	9.90	0.39	12.20	0.480	7.80	0.307	22.00	0.866
TN33	6.00	0.236	11.20	0.441	14.00	0.551	7.90	0.311	24.00	0.945
TN35	7.50	0.295	13.00	0.511	16.40	0.645	9.15	0.360	26.50	1.042

Model	Colour	Approval		Wire Range & Rating	Packing
TN29C	Grey			300 Volt Temp 105°C (221°F) No. 22 – No. 14 AWG Max. 1 #16 w/1 #18 w/1 #20 Min. 2 #22	Box of 100
TN29M	Grey				Bag of 1000
TN29J	Grey				Jar of 500
TN30C	Blue			300 Volt Temp 105°C (221°F) No. 22 – No. 14 AWG Max. 3 #16 Min. 2 #22	Box of 100
TN30M	Blue				Bag of 1000
TN30J	Blue				Jar of 350
TN31C	Orange			600 Volt Max.* Temp 105°C (221°F) No. 22 – No. 14 AWG Max. 4 #16 w/1 #20 Min. 1 #18 w/1 #20	Box of 100
TN31D	Orange				Bag of 500
TN31J	Orange				Jar of 500
TN33C	Yellow			600 Volt Max.* Temp 105°C (221°F) No. 22 – No. 10 AWG Max. 1 #10 w/2 #14 w/1 #16 Min. 3 #20	Box of 100
TN33D	Yellow				Bag of 500
TN33J	Yellow				Jar of 400
TN35L	Red			600 Volt Max.* Temp 105°C (221°F) No. 22 – No. 8 AWG Max. 3 #10 Min. 3 #18	Box of 50
TN35D	Red				Bag of 500
TN35J	Red				Jar of 250

* 1000 Volt Max. in lighting fixtures and signs

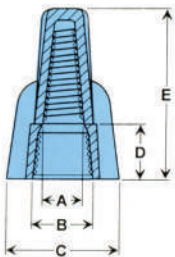
- UL 486C Listed and CSA Certified
- Plastic cap molded of tough thermoplastic UL 94V-2 flame-retardant material
- Five colour-coded to industry standards
- Socket tools are available for easy installation of wire connectors.



Copper Solid and Stranded Wire Only

WINGED WIRE CONNECTORS

B



DIMENSIONS:

Model	A		B		C		D		E	
	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
WN734D	7.20	0.283	11.60	0.457	18.30	0.720	9.20	0.362	29.00	1.142
WN735D	9.00	0.354	13.50	0.531	23.00	0.906	9.60	0.378	31.80	1.252
WN736D	10.00	0.394	14.90	0.587	25.50	1.000	10.00	0.394	33.30	1.311

Model	Colour	Approval		Wire Range & Rating	Packing
WN734D	Tan			600 Volt / 300 Volt* Temp 105°C (221°F) No. 22 – No. 8 AWG Max. 3 #10 Min. 3 #22	Bag of 500
WN734J	Tan				Jar of 400
WN735D	Red			600 Volt / 300 Volt* Temp 105°C (221°F) No. 18 – No. 8 AWG Max. 5 #12 Min. 3 #16	Bag of 500
WN735J	Red				Jar of 250
WN736D	Grey			600 Volt Max.* Temp 105°C (221°F) No. 22 – No. 14 AWG Max. 4 #16 w/1 #20 Min. 1 #18 w/1 #20	Bag of 500
WN736J	Grey				Jar of 175

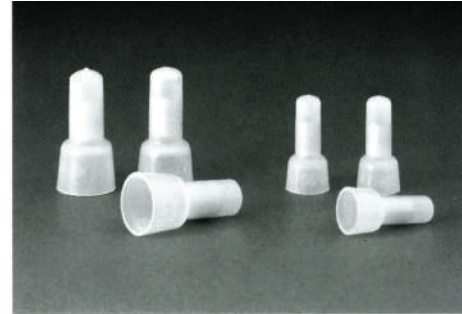
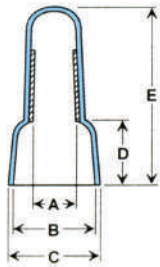
* 1000 Volt Max. in lighting fixtures and signs

- UL 486C Listed and CSA Certified
- Plastic cap molded of tough thermoplastic UL 94V-2 flame-retardant material
- Five colour-coded to industry standards
- Socket tools are available for easy installation of wire connectors.



Copper Solid and Stranded Wire Only




CLOSED-END CONNECTORS



B

DIMENSIONS:

Model	A		B		C		D		E	
	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
NPAA1	2.6	0.102	6.2	0.244	7.8	0.307	6.2	0.244	18.0	0.709
NPAB1	3.0	0.118	7.9	0.311	9.5	0.374	7.2	0.283	19.7	0.776
NPAC1	4.0	0.157	10.5	0.413	12.5	0.492	9.6	0.378	25.5	1.004

Model	Colour	Approval	Wire Range & Rating	Packing
NPAA1	Nature		300 Volt Temp 105°C (221°F) No. 22 – No. 18 AWG Max. 2 #20 w/1 #18 Min. 2 #22	Box of 100
NPAAM	Nature			Bag of 1000
NPAB1	Nature		300 Volt Temp 105°C (221°F) No. 22 – No. 14 AWG Max. 1 #18 w/1 #14 Min. 2 #22	Box of 100
NPAB1M	Nature			Bag of 1000
NPAB1J	Nature			Jar of 350
NPAC1	Nature		300 Volt Temp 105°C (221°F) No. 22 – No. 10 AWG Max. 3 #18 w/1 #12 Min. 2 #22 w/2 #18	Box of 50
NPAC1M	Nature			Bag of 500
NPAC1J	Nature			Jar of 250

- Housing material: Polyamide 66 (Nylon 66), UL 94V-2 self-extinguishing
- Crimping tools: Hand Tools – RAT-CE



Copper Stranded Wire Only

INSULATED SINGLE FERRULES, DIN 46228/4

For Copper Stranded Wire Only

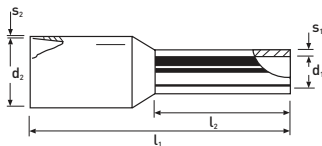
Ferrules are a convenient device used for termination of stranded wires. Ferrules eliminate the risk of fraying single strands and consequential accidental contacts and short circuits. They also protect the wire from damage when using compression screw, spring, or split-bolt type connectors.



Rated at 600V Max, 105°C

Polypropylene Insulated Ferrules

Colour DIN	Part-No.	AWG	Size mm ²	d1	d2	l1	l2	s1	s2	Packing Unit	Approved Tool V Series	CRIMP TOOLS		
												RAT-FER	SPR-FER	RAT-FER2
	FER-22-8D	22	0.50	1.00	2.60	14.00	8.00	0.15	0.25	500	V915	●	●	
	FER-22-6D	22	0.50	1.00	2.60	12.00	6.00	0.15	0.25	500	V915	●	●	
	FER-20-8D	20	0.75	1.20	2.80	14.00	8.00	0.15	0.25	500	V915	●	●	
	FER-20-12D	20	0.75	1.20	2.80	18.00	12.00	0.15	0.25	500	V915	●	●	
	FER-18-8D	18	1.00	1.40	3.00	14.00	8.00	0.15	0.25	500	V915	●	●	
	FER-18-12D	18	1.00	1.40	3.00	18.00	12.00	0.15	0.25	500	V915	●	●	
	FER-16-8D	16	1.50	1.70	3.50	14.00	8.00	0.15	0.25	500	V915	●	●	
	FER-16-10D	16	1.50	1.70	3.50	16.00	10.00	0.15	0.25	500	V915	●	●	
	FER-14-8D	14	2.50	2.20	4.20	14.00	8.00	0.15	0.25	500	V915	●	●	
	FER-14-12D	14	2.50	2.20	4.20	18.00	12.00	0.15	0.25	500	V915	●	●	
	FER-12-10D	12	4.00	2.80	4.80	17.00	10.00	0.20	0.30	500	V915	●	●	
	FER-12-12D	12	4.00	2.80	4.80	20.00	12.00	0.20	0.30	500	V915	●	●	
	FER-10-12C	10	6.00	3.50	6.30	20.00	12.00	0.20	0.30	100	V925		●	●
	FER-8-12C	8	10.00	4.50	7.60	22.00	12.00	0.20	0.40	100	V925		●	●



Technical Information

Insertion Funnel is made of Polypropylene and is heatresistant up to 105 Deg. C. Material: E-Copper, Surface electro tinned. Minimum Coating Thickness 3µm. Rated at 600V Max Tolerances: after part 4

See Page E-5 for tools.

FERRULES IN ASSORTMENT BOXES



Assortment Box with Insulated Single Ferrules



Part-No.	AWG	Content			Colour DIN	Approved Tool V Series	CRIMP TOOLS		
		Quantity	mm ²	l2			RAT-FER	SPR-FER	RAT-FER2
FER-PAC111	Type 1	50	0.50	8		V915	●	●	
		100	0.75	8		V915	●	●	
		100	1.00	8		V915	●	●	
		100	1.50	8		V915	●	●	
		50	2.50	8		V915	●	●	

See Page E-5 for tools.

Assortment Box with Non-insulated Ferrules



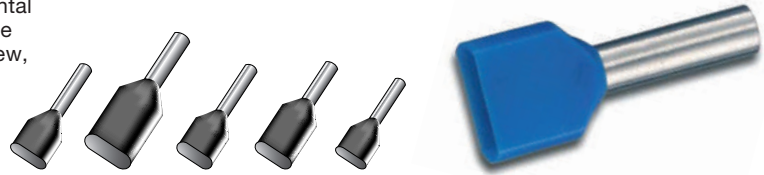
Part-No.	AWG	Content			Size	Approved Tool V Series	CRIMP TOOLS		
		Quantity	mm ²	l2			RAT-FER	SPR-FER	RAT-FER2
FER-PAC050	Type 2	500	0.50	6	0.50-2.50 mm ²	V915	●	●	
		500	0.75	6		V915	●	●	
		400	1.00	6		V915	●	●	
		300	1.50	7		V915	●	●	
		200	2.50	7		V915	●	●	

See Page E-5 for tools.

For Copper Stranded Wire Only

INSULATED TWIN FERRULES

Ferrules are a convenient device used for termination of stranded wires. Ferrules eliminate the risk of fraying single strands and consequential accidental contacts and short circuits. They also protect the wire from damage when using compression screw, spring, or split-bolt type connectors.



B

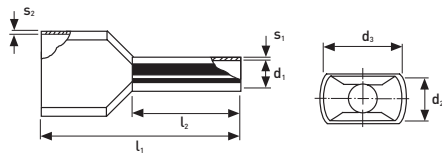
Polypropylene Insulated Twin Ferrules

Rated at 600V Max, 105°C

Colour DIN	Part-No.	AWG	Size mm ²	d1	d2	d3	l1	l2	s1	s2	Pack Unit	Approved Tool V Series	CRIMP TOOLS		
													RAT-FER	SPR-FER	RAT-FER2
	FER2-22-8D	2 x 22	2 x 0.50	1.40	2.50	4.70	15.00	8.00	0.15	0.25	500	V915	●		
	FER2-20-8D	2 x 20	2 x 0.75	1.70	2.80	5.00	15.00	8.00	0.15	0.25	500	V915	●		
	FER2-20-10D	2 x 20	2 x 0.75	1.70	2.80	5.00	17.00	10.00	0.15	0.25	500	V915	●		
	FER2-18-8D	2 x 18	2 x 1.00	1.95	3.40	5.40	15.00	8.00	0.15	0.30	500	V915	●		
	FER2-18-10D	2 x 18	2 x 1.00	1.95	3.40	5.40	17.00	10.00	0.15	0.30	500	V915	●		
	FER2-16-8D	2 x 16	2 x 1.50	2.20	3.60	6.60	16.00	8.00	0.15	0.30	500	V915	●	●	
	FER2-16-12D	2 x 16	2 x 1.50	2.20	3.60	6.60	20.00	12.00	0.15	0.30	500	V915	●	●	
	FER2-14-10B	2 x 14	2 x 2.50	2.80	4.20	7.80	18.50	10.00	0.20	0.30	250	V915		●	
	FER2-14-13B	2 x 14	2 x 2.50	2.80	4.20	7.80	21.50	13.00	0.20	0.30	250	V915		●	
	FER2-12-12C	2 x 12	2 x 4.00	3.70	4.90	8.80	23.00	12.00	0.20	0.40	100	V925			
	FER2-10-14C	2 x 10	2 x 6.00	4.80	6.90	10.00	26.00	14.00	0.20	0.40	100	V925			
	FER2-8-14C	2 x 8	2 x 10.00	6.40	7.20	13.00	26.00	14.00	0.20	0.40	100	V940			●
	FER2-6-14L	2 x 6	2 x 16.00	8.20	9.60	18.40	30.00	14.00	0.20	0.40	50	V940			●

See Page E-5 for tools.

For Copper Stranded Wire Only



Technical Information

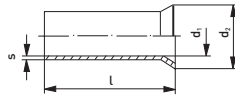
Insertion Funnel is made of Polypropylene and is heatresistant up to 105 Deg. C. Material: E-Copper, Surface electro tinned. Minimum Coating Thickness 3µm. Rated at 600V Max
Tolerances: after part 4

NON INSULATED FERRULES DIN 46228/1



Technical Information

Material: E-Copper,
Surface electro tinned.
Minimum Coating Thickness 3µm.
Rated at 600V Max
Tolerances: after part 1



B

Non-Insulated Ferrules

Rated at 600V

Part-No.	AWG	Size mm ²	d1	d2	l	s	Packing Unit	Approved Tool V Series	CRIMP TOOLS			
									RAT-FER	SPR-FER	RAT-FER2	RAT-FER2XL
FERN-20-10M	20	0.75	1.20	2.30	10.00	0.15	1	V915	●	●		
FERN-18-10M	18	1.00	1.40	2.50	10.00	0.15	1	V915	●	●		
FERN-16-10M	16	1.50	1.70	2.80	10.00	0.15	1	V915	●	●		
FERN-14-10M	14	2.50	2.20	3.40	10.00	0.15	1	V915	●	●		
FERN-12-12M	12	4.00	2.80	4.00	12.00	0.20	1	V915	●	●		
FERN-10-12B	10	6.00	3.50	4.70	10.00	0.20	250	V915	●	●	●	
FERN-8-12B	8	6.00	3.50	4.70	12.00	0.20	250	V925	●	●	●	
FERN-6-12B	6	10.00	4.50	5.80	12.00	0.20	250	V925			●	
FERN-4-12B	4	25.00	7.30	9.50	12.00	0.20	250	V940				●
FERN-2-12C	2	35.00	8.30	11.00	12.00	0.20	100	V940				●
FERN-1/0-18C	1/0	50.00	10.30	13.00	18.00	0.30	100	V945				
FERN-2/0-25C	2/0	70.00	12.50	15.00	25.00	0.40	100	V945				
FERN-3/0-25L	3/0	95.00	14.50	17.00	25.00	0.40	50	V945				
FERN-4/0-32L	4/0	120.00	16.50	19.00	32.00	0.50	50	V950 tool w/V953 die				

For Copper Stranded Wire Only

See Page E-5 for tools.

INSULATED FERRULES IN CUT-STRIP FORM

Technical Information

Insertion Funnel is made of Polypropylene and is heatresistant up to 105 Deg. C.
Material: E-Copper,
Surface electro tinned.
Minimum Coating Thickness 3µm.
Rated at 600V Max
Tolerances: after part 4



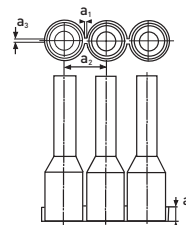
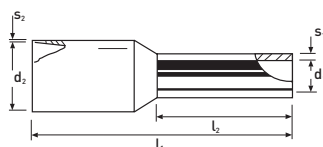
Cut-Strips Polypropylene Insulated Ferrules

Rated at 600V Max, 105°C

Colour DIN	Part-No.	AWG	Size mm ²	d1	d2	l1	l2	s1	s2	a1	a2	a3	a4	Packing Unit	Approved Tool
	FERSTR-22WH	22	0.50	1.00	2.60	14.00	8.00	0.15	0.30	0.20	3.60	0.25	1.50	500(10x50)	SPR-JOK
	FERSTR-20GR	20	0.75	1.20	2.80	14.00	8.00	0.15	0.30	0.20	3.60	0.25	1.50	500(10x50)	SPR-JOK
	FERSTR-18RD	18	1.00	1.40	3.00	14.00	8.00	0.15	0.30	0.20	4.20	0.25	1.50	500(10x50)	SPR-JOK
	FERSTR-16BK	16	1.50	1.70	3.50	14.00	8.00	0.15	0.30	0.20	4.20	0.25	1.50	500(10x50)	SPR-JOK
	FERSTR-14BL	14	2.50	2.20	4.20	14.00	8.00	0.15	0.30	0.20	5.00	0.25	1.50	500(10x50)	SPR-JOK

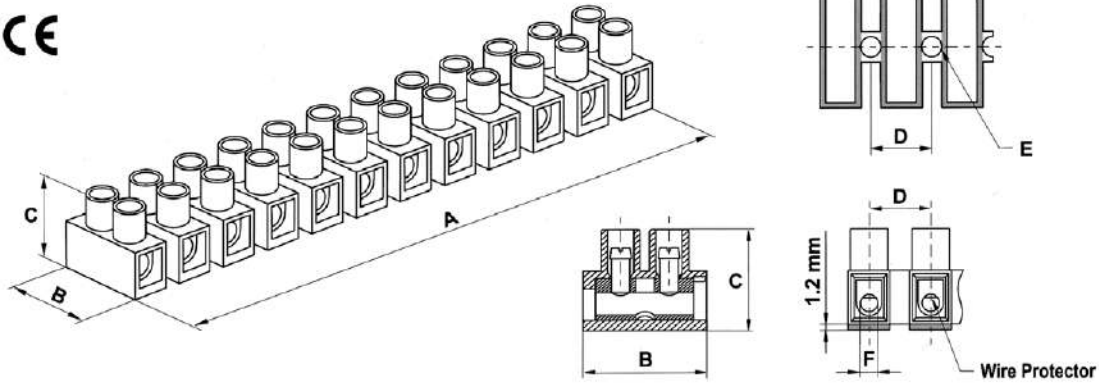
For Copper Stranded Wire Only

See Page E-7 for tools.



TERMINAL STRIPS (H TYPE)

(POLYAMIDE 66, 1.5-4.0 mm² / 2.5-6.0 mm²)



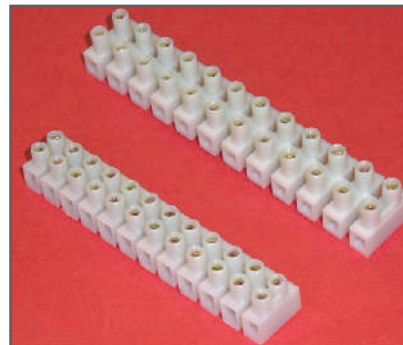
B

DIMENSIONS:

Model	Clamping Area	Wire Range (Cu, AWG)	Screw	Dimensions (mm/inch)							Packing
				Unit	A	B	C	D	E	F	
TSPA8HDS-12	1.5 mm ²	22-12 Sol/Str	M2.6x5	(mm)	96.20	17.00	14.50	8.00	2.90	2.8±0.1	50 Pcs/Bag
				(in)	3.79	0.67	0.57	0.32	0.11	0.11	500 Pcs/Ctn
TSPA10HDS-12	2.5 mm ²	22-12 Sol/Str 10 Sol	M3.0x6	(mm)	117.5	20.20	17.00	10.00	3.60	3.4±0.1	50 Pcs/Bag
				(in)	4.63	0.80	0.67	0.39	0.14	0.13	500 Pcs/Ctn

Description:

- **Base:** With 1.2 mm raised base
- **Housing Material:** Polyamide 66 (Nylon 66), UL 94V-2
- **Temperature Rating:** 105°C (UL), -30°C to T110°C (VDE)
- **Terminal Insert:** Brass metal alloy, nickel plated
- **Wire Protector (DS):** Stainless spring steel
- **Screw:** Zinc plated
- **Stripping Length:** 5.0 mm/0.20 inch for PA8; 6.5 mm/0.25 inch for PA10
- **Poles Available:** 12 poles



For Copper Stranded Wire Only

APPROVALS:

Model	Canada	U.S.A.	Germany
TSPA8HDS-12	600V, 20A #22 - #12	300V, 20A #22 - #12	450V, 17.5A 1.5 mm ²
TSPA10HDS-12	600V, 20A #22 - #12	300V, 20A #22 - #12	450V, 24A 2.5 mm ²

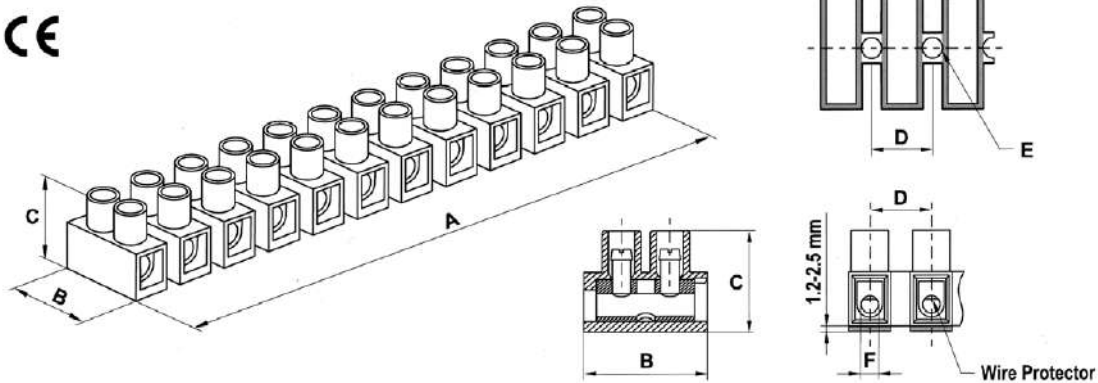


TERMINAL STRIPS (H TYPE)

(POLYAMIDE 66, 4.0-10.0 mm² / 10.0-16.0 mm²)



B

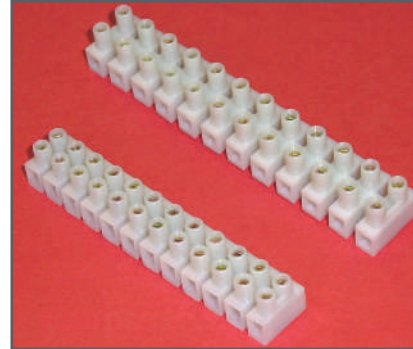


DIMENSIONS:

Model	Clamping Area	Wire Range (Cu, AWG)	Screw	Dimensions (mm/inch)							Packing
				Unit	A	B	C	D	E	F	
TSPA12HDS-12	4.0 mm ²	22-10 Sol/Str	M3.5x7	(mm)	140.7	23.80	19.00	12.00	3.90	4.2±0.1	40 Pcs/Bag
				(in)	5.40	0.94	0.75	0.47	0.15	0.15	400 Pcs/Ctn
TSPA14HDS-12	6.0 mm ²	20-8 Sol/Str	M4.0x9	(mm)	158.0	25.60	25.20	13.50	4.40	5.0±0.1	25 Pcs/Bag
				(in)	6.22	1.01	0.99	0.53	0.17	0.19	250 Pcs/Ctn

Description:

- **Base:** With 1.2-2.5 mm raised base
- **Housing Material:** Polyamide 66 (Nylon 66), UL 94V-0
- **Temperature Rating:** 105°C (UL), -30°C to T110°C (VDE)
- **Terminal Insert:** Brass metal alloy, nickel plated
- **Wire Protector (DS):** Stainless spring steel
- **Screw:** Zinc plated
- **Stripping Length:** 7.0 mm/0.27 inch for PA12; 9.0 mm/0.35 inch for PA14
- **Poles Available:** 12 poles



For Copper Stranded Wire Only

APPROVALS:

Model	Canada/U.S.A.	Germany
TSPA12HDS-12	300V, 35A #22 - #10	500V, 41A 6 mm ²
TSPA14HDS-12	600V, 50A #22 - #8	500V, 57A 10 mm ²



TERMINAL KITS



MK 42

These kits come with a variety of terminals and connectors for industrial, commercial, maintenance, construction and general use purposes. These kits are packaged in a rugged, heavy duty, hinged metal box.

Part #	Description
MK40	Metal Kit Box with Scoop Compartments
MK41	Metal Kit Box with Scoop Compartments and HTS-1000 Crimping Tool
MK42	Metal Kit Box with Scoop Compartments, HTS-1000 Crimping Tool and 500 Assorted Vinyl Insulated Terminals and Connectors
MK43	Metal Kit Box with Scoop Compartments, HTS-1000 Tool and 1000 Assorted Non-Insulated Terminals and Connectors
MK52	Large Metal Kit Box with Scoop Compartments, RAT-PVC Tool, 1 bag L-7509C, 1 IPWM-1 Marker Book and Assortment of 500 PVC Terminals



PK 55

These PK-50 maintenance and repair kits consist of 180 vinyl insulated terminals and connectors in 18 popular styles. All in a pilfer-proof clear plastic package.

Part #	Description
PK50NT	Kit, No Tool
PK55	HVAC/R Maintenance and Repair Kit, 18 popular items
PK57	Hi-Temp Terminal Kit, 12 popular Items (900°F)



PK 57

TERMINAL KIT CONTENTS

MK 42	MK 43	MK 52	PK 50NT	PK 55	PK 57
B4A	B1A	R4A6S	B4A	B4A	B9A
B4B	B1B	R4A10	B4B	B4B	B9B
B4C	B1C	R4B6S	B4C	B4C	B9C
BS4A8	BS1A8	R4B10	BS4A10	BS4B10	FR9B250
BS4B10	BS1B8	R4B14S	BS4B10	BS4C10	FR9C250
BS4C10	BS1B10	R4B38	BS4C10	FLFR1B250	MT9B250
FR4B250	BS1C8	R4C6	FR4A250	FR4B250	R9A10
MT4B250	BS1C10	R4C10	FR4B250	FR4C250	R9B10
NPAB1	FR1B250	R4C14S	FR4C250	FR6B250	R9C10
NPAC1	MT1B250	R4C38	MT4A250	FR9B250	S9A10
R4A6S	R1A6S	BS4A8	MT4B250	MMFA	S9B10
R4A10	R1A10	BS4B10	MT4C250	NPAB1	S9C10
R4B6S	R1B6S	BS4C10	NPAB1	NPAC1	
R4B10	R1B10	NPAB1	NPAC1	PG4B	
R4B14S	R1B14S	NPAC1	R4A10	R4B10	
R4B38	R1B38	B4A	R4B10	R4C10	
R4C6	R1C6	B4B	R4B14S	R9B10	
R4C10	R1C10	B4C	R4C10	R9C10	
R4C14S	R1C14S	FR4B250			
R4C38	R1C38	MT4B250			
		RAT-PVC			
		L-7500C			
		IPWM-1			

22-14 AWG Solid and Stranded wire.
12-10 AWG and all Male/Female Disconnects Stranded wire.

TERMINALS & CONNECTORS (K-SPEC® SERIES)



Crimp 'N' Shrink Butt Connectors (K-Spec® Series)

600V Rating, 105°C, Copper



22-18GA



Approximate length of tubing:
1.250"

691244	5 pk
561244	100 pk
561244J	300 pcs/Jar
561244D	500 pk

16-14GA



Approximate length of tubing:
1.250"

691245	5 pk
561245	100 pk
561245J	300 pcs/Jar
561245D	500 pk

12-10GA



Approximate length of tubing:
1.500"

691246	5 pk
561246	100 pk
561246J	200 pcs/Jar
561246D	500 pk



B

PVC Insulated Butt Connectors (K-Spec® Series)

300V Rating, 75°C, Brass



22-18GA



691231	11 pk
561231	100 pk
561231D	500 pk

16-14GA



691232	10 pk
561232	100 pk
561232D	500 pk

12-10GA



691233	7 pk
561233	100 pk
561233D	500 pk

PVC Insulated Ring Terminals (K-Spec® Series)

600V Rating, 75°C, Copper



22-18GA



Stud Size #6	Stud Size #8	Stud Size #10	Stud Size 1/4"	Stud Size 5/16"	Stud Size 3/8"
691000	691002	691003	691004	691005	691006
100 pk	100 pk	11 pk	100 pk	100 pk	100 pk
561000D	561002D	561003D	561004D	561005D	561006D
500 pk	500 pk	500 pk	500 pk	500 pk	500 pk

16-14GA



Stud Size #6	Stud Size #8	Stud Size #10	Stud Size 1/4"	Stud Size 5/16"	Stud Size 3/8"
691016	691018	691019	691020	691021	691022
11 pk	11 pk	10 pk	9 pk	100 pk	7 pk
561016	561018	561019	561020	561021	561022
100 pk	100 pk	100 pk	100 pk	100 pk	100 pk
561016D	561018D	561019D	561020D	561021D	561022D
500 pk	500 pk	500 pk	500 pk	500 pk	500 pk

12-10GA



Stud Size #6	Stud Size #8	Stud Size #10	Stud Size 1/4"	Stud Size 5/16"
691032	561033	691034	691035	561036
7 pk	100 pk	7 pk	6 pk	100 pk
561032	561033D	561034	561035	561036D
100 pk	500 pk	100 pk	500 pk	100 pk
561032D		561034D	561035D	561036D
500 pk		500 pk	500 pk	500 pk



Stud Size 3/8"	Stud Size 1/2"
691037	691038
6 pk	6 pk
561037	561038
100 pk	100 pk
561037D	561038D
500 pk	500 pk

Crimp Tools can be found on pages E-6 – E-7

TERMINALS & CONNECTORS (K-SPEC® SERIES)



PVC Insulated Spade/Fork Terminals (K-Spec® Series)

600V Rating, 75°C, Copper



Crimp Tools can be found on pages E-6 – E-7

22-18GA



Stud Size #6
561048 100 pk
561048D 500 pk



Stud Size #8
561049 100 pk
561049D 500 pk



Stud Size #10
561050 100 pk
561050D 500 pk

16-14GA



Stud Size #6
561061 100 pk
561061D 500 pk



Stud Size #8
561062 100 pk
561062D 500 pk



Stud Size #10
691063 9 pk
561063 100 pk
561063D 500 pk



Stud Size 1/4"
561064 100 pk
561064D 500 pk

12-10GA



Stud Size #6
561074 100 pk
561074D 500 pk



Stud Size #8
561075 100 pk
561075D 500 pk



Stud Size #10
691076 7 pk
561076 100 pk
561076D 500 pk



Stud Size 1/4"
561077 100 pk
561077D 500 pk

Fully Insulated Quick Disconnects/Slide Connectors (K-Spec® Series)

300V Rating, Brass, Nylon (105°C). PVC (75°C)



22-18GA



Female quick disconnect, Fully Insulated (Nylon). Tab Size .250" x .032"
561354 100 pk
561354D 500 pk



Male quick disconnect, Fully Insulated (Nylon). Tab Size .250" x .032"
561353 100 pk
561353D 500 pk



Female quick disconnect, Fully Insulated (PVC). Tab Size .250" x .032"
561345 100 pk
561345D 500 pk

16-14GA



Female quick disconnect, Fully Insulated (Nylon). Tab Size .250" x .032"
561357 100 pk
561357D 500 pk



Male quick disconnect, Fully Insulated (Nylon). Tab Size .250" x .032"
561358 100 pk
561358D 500 pk



Female quick disconnect, Fully Insulated (PVC). Tab Size .250" x .032"
561346 100 pk
561346D 500 pk

12-10GA



Female quick disconnect, Fully Insulated (Nylon). Tab Size .250" x .032"
561623 100 pk
561623D 500 pk



Male quick disconnect, Fully Insulated (Nylon). Tab Size .250" x .032"
561621 100 pk
561621D 500 pk



Female quick disconnect, Fully Insulated (PVC). Tab Size .250" x .032"
561347 100 pk
561347D 500 pk

TERMINALS & CONNECTORS (K-SPEC® SERIES)



PVC Insulated Quick Disconnects/Slide Connectors (K-Spec® Series)



300V Rating, 75°C, Brass
22-18GA

B



Female quick disconnect
Tab Size .110" x .020"

561377 100 pk
561377D 500 pk



Male quick disconnect
Tab Size .110" x .020"

561378 100 pk
561378D 500 pk



Female quick disconnect
Tab Size .110" x .032"

561379 100 pk
561379D 500 pk



Male quick disconnect
Tab Size .110" x .032"

561380 100 pk
561380D 500 pk



Female quick disconnect
Tab Size .187" x .020"

561381 100 pk
561381D 500 pk



Male quick disconnect
Tab Size .187" x .020"

561382 100 pk
561382D 500 pk



Female quick disconnect
Tab Size .187" x .032"

561383 100 pk
561383D 500 pk



Male quick disconnect
Tab Size .187" x .032"

561384 100 pk
561384D 500 pk



Female quick disconnect
Tab Size .205" x .020"

561395 100 pk
561395D 500 pk



Female quick disconnect
Tab Size .250" x .032"

561352 100 pk
561352D 500 pk



Male quick disconnect
Tab Size .250" x .032"

561351 100 pk
561351D 500 pk

16-14GA



Female quick disconnect
Tab Size .110" x .020"

561396 100 pk
561396D 500 pk



Male quick disconnect
Tab Size .110" x .020"

561391 100 pk
561391D 500 pk



Female quick disconnect
Tab Size .110" x .032"

561397 100 pk
561397D 500 pk



Female quick disconnect
Tab Size .187" x .020"

561387 100 pk
561387D 500 pk



Male quick disconnect
Tab Size .187" x .020"

561388 100 pk
561388D 500 pk



Female quick disconnect
Tab Size .187" x .032"

561389 100 pk
561389D 500 pk



Male quick disconnect
Tab Size .187" x .032"

561390 100 pk
561390D 500 pk



Female quick disconnect
Tab Size .205" x .020"

561398 100 pk
561398D 500 pk



Female quick disconnect
Tab Size .250" x .032"

691355 11 pk
561355 100 pk
561355D 500 pk



Male quick disconnect
Tab Size .250" x .032"

691356 10 pk
561356 100 pk
561356D 500 pk



Female quick disconnect
Tab Size .312" x .032"

561399 100 pk
561399D 500 pk



Female quick disconnect
Tab Size .375" x .047"

561400 100 pk
561400D 500 pk

12-10GA



Female quick disconnect
Tab Size .250" x .032"

692093 6 pk
562093 100 pk
562093D 500 pk



Male quick disconnect
Tab Size .250" x .032"

692115 7 pk
562115 100 pk
562115D 500 pk



Female quick disconnect
Tab Size .375" x .047"

561401 100 pk
561401D 500 pk

Crimp Tools can be found on pages E-6 – E-7

TERMINALS & CONNECTORS (K-SPEC® SERIES)

PVC Insulated Bullet Connectors (K-Spec® Series)

300V Rating, 75°C, Brass



22-18GA



.156" Female Receptacle

561248	100 pk
561248D	500 pk



.156" Male Snap Plug

561247	100 pk
561247D	500 pk

16-14GA – 2 Way (Clear)



NOT LISTED

Mates with two .156" Males

691261	5 pk
561261	100 pk
561261D	500 pk

16-14GA



.156" Female Receptacle

691289	8 pk
561289	100 pk
561289D	500 pk



.156" Male Snap Plug

691251	8 pk
561251	100 pk
561251D	500 pk



.197" Female Receptacle

561258	100 pk
561258D	500 pk



.197" Male Snap Plug

561257	100 pk
561257D	500 pk

12-10GA



.197" Female Receptacle

561260	100 pk
561260D	500 pk



.197" Male Snap Plug

561259	100 pk
561259D	500 pk

Crimp Tools can be found on pages E-6 – E-7

PVC Insulated Piggy Back Connectors (K-Spec® Series)

300V Rating, 75°C, Brass



22-18GA



562415	100 pk
562415D	500 pk

16-14GA



562416	100 pk
562416D	500 pk

12-10GA



562399	100 pk
562399D	500 pk

PVC Insulated Instant Connectors (K-Spec® Series)

600V Rating, 75°C, Copper



NOT LISTED

22-18GA



Tap Splice-Red

561370	100 pk
561370D	500 pk

16-14GA



Tap Splice-Blue

691371	3 pk
561371	100 pk
561371D	500 pk

12-10GA



Tap Splice-Yellow

691372	2 pk
561372	100 pk
561372D	500 pk

PVC Insulated Pin Terminals (K-Spec® Series)

600V Rating, 75°C, Copper



22-18GA



562418	100 pk
562418D	500 pk

16-14GA



562419	100 pk
562419D	500 pk

12-10GA



562417	100 pk
562417D	500 pk

TERMINALS & CONNECTORS (K-SPEC® SERIES)

c US
LISTED

Nylon Insulated Closed End Connectors (K-Spec® Series)

300V Rating, 105°C, Copper



Crimp Tools can be found
on pages E-6 – E-7

22-18GA



561293 100 pk
561293D 500 pk

16-14GA



561294 100 pk
561294D 500 pk

12-10GA



561295 100 pk
561295D 500 pk

B

Nylon Insulated Female Flag Connectors (K-Spec® Series)

300V Rating, 105°C, Copper



22-18GA



.187" x .032"

562398 100 pk
562398D 500 pk



.250" x .032"

562407 100 pk
562407D 500 pk



16-14GA



.250" x .032"

562408 100 pk
562408D 500 pk



Non-Insulated Butt Connectors (K-Spec® Series)

600V Rating, 75°C, Copper. Butted Seam



22-18GA



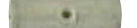
562404 100 pk
562404D 500 pk

16-14GA



562405 100 pk
562405D 500 pk

12-10GA



562406 100 pk
562406D 500 pk

The following part numbers have been discontinued, and replaced with the corresponding part numbers.

Old Part#	⇒	New Part#
762401(M)	⇒	562404(D)
762402(M)	⇒	562405(D)
762403(M)	⇒	562406(D)

Non-Insulated Ring Terminals (K-Spec® Series)

600V Rating, 75°C, Copper. Butted Seam



22-18GA



Stud Size #6
562000 100 pk
562000D 500 pk



Stud Size #8
562001 100 pk
562001D 500 pk



Stud Size #10
562002 100 pk
562002D 500 pk



Stud Size 1/4"
562003 100 pk
562003D 500 pk

16-14GA



Stud Size #6
562004 100 pk
562004D 500 pk



Stud Size #8
562005 100 pk
562005D 500 pk



Stud Size #10
562006 100 pk
562006D 500 pk



Stud Size 1/4"
562007 100 pk
562007D 500 pk

12-10GA



Stud Size #8
562008 100 pk
562008D 500 pk



Stud Size #10
562009 100 pk
562009D 500 pk



Stud Size 1/4"
562010 100 pk
562010D 500 pk



Stud Size 5/16"
562011 100 pk
562011D 500 pk



Stud Size 3/8"
562012 100 pk
562012D 500 pk

TERMINALS & CONNECTORS (K-SPEC® SERIES)

Solderless Terminal Assortment Kit (K-Spec® Series)

560500 Green metal storage tray with carrying handle comes complete with 500 pieces of 20 widely used K-Spec® Series Solderless Terminals. Tray has space for a Crimp Tool. Each part number is indexed on an affixed reference chart for easy identification and quick reorder. Dimensions: 13-1/2"W x 10"L x 1-5/8"H

Kit Contents:

Part#	Qty	Part#	Qty	Part#	Qty
561003	25 pcs	561250	25 pcs	561352	25 pcs
561016	25 pcs	561251	25 pcs	561353	25 pcs
561019	25 pcs	561261	25 pcs	561355	25 pcs
561231	25 pcs	561289	25 pcs	561356	25 pcs
561232	25 pcs	561345	25 pcs	561358	25 pcs
561233	25 pcs	561346	25 pcs	562093	25 pcs
561247	25 pcs	561351	25 pcs		



B

560500 Solderless Terminal Assortment Kit in a Metal Storage Tray (K-Spec® Series)

Solderless Terminal Assortment Kit (K-Spec® Series)

These handy assortment kits come complete with 175 pieces of 18 widely used K-Spec® Series PVC Insulated Solderless Terminals in plastic storage trays. Each part number is indexed on an affixed reference chart for easy identification and quick reorder. Dimensions: 8-1/4"W x 4-1/8"L x 1-1/8"H. These kits are available with or without a crimp tool under the following part numbers:

560175 (with tool)

560175NT (without tool)

Both Kits' Contents:

Part#	Qty	Part#	Qty	Part#	Qty
561003	10 pcs	561247	10 pcs	561346	10 pcs
561016	10 pcs	561250	10 pcs	561351	10 pcs
561019	10 pcs	561251	10 pcs	561352	10 pcs
561231	10 pcs	561261	10 pcs	561355	10 pcs
561232	10 pcs	561289	10 pcs	561356	10 pcs
561233	10 pcs	561345	10 pcs	562093	10 pcs

Available with or without a crimp tool... your choice!



560175 Solderless Terminal Assortment Kit in a Plastic Storage Tray (K-Spec® Series) with Tool



560175NT Solderless Terminal Assortment Kit in a Plastic Storage Tray (K-Spec® Series)

WIRE TERMINAL SELECTOR CHART

Actual Size Terminals Makes Selection Easy!

PVC Insulated Ring Terminals

22-18GA



Stud Size 6
R4A6S 100 pk



Stud Size 10
R4A10 100 pk



Stud Size 1/4"
R4A14S 100 pk



Stud Size 3/8"
R4A38 100 pk

16-14GA



Stud Size 6
R4B6S 100 pk



Stud Size 8
R4B8 100 pk



Stud Size 10
R4B10 100 pk



Stud Size 1/4"
R4B14S 100 pk



Stud Size 3/8"
R4B38 100 pk

12-10GA



Stud Size 6
R4C6S 100 pk



Stud Size 10
R4C10 100 pk



Stud Size 1/4"
R4C14S 100 pk



Stud Size 3/8"
R4C38 100 pk



Stud Size 1/2"
761038 25 pk

Nylon Insulated Ring Terminals

22-18GA



Stud Size #6
R6A6S 100 pk



Stud Size #8
R6A8 100 pk



Stud Size #10
R6A10 100 pk



Stud Size 1/4"
R6A14S 100 pk



Stud Size 3/8"
R6A38 100 pk

16-14GA



Stud Size #6
R6B6S 100 pk



Stud Size #8
R6B8 100 pk



Stud Size #10
R6B10 100 pk



Stud Size 1/4"
R6B14S 100 pk



Stud Size 3/8"
R6B38 100 pk

12-10GA



Stud Size #8
R6C8 100 pk



Stud Size #10
R6C10 100 pk



Stud Size 1/4"
R6C14S 100 pk

WIRE TERMINAL SELECTOR CHART

Actual Size Terminals Makes Selection Easy!

Nylon Insulated Quick Disconnects

22-18GA



Female quick disconnect
Fully Insulated, Tab Size 0.25"

CFR4NA250F 100 pk



Male quick disconnect
Fully Insulated, Tab Size 0.25"

CM4TNA250F 100 pk

16-14GA



Female quick disconnect
Fully Insulated, Tab Size 0.25"

CFR4NB250F 100 pk



Male quick disconnect
Fully Insulated, Tab Size 0.25"

CM4TNB250F 100 pk

B

12-10GA



Female quick disconnect
Fully Insulated, Tab Size 0.25"

CFR4NC250F 100 pk



Male quick disconnect
Fully Insulated, Tab Size 0.25"

CM4TNC250F 100 pk

Nylon Insulated Flag Terminals

22-14GA



.25" Tab Size
FLFR6A250F 100 pk

16-14GA



.25" Tab Size
FLFR6B250F 100 pk

12-10GA



.25" Tab Size
FLFR6C250F 100 pk

PVC Butt Splice

22-18GA



B4A 100 pk

16-14GA



B4B 100 pk

12-10GA



B4C 100 pk

Heat Shrink Butt Splice

22-18GA



761244 25 pk

16-14GA



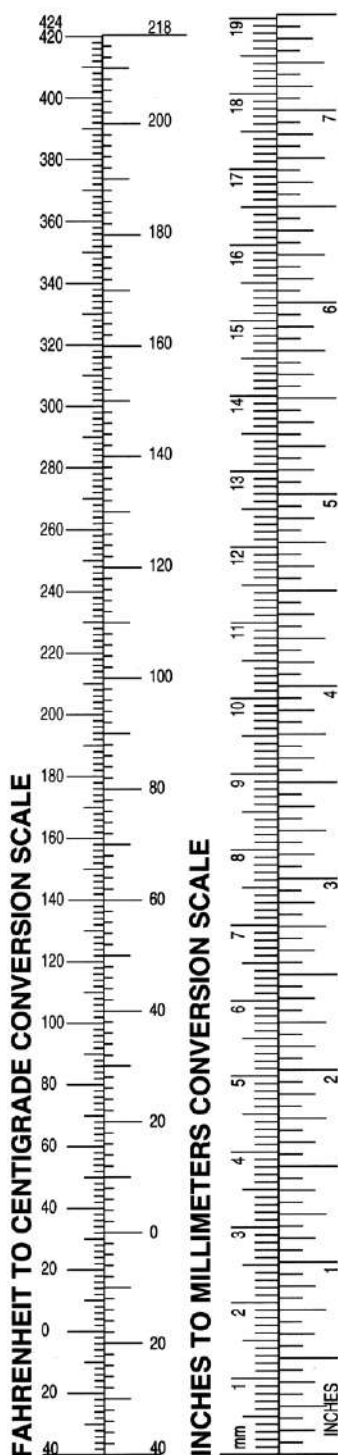
761245 25 pk

12-10GA



761246 25 pk

CONVERSION TABLES



Wire gauge conversion to decimal equivalents

INCH FRAC.	INCH DEC.	MILLI-METERS	INCH FRAC.	INCH DEC.	MILLI-METERS
1/64	.0156	0,397	33/64	.5156	13,097
1/32	.0312	0,794	17/32	.5312	13,494
3/64	.0468	1,191	35/64	.5468	13,891
1/16	.0625	1,588	9/16	.5625	14,288
5/64	.0781	1,984	37/64	.5781	14,684
3/32	.0937	2,381	19/32	.5937	15,081
7/64	.1093	2,778	39/64	.6093	15,478
1/8	.1250	3,175	5/8	.6250	15,875
9/64	.1406	3,572	41/64	.6406	16,272
5/32	.1562	3,969	21/32	.6562	16,669
11/64	.1718	4,366	43/64	.6718	17,066
3/16	.1875	4,763	11/16	.6875	17,463
13/64	.2031	5,159	45/64	.7031	17,859
7/32	.2187	5,556	23/32	.7187	18,256
15/64	.2343	5,954	47/64	.7343	18,653
1/4	.2500	6,350	3/4	.7500	19,050
17/64	.2656	6,747	49/64	.7656	19,447
9/32	.2812	7,144	25/32	.7812	19,844
19/64	.2968	7,541	51/64	.7968	20,241
5/16	.3125	7,938	13/16	.8125	20,638
21/64	.3281	8,334	53/64	.8281	21,034
11/32	.3437	8,731	27/32	.8437	21,431
26/64	.3593	9,128	55/64	.8593	21,828
3/8	.3750	9,525	7/8	.8750	22,225
25/64	.3906	9,922	57/64	.8906	22,622
13/32	.4062	10,319	29/32	.9062	23,019
27/64	.4218	10,716	59/64	.9218	23,416
7/16	.4375	11,113	15/16	.9375	23,813
29/64	.4531	11,509	64/64	.9531	24,209
15/32	.4687	11,906	31/32	.9687	24,606
31/64	.4843	12,303	63/64	.9843	25,003
1/2	.5000	12,700	1	1.0000	25,400

Move decimal point three places to the right to read mills.

AWG	DIAMETER INCHES	CMA	AWG	DIAMETER INCHES	CMA
4/0	.460	212,000	12	.081	6,530
3/0	.410	168,000	13	.072	5,180
2/0	.365	133,000	14	.064	4,110
1/0	.325	106,000	15	.057	3,260
1	.289	83,700	16	.051	2,580
2	.258	66,400	17	.045	2,050
3	.229	52,600	18	.040	1,620
4	.204	41,700	19	.036	1,290
5	.182	33,100	20	.032	1,020
6	.162	26,300	21	.0285	810
7	.144	20,800	22	.0253	642
8	.128	16,500	23	.0226	509
9	.114	13,100	24	.0201	404
10	.102	10,400	25	.0179	320

AWG	mm ²	Standard wires mm ²			
26-22	0,1-0,4	0,14	0,20	0,25	0,35
22-16	0,25-1,6	0,25	0,35	0,50	0,75 1,0 1,5
16-14	1,0-2,6	1,0	1,5	2,5	
12-10	2,7-6,6	4,0	6,0		
8	6,6-10,5	10			
6	10,5-16,8	16			
4	16,8-26,6	2,5			
2	26,6-42,4	35			
1/0	42,4-60,5	50			
2/0	60,5-76,2	70			
3/0	76,2-96,3	95			
4/0	96,3-117,0	120			

Hole diameter #10 and 3/8" are available in metric ref.

#10 .190 .209 (5,31) M5
3/8" .375 .413 (10,5) M9-10

* All decimals plus or minus .003"
Fractions plus or minus .055".

Stud size with hole sizes.

STANDARD STUD SIZE	SCEW DIA. (")	ETC HOLE DIA. INCH/mm	DIN.
● #0	.060	.094 (2,39)	M1,7-2,2
● #1	.073		
● #2	.086		
● #3	.099	.120 (3,025)	M2,6
● #4	.112		
● #5	.125	.146 (3,71)	M3-3,5
● #6	.138		
● #8	.164	.173 (4,39)	M4
● #10	.190	.198 (5,03)	
● #12	.216	17/64 (6,75)	M6
● #14	.242		
● 1/4"	.250		
● 5/16"	.312	21/64 (8,33)	M8
● 3/8"	.375	25/64 (9,92)	M9
● 7/16"	.437	29/64 (11,51)	M11
● 1/2"	.500	33/64 (13,10)	M12
● 5/8"	.625	21/32 (16,67)	M16
● 3/4"	.750	25/32 (19,84)	M18
● 7/8"	.875	29/32 (23,02)	M20
● 1"	1.000	1-1/32 (26,19)	M25

THIN WALL HEAT SHRINK TUBING

Techspan's Thin Wall Heat Shrinkable tubing is used in a variety of applications including:

- Harnessing and strain relief
- Insulation and protection of electronic components
- High volume terminal production
- Thin Wall 2:1 Ratio
- High performance medical equipment

**C**

MEDIUM/HEAVY WALL HEAT SHRINK TUBING

Techspan's Medium/Heavy Wall Heat Shrinkable tubing possesses excellent insulating, environmental sealing, and impact and abrasion resistance properties.

Medium/Heavy Wall tubing is used in a variety of general purpose applications to seal and protect electrical connections and terminations and provide excellent mechanical protection.

Techspan's line of specially designed medium and heavy wall products are used as the industry standard in several markets including Cable TV.



Professionals trust Techspan® Heat Shrink Tubing to seal and protect!

HSP0 – HEAT SHRINK TUBING



Approved

Thin wall, flame retardant, 2:1 shrink ratio, flexible, crosslinked polyolefin heat shrinkable tubing.

DESCRIPTION

HSP0 thin wall, heat shrinkable tubing is a general purpose heat shrink tubing made from a specially formulated, cross-linked polyolefin. It offers excellent electrical, chemical, and physical properties. This tough, flexible tubing can be used for insulation, harnessing, strain relief, and identification purposes in a variety of industrial and military applications.



All colours in stock up to 1" See pages C-6,7 for complete part #'s and package Qty's

MAIN FEATURES

- Shrink Ratio of 2 to 1
- Meets UL, CSA
- 14 standard sizes in 6 colours
- Flame Retardant (except clear)
- Low smoke generation
- Standard 4 foot lengths or 100 foot spools
- 600V Rated
- Continuous operating temperature -45°C to 125°C
- Halogen free
- UL224 VW-1 – black only

Tolerances

3/64"-1/4"	±.008"
5/16"-1/2"	±.012"
5/8"-3/4"	±.016"
5/16"-1/2"	±.012"
3/4"-1"	±.020"

Part # (add your colour code)			Expanded (D) Internal Diameter IN. (mm)	Recovered (d) Internal Diameter IN. (mm)	(W) Wall Thickness IN. (mm)
100' Spool	4' PCS	6' PCS			
HSP0-062-_-C	HSP0-062-_-IIL	HSP0-062-_-6"	.062 (1.6)	.031 (.80)	.011 (.28)
HSP0-125-_-C	HSP0-125-_-IIL	HSP0-125-_-6"	.125 (3.2)	.063 (1.6)	.016 (.21)
HSP0-187-_-C	HSP0-187-_-IIL	HSP0-187-_-6"	.188 (4.7)	.094 (2.4)	.020 (.50)
HSP0-250-_-C	HSP0-250-_-IIL	HSP0-250-_-6"	.250 (6.4)	.125 (3.2)	.022 (.55)
HSP0-312-_-C	HSP0-312-_-IIL	N/A	.312 (7.9)	.158 (3.9)	.024 (.60)
HSP0-375-_-C*	HSP0-375-_-IIL	HSP0-375-_-6"	.375 (9.5)	.188 (4.8)	.024 (.60)
HSP0-500-_-C	HSP0-500-_-IIL	HSP0-500-_-6"	.500 (12.7)	.250 (6.4)	.024 (.60)
HSP0-625-_-C	HSP0-625-_-IIL	N/A	.625 (15.9)	.313 (7.94)	.028 (.70)
HSP0-750-_-C	HSP0-750-_-IIL	HSP0-750-_-6"	.750 (19.1)	.375 (9.50)	.032 (.80)
HSP0-1000-_-C	HSP0-1000-_-IIL	HSP0-1000-_-6"	1.00 (25.4)	.500 (12.7)	.035 (.90)
HSP0-1500-_-C	HSP0-1500-_-IIL	N/A	1.50 (38.1)	.750 (19.0)	.040 (1.0)
HSP0-2000-_-C	HSP0-2000-_-IIL	N/A	2.00 (50.8)	1.00 (25.4)	.040 (1.0)
N/A	HSP0-3000-_-IIL	N/A	3.00 (76.2)	1.50 (38.1)	.050 (1.3)
N/A	HSP0-4000-_-IIL*	N/A	4.00 (101.6)	2.00 (50.8)	.057 (1.6)

APPLICABLE STANDARDS & SPECIFICATIONS

CSA C22.2, 125 DEGREES C
No. 198.1 FILE 220127

UL224, 125 DEGREES C
(colours only)
FILE 203950

ROHS and Sony Compliant

* Black only

Colour Codes

- 0..... Black
- 2..... Red
- 4..... Yellow
- 5..... Green
- 6..... Blue
- 9..... Clear
- WH..... White



INSTALLATION

When heated 120°C, HSP0 will shrink unrestricted to 50% (2:1) of its supplied diameter.



ALPO – HEAT SHRINK TUBING

Thin wall, adhesive lined, 3:1 shrink ratio, flexible, crosslinked polyolefin heat shrinkable tubing.

DESCRIPTION

ALPO thin wall, heat shrinkable tubing is semi-flexible with a meltable inner lining of adhesive. In addition to insulation and mechanical protection this tubing provides a moisture-proof seal for encapsulation of wires, splices, breakouts, and components. The high shrink ratio of ALPO tubing allows for greater versatility in installation.

MAIN FEATURES

- Shrink Ratio of 3 to 1
- Flexible
- Resistant to Common Fluids & Solvents
- Red and black colour (standard)
- 600V Rated
- Continuous operating temperature -45°C to 125°C



Part # (add your colour code)		Expanded (D) Internal Diameter		Recovered (d) Internal Diameter		(W) Wall Thickness	
4' PCS	6' PCS	IN.	(mm)	IN.	(mm)	IN.	(mm)
ALPO-125-_-IIL	ALPO-125-_-6"	.125	(3.2)	.038	(1.0)	.037	(0.95)
ALPO-187-_-IIL	ALPO-187-_-6"	.187	(4.7)	.063	(1.6)	.047	(1.20)
ALPO-250-_-IIL	ALPO-250-_-6"	.250	(6.4)	.087	(2.2)	.053	(1.35)
ALPO-375-_-IIL	ALPO-375-_-6"	.375	(9.5)	.126	(3.2)	.065	(1.65)
ALPO-500-_-IIL	ALPO-500-_-6"	.500	(12.7)	.165	(4.2)	.071	(1.80)
ALPO-750-_-IIL	ALPO-750-_-6"	.750	(19.1)	.248	(6.3)	.079	(2.00)
ALPO-1000-_-IIL	ALPO-1000-_-6"	1.00	(25.4)	.335	(8.5)	.083	(2.10)
ALPO-1250-_-IIL	N/A	1.25	(31.8)	.402	(10.2)	.087	(2.20)
ALPO-1500-_-IIL	N/A	1.50	(38.1)	.531	(13.5)	.094	(2.40)

INSTALLATION

When heated above 120°C, ALPO will shrink unrestricted to 33% (3:1) of its supplied diameter.

Colour Codes

0..... Black
2..... Red
9..... Clear
WH..... White



MAPO – HEAT SHRINK TUBING

Medium wall, adhesive lined, 3:1 shrink ratio, crosslinked polyolefin heat shrinkable tubing.

DESCRIPTION

MAPO medium wall, heat shrinkable tubing is designed for insulating and sealing a variety of low voltage cable applications where lighter weight and greater flexibility are important. MAPO tubing is internally coated with a dual purpose thermoplastic liner which provides excellent insulating and environmental sealing protection for splices, connections, jacket repairs, and terminations. High impact and abrasion resistance.



MAIN FEATURES

- Shrink Ratio of 3 to 1
- Environmentally seals
- 11 standard sizes in black only
- Heat Resistant & Mechanically Tough
- Standard 4 Ft. Lengths
- 600V Rated
- Continuous operating temperature -55°C to 110°C



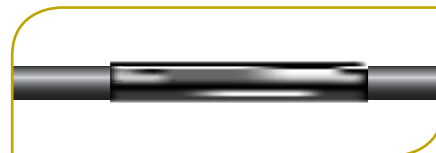
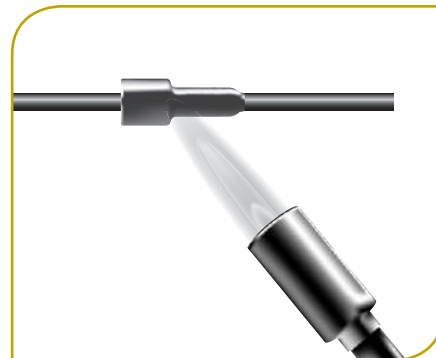
Part # (add your colour code) 4' PCS	Expanded (D) Internal Diameter		Recovered (d) Internal Diameter		(W) Wall Thickness	
	IN.	(mm)	IN.	(mm)	IN.	(mm)
MAPO-400-_-IIL	.400	(10.2)	.150	(3.8)	.080	(2.0)
MAPO-750-_-IIL	.750	(19.0)	.220	(5.6)	.080	(2.0)
MAPO-1100-_-IIL	1.10	(27.9)	.400	(10.2)	.095	(2.4)
MAPO-1300-_-IIL	1.30	(33.0)	.430	(11.0)	.095	(2.4)
MAPO-1500-_-IIL	1.50	(38.1)	.500	(12.7)	.095	(2.4)
MAPO-1700-_-IIL	1.70	(43.2)	.566	(14.4)	.100	(2.5)
MAPO-2050-_-IIL	2.05	(52.1)	.750	(19.0)	.100	(2.5)
MAPO-2750-_-IIL	2.75	(69.8)	1.00	(25.4)	.100	(2.5)
MAPO-3500-_-IIL	3.50	(88.9)	1.18	(30.0)	.100	(2.5)
MAPO-4700-_-IIL	4.70	(119.4)	1.57	(39.9)	.105	(2.7)
MAPO-6700-_-IIL	6.70	(170.2)	2.30	(58.4)	.120	(3.0)

Colour Codes

- 0..... Black
- 2..... Red
- 9..... Clear

PACKAGE TYPES AVAILABLE

- 4 ft. lengths - boxed



INSTALLATION

When heated above 120°C, MAPO will shrink unrestricted to 33% (3:1) of its supplied diameter.

APPLICABLE STANDARDS & SPECIFICATIONS

MIL-DTL-23053/5 Chemical/Fluid Resistance



DIRECT BURIAL HAPO – HEAT SHRINK TUBING

Heavy wall, adhesive lined, 3:1 shrink ratio, crosslinked polyolefin heat shrinkable tubing.

DESCRIPTION

HAPO heavy wall, heat shrinkable tubing affords maximum reliability for insulating and sealing electrical connections and terminations, including direct burial, URD, and submersible installations. HAPO is rated for 1kV, 90 degree C continuous use and is internally coated with a dual purpose thermoplastic liner which provides excellent insulating and environmental sealing protection for splices, connections, jacket repairs, and terminations. Excellent abrasion and impact resistance.



MAIN FEATURES

- Shrink Ratio of 3 to 1 - CSA listed
- Meets ICEA & NEMA insulation thickness standard
- 9 standard sizes in black only
- Conforms to ANSI C-119.1
- Western Underground Guides 2.4, 2.5
- Standard 4 Ft. Lengths
- Resistant to common fluids and solvents
- 600V Rated 1 kV 90°C continuous use
- Continuous operating temperature -55°C to 110°C

Part # (add your colour code) 4' PCS	EXPANDED		RECOVERED			
	(D) Internal Diameter IN. (mm)	(d) Internal Diameter IN. (mm)	(d) Internal Diameter IN. (mm)	(W) Wall Thickness IN. (mm)	(d) Internal Diameter IN. (mm)	(W) Wall Thickness IN. (mm)
HAPO-350-_-IIL	.350 (8.9)	.120 (3.0)	.120 (3.0)	.070 (1.8)	.120 (3.0)	.070 (1.8)
HAPO-500-_-IIL	.510 (13.0)	.160 (4.1)	.160 (4.1)	.080 (2.0)	.160 (4.1)	.080 (2.0)
HAPO-750-_-IIL	.750 (19.1)	.240 (6.1)	.240 (6.1)	.120 (3.0)	.240 (6.1)	.120 (3.0)
HAPO-1100-_-IIL	1.10 (27.9)	.350 (8.9)	.350 (8.9)	.120 (3.0)	.350 (8.9)	.120 (3.0)
HAPO-1500-_-IIL	1.50 (38.1)	.470 (11.9)	.470 (11.9)	.140 (3.6)	.470 (11.9)	.140 (3.6)
HAPO-2000-_-IIL	2.00 (50.8)	.630 (16.0)	.630 (16.0)	.150 (3.8)	.630 (16.0)	.150 (3.8)
HAPO-2700-_-IIL	2.70 (68.1)	.870 (22.1)	.870 (22.1)	.150 (3.8)	.870 (22.1)	.150 (3.8)
HAPO-3500-_-IIL*	3.54 (89.9)	1.18 (30.0)	1.18 (30.0)	.150 (3.8)	1.18 (30.0)	.150 (3.8)
HAPO-4700-_-IIL*	4.72 (119.9)	1.57 (39.9)	1.57 (39.9)	.150 (3.8)	1.57 (39.9)	.150 (3.8)

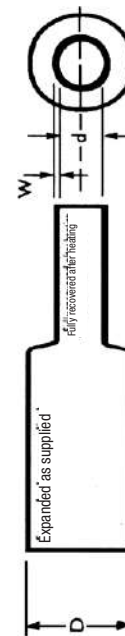
Colour Codes

0..... Black
2..... Red

* Not UL or CSA listed

PACKAGE TYPES AVAILABLE

- 4 ft. lengths - boxed



APPLICABLE STANDARDS & SPECIFICATIONS

CSA C22.2 No.198.2
LR65789, #14-1000 MCM
Underground splicing kits.

UL486D File E132914
For use with underground
conductors

WESTERN UNDERGROUND
GUIDE NO. 2.4, 2.5
ICEA & NEMA insulation
thickness requirements

ANSI C119.1 Underground

INSTALLATION

When heated above 120°C,
HAPO will shrink unrestricted
to 33% (3:1) of its supplied
diameter.



K-SPEC® HEAT SHRINK TUBING



CROSS-LINK POLYOLEFIN

- CSA Approved
- Flame Retardant (except Clear)
- Thin Wall 2:1 Ratio
- Oper. Temp.: -45°C to 125°C
- Shrink Temp.: Start at 70°C, recovery at 120°C
- Longitudinal shrink ratio: < or = 8%
- 600V rated
- UL224 VW-1 – black only
- Low smoke generation
- Zero halogen

C

Part No.	DESCRIPTION 4 FOOT PIECES	CTN/ QTY
MHSP-3/64-0-IIL	HEAT SHRINK THIN-WALL BLACK 3/64"ID X 4FT	50 PK
MHSP-3/64-2-IIL	HEAT SHRINK THIN-WALL RED 3/64"ID X 4FT	50 PK
MHSP-3/64-4-IIL	HEAT SHRINK THIN-WALL YELLOW 3/64"ID X 4FT	50 PK
MHSP-3/64-5-IIL	HEAT SHRINK THIN-WALL GREEN 3/64"ID X 4FT	50 PK
MHSP-3/64-6-IIL	HEAT SHRINK THIN-WALL BLUE 3/64"ID X 4FT	50 PK
MHSP-3/64-9-IIL	HEAT SHRINK THIN-WALL CLEAR 3/64"ID X 4FT	50 PK
MHSP-3/64-WH-IIL	HEAT SHRINK THIN-WALL WHITE 3/64"ID X 4FT	50 PK
MHSP-1/16-0-IIL	HEAT SHRINK THIN-WALL BLACK 1/16"ID x 4FT	50 PK
MHSP-1/16-2-IIL	HEAT SHRINK THIN-WALL RED 1/16"ID X 4FT	50 PK
MHSP-1/16-4-IIL	HEAT SHRINK THIN-WALL YELLOW 1/16"ID X 4FT	50 PK
MHSP-1/16-5-IIL	HEAT SHRINK THIN-WALL GREEN 1/16"ID X 4FT	50 PK
MHSP-1/16-6-IIL	HEAT SHRINK THIN-WALL BLUE 1/16"ID X 4FT	50 PK
MHSP-1/16-9-IIL	HEAT SHRINK THIN-WALL CLEAR 1/16"ID X 4FT	50 PK
MHSP-1/16-WH-IIL	HEAT SHRINK THIN-WALL WHITE 1/16"ID X 4FT	50 PK
MHSP-3/32-0-IIL	HEAT SHRINK THIN-WALL BLACK 3/32"ID X 4FT	50 PK
MHSP-3/32-2-IIL	HEAT SHRINK THIN-WALL RED 3/32"ID X 4FT	50 PK
MHSP-3/32-4-IIL	HEAT SHRINK THIN-WALL YELLOW 3/32"ID X 4FT	50 PK
MHSP-3/32-5-IIL	HEAT SHRINK THIN-WALL GREEN 3/32"ID X 4FT	50 PK
MHSP-3/32-6-IIL	HEAT SHRINK THIN-WALL BLUE 3/32"ID X 4FT	50 PK
MHSP-3/32-9-IIL	HEAT SHRINK THIN-WALL CLEAR 3/32"ID X 4FT	50 PK
MHSP-3/32-WH-IIL	HEAT SHRINK THIN-WALL WHITE 3/32"ID X 4FT	50 PK
MHSP-1/8-5-IIL	HEAT SHRINK THIN-WALL GREEN 1/8"ID X 4FT	50 PK
MHSP-1/8-6-IIL	HEAT SHRINK THIN-WALL BLUE 1/8"ID X 4FT	50 PK
MHSP-1/8-9-IIL	HEAT SHRINK THIN-WALL CLEAR 1/8"ID X 4FT	50 PK
MHSP-1/8-WH-IIL	HEAT SHRINK THIN-WALL WHITE 1/8"ID X 4FT	50 PK
MHSP-1/4-0-IIL	HEAT SHRINK THIN-WALL BLACK 1/4"ID x 4FT	25 PK
MHSP-1/4-2-IIL	HEAT SHRINK THIN-WALL RED 1/4"ID X 4FT	25 PK
MHSP-1/4-4-IIL	HEAT SHRINK THIN-WALL YELLOW 1/4"ID X 4FT	25 PK
MHSP-1/4-9-IIL	HEAT SHRINK THIN-WALL CLEAR 1/4"ID X 4FT	25 PK
MHSP-1/4-WH-IIL	HEAT SHRINK THIN-WALL WHITE 1/4"ID X 4FT	25 PK
MHSP-3/16-0-IIL	HEAT SHRINK THIN-WALL BLACK 3/16"ID x 4FT	50 PK
MHSP-3/16-2-IIL	HEAT SHRINK THIN-WALL RED 3/16"ID x 4FT	50 PK
MHSP-3/16-4-IIL	HEAT SHRINK THIN-WALL YELLOW 3/16"ID X 4FT	50 PK
MHSP-3/16-5-IIL	HEAT SHRINK THIN-WALL GREEN 3/16"ID X 4FT	50 PK
MHSP-3/16-6-IIL	HEAT SHRINK THIN-WALL BLUE 3/16"ID x 4FT	50 PK
MHSP-3/16-WH-IIL	HEAT SHRINK THIN-WALL WHITE 3/16"ID x 4FT	50 PK
MHSP-5/16-0-IIL	HEAT SHRINK THIN-WALL BLACK 5/16"ID X 4FT	25 PK
MHSP-5/16-2-IIL	HEAT SHRINK THIN-WALL RED 5/16"ID X 4FT	25 PK
MHSP-5/16-5-IIL	HEAT SHRINK THIN-WALL GREEN 5/16"ID X 4FT	25 PK
MHSP-5/16-6-IIL	HEAT SHRINK THIN-WALL BLUE 5/16"ID X 4FT	25 PK
MHSP-5/16-9-IIL	HEAT SHRINK THIN-WALL CLEAR 5/16"ID X 4FT	25 PK
MHSP-5/16-WH-IIL	HEAT SHRINK THIN-WALL WHITE 5/16"ID X 4FT	25 PK
MHSP-3/8-0-IIL	HEAT SHRINK THIN-WALL BLACK 3/8"ID x 4FT	25 PK
MHSP-3/8-2-IIL	HEAT SHRINK THIN-WALL RED 3/8"ID X 4FT	25 PK
MHSP-3/8-4-IIL	HEAT SHRINK THIN-WALL YELLOW 3/8"ID X 4FT	25 PK
MHSP-3/8-5-IIL	HEAT SHRINK THIN-WALL GREEN 3/8"ID X 4FT	25 PK
MHSP-3/8-6-IIL	HEAT SHRINK THIN-WALL BLUE 3/8"ID X 4FT	25 PK
MHSP-3/8-9-IIL	HEAT SHRINK THIN-WALL CLEAR 3/8"ID X 4FT	25 PK
MHSP-3/8-WH-IIL	HEAT SHRINK THIN-WALL WHITE 3/8"ID X 4FT	25 PK



Display Tags On 4 Foot Pieces



Re-Load Your Existing TECHSPAN Heat Shrink Display

Part No.	DESCRIPTION 4 FOOT PIECES	CTN/ QTY
MHSP-1/2-0-IIL	HEAT SHRINK THIN-WALL BLACK 1/2"ID x 4FT	25 PK
MHSP-1/2-2-IIL	HEAT SHRINK THIN-WALL RED 1/2"ID X 4FT	25 PK
MHSP-1/2-4-IIL	HEAT SHRINK THIN-WALL YELLOW 1/2"ID X 4FT	25 PK
MHSP-1/2-5-IIL	HEAT SHRINK THIN-WALL GREEN 1/2"ID X 4FT	25 PK
MHSP-1/2-6-IIL	HEAT SHRINK THIN-WALL BLUE 1/2"ID X 4FT	25 PK
MHSP-1/2-9-IIL	HEAT SHRINK THIN-WALL CLEAR 1/2"ID X 4FT	25 PK
MHSP-1/2-WH-IIL	HEAT SHRINK THIN-WALL WHITE 1/2"ID X 4FT	25 PK
MHSP-5/8-0-IIL	HEAT SHRINK THIN-WALL BLACK 5/8"ID x 4FT	25 PK
MHSP-5/8-2-IIL	HEAT SHRINK THIN-WALL RED 5/8"ID X 4FT	25 PK
MHSP-5/8-4-IIL	HEAT SHRINK THIN-WALL YELLOW 5/8"ID X 4FT	25 PK
MHSP-5/8-5-IIL	HEAT SHRINK THIN-WALL GREEN 5/8"ID X 4FT	25 PK
MHSP-5/8-6-IIL	HEAT SHRINK THIN-WALL BLUE 5/8"ID X 4FT	25 PK
MHSP-5/8-9-IIL	HEAT SHRINK THIN-WALL CLEAR 5/8"ID X 4FT	25 PK
MHSP-5/8-WH-IIL	HEAT SHRINK THIN-WALL WHITE 5/8"ID X 4FT	25 PK
MHSP-3/4-0-IIL	HEAT SHRINK THIN-WALL BLACK 3/4"ID X 4FT	10 PK
MHSP-3/4-2-IIL	HEAT SHRINK THIN-WALL RED 3/4"ID X 4FT	10 PK
MHSP-3/4-4-IIL	HEAT SHRINK THIN-WALL YELLOW 3/4"ID X 4FT	10 PK
MHSP-3/4-5-IIL	HEAT SHRINK THIN-WALL GREEN 3/4"ID X 4FT	10 PK
MHSP-3/4-6-IIL	HEAT SHRINK THIN-WALL BLUE 3/4"ID X 4FT	10 PK
MHSP-3/4-9-IIL	HEAT SHRINK THIN-WALL CLEAR 3/4"ID X 4FT	10 PK
MHSP-3/4-WH-IIL	HEAT SHRINK THIN-WALL WHITE 3/4"ID X 4FT	10 PK
MHSP-1-0-IIL	HEAT SHRINK THIN-WALL BLACK 1"ID x 4FT	10 PK
MHSP-1-2-IIL	HEAT SHRINK THIN-WALL RED 1"ID X 4FT	10 PK
MHSP-1-4-IIL	HEAT SHRINK THIN-WALL YELLOW 1"ID X 4FT	10 PK
MHSP-1-5-IIL	HEAT SHRINK THIN-WALL GREEN 1"ID X 4FT	10 PK
MHSP-1-6-IIL	HEAT SHRINK THIN-WALL BLUE 1"ID X 4FT	10 PK
MHSP-1-9-IIL	HEAT SHRINK THIN-WALL CLEAR 1"ID X 4FT	10 PK
MHSP-1-WH-IIL	HEAT SHRINK THIN-WALL WHITE 1"ID x 4FT	10 PK
MHSP-1-1/4-0-IIL	HEAT SHRINK THIN-WALL BLACK 1-1/4"ID x 4FT	5 PK
MHSP-1 1/2-0-IIL	HEAT SHRINK THIN-WALL BLACK 1 1/2"ID x 4FT	10 PK
MHSP-1 1/2-2-IIL	HEAT SHRINK THIN-WALL RED 1 1/2"ID x 4FT	10 PK
MHSP-1 1/2-4-IIL	HEAT SHRINK THIN-WALL YELLOW 1 1/2"ID x 4FT	10 PK
MHSP-1 1/2-6-IIL	HEAT SHRINK THIN-WALL BLUE 1 1/2"ID X 4FT	10 PK
MHSP-1 1/2-9-IIL	HEAT SHRINK THIN-WALL CLEAR 1 1/2"ID X 4FT	10 PK
MHSP-1 1/2-WH-IIL	HEAT SHRINK THIN-WALL WHITE 1 1/2"ID X 4FT	10 PK
MHSP-2-0-IIL	HEAT SHRINK THIN-WALL BLACK 2"ID x 4FT	5 PK
MHSP-2-2-IIL	HEAT SHRINK THIN-WALL RED 2"ID x 4FT	5 PK
MHSP-2-5-IIL	HEAT SHRINK THIN-WALL GREEN 2"ID x 4FT	5 PK
MHSP-2-9-IIL	HEAT SHRINK THIN-WALL CLEAR 2"ID x 4FT	5 PK
MHSP-2-WH-IIL	HEAT SHRINK THIN-WALL WHITE 2"ID X 4FT	5 PK
MHSP-3-0-IIL	HEAT SHRINK THIN-WALL BLACK 3"ID x 4FT	5 PK
MHSP-3-9-IIL	HEAT SHRINK THIN-WALL CLEAR 3"ID X 4FT	5 PK
MHSP-4-0-IIL	HEAT SHRINK THIN-WALL BLACK 4"ID X 4FT	5 PK

K-SPEC® HEAT SHRINK TUBING



CROSS-LINK POLYOLEFIN



100 Foot Rolls

- CSA Approved
- Flame Retardant (except Clear)
- Thin Wall 2:1 Ratio
- Oper. Temp.: -45°C to 125°C
- Shrink Temp.: Start at 70°C, recovery at 120°C
- Longitudinal shrink ratio: < or = 8%
- 600V rated

Tolerances

3/64"-1/4"	±.008"
5/16"-1/2"	±.012"
5/8"-3/4"	±.016"
5/16"-1/2"	±.012"
3/4"-1"	±.020"



Part No.	DESCRIPTION 100 FOOT SPOOLS	CTN/QTY
MHSP-3/64-0-C	HEAT SHRINK THIN-WALL BLACK 3/64"ID	100' SPL
MHSP-1/16-0-C	HEAT SHRINK THIN-WALL BLACK 1/16"ID	100' SPL
MHSP-3/32-0-C	HEAT SHRINK THIN-WALL BLACK 3/32"ID	100' SPL
MHSP-1/8-0-C	HEAT SHRINK THIN-WALL BLACK 1/8"ID	100' SPL
MHSP-1/4-0-C	HEAT SHRINK THIN-WALL BLACK 1/4"ID	100' SPL
MHSP-1/4-9-C	HEAT SHRINK THIN-WALL CLEAR 1/4"ID	100' SPL
MHSP-3/16-0-C	HEAT SHRINK THIN-WALL BLACK 3/16"ID	100' SPL
MHSP-3/8-0-C	HEAT SHRINK THIN-WALL BLACK 3/8"ID	100' SPL
MHSP-1/2-0-C	HEAT SHRINK THIN-WALL BLACK 1/2"ID	100' SPL
MHSP-1/2-9-C	HEAT SHRINK THIN-WALL BLACK 1/2"ID	100' SPL
MHSP-5/8-0-C	HEAT SHRINK THIN-WALL BLACK 5/8"ID	100' SPL
MHSP-5/8-9-C	HEAT SHRINK THIN-WALL BLACK 5/8"ID	100' SPL
MHSP-3/4-0-C	HEAT SHRINK THIN-WALL BLACK 3/4"ID	100' SPL

SPLICE KITS

COPPER BUTT SPLICE KITS



- UL Listed
- 600 Volts maximum, 221°F (105°C) temperature rating
- Meets the requirements of the 2014 National Electric Code: Articles: 110.14(B), 300.5(E) and 300.50(D)
- Designed to simplify splicing copper conductors



PART NO.	UL LISTED WIRE RANGE OF KIT	DESCRIPTION	ORDER UNIT	UNIT QTY.	UNIT PKG.	CARTON QTY.
CSK-14-8	14 - 8 AWG Copper	Butt Splice Kit includes one (1) Copper Butt Splice Connector and one (1) 4 in. piece of Heat Shrink Tube	EA	1	BG	24
CSK-8-2	8 - 2 AWG Copper	Butt Splice Kit includes one (1) Copper Butt Splice Connector and one (1) 4 in. piece of Heat Shrink Tube	EA	1	BG	24

DUAL RATED BUTT SPLICE KITS – FOR DIRECT BURIAL



- For use with aluminum and copper conductors
- UL Listed
- 600 Volts maximum, 221°F (105°C) temperature rating
- Meets the requirements of the 2014 National Electric Code: Articles: 110.14(B), 300.5(E) and 300.50(D)



PART NO.	UL LISTED WIRE RANGE OF KIT	DESCRIPTION	ORDER UNIT	UNIT QTY.	UNIT PKG.	CARTON QTY.
ASK-8-4	8 - 4 AWG AL/CU	Dual Rated Butt Splice Kit includes one (1) Dual Rated Connector and two (2) Heat Shrink Tubes	EA	1	BG	24
ASK-2-1/0	2 - 1/0 AWG AL/CU	Dual Rated Butt Splice Kit includes one (1) Dual Rated Connector and two (2) Heat Shrink Tubes	EA	1	BG	24
ASK-2/0-250	2/0 - 250 MCM AL/CU	Dual Rated Butt Splice Kit includes one (1) Dual Rated Connector and two (2) Heat Shrink Tubes	EA	1	BG	24

PVC ELECTRICAL TAPE

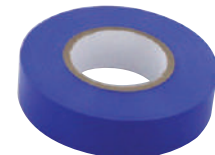
- 600 Volt rating
- Flame Retardant
- Weather-Resistant
- Can be used as primary insulation at not more than 600 Volts
- Lead Free
- Temperature rating: -10°C to 80°C (14°F to 176°F)
- Dimensions (Length x Width x Thickness):
18.3m x 19mm x .18mm (60' x 3/4" x .007")
- CSA Approved/UL Listed
- **Phase Tape**

INDIVIDUAL COLOURS

Colour	1 Roll	10 Rolls/Sleeve	100 Rolls/Carton
Black	669999	769999	769999B
Blue	669666	769666	769666B
Green	669668	769668	769668B
Red	669671	769671	769671B
White	669672	769672	769672B
Yellow	669673	769673	769673B



669999



669666



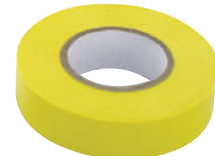
669668



669671



669672



669673



MIXED COLOURS

769649 Sleeve of 6 Rolls, 1 of each colour (Black, Blue, Green, Red, White & Yellow)

769649B Same as **769649**, except 20 Sleeves (of 6 Rolls) per carton (120 Rolls Total)



PVC Electrical Tape
10 Rolls/Sleeve



Sleeve of 6 rolls mixed colours
769649

GOLD WEATHER TAPE

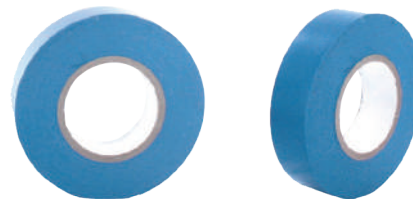
- 600 Volt rating
- Temperature Rating -18°C to 105°C (0°F to 221°F).
Easy to apply, even at low temperatures
- Weather-Resistant
- Can be used as primary insulation at not more than 600 Volts
- Flame retardant
- Lead-free
- Highly elastic
- CSA Approved/UL Listed
- Dimensions (Length x Width x Thickness):
20m x 19mm x .18mm (66' x 3/4" x .007")

Colour	1 Roll
Black	669657
Ice-Blue	669653

^Using P# **769650** will include 50 rolls of tape (25 Black, 25 'ICE' Blue) as well as a shipping/display carton.



Cold Weather Tape... for applications as low as -18°C



669653



669657



769650

WHY THE "ICE-BLUE" COLOUR?

- Installer/End User will know that a genuine Cold Weather Arctic Tape is being used



Order your Cold Weather Tape Display TODAY



HEAT SHRINK STANDARD PACKAGING



Part No.	COLOUR	SIZE EXP.	SIZE REC.	CTN/QTY
ADHESIVE LINED POLYOLEFIN H.S. IN 4 FT. LENGTHS				
ALPO-125-0-IIL	BLACK	1/8"	1/24"	200 FT
ALPO-187-0-IIL	BLACK	3/16"	1/16"	200 FT
ALPO-250-0-IIL	BLACK	1/4"	1/12"	100 FT
ALPO-375-0-IIL	BLACK	3/8"	1/8"	100 FT
ALPO-500-0-IIL	BLACK	1/2"	1/6"	100 FT
ALPO-750-0-IIL	BLACK	3/4"	1/4"	40 FT
ALPO-1000-0-IIL	BLACK	1"	1/3"	40 FT
ALPO-1250-0-IIL	BLACK	1-1/4"	7/16"	40 FT
ALPO-1500-0-IIL	BLACK	1-1/2"	1/2"	40 FT
ALPO-125-2-IIL	RED	1/8"	1/24"	200 FT
ALPO-187-2-IIL	RED	3/16"	1/16"	200 FT
ALPO-250-2-IIL	RED	1/4"	1/12"	100 FT
ALPO-375-2-IIL	RED	3/8"	1/8"	100 FT
ALPO-500-2-IIL	RED	1/2"	1/6"	100 FT
ALPO-750-2-IIL	RED	3/4"	1/4"	40 FT
ALPO-1000-2-IIL	RED	1"	1/3"	40 FT
ALPO-1250-2-IIL	RED	1-1/4"	7/16"	40 FT
ALPO-1500-2-IIL	RED	1-1/2"	1/2"	40 FT
ADHESIVE LINED POLYOLEFIN H.S. IN 6" PIECES				
ALPO-125-0-6"	BLACK	1/8"	1/24"	6 PCS
ALPO-187-0-6"	BLACK	3/16"	1/16"	6 PCS
ALPO-250-0-6"	BLACK	1/4"	1/12"	6 PCS
ALPO-375-0-6"	BLACK	3/8"	1/8"	6 PCS
ALPO-500-0-6"	BLACK	1/2"	1/6"	6 PCS
ALPO-750-0-6"	BLACK	3/4"	1/4"	6 PCS
ALPO-1000-0-6"	BLACK	1"	1/3"	6 PCS
ALPO-1500-0-6"	BLACK	1-1/2"	1/2"	6 PCS
ALPO-125-2-6"	RED	1/8"	1/24"	6 PCS
ALPO-187-2-6"	RED	3/16"	1/16"	6 PCS
ALPO-250-2-6"	RED	1/4"	1/12"	6 PCS
ALPO-375-2-6"	RED	3/8"	1/8"	6 PCS
ALPO-500-2-6"	RED	1/2"	1/6"	6 PCS
ALPO-750-2-6"	RED	3/4"	1/4"	6 PCS
ALPO-1000-2-6"	RED	1"	1/3"	6 PCS
THIN WALL POLYOLEFIN H.S. IN 4 FT. LENGTHS				
HSP0-062-0-IIL	BLACK	1/16"	1/32"	200 FT
HSP0-125-0-IIL	BLACK	1/8"	1/16"	200 FT
HSP0-187-0-IIL	BLACK	3/16"	3/32"	200 FT
HSP0-250-0-IIL	BLACK	1/4"	1/8"	100 FT
HSP0-312-0-IIL	BLACK	5/16"	5/32"	100 FT
HSP0-375-0-IIL	BLACK	3/8"	3/16"	100 FT
HSP0-500-0-IIL	BLACK	1/2"	1/4"	100 FT
HSP0-625-0-IIL	BLACK	5/8"	5/16"	100 FT
HSP0-750-0-IIL	BLACK	3/4"	3/8"	40 FT
HSP0-1000-0-IIL	BLACK	1"	1/2"	40 FT
HSP0-1500-0-IIL	BLACK	1-1/2"	3/4"	40 FT
HSP0-2000-0-IIL	BLACK	2"	1"	40 FT
HSP0-3000-0-IIL	BLACK	3"	1.5"	20 FT
HSP0-4000-0-IIL	BLACK	4"	2"	20 FT

Part No.	COLOUR	SIZE EXP.	SIZE REC.	CTN/QTY
THIN WALL POLYOLEFIN H.S. IN 4 FT. LENGTHS				
HSP0-062-2-IIL	RED	1/16"	1/32"	200 FT
HSP0-125-2-IIL	RED	1/8"	1/16"	200 FT
HSP0-187-2-IIL	RED	3/16"	3/32"	200 FT
HSP0-250-2-IIL	RED	1/4"	1/8"	100 FT
HSP0-375-2-IIL	RED	3/8"	3/16"	100 FT
HSP0-500-2-IIL	RED	1/2"	1/4"	100 FT
HSP0-625-2-IIL	RED	5/8"	5/16"	100 FT
HSP0-750-2-IIL	RED	3/4"	3/8"	40 FT
HSP0-1000-2-IIL	RED	1"	1/2"	40 FT
HSP0-1500-2-IIL	RED	1-1/2"	3/4"	40 FT
HSP0-062-5-IIL	GREEN	1/16"	1/32"	200 FT
HSP0-125-5-IIL	GREEN	1/8"	1/16"	200 FT
HSP0-187-5-IIL	GREEN	3/16"	3/32"	200 FT
HSP0-250-5-IIL	GREEN	1/4"	1/8"	100 FT
HSP0-375-5-IIL	GREEN	3/8"	3/16"	100 FT
HSP0-500-5-IIL	GREEN	1/2"	1/4"	100 FT
HSP0-625-5-IIL	GREEN	5/8"	5/16"	100 FT
HSP0-750-5-IIL	GREEN	3/4"	3/8"	40 FT
HSP0-1000-5-IIL	GREEN	1"	1/2"	40 FT
HSP0-1500-5-IIL	GREEN	1-1/2"	3/4"	40 FT
HSP0-062-4-IIL	YELLOW	1/16"	1/32"	200 FT
HSP0-125-4-IIL	YELLOW	1/8"	1/16"	200 FT
HSP0-187-4-IIL	YELLOW	3/16"	3/32"	200 FT
HSP0-250-4-IIL	YELLOW	1/4"	1/8"	100 FT
HSP0-375-4-IIL	YELLOW	3/8"	3/16"	100 FT
HSP0-500-4-IIL	YELLOW	1/2"	1/4"	100 FT
HSP0-625-4-IIL	YELLOW	5/8"	5/16"	100 FT
HSP0-750-4-IIL	YELLOW	3/4"	3/8"	40 FT
HSP0-1000-4-IIL	YELLOW	1"	1/2"	40 FT
HSP0-1500-4-IIL	YELLOW	1-1/2"	3/4"	40 FT
HSP0-062-6-IIL	BLUE	1/16"	1/32"	200 FT
HSP0-125-6-IIL	BLUE	1/8"	1/16"	200 FT
HSP0-187-6-IIL	BLUE	3/16"	3/32"	200 FT
HSP0-250-6-IIL	BLUE	1/4"	1/8"	100 FT
HSP0-375-6-IIL	BLUE	3/8"	3/16"	100 FT
HSP0-500-6-IIL	BLUE	1/2"	1/4"	100 FT
HSP0-625-6-IIL	BLUE	5/8"	5/16"	100 FT
HSP0-750-6-IIL	BLUE	3/4"	3/8"	40 FT
HSP0-1000-6-IIL	BLUE	1"	1/2"	40 FT
HSP0-1500-6-IIL	BLUE	1-1/2"	3/4"	40 FT
HSP0-062-WH-IIL	WHITE	1/16"	1/32"	200 FT
HSP0-125-WH-IIL	WHITE	1/8"	1/16"	200 FT
HSP0-187-WH-IIL	WHITE	3/16"	3/32"	200 FT
HSP0-250-WH-IIL	WHITE	1/4"	1/8"	100 FT
HSP0-375-WH-IIL	WHITE	3/8"	3/16"	100 FT
HSP0-500-WH-IIL	WHITE	1/2"	1/4"	100 FT
HSP0-625-WH-IIL	WHITE	5/8"	5/16"	100 FT
HSP0-750-WH-IIL	WHITE	3/4"	3/8"	40 FT
HSP0-1000-WH-IIL	WHITE	1"	1/2"	40 FT
HSP0-1500-WH-IIL	WHITE	1-1/2"	3/4"	40 FT





HEAT SHRINK

C

Part No.	COLOUR	SIZE EXP.	SIZE REC.	CTN/QTY
THIN WALL POLYOLEFIN H.S. IN 6" PCS				
HSP0-062-0-6"	BLACK	1/16"	1/32"	6 PCS
HSP0-125-0-6"	BLACK	1/8"	1/16"	6 PCS
HSP0-187-0-6"	BLACK	3/16"	3/32"	6 PCS
HSP0-250-0-6"	BLACK	1/4"	1/8"	6 PCS
HSP0-375-0-6"	BLACK	3/8"	3/16"	6 PCS
HSP0-500-0-6"	BLACK	1/2"	1/4"	6 PCS
HSP0-750-0-6"	BLACK	3/4"	3/8"	6 PCS
HSP0-1000-0-6"	BLACK	1"	1/2"	6 PCS

THIN-WALL POLYOLEFIN H.S. 100' ROLLS				
HSP0-062-0-C	BLACK	1/16"	1/32"	100 FT
HSP0-125-0-C	BLACK	1/8"	1/16"	100 FT
HSP0-187-0-C	BLACK	3/16"	3/32"	100 FT
HSP0-250-0-C	BLACK	1/4"	1/8"	100 FT
HSP0-375-0-C	BLACK	3/8"	3/16"	100 FT
HSP0-500-0-C	BLACK	1/2"	1/4"	100 FT
HSP0-750-0-C	BLACK	3/4"	3/8"	100 FT
HSP0-1000-0-C	BLACK	1"	1/2"	100 FT
HSP0-1500-0-C	BLACK	1-1/2"	3/4"	100 FT
HSP0-2000-0-L	BLACK	2"	1"	50 FT

BUTANE TORCH

MODEL #: 762099

- Ideal for heat shrink tubing
- Adjustable flame
- Butane not included
- Uses regular lighter butane refill



Heat Shrink Torch – Medium Duty

Part No.	COLOUR	SIZE EXP.	SIZE REC.	CTN/QTY
MEDIUM WALL ADHESIVE LINED POLYOLEFIN H.S. IN 4 FT. LENGTHS				
MAPO-400-0-IIL	BLACK	.40"	.15"	8 FT
MAPO-750-0-IIL	BLACK	.75"	.22"	8 FT
MAPO-1100-0-IIL	BLACK	1.10"	.40"	4 FT
MAPO-1300-0-IIL	BLACK	1.30"	.40"	4 FT
MAPO-1500-0-IIL	BLACK	1.50"	.50"	4 FT
MAPO-1700-0-IIL	BLACK	1.70"	.50"	4 FT
MAPO-2050-0-IIL	BLACK	2.05"	.75"	4 FT
MAPO-2750-0-IIL	BLACK	2.75"	1.00"	4 FT
MAPO-3500-0-IIL	BLACK	3.50"	1.18"	4 FT
MAPO-4700-0-IIL	BLACK	4.70"	1.57"	4 FT
MAPO-6700-0-IIL	BLACK	6.70"	2.30"	4 FT
MAPO-9000-0-IIL	BLACK	9.00"	3.00"	4 FT

HEAVY WALL ADHESIVE LINED POLYOLEFIN H.S. IN 4 FT. LENGTHS				
HAP0-350-0-IIL	BLACK	.35"	.12"	8 FT
HAP0-500-0-IIL	BLACK	.51"	.16"	8 FT
HAP0-750-0-IIL	BLACK	.75"	.24"	4 FT
HAP0-1100-0-IIL	BLACK	1.10"	.35"	4 FT
HAP0-1500-0-IIL	BLACK	1.50"	.47"	4 FT
HAP0-2000-0-IIL	BLACK	2.00"	.63"	4 FT
HAP0-2700-0-IIL	BLACK	2.68"	.87"	4 FT
HAP0-3500-0-IIL	BLACK	3.54"	1.18"	4 FT
HAP0-4700-0-IIL	BLACK	4.72"	1.57"	4 FT

HEAT SHRINK GUN

MODEL#: HS-GUN

- Includes Hot Air Baffle
- 120 Volt
- 1200 Watt 4100 BTU
- 2 Stage (750° F, 1000° F)



Heat Shrink Gun – Flameless

HEAT SHRINK DISPLAY

NEW



HS-DISPLAY-COMPLETE

Heat Shrink Display

Part#		Qty/Pkg
HS-DISPLAY	Display only – no product	1 PC
HS-DISPLAY-COMPLETE	Contains the Display and following part numbers:	
PART NUMBER	DESCRIPTION	Qty/PC
HAPO-350-0-IIL	HT SHK HVY SEAL .35" ID BLK 4FT	5
HAPO-500-0-IIL	HT SHK HVY SEAL 1/2" ID BLK 4FT	5
HAPO-750-0-IIL	HT SHK HVY SEAL 3/4" ID BLK 4FT	5
HAPO-1100-0-IIL	HT SHK HVY SEAL 1.1" ID BLK 4FT	2
HAPO-1500-0-IIL	HT SHK HVY SEAL 1.5" ID BLK 4FT	2
HAPO-2000-0-IIL	HT SHK HVY SEAL 2" ID BLK 4FT	1
HAPO-2700-0-IIL	HT SHK HVY SEAL 2.7" ID BLK 4FT	1
HAPO-3500-0-IIL	HT SHK HVY SEAL 3.5" ID BLK 4FT	1
ALPO-125-0-IIL	HT SHK SEAL WALL 1/8" ID BLK 4FT	10
ALPO-187-0-IIL	HT SHK SEAL WALL 3/16" ID BLK 4FT	10
ALPO-250-0-IIL	HT SHK SEAL WALL 1/4" ID BLK 4FT	10
ALPO-375-0-IIL	HT SHK SEAL WALL 3/8" ID BLK 4FT	10
ALPO-500-0-IIL	HT SHK SEAL WALL 1/2" ID BLK 4FT	10
ALPO-750-0-IIL	HT SHK SEAL WALL 3/4" ID BLK 4FT	10
ALPO-1000-0-IIL	HT SHK SEAL WALL 1" ID BLK 4FT	5
MHSP-1/16-0-IIL	HT SHK THIN-WALL 1/16" ID BLK 4FT	10
MHSP-1/2-0-IIL	HT SHK THIN-WALL 1/2" ID BLK 4FT	20
MHSP-3/32-0-IIL	HT SHK THIN-WALL 3/32" ID BLK 4FT	10
MHSP-1/8-0-IIL	HT SHK THIN-WALL 1/8" ID BLK 4FT	20
MHSP-1/4-0-IIL	HT SHK THIN-WALL 1/4" ID BLK 4FT	20
MHSP-5/16-0-IIL	HT SHK THIN-WALL 5/16" ID BLK 4FT	5
MHSP-3/16-0-IIL	HT SHK THIN-WALL 3/16" ID BLK 4FT	10
MHSP-3/8-0-IIL	HT SHK THIN-WALL 3/8" ID BLK 4FT	10
MHSP-3/4-0-IIL	HT SHK THIN-WALL 3/4" ID BLK 4FT	10
MHSP-1-0-IIL	HT SHK THIN-WALL 1" ID BLK 4FT	5


**ADHESIVE
 LINED
 UNDERGROUND
 SPLICING**


**SINGLE
 WALL**

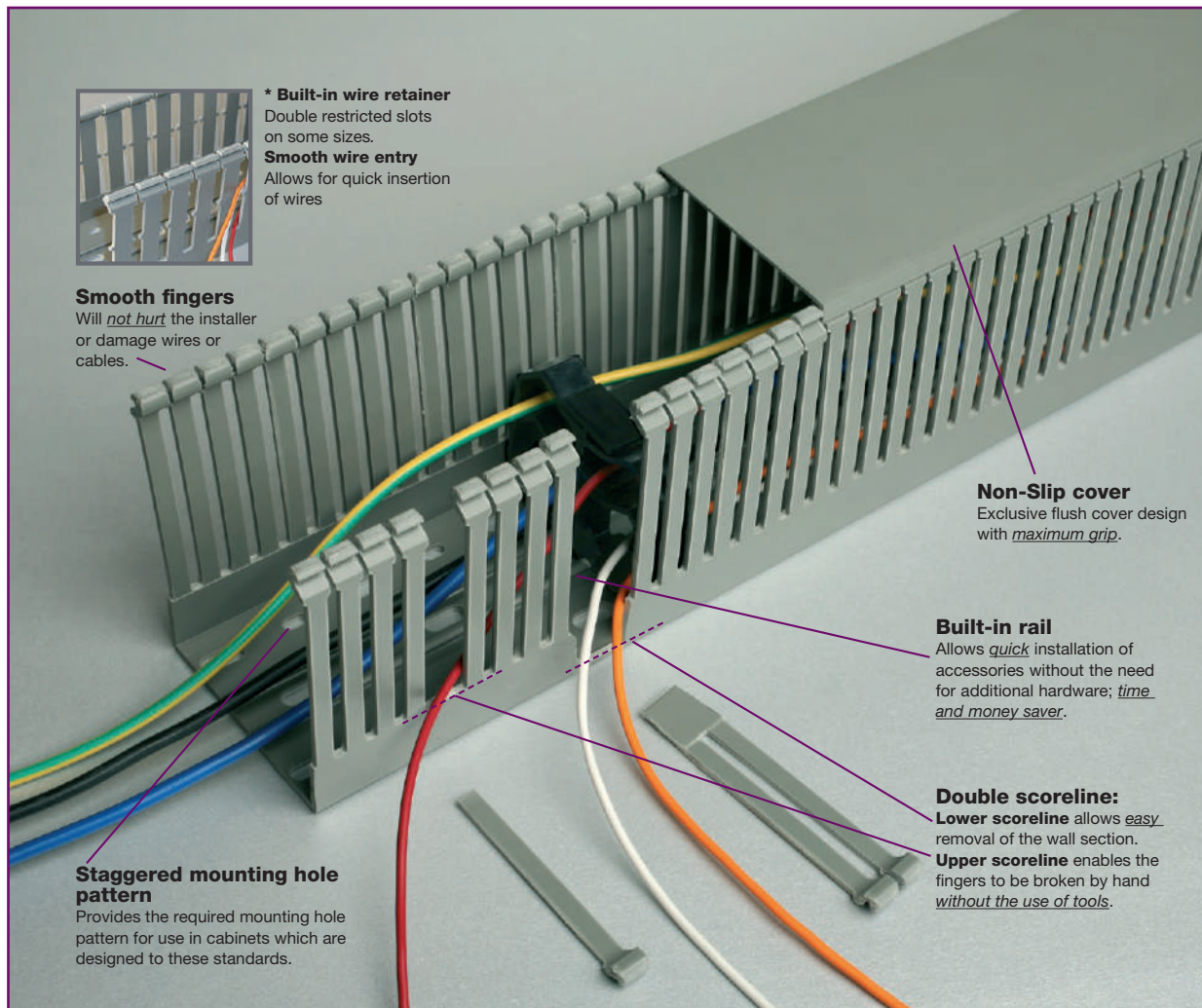
EURO-DUCT – NARROW SLOT

Designed for terminal block and Din component applications with higher number of entries into the duct.

Wire ducts with 4 mm. slots
 Material: Self-extinguishing rigid PVC Class 1 (UL94-VO)
 RoHS certified.

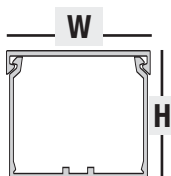
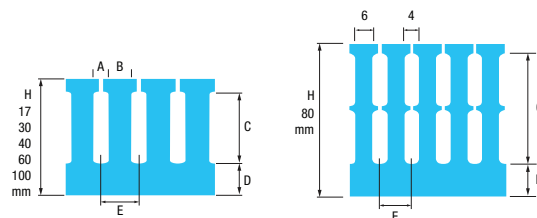


D



- All wiring ducts come complete with cover.

The RoHS Directive stands for "the restriction of the use of certain hazardous substances in electrical and electronic equipment". This Directive will ban the use on the EU market of new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants starting July 1, 2006.



COLOUR:

G = Grey

Height H	Slots sizes mm.				
	A	B	C	D	E
17	4	6	7	5	12
30	8	12	12	9	12
40	8	12	17	12	12
60	8	12	37	14	12
80	8	12	55	16	12
100	8	12	72	20	12

EURO-DUCT – NARROW SLOT

Wire ducts with 4 mm. slots
Lead free. RoHS certified.



Part Number	Duct Size WxH		CP Type	Standard Carton Qty	Length		Accessories Selection	
	Inches	(mm)			ft	(mtr)	Cross-Arms	Separators
S2530C	0.98x1.18	25x30	CZE16 4	40	6.56	2		
S2540C	0.98x1.57	25x40	CZE13 4	30	6.56	2		
S2560C	0.98x2.36	25x60	CZE7 4	20	6.56	2		
S2580C†	0.98x3.15	25x80	CZE14 4	16	6.56	2		
S25100C	0.98x3.94	25x100	CZE34 4	12	6.56	2		
S4040C	1.57x1.57	40x40	CZE8 4	20	6.56	2	PTR	
S4060C	1.57x2.36	40x60	CZE5 4 CG *	18	6.56	2	PTR	S2C
S4080C†	1.57x3.15	40x80	CZE15 4 CG *	12	6.56	2	PTR	S4C
S40100C	1.57x3.94	40x100	CZE35 4	8	6.56	2	PTR	
S6040C	2.36x1.57	60x40	CZE4 4 CG *	24	6.56	2	PTR	S1C**-S3C
S6060C	2.36x2.36	60x60	CZE9 4 CG *	12	6.56	2	PTR	S2C
S6080C†	2.36x3.15	60x80	CZE11 4 CG *	12	6.56	2	PTR	S4C
S60100C	2.36x3.94	60x100	CZE18 4	8	6.56	2	PTR	
S8040C	3.15x1.57	80x40	CZE26 4 CG *	12	6.56	2	PTR	S1C**-S3C
S8060C	3.15x2.36	80x60	CZE6 4 CG *	12	6.56	2	PTR	S2C
S8080C†	3.15x3.15	80x80	CZE12 4 CG *	12	6.56	2	PTR	S4C
S80100C	3.15x3.94	80x100	CZE36 4	8	6.56	2	PTR	S5C
S10060C	3.94x2.36	100x60	CZE17 4 CG *	10	6.56	2	PTR	S2C
S10080C†	3.94x3.15	100x80	CZE19 4 CG *	8	6.56	2	PTR	S4C
S100100C	3.94x3.94	100x100	CZE37 4	8	6.56	2	PTR	S5C
S12060C	4.72x2.36	120x60	CZE104	8	6.56	2	PTR	S2C

† Built-in Wire Retainer

S1**= double separator

PLEASE CALL FOR PRODUCT AVAILABILITY



Flush cover design with maximum grip.



Designed for use with several accessories: wire retainers, label holders etc.

Accessories

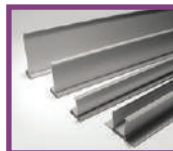
PTR



DMF *



SC



WT-1 – Duct Cutting Tool

Complete selection of accessories and tools for installation: see pages D-8, 9

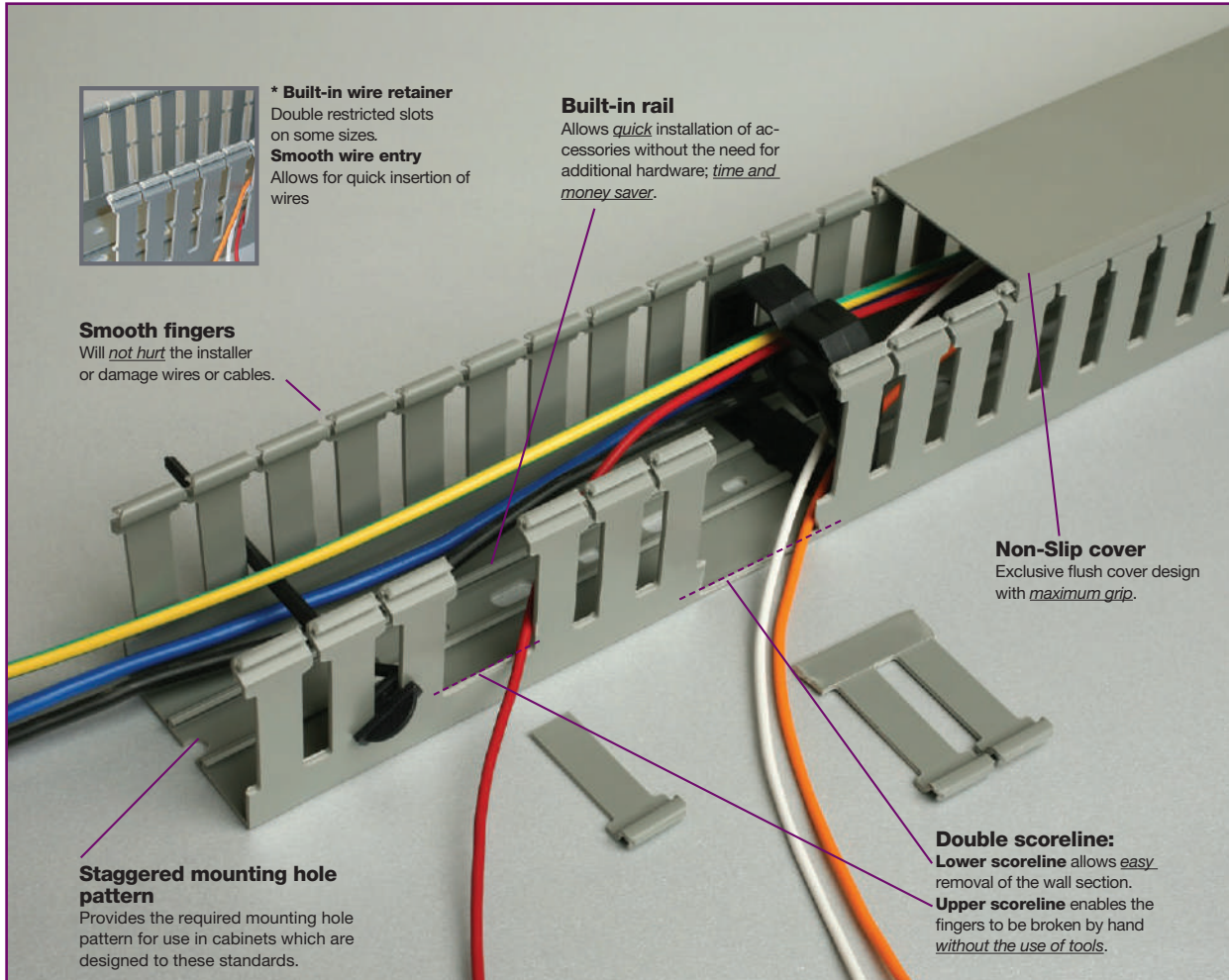
AMERI-DUCT – WIDE SLOT

Wiring ducts with large fingers and larger slots for easy insertion of larger wires and cables.

Wire ducts with 8 mm. slots
 Material: Self-extinguishing rigid PVC Class 1 (UL94-VO)
 RoHS certified.



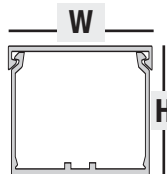
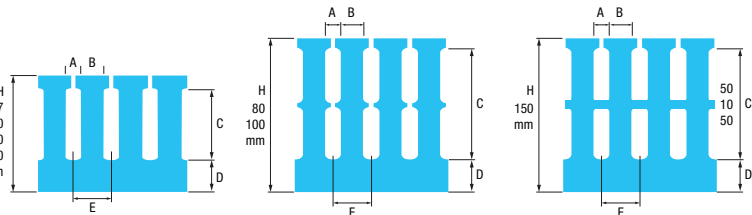
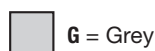
D



- All wiring ducts come complete with cover.

The RoHS Directive stands for "the restriction of the use of certain hazardous substances in electrical and electronic equipment". This Directive will ban the use on the EU market of new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants starting July 1, 2006.

COLOUR:



Height H	Slots sizes mm.				
	A	B	C	D	E
17	4	6	7	5	20
30	8	12	12	9	20
40	8	12	17	12	20
60	8	12	37	14	20
80	8	12	55	16	20
100	8	12	72	20	20
150	20	30	110	26	50

AMERI-DUCT – WIDE SLOT

Wire ducts with 8 mm. slots
Lead free. RoHS certified.



Part Number	Duct Size WxH		CP Type	Standard Carton Qty	Length		Accessories Selection	
	Inches	(mm)			ft	(mtr)	Cross-Arms	Separators
A1517C	0.59x0.67	15x17	CZE20	60	6.56	2		
A1530C	0.59x1.18	15x30	CZE22	48	6.56	2		
A1540C	0.59x1.57	15x40	CZE25	36	6.56	2		
A2530C	0.98x1.18	25x30	CZE16	40	6.56	2		
A2540C	0.98x1.57	25x40	CZE13	30	6.56	2		
A2560C	0.98x2.36	25x60	CZE7	20	6.56	2	PTR	
A2580C†	0.98x3.15	25x80	CZE14	16	6.56	2	PTR	S2C
A25100C†	0.98x3.94	25x100	CZE34	12	6.56	2	PTR	S4C
A4030C	1.57x1.18	40x30	CZE23	24	6.56	2	PTR	
A4040C	1.57x1.57	40x40	CZE8	20	6.56	2	PTR	S1C**-S3C
A4060C	1.57x2.36	40x60	CZE5 CG *	18	6.56	2	PTR	S2C
A4080C†	1.57x3.15	40x80	CZE15 CG *	12	6.56	2	PTR	S4C
A40100C†	1.57x3.94	40x100	CZE35	8	6.56	2	PTR	
A6030C	2.36x1.18	60x30	CZE24	16	6.56	2	PTR	S1C**-S3C
A6040C	2.36x1.57	60x40	CZE4 CG *	24	6.56	2	PTR	S2C
A6060C	2.36x2.36	60x60	CZE9 CG *	12	6.56	2	PTR	S4C
A6080C†	2.36x3.15	60x80	CZE11 CG *	12	6.56	2	PTR	S5C
A60100C†	2.36x3.94	60x100	CZE18	8	6.56	2	PTR	S2C
A8040C	3.15x1.57	80x40	CZE26 CG *	12	6.56	2	PTR	S4C
A8060C	3.15x2.36	80x60	CZE6 CG *	12	6.56	2	PTR	S5C
A8080C†	3.15x3.15	80x80	CZE12 CG *	12	6.56	2	PTR	S5C
A80100C†	3.15x3.94	80x100	CZE36	8	6.56	2	PTR	S2C
A10040C	3.94x1.57	100x40	CZE27	8	6.56	2		
A10060C	3.94x2.36	100x60	CZE17 CG *	10	6.56	2		
A10080C†	3.94x3.15	100x80	CZE19 CG *	8	6.56	2		
A100100C†	3.94x3.94	100x100	CZE37	8	6.56	2		
A100150C†	3.94x5.91	100x150	CZE43	4	6.56	2		
A12060C	4.72x2.36	120x100	CZE310	8	6.56	2		
A150100C†	5.91x3.94	150x100	CZE39	4	6.56	2		

† Built-in Wire Retainer

S1**= double separator

PLEASE CALL FOR PRODUCT AVAILABILITY

Accessories

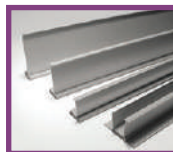
PTR



DMF *



SC



Complete selection of accessories and tools for installation: see pages D-8, 9

WT-1 – Duct Cutting Tool

CORNER EDGE DUCT

Modular angular trunking for cabling.

Material: Self-extinguishing rigid PVC Class 1 (UL94-VO) RoHS certified.



Patented:

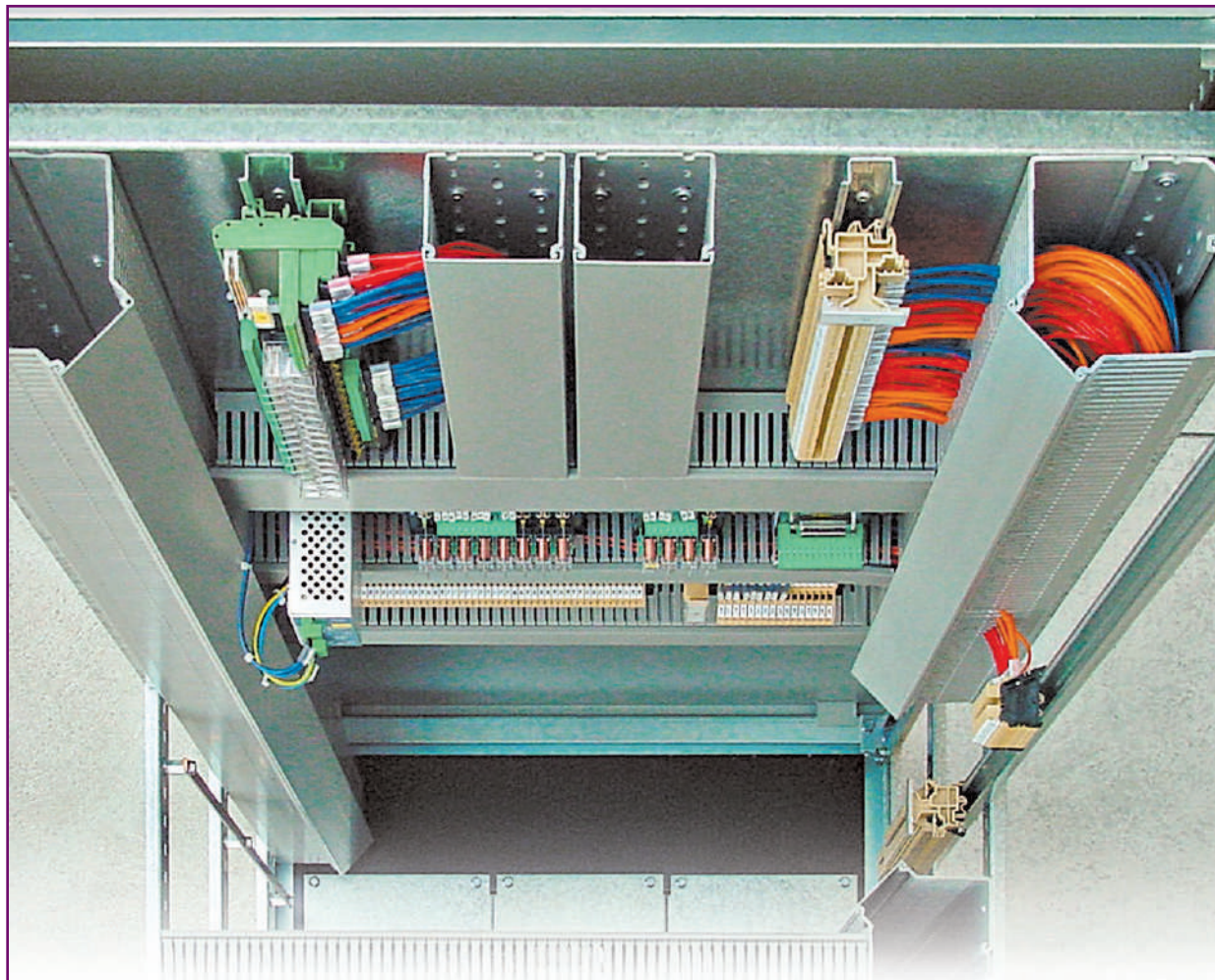
N° 00246688

MI99U000250


23/04/1999



D



COLOUR:

 G = Grey

CORNER EDGE DUCT

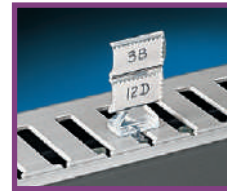
Modular angular trunking for cabling.

Material: Self-extinguishing rigid PVC Class 1 (UL94-V0)

RoHS certified.



Part Number	Duct Size WxH		Standard Carton Qty	Length	
	Inches	(mm)		ft	(mtr)
S1106080	4.33x2.36x3.15	110x60x80	4	6.56	2
S904060	4.33x1.57x3.15	90x40x80	4	6.56	2



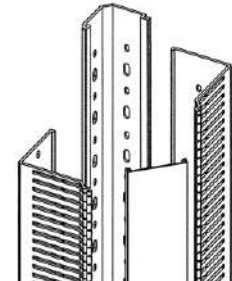
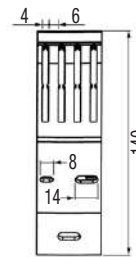
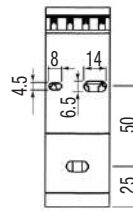
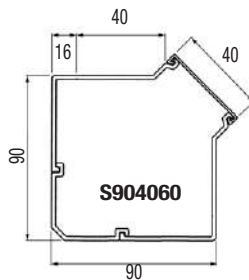
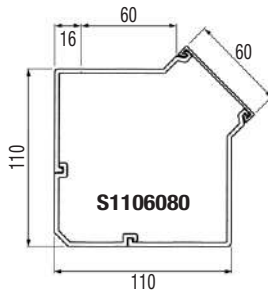
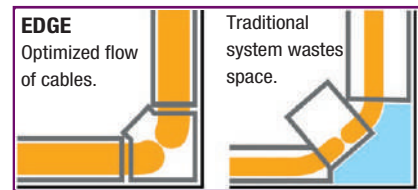
Designed for use with several accessories: wire retainers, label holders etc.

Advantages of the system.

The Edge wire duct is designed to be used on the very corner of the enclosure where the space is normally not utilized. This system allows wires and cables to be routed professionally to the lateral panels.

Features of the EDGE ducts.

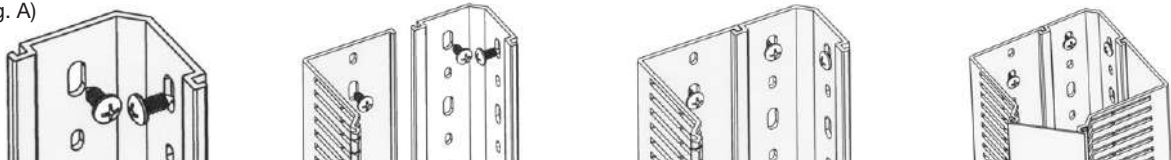
Available with cover opening of 40 and 60 mm (90 x 90 mm, 110 x 110 mm) and useful sections of 9000 and 11,050 mm². Just changing the "L" shaped bottom piece and keeping the same side wall, you will get a big saving on the ducts and stocking costs, beside getting an increase in wire fill capacity inside the electrical panel.



Installation.

Connecting the two slotted walls, 4 mm slots, you have the possibility of use the bottom and side panels for the fixing of instruments and terminals. You can avoid strange applications that, to get the same result, need the fixing of the traditional duct on corner clamps, a solution that restricts the space available for cables.

(fig. A)



Fix the corner profile between the panels, with 2-4 rivets (RIV1) or screw per meter (see fig. A). Set the slotted walls under the profile and in the suitable groove. Fix the panel with 2-4 rivets (RIV1) per meter. Fix the cover by pressing. To hold back the wires, use the cross arm TR4-TR6 not supplied.

Accessories

PTR



WT-1 – Duct Cutting Tool

Complete selection of accessories and tools for installation:
see pages D-8, 9

DUCT ACCESSORIES

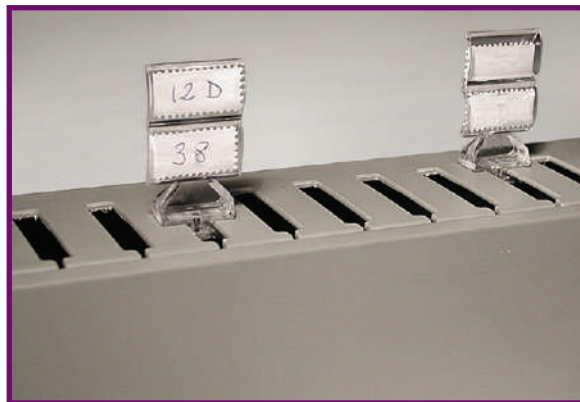
PTE

Part Number	CP Type	PCS Package
PTE	PTE	250 (5x50)

PLEASE CALL FOR PRODUCT AVAILABILITY

Label Holder.
For Type E - A wire ducts.

COLOUR: Transparent



D

PTR

Part Number	CP Type	PCS Package
PTR	PTR	100 (4x25)

PLEASE CALL FOR PRODUCT AVAILABILITY

Cross arm for Type E - A trunkings.



RIV1 / RIV2

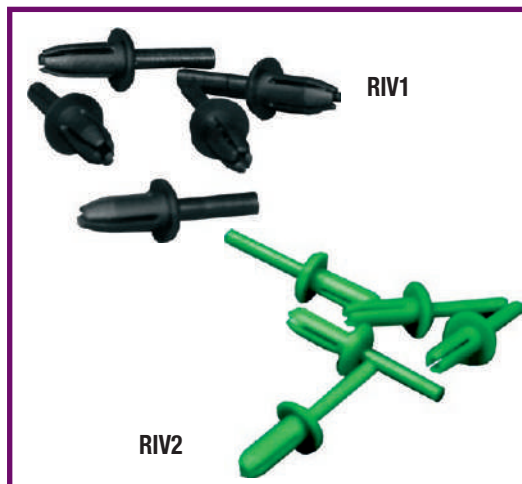
Part Number	Ø in.	Ø mm.	PCS Package
RIV1	0.25	6.5	1000 (5x200)
RIV2	0.18	4.5	1000 (5x200)

PLEASE CALL FOR PRODUCT AVAILABILITY

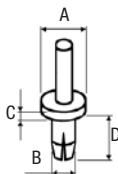
Rivets. To fix the ducts to panels.
Material: Nylon

COLOUR: RIV1 Black

RIV2 Green



Type	A	B	C	D
RIV1	11.3	6	2	10
RIV2	10	4.5	3	8.5



RIV 1 expansion from 6.5 to 7.5 mm
RIV2 from 4.5 to 5.5 mm

DUCT ACCESSORIES (Continued)

PRRIV

Part Number	Ø in.	Ø mm.	PCS Package
PRRIV1	0.25	6.5	1000 (5x200)
PRRIV2	0.18	4.5	1000 (5x200)

PLEASE CALL FOR PRODUCT AVAILABILITY

Riveting tool.

For the fast installation of the RIV1 and RIV2 rivets.

PRRIV1 = Riveting tool RIV1

PRRIV2 = RIV2 adapter



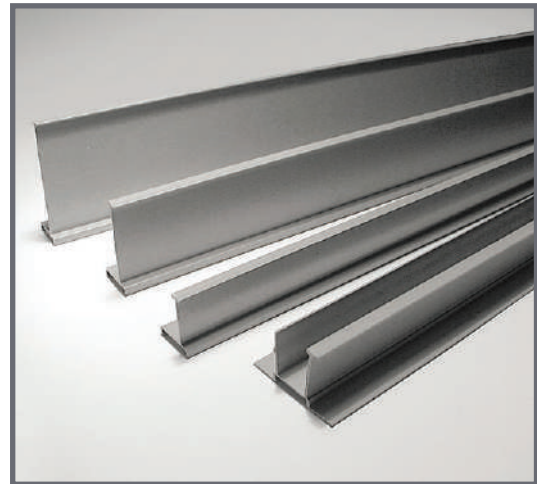
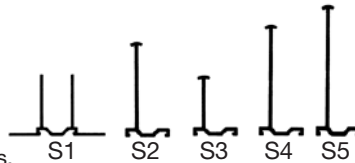
S()C

Part Number	Height		PCS Package
	inch	mm.	
S1C (2 separators)	1.57	40	30
S2C	2.36	60	50
S3C	1.57	40	60
S4C	3.15	80	32
S5C	3.94	100	32

PLEASE CALL FOR PRODUCT AVAILABILITY

Cable separator.

For separating the cables housed inside the ducting. Snap on the built-in rail of the duct. Several separation schemes can be obtained using different separators.



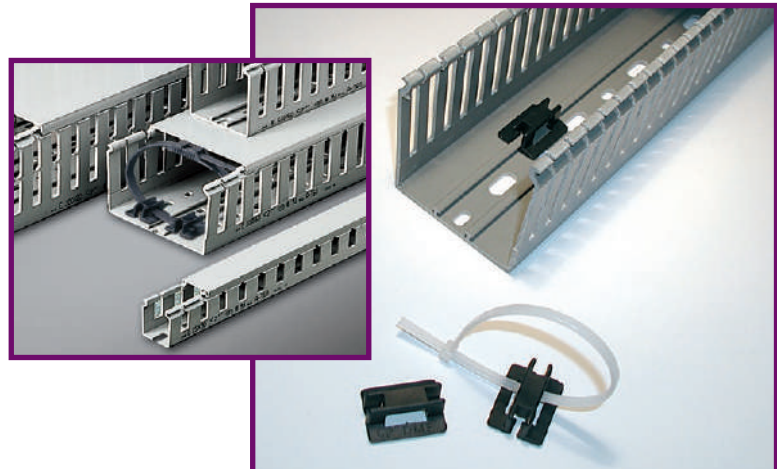
DMF

Part Number	CP Type	PCS Package
DMF	DMF	100 (2x50)

PLEASE CALL FOR PRODUCT AVAILABILITY

Cable tie holder which can be attached to all ducts fitted with a base rail.

Material: Nylon



D

'SNAP-DUCT' RACEWAY

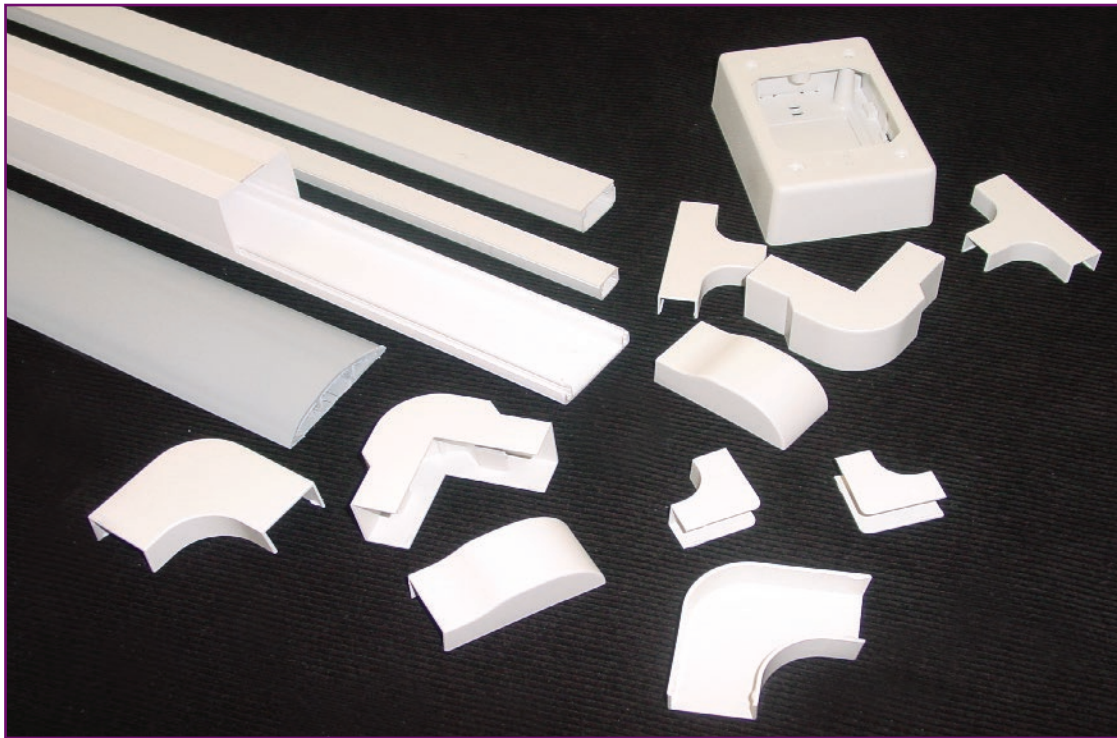


- Easy to install
- Low profile
- Durable
- Category 5
- Colours
- 48 Volts (max.)

All raceways, fittings and accessories are manufactured from high impact PVC and ABS, which complies with both UL 94V-0 and CSA 0.6V-0 flame ratings.

TYPICAL APPLICATION:

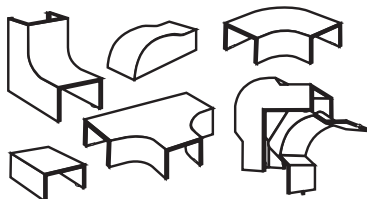
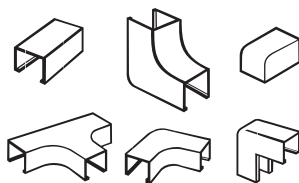
To secure, protect, and conceal all types of wire and cable in any residential, commercial or industrial application.



D



Reducer



REDUCER

Part #	Description	Colour	Standard Package
SD1250/500 RWH	02 to 01 Reducer	Off White	1 Pk

COMBO PACK *

Part #	Description	Colour	Standard Package
SD500CBPKWH	01 Combo-Pack	Off White	1 Pk

*Each bag contains, 4 Couplings, 2 End Caps, 4 Inside Corners, 4 Outside Corners, 4 Right Angles and 2 Tee Connectors.

COMBO PACK *

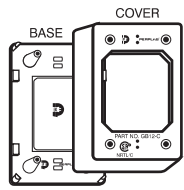
Part #	Description	Colour	Standard Package
SD1250CBPKWH	01 Combo-Pack	Off White	1 Pk

*Each bag contains, 2 Couplings, 1 End Cap, 2 Inside Corners, 2 Outside Corners, 4 Right Angles and 1 Tee Connectors.

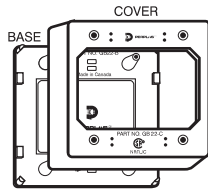
'SNAP-DUCT' RACEWAY



SINGLE



DOUBLE

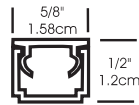
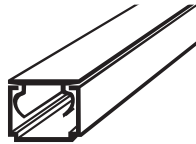


SINGLE GANG BOX

Part #	Description	Colour	Size W" x H"	Standard Package
SD-BOX-WH	Single Gang Box	Off White	3-3/8" x 5-1/8" x 1-11/16"	1

DOUBLE GANG BOX

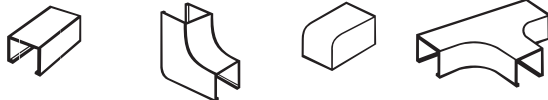
Part #	Description	Colour	Size W" x H"	Standard Package
SD-2G-BOX-WH	Double Gang Box	Off White	5-1/4" x 5-1/8" x 2"	1



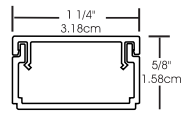
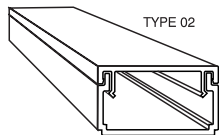
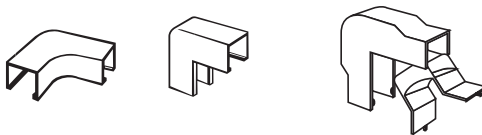
RACEWAY WITH TAPE

Part #	Description	Colour	Size W" x H"	Length	Standard Package
SDPV 500 WH6	Raceway W/Tape	Off White	5/8" X 1/2"	6' 0"	300 ft

Coupling Inside Corner End Cap Tee Connector



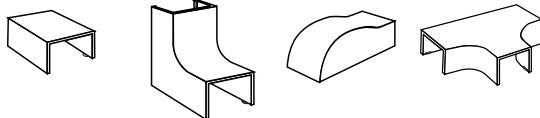
Right Angle Outside Corner Category 5 Outside Corner



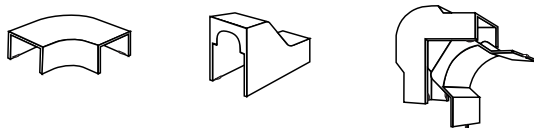
RACEWAY WITH TAPE

Part #	Description	Colour	Size W" x H"	Length	Standard Package
SDPV 1250 WH6	Raceway W/Tape	Off White	1-1/4" X 5/8"	6' 0"	120 ft

Coupling Inside Corner End Cap Tee Connector



Right Angle Drop Ceiling Entrance End Category 5 Outside Corner



Carpet / Floor Ramp



CARPET / FLOOR RAMP

Part #	Description	Colour	Size W" x H"	Length	Standard Package
RAMP3000GR6	Carpet/Floor Ramp	Gray	3" x 5/8"	6' 0"	60 ft.

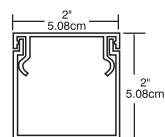
RACEWAY 1 X 2

Part #	Description	Colour	Size W" x H"	Length	Standard Package
SDPV1000WH6	Raceway w/tape	Off White	1" x 2"	6' 0"	60 ft.

RACEWAY 2 X 2

Part #	Description	Colour	Size W" x H"	Length	Standard Package
SDPV2000WH6	Raceway w/tape	Off White	2" x 2"	6' 0"	36 ft.

Raceway 2 x 2



D

WIRE FILL CAPACITY CHART

Duct Size WxH				ELECTRICAL												COMMUNICATION		
				8 AWG		10 AWG		12 AWG		14 AWG			16 AWG		18 AWG		22 AWG	24 AWG
inches	mm	G.S. in ²	G.S. mm ²	0.216	0.153	0.122	0.158	0.105	0.139	0.165	0.096	0.125	0.084	0.113	0.065	0.217	0.25	0.422
				THHN	THHN	THHN	MTW	THHN	MTW	MTW	TFFN	MTW	TFFN	MTW	MTW	UTP/CM Cat5e	STP/CM Cat6e	UPT/CM
0.59x0.67	15 x 17	0.263	170	3	5	10	6	14	8	6	16	10	21	12	36	3	2	1
0.59x1.57	15 x 30	0.496	320	6	10	19	11	52	15	10	31	18	40	22	67	6	5	1
0.59x1.57	15 x 40	0.697	450	9	13	27	16	72	21	15	43	26	57	30	95	8	6	2
0.98x1.18	25 x 30	0.852	550	10	16	33	20	89	25	18	53	31	69	37	116	10	8	2
0.98x1.57	25 x 40	1.178	760	14	23	45	27	122	35	25	73	43	96	51	160	14	11	3
0.98x2.36	25 x 60	1.86	1200	23	36	72	43	193	55	39	116	68	151	81	252	23	17	5
0.98x3.15	25 x 80	2.387	1540	29	46	92	55	248	71	50	148	88	194	104	324	29	22	6
0.98x3.94	25 x 100	3.565	2310	44	69	137	82	371	106	75	222	131	289	155	483	43	33	9
1.57x1.18	40 x 30	1.426	920	18	27	55	33	148	42	30	89	52	116	62	193	17	13	4
1.57x1.57	40 x 40	2.03	1310	25	39	78	47	211	60	43	126	74	165	88	275	25	19	5
1.57x2.36	40 x 60	3.038	1960	37	58	117	70	316	90	64	189	111	247	132	412	37	28	8
1.57x3.15	40 x 80	4.154	2680	51	80	160	95	432	123	87	258	152	337	181	563	51	38	10
1.57x3.94	40 x 100	5.192	3350	64	100	200	119	540	154	109	323	190	422	226	704	63	48	13
2.36x1.18	60 x 30	2.17	1400	27	42	84	50	226	64	46	135	80	176	94	294	26	20	5
2.36x1.57	60 x 40	3.038	1960	37	58	117	70	316	90	64	189	111	247	132	412	37	28	8
2.36x2.36	60 x 60	4.774	3080	59	92	184	110	496	142	100	297	175	388	208	647	58	44	12
2.36x3.15	60 x 80	6.509	4200	80	125	251	149	677	193	137	405	239	529	283	883	79	60	16
2.36x3.94	60 x 100	8.245	5320	101	159	317	189	857	245	174	513	302	670	359	1118	100	76	21
3.15x1.57	80 x 40	4.115	2655	51	79	158	94	428	122	87	256	151	334	179	558	50	38	10
3.15x2.36	80 x 60	6.471	4175	79	124	249	149	673	192	136	402	237	525	281	878	79	59	16
3.15x3.15	80 x 80	8.827	5695	108	170	340	203	917	262	186	549	324	717	384	1197	107	81	22
3.15x3.94	80 x 100	11.043	7125	136	212	425	253	1148	327	232	687	405	897	480	1498	134	101	28
3.94x1.57	100 x 40	5.231	3375	64	101	201	120	544	155	110	325	192	425	227	709	64	48	13
3.94x2.36	100 x 60	8.207	5295	101	158	316	188	853	243	173	510	301	666	357	1113	100	75	21
3.94x3.15	100 x 80	11.182	7215	137	215	431	257	1162	332	235	695	410	908	486	1517	136	103	28
3.94x3.94	100 x 100	14.158	9135	174	272	545	325	1472	420	298	880	519	1150	616	1920	172	130	36
3.94x5.91	100 x 150	21.226	3695	261	408	817	487	2206	629	447	1320	778	1724	923	2879	258	195	54
4.72x3.15	120 x 80	13.499	8710	166	260	520	310	1403	400	284	839	495	1096	587	1831	164	124	34
5.91x3.94	150 x 100	21.187	3670	260	407	816	486	2202	628	446	1317	777	1721	921	2873	258	194	54

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TECHNICAL INFO

Materials characteristics

	PVC Self-extinguishing	ABS Self-extinguishing
Specific gravity	1.48 g/cm ²	1.05 g/cm ²
Shore hardness	79 D	110 R
Vicat degree (5kg)	76°C	95°C
Izod resistance at 23° C (C. Int.)	7.4 Kj/m	70 J/m
Izod resistance at 0° C (C. Int.)	4.1 Kj/m	40 J/m
Izod resistance at -10° C (C. Int.)	4 Kj/m	5 J/m
Ultimate tensile stress	37.3 N/mm ²	40 MPa
Yeld point	46.2 N/mm ²	25%
Modulus of elasticity	2736 N/mm ²	2400 MPa
Flame resistance (According to UL94)	V0	V2
Linear thermal expansion coefficient	0.1 mm/m/°C	0.19

Classification grading according to the standard EN 50085-2/3

Reference to the specifications for slotted and solid wiring ducts

Classification min temperature of transport and storage		
1 ^a Code	Temp. °C	°F
2XX	-25	-13

Classification min temperature of installation and use		
1 ^a Code	Temp. °C	°F
X3X	-5	23

Classification max temp. of use		
1 ^a Code	Temp. °C	°F
XX1	+60	140

Derivating classification of our wire ducts

Type A	231
Type S	231
Type EDGE	231

RESISTANCE OF PVC TO CHEMICAL AGENTS

Resistance of PVC to chemical agents

Chemical Compound	Concentration	Temp. °C	Resistance of PVC
LEAD ACETATE, solution	hot saturated	50	+
VINEGAR (wine)	commercially available	40	+
ACETONE	trace	20	-
ACETONE	100%	20	-
FATTY ACIDS	100%	60	+
ARSENIC ACID, solution	dilute	40	+
BENZOLIC ACID, solution	any concentration	20	+
BORIC ACID, solution	dilute	40	+
BUTYRIC ACID, solution	20%	20	+
CITRIC ACID, solution	up to 10%	40	+
HYDROCHLORIC ACID, solution	up to 30%	40	+
CHROMIC ACID, solution	up to 50%	40	+
FORMIC ACID	100%	20	+
FORMIC ACID, solution	up to 50%	40	+
NITRIC ACID, solution	up to 30%	50	+
BATTERY ACID	-	60	+
PRUSSIC ACID	-	60	+
SILICIC ACID, solution	all concentrations and types	60	+
SULPHURIC ACID, solution	up to 40%	40	+
SUCCINIC ACID, solution	-	60	+
TANNIC ACID	10%	60	•
TARTARIC ACID, solution	up to 10%	40	+
WATER	100%	40	+
AMMONIA WATER	hot saturated	40	+
BROMINE WATER	cold saturated	20	+
CHLORINE WATER	saturated	20	•
SEA WATER	-	60	•
WHITE SPIRIT	-	20	•
SALT WATER	-	40	+
CARBONATED WATER	normal	40	•
AQUA VITAE, all types	commercially available	20	+
DENATURED ETHYL ALCOHOL (sol. 2%)	96%	20	+
METHYL ALCOHOL	100%	40	+
AMMONIA GAS	100%	60	+
LIQUID AMMONIA	100%	20	•
CARBON DIOXIDE dry	100%	60	+
PURE ANILINE	100%	20	-
PHOTOGRAPHIC DEVELOPMENT BATHS	commercially available	40	+
PETROL	100%	60	+
PETROL for tests	-	20	+
BENZOL	100%	20	-
ALCOHOLIC DRINKS	commercially available	20	+
BEER	commercially available	20	+
BORAX, solution	dilute	40	+
BROMINE, liquid	100%	20	-
BUTADIENE	50%	60	+
BUTANE, gas	-	20	+
BUTANOL	up to 10%	20	+
BEESWAX	commercially available	20	+
CHLORINE active	usual concentration	40	+
CHLORINE GAS, dry	100%	20	+
CHLORINE GAS, wet	0.5%	20	+
LIQUID CHLORINE	-	20	-
ALUMINIUM CHLORIDE, solution	dilute	40	+
CALCIUM CHLORIDE, aqueous (sedim.)	-	60	•

Chemical Compound	Concentration	Temp. °C	Resistance of PVC
CALCIUM CHLORIDE, solution	dilute	40	+
IRON CHLORIDE, solution	up to 10%	40	+
HEXANE	-	20	+
ETHYL BENZOL	-	20	-
FORMALDEHYDE	dilute	40	+
FREON 12	100%	20	+
OIL, heating	-	20	•
GELATINE, solution	all concentrations and types	40	+
GLYCERINE, solution	all concentrations and types	60	+
HYDROGEN	100%	60	+
BARIUM HYDROXIDE, solution	all concentrations and types	60	+
POTASSIUM HYDROXIDE, solution	up to 40%	40	+
SODIUM HYDROXIDE, solution	up to 40%	40	+
MILK	commercially available	20	+
LIQUID ANTIFREEZE, for motor vehicles	commercially available	20	+
LYE	-	-	-
MOLASSES	industrial concentrate	20	+
PETROL/BENZOL MIXTURE	80/20%	20	-
NAPHTHALENE	-	20	-
NEKTAL BX, solution	dilute	40	+
OILS AND GREASES	commercially available	60	+
LUBRICATING OILS	100%	20	+
CAMPOR OIL	100%	20	+
DIESEL OIL	100%	20	+
CORNFLOWER OIL	-	20	+
LINSEED OIL	100%	60	•
MANDARIN OIL	-	20	+
MINERAL OIL	100%	20	+
SILICONE OIL	100%	20	+
TURPENTINE OIL	100%	60	•
TRANSFORMER OIL	100%	20	+
LIQUID PARAFFIN	100%	20	-
OZONE	100%	20	+
PARAFFIN	-	60	+
POTASSIUM PERMANGANATE	up to 6%	20	+
LIQUID PROPANE	100%	20	+
COOKING SALT, solution	dilute	40	+
BARIUM SALTS, solution	all concentrations	60	+
FERTILIZER SALTS, solution	up to 10%	60	+
ZINC SALTS, solution	cold diluted	60	+
SODIUM CARBONATE, solution	dilute	40	+
ALUMINIUM SULPHATE, solution	dilute	40	+
COPPER SULPHATE, solution	dilute	40	+
ZINC SULPHATE, solution	dilute	40	+
SOLUTION for photographic laboratories	commercially available	40	+
FRUIT JUICES	usual concentration	60	+
CARBON TETRACHLORIDE technical	100%	20	•
TETRAETHYL LEAD	100%	20	+
TETRAHYDROFURAN	100%	20	-
TINCTURE OF IODINE	commercially available	20	-
TOLUENE	100%	20	-
UREA, solution	up to 10%	40	-
URINE	normal	40	+
WINES, red and white	commercially available	20	+
SULPHUR	-	60	•

Key: + Resistant - Not resistant • Limited resistance

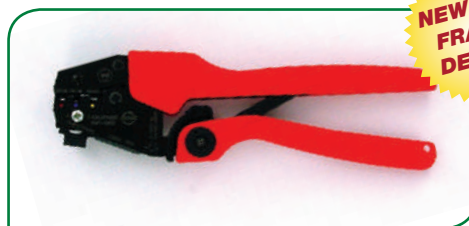
Flame resistance

Homologation
Cod. MI422C30CD100001
File 4190, sub. 326 - Material prototype: G30

PVC: Class M1 (NFP 92-501)
Self-extinguishing (UL94 V0) for trunking
GWT 850° for accessories

“RHT” APPROVED TOOLS CHART

Ratcheting Ergonomic Crimp Tools



Tools listed are the approved tools designed for terminals, splices and disconnects.

Tools may not be exactly as shown.

Techspan #	"RHT" Tool 1	"RHT" Tool 2	Pneumatic crimp die 1	Pneumatic crimp die 2
B1A	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
B1B	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
B1C	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
B4E	PPDLH-CS/192860065	PPHLS-CS/192860117	HHL-D-710/192890001	
B4F	PPDLH-CS/192860065	PPHLS-CS/192860117	HHL-E-720/192890004	
B7A	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
B7B	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
B7C	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
B7E	AT/192820004	HHS/192900034	HHL/192900001	DLH/ 30 PSI
B7F	AT/192820003	HHS/192900037	HHL/192900004	DLH/35 PSI
B7G	192860065/PPDLH-40PSI	192860117/PPHLS	HHL DIE 192900007	64001-3900
B8A	RHT/192850054		AT/192830049	
B8B	RHT/192850055	RHT/192850006	AT/192830050	AT/192830003
B8C	RHT/192850059	RHT/192850006	AT/192830053	AT/192830003
BS1A10	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
BS1A6	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
BS1A6S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
BS1A8	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
BS1B10	640030100/RHT-1992/192840014	RHT-1000/192840001	640070100/AT-1992/192820015	AT-1000/192820001
BS1B6	640030100/RHT-1992/192840014	RHT-1000/192840001	640070100/AT-1992/192820015	AT-1000/192820001
BS1B8	640030100/RHT-1992/192840014	RHT-1000/192840001	640070100/AT-1992/192820015	AT-1000/192820001
BS1C10	640030100/RHT-1992/192840014	RHT-1000/192840001	640070100/AT-1992/192820015	AT-1000/192820001
BS1C6	640030100/RHT-1992/192840014	RHT-1000/192840001	640070100/AT-1992/192820015	AT-1000/192820001
BS1C8	640030100/RHT-1992/192840014	RHT-1000/192840001	640070100/AT-1992/192820015	AT-1000/192820001
BS2A10	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
BS2A6	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
BS2B6S	RHT/192840002	RHT/192840014	AT/192820002	AT/192820015
BS2C10	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
BS2C8	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
BS4A10	640010100/RHT-1990/192850004		640050100/AT-1990	
BS4A6	640010100/RHT-1990/192850004		640050100/AT-1990	
BS4A6S	640010100/RHT-1990/192850004		640050100/AT-1990	
BS4A8	640010100/RHT-1990/192850004		640050100/AT-1990	
BS4B10	640010100/RHT-1990/192850004		640050100/AT-1990	
BS4B6	640010100/RHT-1990/192850004		640050100/AT-1990	
BS4B6S	640010100/RHT-1990/192850004		640050100/AT-1990	
BS4B8	640010100/RHT-1990/192850004		640050100/AT-1990	
BS4C10	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
BS4C6	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
BS4C8	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
BS6A10	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
BS6A6	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
BS6A6S	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
BS6A8	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
BS6B10	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
BS6B6	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
BS6B6S	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
BS6B8	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
BS6C10	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
BS6C6	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
BS6C8	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
BSF1A8	RHT/192840002	RHT/192840014	AT/192820002	AT/192820015
BSF4A10	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
BSF4A6	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
BSF4B10	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001

"RHT" APPROVED TOOLS CHART

Techspan #	"RHT" Tool 1	"RHT" Tool 2	Pneumatic crimp die 1	Pneumatic crimp die 2
BSF4B6	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
BSF4C10	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
BSF6C10	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
CFR4NA187F	640010800 / RHT-5760 / 192850041		640050800 / AT-5760 / 192830035	
CFR4NB187F	640011100 / RHT-5762 / 192850043		640051100 / AT-5762 / 192830037	
CFR4NC250F	RHT/192850023		AT/192830020	
CM4TNA187F	RHT-5761 / 19285-0042 / 64001-2600		AT-5761 / 19283-0036 / 64005-2600	
CM4TNB187F	RHT-5761 / 19285-0042 / 64001-2600		AT-5761 / 19283-0036 / 64005-2600	
CM4TNC250F	640015100/RHT-2264/192850024		640055100/AT-2264/192830021	
FLFR1A187	RHT/192840031		AT/192820025	
FLFR1A250	RHT/192840031		AT/192820025	
FLFR1B187	RHT/192840031		AT/192820025	
FLFR1B250	RHT/192840031		AT/192820025	
FLFR6A187BF	RHT/192850060		AT/192830054	
FLFR6A250BF	RHT/192850060		AT/192830054	
FLFR6A250F	RHT-FIFG/192850063/640014100		AT-FIFG/192830056/640054100	
FLFR6A250F	RHT/192850060		AT/192830054	
FLFR6C250BF	RHT/198031020		AT/198032030	
FLFR6C250F	RHT/198031020		AT/198032030	
FLR1B10	RHT/192840006		AT/192820007	
FR1A110	RHT/192840010		AT/192820011	
FR1A187	RHT/192840010		AT/192820011	
FR1A250	RHT/192840010		AT/192820011	
FR1B110	RHT/192840011	RHT/192840010	AT/192820012	AT/192820011
FR1B187	RHT/192840011	RHT/192840010	AT/192820012	AT/192820011
FR1B250	RHT/192840011	RHT/192840010	AT/192820012	AT/192820011
FR1C250	RHT-1754/192840013/640031300		AT-1754/192820011/640071100	
FR4A110	RHT/192850035		AT/192830028	
FR4A187	RHT/192850035		AT/192830028	
FR4A250	RHT/192850035		AT/192830028	
FR4B110	RHT/192850037		AT/192830030	
FR4B187	RHT/192850037		AT/192830030	
FR4B250	RHT/192850037		AT/192830030	
FR4C250	192850022 / RHT-2251	640010200 / RHT-1991	64005-0200 / AT-1991	640014800 / RHT-2251
FR6A110	RHT/192850035		AT/192830028	
FR6A187	RHT/192850035		AT/192830028	
FR6A250	RHT/192850035		AT/192830028	
FR6B110M	RHT/192850037		AT/192830030	
FR6B187	RHT/192850037		AT/192830030	
FR6B250	RHT/192850037		AT/192830030	
FR6C250	RHT/64001-0200		AT/64005-0200	
LS4A10	RHT/192850016	RHT/192850004	AT/192830010	AT/192830001
LS4A6	RHT/192850016	RHT/192850004	AT/192830010	AT/192830001
LS4A6S	RHT/192850016	RHT/192850004	AT/192830010	AT/192830001
LS4A8	RHT/192850016	RHT/192850004	AT/192830010	AT/192830001
LS4B10	RHT/192850016	RHT/192850004	AT/192830010	AT/192830001
LS4B6	RHT/192850016	RHT/192850004	AT/192830010	AT/192830001
LS4B6S	RHT/192850016	RHT/192850004	AT/192830010	AT/192830001
LS4B8	RHT/192850016	RHT/192850004	AT/192830010	AT/192830001
LS4C10	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
LS4C6	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
LS4C8	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
MT1A250	RHT/192840001		AT/192820001	
MT1B250	RHT/192840001		AT/192820001	
MT4A187	RHT/192850048		AT/192830043	
MT4A250	RHT/192850008		AT/192830005	
MT4B250	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
MT4C250	RHT-2000			
MT6A250	RHT-1990/64001-0100	RHT-2000 / 19285-0008		
MT6B187				
MT6B250	RHT-1990/64001-0100	RHT-2100 /64001-1400		
MT6C250	RHT-1991 /64001-0200	RHT-2251 / 64001-5900		
R1A10	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1A14S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1A6	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1A6S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1A8	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1B10	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1B14S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1B38	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015



“RHT” APPROVED TOOLS CHART

Techspan #	"RHT" Tool 1	"RHT" Tool 2	Pneumatic crimp die 1	Pneumatic crimp die 2
R1B56	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1B56S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1B6	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1B6S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1B8	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1C10	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1C14S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1C38	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1C56S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1C6M	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1C6S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1C8	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R1C8S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2A10	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2A14S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2A56S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2A6	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2A6S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2A8	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2A8S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2B10	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2B14S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2B38	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2B56	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2B56S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2B6	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2B6S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2B8	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2B8S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2C10	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2C14S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2C38	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2C56	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2C56S	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R2C8	RHT/192840001	RHT/192840014	AT/192820001	AT/192820015
R4A38	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
R4A56S	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
R4A6	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
R4A6S	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
R4A8	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
R4B56S	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
R4C12	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R4C56	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R4C56S	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R4C6	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R4C6S	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R4C8S	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R6A10	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
R6A14S	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
R6A56S	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
R6A6	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
R6A6S	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
R6A8	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
R6A8S	RHT/192850008	RHT/192850004	AT/192830005	AT/192830001
R6B10	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
R6B14S	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
R6B38	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
R6B56S	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
R6B6	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
R6B6S	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
R6B8	RHT/192850013	RHT/192850004	AT/192830009	AT/192830001
R6B8S	RHT/192850016	RHT/192850004	AT/192830010	AT/192830001
R6C10	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R6C14S	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R6C38	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R6C50	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R6C56	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R6C56S	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R6C6	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R6C6S	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R6C8	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001
R6C8S	RHT/192850018	RHT/192850004	AT/192830012	AT/192830001

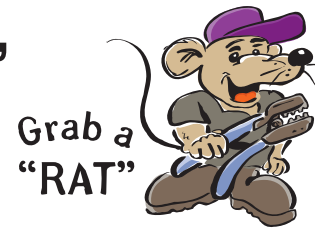
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APPROVED WORKING TOOLS FOR FERRULES

PART NO.	SIZE	DESCRIPTION
V 915 	0.14 – 6.00mm ² 2x0.25 – 2x2.50mm ² 28 – 10 AWG 2 x 24 – 12 x 14 AWG	Crimping Pliers for Ferrules <ul style="list-style-type: none"> • Trapezium formed crimping results • Insertion of contact and wire from the front • Releasable forced locking mechanism • 500g
V 925 	6.00 – 16.00mm ² 2x6.00mm ² 10 – 6 AWG 2 x 10 AWG	Crimping Pliers for Ferrules <ul style="list-style-type: none"> • Trapezium formed crimping results • Insertion of contact and wire from the front • Releasable forced locking mechanism • 600g
V 947 	0.75 – 10.00mm ² 2x0.50 – 2x4.00mm ² 28-8 AWG 2 x 22 – 2 x 12 AWG	Self-adjusting Crimping Pliers for Ferrules <ul style="list-style-type: none"> • Square crimp profile realized by synchronously driven crimp jaws • Forced locking system (releasable) guarantees exact and gasproof crimp connections conforming to standards • Automatic self-adjustment • 380g
V 940 	10.00 – 50.00mm ² 2x4.00 – 2x16.00mm ² 8-1 AWG 2 x 12 – 2 x 6 AWG	Crimping Pliers for Ferrules <ul style="list-style-type: none"> • Trapezoid crimping • Lateral insertion with ratchet • 800g
V 945 	50.00 – 95.00mm ² #1 – 3/0 AWG	Crimping Pliers for Ferrules <ul style="list-style-type: none"> • Trapezoid crimping • Lateral insertion with ratchet • 800g
V 950 	70.00 – 150.00mm ² 2/0 – 300 MCM	Crimping Pliers for Ferrules (for interchangeable dies) <ul style="list-style-type: none"> • Head 360° rotates • With telescope handles • Length: approx. 560mm infinitely variable to 860mm • 2.500g
V 951	70.00mm ² 2/0 AWG	Crimping die for V 950 <ul style="list-style-type: none"> • Trapezoid crimping, width 20mm
V 952	95.00mm ² 3/0 AWG	Crimping die for V 950 <ul style="list-style-type: none"> • Trapezoid crimping, width 20mm
V 953	120.00mm ² 4/0 AWG	Crimping die for V 950 <ul style="list-style-type: none"> • Trapezoid crimping, width 20mm



ERGONOMIC "RATCHET ACTION TOOLS"



The wide range of Techspan® ratchet crimping tools are the finest quality for wiring professionals. Each tool features smooth, ergonomically designed handles for comfort and performance.

The interchangeable die sets crimp a wide variety of terminals of different wire gauges. The precise ratchet action is responsive and only releases when optimum crimping torque is achieved.* Insist on Techspan for quality and value.



Flag Terminals

RAT-FLAG Crimp all Nylon insulated flag terminals with a single crimp. The double nested die allows crimping of wire gauges:

1. 22-18 AWG (1.25 mm²)
2. 16-14 AWG (2 mm²)



PVC Terminals

RAT-PVC Crimp all PVC insulated terminals with a single and double crimp. The triple nested die allows crimping of wire gauges:

1. 22-18 AWG (1.25 mm²)
2. 16-14 AWG (2 mm²)
3. 12-10 AWG (5.5 mm²)



Nylon Terminals

RAT-NYL Crimp all Nylon insulated terminals with a double crimp. The first crimp secures the bare wire conductor. The second crimp secures the wire sheath for superior hold in vibration situations. (NOTE: this tool may also be used on PVC insulated terminals). The triple nested die allows crimping of wire gauges:

1. 22-18 AWG (1.25 mm²)
2. 16-14 AWG (2 mm²)
3. 12-10 AWG (5.5 mm²)



Open Barrel Terminals

RAT-OPBA Crimp all Open Barrel non-insulated terminals with a single crimp. These terminals are common in the automotive and appliance industry. The triple nested die allows crimping of wire gauges:

1. 22-18 AWG (1.25 mm²)
2. 16-14 AWG (2 mm²)
3. 12-10 AWG (5.5 mm²)



Disconnect Terminals

RAT-DISC Crimp all Nylon and PVC insulated male or female disconnects (slide terminals) with a single crimp. The triple nested die allows crimping of wire gauges:

1. 22-18 AWG (1.25 mm²)
2. 16-14 AWG (2 mm²)
3. 12-10 AWG (5.5 mm²)



Non-Insulated Terminals

RAT-NINS Crimp all non-insulated terminals with a single crimp. The triple nested die allows crimping of wire gauges:

1. 22-18 AWG (1.25 mm²)
2. 16-14 AWG (2 mm²)
3. 12-10 AWG (5.5 mm²)
4. 8 AWG (8 mm²)



(Not exactly as shown)

Ratchet Kit

RAT-KIT This kit contains our five most popular crimping die sets. Dies are easily changed with a couple of screws. The RAT-KIT provides quick and flexible crimping alternatives for the wiring professional. Never be caught short on a job because you don't have the right tool!

The RAT-KIT contains the following 5 die sets:

1. Die # D-PVC for PVC insulated terminals (specifications per RAT-PVC above)
2. Die # D-NINS for non-insulated terminals (specifications per RAT-NINS above)
3. Die # D-DISC for disconnect terminals (specifications per RAT-DISC above)
4. Die # D-FER for ferrules (specifications per RAT-FER on next page)
5. Die # D-NYL for nylon insulated terminals (specifications for RAT-NYL above)



Individual tools come in their own carrying case.

*Note: All terminal manufacturers have their own insulation thicknesses and tolerances. Techspan tools are set to "industry average" specifications. It is the responsibility of all installers to check their crimps for safety. Techspan will not be held responsible for poor crimps for any reason.

MECHANICAL CRIMPING TOOLS



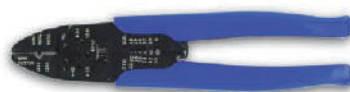
Copper Lugs & Large Terminals

LUG-12-4 Crimping copper lugs & non-insulated terminals. Extra long handles with ratchet action. **LUG-12-4-HD** Hex die Crimps wire gauges:

1. 12-10 AWG (6 mm²)
2. 8 AWG (10 mm²)
3. 6 AWG (16 mm²)
4. 4 AWG (25 mm²)

LUG-8-2-INS For Insulated terminals #8-#2 AWG

LUG-8-4 For Heavy Duty non-Insulated terminals #8-#4 AWG



Economy Crimper/Wire Cutter/Stripper

HTS-1000

- Wire cutter
- Crimps insulated terminals
- Bolts cutter
- Crimps non-insulated terminals
- Wire stripper

HTS-2000 For non-insulated flag terminals 22-10 AWG.



#8-500 MCM Compression Tool

TDM500 Dieless mechanical compression tool for both copper and aluminum connectors #8-500 MCM. Unique extendable handles provide increased leverage for 250-500 MCM.

Extendable Handles for Improved Leverage



Crimper/Cutter

453 Made of high quality forged steel, cushion grip handles, crimps insulated and non-insulated terminals from 22-10 AWG. Complete with extra sharp wire cutter.



#8-250 MCM Compression Tool

TDM250 Dieless mechanical compression tool for both copper connectors #8-250 MCM and aluminum connectors #8-4/0. Unique extendable handles provide increased leverage.

Extendable Handles for Improved Leverage

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FERRULE CRIMPING TOOLS



Ratchet Ferrule Tool

RAT-FER Crimp all insulated ferrules with a single crimp and smooth ratchet action. Ferrules turn stranded wire into solid wire. The five nested die allows crimping of wire gauges:

1. 22 AWG (0.5 mm²)
2. 20 AWG (0.75 mm²)
3. 18 AWG (1.0 mm²)
4. 16 AWG (1.5 mm²)
5. 14 AWG (2.5 mm²)
6. 12 AWG (4.0 mm²)

RAT-FER2 10-6 AWG and large twin ferrules



Ferrules come in a variety of sizes. See page B-27

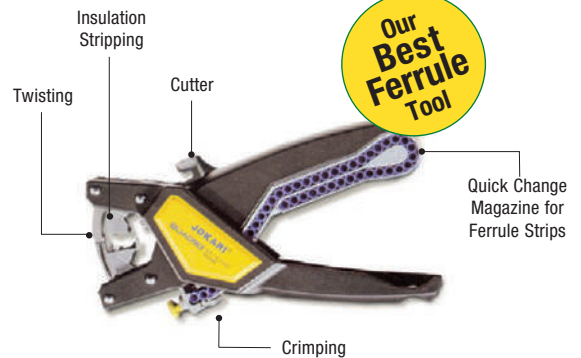
RAT-FER2XL 4 & 2 AWG, X-Large twin ferrules



Spring Plier Ferrule Tool

SPR-FER Our most economical ferrule crimping tool. Crimps wire gauges:

1. 20 AWG (0.75 mm²)
2. 18 AWG (1.0 mm²)
3. 16 AWG (1.5 mm²)
4. 14 AWG (2.5 mm²)
5. 12 AWG (4.0 mm²)
6. 10 AWG (6.0 mm²)
7. 8 AWG (10.0 mm²)



Our Best Ferrule Tool

Four Functions

SPR-JOK This four function ferrule tool cuts wire, strips, twists and crimps. Ferrule replacement strips available 22-14 AWG.

- FERSTR-22WH** 22 AWG White (50/Strip)
- FERSTR-20GR** 20 AWG Grey (50/Strip)
- FERSTR-18RD** 18 AWG Red (50/Strip)
- FERSTR-16BK** 16 AWG Black (50/Strip)
- FERSTR-14BL** 14 AWG Blue (40/Strip)

Includes: Carrying case and 3x quick change magazines.

WIRE AND CABLE CUTTERS



Heavy-Duty Wire/Cable Cutters

769884 & 769886 Made of high quality forged steel, high leverage.



Ratcheting Cable Cutter

RAT-CABLE Cuts copper & aluminum cable up to 750 MCM (380 mm²).



Long Handle Cable Cutters

769887 Long handle cable cutters for extra leverage cuts copper cables up to 350 MCM, aluminum cable up to 250 MCM.

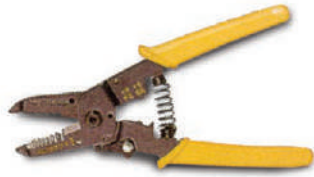


Cable Cutter-Extra Long Handle

769883 Cuts wire/cable sizes 8GA to 4/0GA. The long and conveniently shaped handles provide excellent leverage. The stopper-like apparatus lets the user know when the cable is fully cut. This tool provides very clean cuts. Approximate length: 24" (609.60mm)

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WIRE STRIPPERS



Wire Stripper/Cutter Plier

STR-22-10 Wire stripper/cutter plier 22 - 10 AWG.



Heavy-Duty Wire Stripper

669967 This heavy-duty wire stripper has a built in crimper/cutter. Good for 22 - 10 AWG insulated and non-insulated terminals.



Heavy-Duty Wire Stripper

10270 Made of extremely wear-resistant nylon. Adjustable cutting depth, automatic settings. Spare blade included. Strips #1 to 750 MCM.



Ergonomic Wire Stripper/Cutter Plier

669968 Ergonomic wire stripping tool. Good for 22 - 10 AWG.



Ergonomic Wire Stripper/Cutter Plier

669970 Ergonomic wire cutting and stripping tool, trigger style design comes with wire stopper. Good for 22 - 10 AWG.



Flat & Round Type Wire/Cable Stripper

669963 This tool strips flat PVC jacketed multi conductor cables and parallel jacketed (ribbon) cable. Strips stranded wire from 20-6 ga.

OTHER STOCKED CRIMP TOOLS

RAT-FIDISC Fully insulated disconnects 22 AWG to 10 AWG.

RAT-NINS2 Non-insulated terminals 14 AWG to 6 AWG.

RAT-CE for crimping closed end connectors i.e. NPAA1 NPAB1 to NPBC1 and heat shrinkable terminals. 22 AWG to 10 AWG.

RAT-HS for heat shrinkable terminals. 22 AWG to 10 AWG.

RAT-COAX for crimping RG 58, 59/62, BNC/TNC coax connectors.

RAT-RJ45 for crimping 8 position keyed and non-keyed modular plugs (excluding AMP).

SPR-RJ11/45 spring handle tool for crimping 6 & 8 position modular connectors. Includes a wire cutter and outer sheath stripper. 3 in 1 tool compatible with AMP connectors.

"AMP" is a registered trademark of AMP Incorporated.

HEAT GUNS AND TORCHES



2 Stage Heat Shrink Gun

HS-GUN 750 degrees F. and 1000 degrees F., 120V, 1200 watts, 4100 BTU. Includes hot air baffle.

Flameless Heat Torch



HS-TORCH

- General heating and drying
- Shrink tubing & packaging
- Self-starting with safety lock
- Powered by fuel cell or disposable lighter (included)
- Windproof and waterproof
- Baffle included



PNEUMATIC CRIMP TOOLS



Part #	Description
AT200	Pneumatic Crimping Tool
ATBA	Bench Adapter, Foot Pedal, Hose Set
ATFRG	Filter, Lubricator, Regulator
AT1990	Crimp Head for PVC Rings & Butts 22-10 AWG
AT1991	Crimp Head for Disconnects 22-10 AWG
AT1992	Crimp Head for Non-Insulated Terms & Butts 22-10 AWG

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HAND-OPERATED CRIMP TOOLS

TDM-250 MECHANICAL COMPRESSION TOOL WITH BUILT-IN DIES

MORE ECONOMICAL

- Dieless – no dies to buy or lose
- Compression connectors are UL listed and CSA certified when installed in accordance with manufacturer’s installation instructions
- Widest range available – crimps #8-250 MCM AL or CU
- Costs less than expensive hydraulic tools
- Quality construction – all-steel, durable construction
- Five year manufacturer’s warranty for replacement or service



MORE CONVENIENT TO USE

- Unique telescopic handle design provides increased leverage. At 250 MCM, the TDM-250 requires less handle load than conventional 250 MCM tools require at 250 MCM.
- No dies to change or lose
- Easy-to-read settings are provided on calibrated index plates, one for AL and one for CU, located on the side of the tool.
- Small head – convenient in confined areas.
- Easiest bench use – machined flat head surface allows you to stand tool freely in working position.

CATALOG NO.	WIRE RANGE
TDM-250	#8 - 250 MCM CU
	#8 - 250 MCM AL
TDM-250XF	#8 - 4/0 EXTRA FLEXIBLE CU
	#8 - 250 MCM CU

For use with: BCU, BBCU, BLU, BBLU, BBLZ, BLY (use TDM-250XF) style copper connectors



TDM-500 MECHANICAL COMPRESSION TOOL WITH BUILT-IN DIES

MORE ECONOMICAL

- Dieless – no dies to buy or lose
- Compression connectors are UL listed and CSA certified when installed in accordance with manufacturer’s installation instructions
- Widest range available – crimps #8-500 MCM AL or CU
- Costs less than expensive hydraulic tools
- Quality construction – all-steel, durable construction
- Five year manufacturer’s warranty for replacement or service



MORE CONVENIENT TO USE

- Unique telescopic handle design provides increased leverage. At 500 MCM, the TDM-500 requires less handle load than conventional 250 MCM tools require at 250 MCM.
- No dies to change or lose
- Easy-to-read settings are provided on calibrated index plates, one for AL and one for CU, located on the side of the tool.
- Small head – convenient in confined areas.
- Easiest bench use – machined flat head surface allows you to stand tool freely in working position.

CATALOG NO.	WIRE RANGE
TDM-500	#8 - 500 MCM CU
	#8 - 500 MCM AL

For use with: BCU, BBCU, BLU, BBLU, BBLZ style copper connectors

HAND-OPERATED CRIMP TOOLS

TDM-408 MECHANICAL COMPRESSION TOOL WITH ROTATING DIES

- Comfort grip handles reduce fatigue during continuous use
- Penn-Union BLU, BBLU, BBLZ, BCU and BBCU Series connectors are UL listed and CSA certified when installed with this tool
- Crimps all popular small to mid-range copper lugs and splices
- Built-in rotatable dies eliminate need to carry and maintain nine sets of dies
- Plated jaws ensure protection against corrosion



For use with: BCU, BBCU, BLU, BBLU, and BBLZ style copper connectors

CAPACITY: 8 - 4/0 AWG Copper Only

LENGTH: 24.4 in. **WEIGHT:** 8.8 lbs.

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TMU-OD3 MECHANICAL COMPRESSION TOOL

- Die inserts snap into the D3 groove with one hand and are locked into the tool with spring loaded positive lock die retainer buttons
- Versatile mechanical compression tool for full tension and non-tension splices
- Over center cam action
- High strength, butting, forged steel jaws
- Provides 4.5 tons of crimping force
- No additional dies required for "O" and "D3" size tap connectors; D3 Groove accommodates full line of industry standard "W" die inserts
- Bent handles and anti-slip grips for easier operation
- Tool adjustment easily checked and adjusted with allen wrench



For use with: CCT, CST and CDT style copper connectors; KO, KD, PIK, PSK, PSKS and DBTBF style aluminum connectors

CAPACITY: 14 - 4/0 AWG

LENGTH: 25.5 in. **WEIGHT:** 9.0 lbs.

TRC-28 MECHANICAL RATCHET HAND CRIMP TOOL

- For insulated and non-insulated terminals, and Type "RTC" copper CTAPS (RTC-2 through RTC-6)
- Full cycle ratcheting mechanism ensures proper crimp

CAPACITY: Insulated terminals 8 - 2 AWG;
Non-insulated terminals 6 - 1/0 AWG

LENGTH: 16.1 in. **WEIGHT:** 4.6 lbs.



HAND-OPERATED HYDRAULIC TOOLS

HDT-1000 DIELESS HAND OPERATED HYDRAULIC TOOL 12 TON OUTPUT FORCE

- Dieless operation
- Twist handle release mechanism
- 7 indent profiles per crimp, requiring fewer crimps per connector
- Hinged head for easy removal of splices up to 1000 MCM
- Automatic two-speed pump provides rapid advance reducing cycle time
- Audible pressure “pop-off” valve indicates crimp completion
- Easy installation with 180° swivel crimping head
- Includes durable high impact carrying case



CAPACITY: 3/0 AWG - 1000 MCM Copper Lugs and Splices
 1/0 AWG - 600 MCM Aluminum Lugs and Splices
LENGTH: 25.0 in. **WEIGHT:** 17.0 lbs.

For use with: BCU, BBCU, BLU, BBLU and BBLZ style copper connectors; BCUA and BLUA style aluminum connectors

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TPU-12B DIE-TYPE HAND OPERATED HYDRAULIC TOOL 12 TON OUTPUT FORCE WITH 1.0" JAW OPENING

- Accepts all semi-circular slotted dies common to most 12 ton tools (“U” Dies)
- Die changes are easy with push button die locks
- Strong, lightweight fiberglass handles with twist release mechanism
- Automatic two-speed pump
- Audible pressure “pop-off” valve
- Easy installation with 180° swivel crimping head
- Compression connectors are UL listed and CSA certified when installed with specified die set
- Includes durable high impact carrying case



CAPACITY: 8 AWG - 750 MCM Aluminum & Copper Lugs,
 8 AWG - 400 MCM Aluminum and Copper Splices

LENGTH: 22.9 in. **WEIGHT:** 13.9 lbs.

For use with: BCU, BBCU, BLU, BBLU, BBLZ, BLY, CST, CDT, TLU, LL, LLR, and LLN style copper connectors;

KO, KD, KN, PIK, PSK, PS, TP, TPO, PSS, PSKS, KBO, KKBO, KBD, KKBD, BCUA, BLUA, FKLA, FSLA, FULA style aluminum connectors

HAND-OPERATED HYDRAULIC TOOLS

TPU-12B42 DIE-TYPE HAND OPERATED HYDRAULIC TOOL 12 TON OUTPUT FORCE – 1.65" JAW OPENING

- Large 1.65" jaw opening allows for easy installation of lugs and splices up to 750 MCM
- Accepts all semi-circular slotted dies common to most 12 ton tools ("U" Dies)
- Die changes are easy with push button die locks
- Strong, lightweight fiberglass handles with twist release mechanism
- Automatic two-speed pump
- Audible pressure "pop-off" valve indicates crimp completion
- Easy installation with 180° swivel crimping head
- Compression connectors are UL listed and CSA certified when installed with specified die set
- Includes durable high impact carrying case



For use with: BCU, BBCU, BLU, BBLU, BBLZ, TLU, LL, LLR, and LLN style copper connectors;

KO, KD, KN, PIK, PSK, PS, PSS, PSKS, KBO, KKBO, KBD, KKBD, BCUA, BLUA, FKLA, FSLA, FULA and DBTBF style aluminum connectors

CAPACITY: 8 AWG - 750 MCM Aluminum & Copper
Lugs / Splices

LENGTH: 25.2 in. **WEIGHT:** 18.0 lbs.

E

TPU-6 DIELESS HAND OPERATED HYDRAULIC TOOL 6 TON OUTPUT FORCE

- Dieless installation system utilizes four indentors to make crimp, eliminates need to purchase and maintain dies
- Automatic two-stage pumping piston for rapid advance
- Audible pressure "pop-off" valve indicates crimp completion
- Strong, lightweight fiberglass handles with twist release mechanism
- Easy installation with 360° swivel crimping head
- UL listed and CSA certified crimp connections when used with Penn Union copper color-coded lugs and splices (6 AWG - 500 MCM)
- Includes durable high impact carrying case



For use with: BCU, BBCU, BLU, BBLU and BBLZ style copper connectors;

*BCUA and BLUA style aluminum connectors
(NOT UL listed or CSA certified with this tool)*

CAPACITY: 8 AWG - 500 MCM Copper Lugs and Splices

LENGTH: 23.6 in. **WEIGHT:** 11.0 lbs.

HAND-OPERATED HYDRAULIC TOOLS

TPU-18B DIE-TYPE HAND OPERATED HYDRAULIC TOOL 18 TON OUTPUT FORCE

- Accepts all semi-circular slotted “U” dies
- Die changes are easy with push button die locks
- Removeable end cap for easy removal of splice connections
- Automatic two-stage pump for rapid advance
- Audible pressure “pop-off” valve indicates crimp completion
- Easy turn valve release for rapid ram retraction
- Comfortable rubber grip handles help reduce operator fatigue
- Easy installation with 180° swivel crimping head
- Compression lugs and splices are UL listed and CSA certified when installed with specified die set
- Includes durable high impact carrying case



CAPACITY: 8 AWG - 1250 MCM Copper Lugs/Splices
8 AWG - 1000 MCM Aluminum Lugs/Splices

LENGTH: 25.6 in. **WEIGHT:** 14.3 lbs.

For use with: BCU, BBCU, BLU, BBLU, BBLZ, TLU, LL, LLR, and LLN style copper connectors;

KO, KD, KN, PIK, PSK, PS, PSS, TP, TPO, PSS, PSKS, KBO, KKBO, KBD, KKBD, BCUA, BLUA, FKLA, FSLA, FULA style aluminum connectors

E

TPU-6FT DIELESS HAND OPERATED HYDRAULIC TOOL 6 TON OUTPUT FORCE

- Dieless installation system utilizes four indentors to make the crimp, eliminates need to purchase and maintain dies
- Flip top allows easy removal of splice connections
- Automatic two-stage piston for rapid advance
- Audible pressure “pop-off” valve indicates crimp completion
- Strong, lightweight fiberglass handles with twist release mechanism
- Easy installation with 360° swivel crimping head
- UL listed and CSA certified crimp connections when used with Penn-Union copper color-coded lugs and splices (6 AWG - 750 MCM)
- Includes durable high impact carrying case



CAPACITY: 8 AWG - 750 MCM Aluminum & Copper Lugs/Splices,

LENGTH: 22.8 in. **WEIGHT:** 11.5 lbs.

For use with: BCU, BBCU, BLU, BBLU and BBLZ style copper connectors;

BCUA and BLUA style aluminum connectors
(NOT UL listed or CSA certified with this tool)

HAND-OPERATED HYDRAULIC TOOLS

HCT-1000 HAND OPERATED HYDRAULIC CUTTER

- Automatic two-speed pump for cutting copper, aluminum and ACSR conductor, soft steel bar up to 5/8 in., rebar up to 1/2 in.
- Heat treated steel cutting blades for durability
- Hinged flip top cutting head
- Twist handle release mechanism
- Easy operation and accessibility with 180° swivel cutting head
- 1-year limited warranty (excluding blades)
- Includes nylon bag with carrying strap for portability

CAPACITY: Aluminum & Copper Cable up to 1000 MCM
ACSR Up to 1033.5 MCM
Steel Bar up to 5/8 in.; Rebar up to 1/2 in.

LENGTH: 23.8 in. **WEIGHT:** 12.1 lbs.



REMOTE HYDRAULIC TOOLS

TPU-60 REMOTE OPERATED HYDRAULIC TOOL 60 TON OUTPUT FORCE

- Application: substation and transmission construction
- Accepts industry standard 60 ton “L” type dies currently used with BURNDY, ALCOA and HUSKIE 60 ton presses
- Easy die set installation, top of head swivels 90° for easy connector removal
- Includes aluminum base for added stability and metal carrying case with storage room for dies

CAPACITY: For 1000 MCM and 1500 MCM HBLTU Style crimp lugs (UL Listed Only). Suitable for copper and aluminum stranded cable up to 2000 MCM

OPERATING PRESSURE: 10,000 psi **TYPE:** Single Acting
OIL VOLUME: 303 cc **RAM STROKE:** 1.5 in. Travel

MAX CONNECTOR: O.D. 2.36 in.

HEIGHT: 15.6 in. **DIAMETER:** 5.7 in. **WEIGHT:** 67.0 lbs.



For use with: HBLTU style copper connectors



TPU-12BH REMOTE OPERATED HYDRAULIC TOOL 12 TON OUTPUT FORCE – 1.00" JAW OPENING

- Accepts all semi-circular slotted dies common to most 12 ton tools (“U” dies)
- Die changes are easy with push button die locks
- Integral lifting eye for easy maneuverability
- Compatible with universal hot-stick tooling
- Internal ram spring retracts jaw when pump pressure is achieved
- Compression connectors are UL listed and CSA certified when installed with specific die set
- Includes durable high impact carrying case

CAPACITY: 8 AWG - 750 MCM Aluminum & Copper Lugs
 8 AWG - 400 MCM Aluminum & Copper Splices

LENGTH: 8.3 in. **WEIGHT:** 7.9 lbs.



For use with: BCU, BBCU, BLU, BBLU, BBLZ, BLY, CST, CCT, TLU, LL, LLR, and LLN style copper connectors;

KO, KD, KN, PIK, PSK, PS, TP, TPO, PSS, PSKS, KBO, KKBO, KBD, KKBD, DBTBF, BCUA, BLUA, FKLA, FSLA, FULA style aluminum connectors

REMOTE HYDRAULIC TOOLS

TPU-12B42H REMOTE OPERATED HYDRAULIC TOOL 12 TON OUTPUT FORCE – 1.65" JAW OPENING

- Accepts all semi-circular slotted dies common to most 12 ton tools ("U" dies)
- Die changes are easy with push button die locks
- Integral lifting eye for easy maneuverability
- Internal ram spring retracts jaw when pump pressure is relieved
- Compression connectors are UL listed and CSA certified when installed with specified die set
- Includes durable high impact carrying case

CAPACITY: 8 AWG - 750 MCM Aluminum & Copper Lugs /Splices
LENGTH: 9.9 in. **WEIGHT:** 11.7 lbs.



For use with: BCU, BBCU, BLU, BBLU and BBLZ style copper connectors;

KO, KD, KN, PIK, PSK, PS, PSS, PSKS, KBO, KKBO, KBD, KKBD, BCUA, BLUA, FKLA, FSLA, FULA style aluminum connectors

E

TPU-18BH REMOTE OPERATED HYDRAULIC TOOL 18 TON OUTPUT FORCE

- Removeable end cap allows for easy removal of splice connections
- Captive knurled steel pin locks end cap securely in place
- Internal ram spring retracts jaw when pump pressure is relieved
- Compression connectors are UL listed and CSA certified when installed with specified die set
- Includes durable high impact carrying case

CAPACITY: 8 AWG - 1250 MCM Copper Lugs/Splices
8 AWG - 1000 MCM Aluminum Lugs/Splices

LENGTH: 9.4 in. **WEIGHT:** 10.6 lbs.



For use with: BCU, BBCU, BLU, BBLU and BBLZ style copper connectors;

KO, KD, KN, PIK, PSK, PS, PSS, PSKS, KBO, KKBO, KBD, KKBD, BCUA, BLUA, FKLA, FSLA, FULA style aluminum connectors

TPU-6H DIELESS REMOTE OPERATED HYDRAULIC TOOL 6 TON OUTPUT FORCE

- Dieless installation system, utilizes four indentors to make crimp, eliminates the need to purchase and maintain dies
- UL Listed and CSA certified range taking crimp connections when used with Penn Union copper color-coded lugs and splices (6 AWG - 500 MCM)
- Includes durable high impact carrying case

CAPACITY: 8 AWG - 500 MCM Aluminum and Copper Lugs/Splices

LENGTH: 10.6 in. **WEIGHT:** 6.2 lbs.



For use with: BCU, BBCU, BLU, BBLU and BBLZ style copper connectors;

BCUA and BLUA style aluminum connectors (NOT UL listed or CSA certified with this tool)

REMOTE HYDRAULIC TOOLS

TPU-1500H REMOTE OPERATED HYDRAULIC TOOL 15 TON OUTPUT FORCE

- Compatible with industry standard 15 ton “P” dies as well as standard 12 ton “U” dies with the PU-15 adapter (pg. 20)
- 1.97 in. jaw opening, 1.67 in. jaw opening with “U” die adapter
- 15 ton output with any 10,000 psi hydraulic pump
- Compression lugs and splices are UL Listed and CSA certified when installed with specified die set
- Includes durable high impact carrying case

CAPACITY: 8 AWG - 1500 MCM Copper Lugs /Splices
 8 AWG - 1250 MCM Aluminum Lugs/Splices
LENGTH: 11.8 in. **WEIGHT:** 15.4 lbs.



For use with: BCU, BBCU, BLU, BBLU, BBLZ, TLU, LL, LLR, and LLN style copper connectors; BCUA, BLUA, DBTBF, KO, KD, KN, PIK, PSK, PS, PSS, PSKS, KBO, KKBO, KBD, KKBD, FKLA, FSLA, FULA style aluminum connectors

TPU-6FTH DIELESS REMOTE OPERATED HYDRAULIC TO 6 TON OUTPUT FORCE

- Flip top design with pull pin locking mechanism
- Accepts larger connectors up to 750 MCM
- Dieless installation system utilizes four indentors to make crimp, eliminates the need to purchase and maintain dies
- UL Listed and CSA Certified range taking crimp connections when used with Penn Union copper color-coded lugs and splices. (6 AWG - 750 MCM)
- Includes durable high impact carrying case

CAPACITY: 8 AWG - 750 MCM Aluminum & Copper Lugs/Splices
LENGTH: 11.0 in. **WEIGHT:** 6.6 lbs.



For use with: BCU, BBCU, BLU, BBLU and BBLZ style copper connectors; BCUA and BLUA style aluminum connectors (NOT UL listed or CSA certified with this tool)

HYDRAULIC PUMPS

M-FP 10,000 PSI MANUAL FOOT PUMP

- Two-stage operation provides rapid advance
- Automatic safety bypass valve actuates when reaching maximum pressure
- Knob type release valve
- Integral handle lock for easy carrying
- Hydraulic hose (6 ft.) with Quick Connect coupler included



RESERVOIR CAPACITY: .74 qt.

LENGTH: 18.7 in. **WIDTH:** 6.8 in.

HEIGHT: 6.8 in. **WEIGHT:** 24.0 lbs

M-HP 10,000 PSI MANUAL HAND PUMP

- Two-stage operation provides rapid advance
- Automatic safety bypass valve actuates when reaching maximum pressure
- Knob type release valve
- Integral handle lock for easy carrying
- Hydraulic hose (6 ft.) with Quick Connect coupler included



RESERVOIR CAPACITY: .74 qt.

LENGTH: 26.7 in. **WIDTH:** 4.4 in.

HEIGHT: 5.9 in. **WEIGHT:** 17.6 lbs

HP-3000 10,000 PSI ELECTRIC/HYDRAULIC PUMP

- For use with all Penn-Union remote tools
- Includes pendant control with 6 ft. operating cord, allowing user to advance and retract at will
- Low pressure provides fast ram advance, pump automatically changes over to low volume high pressure
- Hydraulic hose (6 ft.) with Quick Connect coupler
- Red LED light to confirm pump is in "on" position
- Cast aluminum reservoir
- Integral handles for easy portability
- Convenient inspection window for quick check of reservoir oil level



RESERVOIR CAPACITY: 3.17 qt. **LENGTH:** 9.0 in. **WIDTH:** 7.5 in.

HEIGHT: 16.2 in. **WEIGHT:** 48.7 lbs with oil

BATTERY POWERED TOOLS

TPU-42B BATTERY-ACTUATED HYDRAULIC TOOL

12 TON – 1.65" JAW OPENING

- 18v LI-ION battery operation
- Provides up to 70% more crimp cycles than with Ni-Cd batteries
- Integral LED work light and built in diagnostics
- Accepts all semi-circular slotted dies common to most 12 ton tools ("U" dies)
- Audible pressure "pop-off" valve indicates crimp completion
- Easy installation with 360° swivel crimping head
- Aluminum and copper color-coded lugs and splices are UL listed and CSA certified when installed with specified die set
- Can be used with Tool Analyzer ST-100 (pg. E-22) to retrieve tool statistics
- Includes 1 LI-18-A LI-ION Battery, high impact carrying case with lanyard, die compartment & battery charger



For use with: BCU, BBCU, BLU, BBLU, BBLZ, TLU, LL, LLR, and LLN style copper connectors;

KO, KD, KN, PIK, PSK, PS, PSS, PSKS, KBO, KKBO, KBD, KKBD, BCUA, BLUA, FKLA, FSLA, FULA style aluminum connectors

CAPACITY: 8 AWG - 750 MCM Aluminum & Copper Lugs/Splices

LENGTH: 16.5 in. **WIDTH:** 11.8 in.

HEIGHT: 11.8 in. **WEIGHT:** 17.6 lbs

TPU-6B DIELESS BATTERY-ACTUATED HYDRAULIC TOOL

6 TON OUTPUT FORCE

- 18v LI-ION battery operation
- Provides up to 70% more crimp cycles than with Ni-Cd batteries
- Integral LED work light and built in diagnostics
- Dieless installation system utilizes four indentors to make the crimp, eliminates the need to purchase and maintain dies
- Audible pressure "pop-off" valve indicates crimp completion
- UL listed and CSA certified crimp connections when used with Penn-Union copper color-coded lugs and splices (6 AWG - 500 MCM)
- Can be used with Tool Analyzer ST-100 (pg. E-22) to retrieve tool statistics
- Includes 1 LI-18-A LI-ION Battery, durable high impact carrying case with lanyard and battery charger



For use with: BCU, BBCU, BLU, BBLU and BBLZ style copper connectors; BCUA and BLUA style aluminum connectors (NOT UL listed or CSA certified with this tool)

CAPACITY: 8 AWG - 500 MCM Aluminum & Copper Lugs/Splices

LENGTH: 14.2 in. **WIDTH:** 3.0 in.

HEIGHT: 12.2 in. **WEIGHT:** 9.7 lbs.



BATTERY POWERED TOOLS

TPU-6FTB DIELESS BATTERY-ACTUATED HYDRAULIC TOOL 6 TON OUTPUT FORCE

- 18v LI-ION battery operation
- Provides up to 70% more crimp cycles than with Ni-Cd batteries
- Integral LED work light and built in diagnostics
- Flip top design with pull pin locking mechanism allows for easy cable positioning and removal
- Accepts larger connectors up to 750 MCM
- Dieless installation system utilizes four indentors to make the crimp, eliminates the need to purchase and maintain dies
- Audible pressure “pop-off” valve indicates crimp completion
- UL listed and CSA certified crimp connections when used with Penn-Union color-coded lugs and splices (6 AWG - 750 MCM)
- Can be used with Tool Analyzer ST-100 (pg. E-22) to retrieve tool statistics
- Includes 1 LI-18-A LI-ION Battery durable high impact carrying case with lanyard and battery charger



For use with: BCU, BBCU, BLU,
 BBLU and BBLZ style copper connectors;
 BCUA and BLUA style aluminum connectors
 (NOT UL listed or CSA certified with this tool)

CAPACITY: 8 AWG - 750 MCM Aluminum & Copper Lugs /Splices

LENGTH: 14.2 in. **WIDTH:** 3.0 in. **HEIGHT:** 14.0 in. **WEIGHT:** 10.6 lbs.

BCT-750 BATTERY-ACTUATED CABLE CUTTER

- 18v LI-ION battery operation
- Light weight, hook head type design
- Hardened steel blades for long life
- Ergonomic space saving design
- Includes 1 LI-18-A LI-ION Battery high impact carrying case with lanyard and battery charger



CUTTING CAPACITY: 750 MCM Hard Drawn Copper,

1000 MCM Soft Drawn Copper, 1000 MCM Aluminum

LENGTH: 4.2 in. **WIDTH:** 4.6 in. **HEIGHT:** 14.8 in. **WEIGHT:** 4.4 lbs.

BCTA-1000 BATTERY-ACTUATED HYDRAULIC CABLE CUTTER

- 18v LI-ION battery operation
- 180° head rotation for easy operation
- Light weight and portable
- Flip top head design with positive latch
- Includes 1 LI-18-A LI-ION Battery high impact carrying case with lanyard and battery charger



CUTTING CAPACITY: Aluminum & Copper Cable up to 1.29" Diameter
 (1250 MCM); and ACSR up to 1113 MCM

LENGTH: 16.9 in. **WIDTH:** 2.9 in. **HEIGHT:** 12.2 in. **WEIGHT:** 20.3 lbs.

HAND OPERATED CABLE CUTTERS

CT-1000 MANUAL RATCHET CABLE CUTTER

- Two-handed operation provides additional leverage, makes cutting larger cables easier
- Ratcheting mechanism and compact design allow for use in tight spaces
- Cutting blades can be opened mid-cycle
- Steel handles with non-slip rubber grips
- 1-year limited warranty (excluding blades)



CUTTING CAPACITY: Aluminum & Copper Cables Only
 - up to 1000 MCM

LENGTH: 16.9 in. **WEIGHT:** 2.0 lbs.

CTA-750 MANUAL RATCHET CABLE CUTTER

- Two cutting actions – fast scissor, quickly cut small cable in scissor mode, cutter converts automatically to ratchet mode for larger cable
- 1-year limited warranty (excluding blades)



CUTTING CAPACITY: Aluminum & Copper Conductors up to 750 MCM; ACSR Conductor up 636 MCM (30/19) and Soft Steel Rod up to 1/2 in.

LENGTH: 31.5 in. **WEIGHT:** 11.0 lbs.

DCT-750 DRILL-ACTUATED-CABLE CUTTER

- Time saving cable cutter easily attaches to any cordless or corded drill motor that accepts a 3/8" drive shaft
- Rugged metal housing with durable gears for long life
- Contour machined blade design minimizes cable distortion
- Replaceable heat-treated durable steel blades
- Ergonomically designed handle for comfort and control
- 1-year limited warranty (excluding blades)



CUTTING CAPACITY: Aluminum & Copper Cables Only – up to 750 MCM

LENGTH: 8.7 in. **WIDTH:** 8.7 lbs. **HEIGHT:** 3.5 lbs. **WEIGHT:** 6.2 lbs.

Drill not included



TOOL ACCESSORIES



LI-18-A LITHIUM ION BATTERY

- 18v DC output, capacity 3Ah
- Charging time 60 minutes
- Provides up to 70% more crimp cycles than Ni-Cd batteries
- Works with Penn-Union 18v tools: TPU-6B, TPU-6FTB, TPU-42B, BCT-750, and BCTA-1000 (pgs. E-14-15)



LI-18-B LITHIUM ION BATTERY

- 18v DC output, capacity 1.5Ah
- Charging time 30 minutes
- Provides up to 70% more crimp cycles than Ni-Cd batteries
- Works with Penn-Union 18v tools: TPU-6B, TPU-6FTB, TPU-42B, BCT-750, and BCTA-1000 (pgs. E-14-15)

E



BC-07 18V LITHIUM ION BATTERY CHARGER

- LED display indicates charging status
- Battery protection circuitry prevents overcharging
- Charges Penn-Union 18v Li-ION batteries: LI-18-A and LI-18-B



ST-100 ANALYZER FOR BATTERY-ACTUATE TOOLS WITH SENSOR TECHNOLOGY

- Easily plugs into Penn-Union battery compression tools (TPU-42B, TPU-6B, and TPU-6FTB pgs. E-14-15) and allows user to monitor
- Crimping pressure
- Tool temperature
- Battery voltage
- Logs number of crimp cycles and crimping pressure achieved

User Enabled Features:

- Set LED on time
- Set pressure alarm
- Set temperature alarm

TOOL ACCESSORIES



PG-1000 IN LINE PRESSURE GAUGE KIT

- Use to measure oil pressure of hydraulic pumps
- Maximum working pressure 10,000 psi
- 2.5" diameter gauge
- 3/8" NPT connection



TG-1000 CRIMPING TOOL LOAD CELL

- Use to calibrate and measure force developed by 12 ton hydraulic tools
- Maximum working pressure 10,000 psi
- Supplied with U-Type test dies
- Large, easy to read 3.5" diameter gauge
- Includes steel carrying case

E


H-6 6 FOOT HYDRAULIC HOSE

- Maximum pressure 10,000 psi
- 3/8" male NPT out threads



H-10 10 FOOT HYDRAULIC HOSE

- Maximum pressure 10,000 psi
- 3/8" male NPT out threads

TOOL ACCESSORIES



C-18 QUICK COUPLER

- Complete quick coupler
- 3/8" male NPT threads each end



C-18-F CONNECTOR

- Female coupling half
- 3/8" male NPT screw type

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C-18-M CONNECTOR

- Male coupling half
- 3/8" NPT threads



C-20 QUICK COUPLER

- Complete quick coupler
- 3/8" female NPT threads each end



C-20-F CONNECTOR

- Female coupling half
- 3/8" female NPT threads
- Push/pull quick connect



C-20-M CONNECTOR

- Male coupling half
- 3/8" female NPT threads

PENN-UNION DIES

12 TON CRIMP DIE SELECTION CHARTS

PENN-UNION COMPRESSION DIES EQUIVALENT TO BURNDY AND HUSKIE "U" TYPE DIES FOR 12 TON TOOLS AND USE WITH COPPER CONNECTORS

COPPER CONDUCTOR SIZE	DIE COLOR CODE	PENN-UNION	BURNDY	HUSKIE
8 AWG	RED	T-49	U8CRT	—
6 AWG	BLUE	T-7	U5CRT	HT41AT
4 AWG	GRAY	T-8	U4CRT	HT41AU
3 AWG	WHITE	T-9	U3CRT	HT41AV
2 AWG	BROWN	T-10	U2CRT	HT41AW
1 AWG	GREEN	T-11	U1CRT	HT41AX
1/0 AWG	PINK	T-12	U25RT	HT41AY
2/0 AWG	BLACK	T-13	U26RT	HT41AZ
3/0 AWG	ORANGE	T-14	U27RT	HT41BA
4/0 AWG	PURPLE	T-15	U28RT	HT41BC
250 kcmil	YELLOW	T-16	U29RT	HT41BE
300 kcmil	WHITE	T-17	U30RT	HT41BF
350 kcmil	RED	T-18	U31RT	HT41BJ
400 kcmil	BLUE	T-19	U32RT	HT41BK
500 kcmil	BROWN	T-20	U34RT	HT41BL
600 kcmil	GREEN	T-22	U36RT	HT41BM
650 kcmil	PINK	T-300	U34ART	HT41FB
750 kcmil	BLACK	T-24	U39RT	HT41BP



"U" TYPE DIES

TOOLS THAT ACCEPT "U" TYPE DIES

TPU-12B	PAGE E-6
TPU-12B42	PAGE E-7
TPU-18B	PAGE E-8
TPU-12BH	PAGE E-10
TPU-12B42H	PAGE E-11
TPU-18BH	PAGE E-11
TPU-1500H (WITH PU-15 ADAPTER)	PAGE E-19
TPU-42B	PAGE E-21

Penn-Union dies listed above provide UL and/or CSA certified connections when used with Penn-Union tools and connectors.

PENN-UNION COMPRESSION DIES EQUIVALENT TO BURNDY AND HUSKIE "U" TYPE DIES FOR 12 TON TOOLS AND USE WITH ALUMINUM CONNECTORS

ALUMINUM OR COPPER CONDUCTOR SIZE	DIE COLOR CODE	PENN-UNION	BURNDY	HUSKIE
8 AWG	BLUE	T-374	U8CABT	HT41GL
6 AWG	GRAY	T-346	U6CABT	HT41GE
4 AWG	GREEN	T-375	U4CABT	HT41GM
2 AWG	PINK	T-348	U2CABT	HT41GF
1 AWG	GOLD	T-471	U1CART	—
1/0 AWG	TAN	T-296	U25ART	HT41EX
2/0 AWG	OLIVE	T-297	U26ART	HT41EY
3/0 AWG	RUBY	T-467	U27ART	HT41GW
4/0 AWG	WHITE	T-298	U28ART	HT41EZ
250 kcmil	RED	T-324	U29ART	HT41FW
300 kcmil	BLUE	T-470	U30ART	HT41GZ
350 kcmil	BROWN	T-299	U31ART	HT41FA
400 kcmil	GREEN	T-472	U32ART	HT41HH
500 kcmil	PINK	T-300	U34ART	HT41FB
600 kcmil	BLACK	T-473	U36ART	HT41HG



PU-15 "U" DIE ADAPTER

- Accepts all industry standard 12 ton "U" style dies
- For use in TPU-1500H, 15 ton remote hydraulic crimping tool (pg. E-19)



PENN-UNION DIES

15 TON CRIMP DIE SELECTION CHARTS

PENN-UNION COMPRESSION DIES EQUIVALENT TO BURNDY AND HUSKIE “P” TYPE DIES FOR 15 TON TOOLS AND USE WITH COPPER CONNECTORS

COPPER CONDUCTOR SIZE	PENN-UNION	BURNDY	HUSKIE
750 kcmil	T-24P	P39 RT	HT61BP
800 kcmil	T-25 P	P40 RT	HT61BR
1000 kcmil	T-27P	P44RT	HT61BU
1500 kcmil	T-31P	P46 RT	HT61BV



“P” TYPE DIES

Penn-Union 15 TON Crimp Tool
Model TPU-1500H (pg. E-19)
accepts all industry standard
“P” Type Dies

PENN-UNION COMPRESSION DIES EQUIVALENT TO BURNDY AND HUSKIE “P” TYPE DIES FOR 15 TON TOOLS AND USE WITH ALUMINUM CONNECTORS

ALUMINUM OR COPPER CONDUCTOR SIZE	PENN-UNION	BURNDY	HUSKIE
750 kcmil	1-301 P	P39ART	HT61FC
800 kcmil	T-474P	P40ART	HT61HJ
1000 kcmil	T-302P	P44ART	HT61FD

Penn-Union dies listed above provide UL and/or CSA certified connections when used with Penn-Union tools and connectors.

“W” TYPE CRIMP DIE SELECTION CHARTS

PENN-UNION COMPRESSION DIES EQUIVALENT TO BURNDY AND HUSKIE “W” TYPE DIES FOR USE IN 4-6 TON TOOLS

PENN-UNION	BURNDY	HUSKIE
PW-K840	W-K840	HT58AE
PW-161	W-161	HT58BX
PW-162	W-162	HT58BZ
PW-163	W-163	HT58CB
PW-164	W-164	HT58CD
PW-165	W-165	HT58CE
PW-166	W-166	HT58CF
PW-167	W-167	HT58CG
PW-171	W-171	HT58CM
PW-BG	W-BG	HT58G
PW-C	W-C	HT58J
PW-0	W-0	HT58AK
PW-CUTTER	W-CUTTER	HT58CUT
PW-236	W-236	HT58DE
PW-238	W-238	HT58DG
PW-239	W-239	HT58DH
PW-241	W-241	HT58DK



“W” TYPE DIES

Penn-Union Compression Tool
Model TMU-OD3 (pg. E-12)
accepts all industry standard
“W” Type Dies

PENN-UNION	BURNDY	HUSKIE
PW-243	W-243	HT58DM
PW-245	W-245	HT58DP
PW-247	W-247	HT58DT
PW-248	W-248	HT58DV
PW-249	W-249	HT58DW
PW-687	W-687	HT58KA
PW-702	W-702	HT58KH
PW-L	W-L	HT58AF

PENN-UNION COPPER CONNECTORS FOR USE WITH VERSA-CRIMP® TYPE INSTALLATION TOOLING

(Number of required crimps per connection by connector & tool combinations)



COPPER CONNECTOR CATALOG NUMBER FOR TYPES: BLU, BCU, BBLU, BBCU	VERSA-CRIMP® TOOLS WIRE RANGE AWG OR MCM STRANDED COPPER	VERSA-CRIMP® TOOLS / CONNECTOR TYPES / NUMBER OF CRIMPS						
		VC6-350		VC6-500-BP		VC6-3 1		VC6-FT
		BLU/BCU	BBLU/BBCU	BLU/BCU	BBLU/BBCU	BLU/BCU	BBLU/BBCU	BLU/BCU
-6	#6	1	2	1	2	—	—	—
-4	#4	1	2	1	2	—	—	—
-2	#6 - #2	1	2	1	2	1	2 0'LAP	1
-1	#6 - #1	1	3	1	3	1	2	1
-1/0	#6 - 1/0	1	3	1	3	1	2	1
-2/0	#4 - 2/0	1	3	1	3	1	2	1
-3/0	#2 - 3/0	2	3	2	3	2 0'LAP	2	2 0'LAP
-4/0	#1 - 4/0	2	3	2	3	2 0'LAP	2	2 0'LAP
-025	1/0 - 250	2	3	2	3	2 0'LAP	2	2 0'LAP
-030	2/0 - 300	2	4	2	4	2 0'LAP	3	2 0'LAP
-035	3/0 - 350	—	—	3 0'LAP	5	2 0'LAP	3	2 0'LAP
-040	4/0 - 400	—	—	3 0'LAP	6	2 0'LAP	3	2 0'LAP
-050	4/0 - 500	—	—	4 0'LAP	6	2	4 0'LAP	2
-060	250 - 600	—	—	—	—	—	—	2
-075	500 - 750	—	—	—	—	—	—	3 0'LAP
-080	500 - 800	—	—	—	—	—	—	—
-100	750 - 1000	—	—	—	—	—	—	—
-150	1000 - 1500	—	—	—	—	—	—	—

- 1 Users of HUSKIE® EP-630A, ANDERSON VC7 and related tools must strip off an extra 1-5/8" of insulation from one end of cable to permit removal of tool over conductor sizes 250 MCM and larger on "BCU" and "BBCU" splicing sleeves.
- 2 VC8C Tool Crimps 500 MCM only.
- 3 VC8C Tool Crimps 500-600 MCM only.



PENN-UNION COPPER CONNECTORS FOR USE WITH VERSA-CRIMP® TYPE INSTALLATION TOOLING

(Number of required crimps per connection by connector & tool combinations)



VERSA-CRIMP® TOOLS / CONNECTOR TYPES / NUMBER OF CRIMPS						
VC6-FT	VC 7		VC7-FT		VC8C	
BBLU/ BBCU	BLU/BCU BBLU/ BBCU	BBLU/ BBCU	BLU/BCU	BBLU/ BBCU	BLU/BCU BBLU/ BBCU	
—	—	—	—	—	—	
—	—	—	—	—	—	
2 0'LAP	1	2	1	2	—	
2	1	2	1	2	—	
2	1	2	1	2	—	
2	1	2	1	2	—	
2	2	2	2	2	—	
2	2	2	2	2	—	
2	2	2	2	2	—	
3	2	3	2	3	—	
3	2	3	2	3	—	
3	2	3	2	3	—	
4 0'LAP	2	4	2	4	1	2
4	—	—	2	4	1	3
4 0'LAP	—	—	3	4	2 0'LAP	3
—	—	—	—	—	2 0'LAP	3
—	—	—	—	—	2	4 0'LAP
—	—	—	—	—	2	4 0'LAP

VERSA-CRIMP® is a registered trademark of HUBBELL Incorporated

- Users of HUSKIE® EP-630A, ANDERSON VC7 and related tools must strip off an extra 1-5/8" of insulation from one end of cable to permit removal of tool over conductor sizes 250 MCM and larger on "BCU" and "BBCU" splicing sleeves.
- VC8C Tool Crimps 500 MCM only.
- VC8C Tool Crimps 500-600 MCM only.

TOOL SUMMARY: REPRESENTATIVE TOOL & RELATED TOOLS

"P" = PENN-UNION®
"A" = ANDERSON®
"H" = HUSKIE®

**"A" VC6-350
RELATED TOOLS:**
"A" VC6-350R
"A" VC6-350-SN
"A" VC6-350R-SN

**"A" VC6-500-BP
RELATED TOOLS:**
NONE

"A" VC6-3
RELATED TOOLS:
"P" TPU-6
"H" EP-630A
"P" TPU-6B
"A" VC6-3
"A" VC6-3-BP
"H" REC-630
"P" TPU- 6H
"A" VC6R
"H" EP-630HA

**"A" VC6-FT
RELATED TOOLS:**
"P" TPU-6FT
"H" EP-750A
"P" TPU-6FTB
"A" VC6-FT-BP
"H" REC-750
"P" TPU-6FTH
"A" VC6-FTR
"H" EP-750HA

"A" VC7
RELATED TOOLS:
"A" VC7R

**"A" VC7-FT
RELATED TOOLS:**
"A" VC7-FTR

**"A" VC8C
RELATED TOOLS:**
NONE

COMPRESSION CONNECTOR CRIMPING GUIDELINES

To retain UL or CSA rating, installation tools and methods must be matched to the connectors used

Of all the methods used to make electrical connections, compression of the connector onto the cable with some type of compression tool is considered by most installers to be the most permanent of the common connection methods. To maintain Underwriters Laboratories (UL) or Canadian Standards Association (CSA) for a completed compression connection, it is necessary to use the installation tools and installation methods which have been qualified for the connectors by those organizations during the listing/certification processes.

Cable Preparation

It is imperative that the cable strands and the compression connector be clean and free of dirt and/or corrosion. This is particularly important when making connections on cables which have been installed for a period of time.

Connectors which are Underwriters Laboratories Listed or Canadian Standards Association Certified may contain installation instructions in the connector carton which may include information such as usable cable types, insulation strip lengths, and crimping tools for specific connectors. Proper preparation of the cable can make the difference between a permanent connection and a connection which may require a service call at some point in the future.

The cable material will dictate the type of connector which can be used in the compression connection. Copper cable can be installed in a copper compression connector which has a "CU" rating or in an aluminum compression connector which has a "AL9CU" rating. Aluminum cable on the other hand, can ONLY be installed in an aluminum compression connector which has a rating of "AL" or "AL9CU". ALUMINUM CABLE CAN NEVER BE INSTALLED IN A COPPER COMPRESSION CONNECTOR.

Once the cable preparation has been accomplished and the proper type and size of compression connector has been selected, the

connector manufacturer's recommendations for choice of compression tooling and compression methods should be followed to maintain the UL and/or CSA rating for the completed connection. Connector manufacturers will often be in a position to specify several equivalent UL/CSA crimping recommendations for a specific connector installation. For connectors from No. 22 AWG through No. 10 AWG the compression tools most often have mechanical operation. For No. 8 AWG through 4/0 AWG, the compression tools could use either mechanical or hydraulic means to apply the crimping force.

Historically at 250 kcmil and above in wire size, the crimping force was almost always applied by a hydraulic crimping tool. With the advent of the TDM500, that has changed to 500kcmil due to the extra available leverage generated by the extendable handles. Mechanical tools for small wire sizes are generally single leverage types, while those for the medium sized cables apply the crimping force via a compound leverage system. Mechanical crimping tools make either a surrounding type of crimp (Fig. 1A) or a nest and indenter crimp shape (Fig. 1B). The hydraulic crimping tools used for the medium and large cable sizes can have quite a variety of crimping die systems and hydraulic pressure sources.

Die-type Crimpers

The die-type tools require that a separate set of inserts be placed into the crimping tool head for each different size and type (AL or CU) of connector that is to be crimped. These crimping die inserts are shaped to compress their specific connector size the correct amount when the full force of the hydraulic system of the tool is applied to them. Die type crimping tools generally produce crimps that surround the barrel of the connector with either a rounded oval or a hexagonally shaped outer surface.

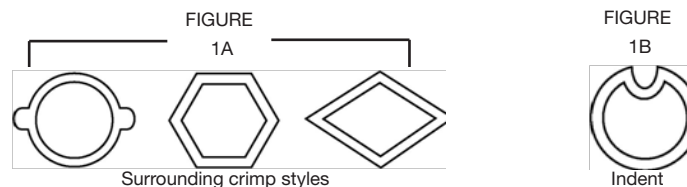
Many of the copper and aluminum connectors used in the electrical contracting industry have a color code applied to them which matches up with a crimping die reference of the same color.

This color code is meant to allow the installer to be able to find the correct die more quickly from as many as several dozen die sets that may be required to crimp all of the connectors within the installation range of the specific hydraulic crimping tool.

Certain styles of connectors used in the electric utility industry are designed to minimize the number of crimping die sets that each line crew must carry. These special connectors are designed to have a constant outside diameter on the crimp barrel portion of the connector with various inside diameters to match conductor size. For example, a popular grouping of electric utility connectors has a constant outside diameter of 0.640 inches for a series of cable sizes from No. 10 AWG through 1/0 AWG and all of the individual connectors are crimped with the same die insert. Electric utilities also use a series of compression taps with a cross section shape similar to the letter “H” which are grouped to install most cable size combinations between No. 6 AWG and 500kcmil with only three crimping die sizes.

Dieless-type Crimpers

The other class of hydraulic crimping tools are the dieless tools. Dieless actually means that there is no die insert change needed when one needs to crimp a different connector size within the range of the tool. The dieless hydraulic tools can be further classified by the three general crimp shapes that are made. One group of dieless tools makes crimps which are of the nest and indenter style with the nest being a stationary portion of the tool and the indenter moving with the hydraulic ram. A second grouping of dieless tools makes use of multiple indentors which indent the connector from multiple sides without the use of a nest. The third group of dieless tools provides a crimp which surrounds the connector barrel and has an appearance more like that of a die type tool than either of the two indenter style dieless tools can provide. All of the dieless tool types are capable of crimping cylindrical connector barrels as recommended by their respective manufacturers.



WARRANTY INFORMATION

All Penn-Union tools including hydraulic and mechanical crimping tools, battery powered crimping tools, hydraulic and mechanical cable cutters, hydraulic pumps, pressure gauges and accessory items carry a one-year (1) warranty against defects in materials and manufacturing from purchase date. Cutting blades, batteries, and chargers are NOT covered under this warranty as they are considered expendables.

Penn-Union warrants all new tooling products to be free of defects in materials and manufacturing for a period of one-year (1) from the date of sale. Upon receipt or notification of a defective product within the warranty period, it will be replaced or repaired at Seller's option free of charge.

Seller shall not be responsible for the cost of transportation incurred in connection with the repair or replacement of these products.

Penn-Union does not assume any liability for the improper selection, repair, use or abuse of such tools. If in the Seller's judgment the tool has been abused, tampered with, altered, or damaged by improper selection, repair or use, the above warranty is void.

This warranty, and the Seller's obligation hereunder is in lieu of all other warranties, express, implied or statutory, including any warranties of merchantability and of fitness for a particular purpose, and all other obligations or liabilities, including incidental and consequential damages.

REPAIR AND WARRANTY CLAIMS

All claims must be sent to Penn-Union for inspection and authorization. A Return Materials Authorization (RMA) must be requested and issued before shipping tools to Penn-Union. An authorization can be requested by contacting Techspan by telephone (888) 363-1588, fax (905) 820-6142 or email (sales@techspan.ca). Please include all details of the claim including model number, description of issue, date of

purchase and distributor through which the tool or accessory was purchased. Non-warranty repairs will be handled using this same procedure. Any repairs which exceed 50% of the cost of a new tool will be advised prior to repairs being made. All products will be returned to Techspan Industries.

AWG VS. METRIC WIRE SIZES

Circ. Mils	Equivalent Circ. Mils	Awg. Size	Metric Wire Size mm²	Stranding/Wire Diameter Per Strand		Approximate Overall Diameter		Circ. Mils	Equivalent Circ. Mils	Awg. Size	Metric Wire Size mm²	Stranding/Wire Diameter Per Strand		Approximate Overall Diameter	
				in	mm	in	mm					in	mm		
-	987	-	0.50	1/.032	1/.813	.032	0.81	83690	-	1	-	19/.0664	19/1.69	.332	8.43
1020	-	20	-	7/.0121	7/.307	.036	0.91	-	98680	-	50	19/.073	19/1.85	.365	9.27
-	1480	-	0.75	1/.039	1/.991	.039	0.99	105600	-	1/0	-	19/.0745	19/1.89	.373	9.46
1620	-	18	-	1/.0403	1/1.02	.040	1.02	133100	-	2/0	-	19/.0837	19/2.13	.419	10.6
1620	-	18	-	7/.0152	7/.386	.046	1.16	-	138100	-	70	19/.086	19/2.18	.430	10.9
-	1974	-	1.0	1/.045	1/1.14	.045	1.14	167800	-	3/0	-	19/.094	19/2.39	.470	11.9
-	1974	-	1.0	7/.017	7/.432	.051	1.30	167800	-	3/0	-	37/.0673	37/1.71	.471	12.0
2580	-	16	-	1/.0508	1/1.29	.051	1.29	-	187500	-	95	19/.101	19/2.57	.505	12.8
2580	-	16	-	7/.0192	7/.488	.058	1.46	-	187500	-	95	37/.072	37/1.83	.504	12.8
-	2960	-	1.5	1/.055	1/1.40	.055	1.40	211600	-	4/0	-	19/.1055	19/2.68	.528	13.4
-	2960	-	1.5	7/.021	7/5.33	.063	1.60	-	237.8 MCM	-	120	37/.081	37/2.06	.567	14.4
4110	-	14	-	1/.0641	1/1.63	.064	1.63	250 MCM	-	-	-	37/.0822	37/2.09	.575	14.6
4110	-	14	-	7/.0242	7/6.15	.073	1.84	300 MCM	-	-	-	37/.090	37/2.29	.630	16.0
-	4934	-	2.5	1/.071	1/1.80	.071	1.80	350 MCM	-	-	-	37/.0973	37/2.47	.681	17.3
-	4934	-	2.5	7/.027	7/6.86	.081	2.06	-	365.1 MCM	-	185	37/.100	37/2.54	.700	17.8
6530	-	12	-	1/.0808	1/2.05	.081	2.05	400 MCM	-	-	-	37/.104	37/2.64	.728	18.5
6530	-	12	-	7/.0305	7/7.75	.092	2.32	-	473.6 MCM	-	240	37/.114	37/2.90	.798	20.3
-	7894	-	4	1/.089	1/2.26	.089	2.26	-	473.6 MCM	-	240	61/.089	61/2.26	.801	20.3
-	7894	-	4	7/.034	7/8.64	.102	2.59	500 MCM	-	-	-	37/.1162	37/2.95	.813	20.7
10380	-	10	-	1/.1019	1/2.59	.102	2.59	500 MCM	-	-	-	61/.0905	61/2.30	.814	20.7
10380	-	10	-	7/.0385	7/9.78	.116	2.93	-	592.1 MCM	-	300	61/.099	61/2.51	.891	22.6
-	11840	-	6	1/.109	1/2.77	.109	2.77	600 MCM	-	-	-	61/.0992	61/2.52	.893	22.7
-	11840	-	6	7/.042	7/1.07	.126	3.21	700 MCM	-	-	-	61/.1071	61/2.72	.964	24.5
13090	-	9	-	1/.1144	1/2.91	.1144	2.91	750 MCM	-	-	-	61/.1109	61/2.82	.998	25.4
13090	-	9	-	7/.0432	7/1.10	.130	3.30	750 MCM	-	-	-	91/.0908	91/2.31	.999	25.4
16510	-	8	-	1/.1285	1/3.26	.128	3.26	-	789.4 MCM	-	400	61/.114	61/2.90	1.026	26.1
16510	-	8	-	7/.0486	7/1.23	.146	3.70	800 MCM	-	-	-	61/.1145	61/2.91	1.031	26.2
-	19740	-	10	1/.141	1/3.58	.141	3.58	800 MCM	-	-	-	91/.0938	91/2.38	1.032	26.2
-	19740	-	10	7/.054	7/1.37	.162	4.12	1000 MCM	-	-	-	61/.1280	61/3.25	1.152	29.3
20820	-	7	-	1/.1443	1/3.67	.144	3.67	1000 MCM	-	-	-	91/.1048	91/2.66	1.153	29.3
20820	-	7	-	7/.0545	7/1.38	.164	4.15	-	1233.7 MCM	-	625	91/.117	91/2.97	1.287	32.7
26240	-	6	-	1/.162	1/4.11	.162	4.11	1250 MCM	-	-	-	91/.1172	91/2.98	1.289	32.7
26240	-	6	-	7/.0612	7/1.55	.184	4.66	1250 MCM	-	-	-	127/.0992	127/2.52	1.290	32.8
-	31580	-	16	7/.068	7/1.73	.204	5.18	1500 MCM	-	-	-	91/.1284	91/3.26	1.412	35.9
33090	-	5	-	7/.0688	7/1.75	.206	5.24	1500 MCM	-	-	-	127/.1087	127/2.76	1.413	35.9
41740	-	4	-	7/.0772	7/1.96	.232	5.88	-	1578.8 MCM	-	800	91/.132	91/3.35	1.452	36.9
-	49340	-	25	7/.085	7/2.16	.255	6.48	-	1973.5 MCM	-	1000	91/.147	91/3.73	1.617	41.1
-	49340	-	25	19/.052	19/1.32	.260	6.60	2000 MCM	-	-	-	127/.1255	127/3.19	1.632	41.5
52620	-	3	-	7/.0867	7/2.20	.260	6.61	2000 MCM	-	-	-	169/.1088	169/2.76	1.632	41.5
66360	-	2	-	7/.0974	7/2.47	.292	7.42	-	-	-	-	-	-	-	-
-	69070	-	35	7/.100	7/2.54	.300	7.62	-	-	-	-	-	-	-	-
-	69070	-	35	19/.061	19/1.55	.305	7.75	-	-	-	-	-	-	-	-

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DIESEL LOCOMOTIVE & CAR WIRING CABLE

Conductor Stranding	Approx. Size Awg	Circular Mil Area	Conductor Diameter Inches
19/.0117	16	2601	.060
19/27	14	3831	.070
19/25	12	6088	.090
27/24	10	10910	.123
37/24	8	14950	.140
61/24	6	24640	.180
91/24	5	36760	.220
105/24	4	42420	.240
125/24	3	50500	.260
150/24	2	60600	.325
225/24	1	90900	.390
275/24	1/0	111100	.420
325/24	2/0	131300	.460
450/24	3/0	181800	.565
550/24	4/0	222200	.590
650/24	-	262600	.660
775/24	-	313100	.740
925/24	-	373700	.790
1100/24	-	444400	.870
1325/24	-	535300	.940
1600/24	-	646400	1.025
1925/24	-	777700	1.120
2300/24	-	929200	1.230
2750/24	-	1111000	1.370

ADDITIONAL WIRE SIZE RECOMMENDATIONS FOR COPPER PENN-CRIMPS®

TYPES: BCU, BCU-FL, BBCU, BBCU-FL, BLU, BLU-FL, BBLU, BB LU-FL, BBLZ

Copper Connector Catalog Type Splices and Lugs (1 & 2 Hole)	UL SP		UL SP		UL SP		UL SP		UL SP		UL SP	
	Class B & C Building Wire Cu Cable Size & Stranding	Class I Flexible Cable (#24AWG Cu Strands) Size & Stranding	Class K Weld Cable (#30AWG Cu Strands) Size & Stranding	Diesel Locomotive Cable (#24AWG Cu Strands) Size & Stranding	Class H Cable (No. & Dia. of Wire) Size & Stranding	Class G Cable (No. & Dia. of Wire) Size & Stranding	Class M Flexible Cable (#34AWG Cu Strands) Size & Stranding	Metric Cable Wire Size Range Copper Cable Only Metric Size & Dia.	Navy Cable	Air Craft		
BCU-BBCU-BLU-BBLU-8 BBLZ	#8 AWG 7 or 19	#8 AWG 41/24	None	None	*#8 AWG 133/.0111	*#8 AWG 49/.0184	#8 AWG 420/34	6mm ² 3.21mm	#23	AN-8		
BCU-BBCU-BLU-BBLU-6 BBLZ	#6 AWG 7 or 19	#6 AWG 63/24	None	None	*#7 AWG 133/.0125	#7 AWG 49/.0206	#7 AWG 532/34	10mm ² 4.12mm	None	None		
BCU-BBCU-BLU-BBLU-5 BBLZ	#5 AWG 7 or 19	None	None	None	*#6 AWG 133/.0140	*#6 AWG 49/.0231	#6 AWG 665/34	16mm ² 5.18mm	#30	AN-6		
BCU-BBCU-BLU-BBLU-4 BBLZ	#4 AWG 7 or 19	None	None	None	*#5 AWG 133/.0158	*#5 AWG 49/.0260	#5 AWG 836/34	*20mm ² 5.72mm	#40	None		
BCU-BBCU-BLU-BBLU-3 BBLZ	#3 AWG 7 or 19	#4 AWG 105/24	#4 AWG 420/30	#4 AWG 105/24	#4 AWG 133/.0177	#4 AWG 49/.0292	#4 AWG 1064/34	25mm ² 6.60mm	#50	AN-4		
BCU-BBCU-BLU-BBLU-2 BBLZ	#2 AWG 7 or 19	None	None	None	*#3 AWG 133/.0199	*#3 AWG 49/.0328	#3 AWG 1323/34	*30mm ² 7.01 mm	#60	None		
BCU-BBCU-BLU-BBLU-1 BBLZ	#1 AWG 19 or 37	#2 AWG 161/24	#2 AWG 665/30	#2 AWG 150/24	#2 AWG 133/.0223	#2 AWG 49/.0368	#2 AWG 1666/34	*40mm ² 8.20mm	#75	AN-2		
BCU-BBCU-BLU-BBLU-1/0 BBLZ	1/0 AWG 19 or 37	None	#1 AWG 836/30	#1 AWG 225/24	#1 AWG 259/.0180	#1 AWG 133/.0251	#1 AWG 2107/34	50mm ² 9.27mm	#100	AN-1		
BCU-BBCU-BLU-BBLU-2/0 BBLZ	2/0 AWG 19 or 37	1/0 AWG 266/24	1/0 AWG 1064/30	1/0 AWG 275/24	1/0 AWG 259/.0202	1/0 AWG 133/.0282	1/0 AWG 2646/34	70mm ² 10.92mm	#125	AN-1/0		
BCU-BBCU-BLU-BBLU-3/0 BBLZ	3/0 AWG 19 or 37	2/0 AWG 342/24	2/0 AWG 1323/30	2/0 AWG 325/24	2/0 AWG 259/.0227	2/0 AWG 133/.0316	None	*85mm ² 11.94mm	#150	None		
BCU-BBCU-BLU-BBLU-4/0 BBLZ	4/0 AWG 19 or 37	None	3/0 AWG 1666/30	3/0 AWG 450/24	3/0 AWG 259/.0255	3/0 AWG 133/.0355	2/0 AWG 3325/34	95mm ² 12.80mm	#200	AN-2/0 AN-3/0		
BCU-BBCU-BLU-BBLU-025 BBLZ	250 MCM 37 or 61	None	None	None	None	None	3/0 AWG 4256/34	120mm ² 14.40mm	None	None		
BCU-BBCU-BLU-BBLU-030 BBLZ	300 MCM 37 or 61	4/0 AWG 532/24	4/0 AWG 2107/30	4/0 AWG 550/24	*4/0 AWG 259/.0286	*4/0 AWG 133/.0399	4/0 AWG 5320/34	150mm ² 16.00mm	#300	AN-4/0		
BCU-BBCU-BLU-BBLU-035 BBLZ	350 MCM 37 or 61	None	None	262 MCM 650/24	*250 MCM 427/.0242	*250 MCM 259/.0311	None	*180mm ² 17.42mm	#350	None		
BCU-BBCU-BLU-BBLU-040 BBLZ	400 MCM 37 or 61	None	None	313 MCM 775/24	300 MCM 427/.0265	300 MCM 259/.0340	250 MCM 6384/34	185mm ² 17.80mm	#400	None		
BCU-BBCU-BLU-BBLU-045 BBLZ	450 MCM 37 or 61	None	None	None	*350 MCM 427/.0286	*350 MCM 259/.0368	300 MCM 7581/34	None	None	None		
BCU-BBCU-BLU-BBLU-050 BBLZ	500 MCM 37 or 61	350 MCM 882/24	None	373 MCM 925/24	400 MCM 427/.0306	400 MCM 259/.0393	350 MCM 8806/34	240mm ² 20.30mm	None	None		
BCU-BBCU-BLU-BBLU-060 BBLZ	600 MCM 61 or 91	None	None	444 MCM 1100/24	450 MCM 427/.0325	450 MCM 259/.0417	400 MCM 10101/34	300mm ² 22.63mm	None	None		
BCU-BBCU-BLU-BBLU-065 BBLZ	650 MCM 61 or 91	500 MCM 1225/24	None	535 MCM 1325/24	500 MCM 427/.0342	500 MCM 259/.0439	450 MCM 11396/34	None	None	None		
BCU-BBCU-BLU-BBLU-075 BBLZ	750 MCM 61 or 91	None	None	646 MCM 1600/24	*550 MCM 703/.0280	*550 MCM 427/.0359	500 MCM 12691/34	None	None	None		
BCU-BBCU-BLU-BBLU-080 BBLZ	800 MCM 61 or 91	None	None	None	*600 MCM 703/.0292	*600 MCM 427/.0375	550 MCM 13664/34	400mm ² 26.1mm	None	None		
BCU-BBCU-BLU-BBLU-100 BBLZ	1000 MCM 61 or 91	750 MCM 1862/24	None	777 MCM 1925/24	*700 MCM 703/.0316	*700 MCM 427/.0419	600 MCM 14945/34 650 MCM 16226/34	500mm ² 29.3mm	None	None		

*Not UL Listed

Pictorial Index

COMPRESSION CONNECTORS

<p>pg. F-6</p> <p>Type BLU-S</p>	<p>pg. F-8</p> <p>Type BLU-S-NT</p>	<p>pg. F-10</p> <p>Type BBLU-S</p>	<p>pg. F-12</p> <p>Type BBLU-S-NT</p>	<p>pg. F-14</p> <p>Type BBLZ-S</p>
<p>pg. F-16</p> <p>Type BBLZ-S-NT</p>	<p>pg. F-18</p> <p>Type BLU-D</p>	<p>pg. F-20</p> <p>Type BLU-D-NT</p>	<p>pg. F-22</p> <p>Type BBLU-D</p>	<p>pg. F-25</p> <p>Type BBLU-D-NT</p>
<p>pg. F-26</p> <p>Type BBLZ-D</p>	<p>pg. F-28</p> <p>Type BBLZ-D-NT</p>	<p>pg. F-30</p> <p>Type BLU-S-FL</p>	<p>pg. F-31</p> <p>Type BBLU-S-FL</p>	<p>pg. F-32</p> <p>Type BLU-D-FL</p>
<p>pg. F-33</p> <p>Type BBLU-D-FL</p>	<p>pg. F-35</p> <p>Type BLY</p>	<p>pg. F-37</p> <p>Type BCU</p>	<p>pg. F-38</p> <p>Type BBCU</p>	<p>pg. F-39</p> <p>Type BCU-FL</p>
<p>pg. F-40</p> <p>Type BBCU-FL</p>	<p>pg. F-42</p> <p>Type BLUA-S</p>	<p>pg. F-44</p> <p>Type BLUA-S-NT</p>	<p>pg. F-45</p> <p>Type BLUA-D</p>	<p>pg. F-46</p> <p>Type BLUA-D-NT</p>
<p>pg. F-47</p> <p>Type BCUA</p>	<p>pg. F-48</p> <p>Type TPC</p>	<p>pg. F-49</p> <p>Types CST and CDT</p>	<p>pg. F-50</p> <p>Type RTC</p>	<p>pg. F-52</p> <p>Type CCT</p>
<p>pg. F-53</p> <p>Type PT</p>				

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OXIDE INHIBITORS

<p>pg. F-54</p>  <p>Cual-Gel</p>	<p>pg. F-55</p>  <p>Cual-Aid #11C</p>	<p>pg. F-55</p> <p>ALSO AVAILABLE</p> <p>Cual-Aid #12C</p>
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INSULATED MECHANICAL CONNECTORS

<p>pg. F-56</p>  <p>Type IMLC</p>	<p>pg. F-57</p>  <p>Type IPB-S</p>	<p>pg. F-57</p>  <p>Type IPBB-S</p>	<p>pg. F-59</p>  <p>Type IPB-D</p>	<p>pg. F-59</p>  <p>Type IPBB-D</p>
<p>pg. F-61</p>  <p>Type IPB-A</p>	<p>pg. F-61</p>  <p>Type IPBB-A</p>	<p>pg. F-62</p>  <p>Type IPBM-S</p>	<p>pg. F-62</p>  <p>Type IPBBM-S</p>	<p>pg. F-64</p>  <p>Type IPBM-D</p>
<p>pg. F-64</p>  <p>Type IPBBM-D</p>	<p>pg. F-66</p>  <p>Type IISR</p>	<p>pg. F-66</p>  <p>Type IISRB</p>		

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MECHANICAL CONNECTORS

pg. F-67



Types S and SEL

pg. F-69



Type SW

pg. F-70



Type SWA

pg. F-71



Type SSS and SCS

pg. F-72



Type STS and SDS

pg. F-73



Types SLU and SAU

pg. F-74



Type LU

pg. F-75



Aluminum Lugs

pg. F-77



Lay In Lugs

pg. 78



Type LLA2

pg. F-79



Type PB

pg. F-80



Type LASK

pg. F-81



Type SR

pg. F-82



Type GPT

pg. F-82



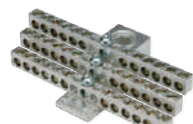
Type GTC

pg. F-83



Type SLK

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Type SNB

pg. F-85

NEW PRODUCT



Types NA and NC

F

ALUMINUM POWER DISTRIBUTION BLOCKS

pg. F-86



Type ADB

pg. F-89



Type ADB

TERMINAL BLOCKS

pg. F-91



Type 15-1600

pg. F-92



Type 3000

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GROUNDING CONNECTORS

<p>pg. F-93</p> <p>Direct Burial</p>	<p>pg. F-94</p> <p>Type KPB</p>	<p>pg. F-94</p> <p>Types KPL</p>	<p>pg. F-94</p> <p>Type KC</p>	<p>pg. F-95</p> <p>Type KW</p>
<p>pg. F-95</p> <p>Type KH</p>	<p>pg. F-96</p> <p>Type KL</p>	<p>pg. F-96</p> <p>Type KS</p>	<p>pg. F-97</p> <p>Types KLS and KLS-S</p>	<p>pg. F-97</p> <p>Type KHH</p>
<p>pg. F-98</p> <p>Type KLH</p>	<p>pg. F-99</p> <p>Type CH</p>	<p>pg. F-102</p> <p>Type FXB</p>	<p>pg. F-104</p> <p>Type GPL</p>	<p>pg. F-106</p> <p>Type GT</p>
<p>pg. F-108</p> <p>Type GU</p>	<p>pg. F-109</p> <p>Type GR</p>	<p>pg. F-111</p> <p>Type GO</p>	<p>pg. F-112</p> <p>Types GBC and GBCH</p>	<p>pg. F-112</p> <p>Type GM</p>
<p>pg. F-113</p> <p>Type GMS</p>	<p>pg. F-113</p> <p>Type GWL</p>	<p>pg. F-114</p> <p>Type GH</p>	<p>pg. F-114</p> <p>Type GHS</p>	<p>pg. F-115</p> <p>Type GJ</p>
<p>pg. F-115</p> <p>Type GJS</p>	<p>pg. F-116</p> <p>Type JC</p>	<p>pg. F-117</p> <p>Type FF</p>		

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Pictorial Index

UTILITY CONNECTORS / OVERHEAD

pg. F-118



Type KO-R and KD-R

pg. F-120



Types KN and KN-R

pg. F-121



Type KR-R

pg. F-122



Type PIK 5/8" OD

pg. F-123



Type PIK .840" OD

UTILITY CONNECTORS / UNDERGROUND

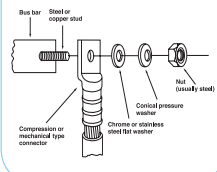
pg. F-124



Type ULS

TECHNICAL INFORMATION

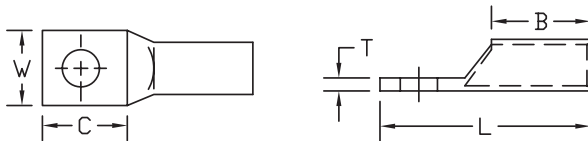
pg. F-125



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Standard Barrel - One Hole Tongue with Inspection Window Type BLU-S

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Inspection window to ensure full cable insertion
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



BLU-S

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BLU-S DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					INSTALLATION TOOLING				
			TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO. /TOOL	PENN-UNION DIE CATALOG NO.	WIRE STRIP LENGTH
BLU-8S14	8 AWG	#10	.37	.50	.08	.41	1.09	Red	TDM-250 or TDM-500	6	T-49	1/2"
BLU-8S15		1/4"	.37	.56	.08	.41	1.14					
BLU-8S16A		5/16"	.60	.64	.07	.57	1.46					
BLU-8S17A		3/8"	.60	.64	.07	.58	1.52					
BLU-8S18A		1/2"	.70	1.00	.09	.57	1.72					
BLU-6S	6 AWG	#10	.41	.53	.09	.81	1.51	Blue	TDM-250 or TDM-500	7	T-7	15/16"
BLU-6S1		1/4"	.41	.69	.09	.81	1.67					
BLU-6S2		5/16"	.45	.75	.07	.82	1.78					
BLU-6S8		3/8"	.60	.88	.06	.81	1.97					
BLU-6S9+		1/2"	.70	.94	.08	.75	1.88					
BLU-5S	5 AWG	#10	.43	.56	.08	.81	1.61	Blue	TDM-250 or TDM-500	7	T-7	15/16"
BLU-5S1		1/4"	.43	.69	.08	.81	1.73					
BLU-5S2		5/16"	.61	.72	.06	.81	1.77					
BLU-5S3		3/8"	.61	.88	.06	.81	1.92					
BLU-4S	4 AWG	#10	.48	.56	.09	.81	1.61	Gray	TDM-250 or TDM-500	8	T-8	15/16"
BLU-4S1		1/4"	.48	.69	.09	.81	1.67					
BLU-4S10		5/16"	.48	.72	.09	.81	1.76					
BLU-4S2		3/8"	.60	.88	.08	.81	1.97					
BLU-4S4 +		1/2"	1.12	1.12	.13	.83	2.22					
BLU-3S	3 AWG	#10	.53	.56	.09	.88	1.67	White	TDM-250 or TDM-500	9	T-9	1"
BLU-3S1		1/4"	.53	.69	.09	.88	1.80					
BLU-3S2		5/16"	.53	.75	.09	.88	1.86					
BLU-3S3		3/8"	.59	.88	.08	.88	1.98					

BLU-5 DIMENSIONS & INSTALLATION TOOLING INFORMATION (Continued)

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					INSTALLATION TOOLING				
			TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO. /TOOL	PENN-UNION DIE CATALOG NO.	WIRE STRIP LENGTH
BLU-2S15	2 AWG	#10	.59	.69	.11	.88	1.73	Brown	TDM-250 or TDM-500	10	T-10	1"
BLU-2S		1/4"	.59	.69	.11	.88	1.73					
BLU-2S1		5/16"	.59	.75	.11	.88	1.86					
BLU-2S2		3/8"	.59	.87	.11	.88	1.98					
BLU-2S10		1/2"	.82	1.13	.10	.88	2.25					
BLU-1S9	1 AWG	1/4"	.67	.56	.11	.62	1.42	Green	TDM-250 or TDM-500	11	T-11	3/4"
BLU-1S		5/16"	.67	.75	.11	.88	1.86					1"
BLU-1S1		3/8"	.67	.87	.11	.94	2.05					1-1/16"
BLU-1S4Δ		1/2"	.70	1.06	.09	.82	2.03					-
BLU-1/0S19	1/0 AWG	1/4"	.73	.87	.12	.87	2.05	Pink	TDM-250 or TDM-500	12	T-12	1"
BLU-1/0S		5/16"	.73	.87	.12	.88	2.05					
BLU-1/0S1		3/8"	.73	.87	.12	.88	2.05					
BLU-1/0S20	2/0 AWG	1/2"	.73	1.06	.12	.87	2.25	Black	TDM-250 or TDM-500	13	T-13	1-1/16"
BLU-2/0S20		1/4"	.81	.81	.12	.94	2.06					
BLU-2/0S21		5/16"	.81	.81	.12	.94	2.06					
BLU-2/0S		3/8"	.81	.87	.12	.94	2.11					
BLU-2/0S4	3/0 AWG	1/2"	.81	1.12	.12	.94	2.37	Orange	TDM-250 or TDM-500	14	T-14	1-1/8"
BLU-3/0S14		1/4"	.89	.81	.12	.75	1.94					
BLU-3/0S15		5/16"	.89	.81	.12	.75	1.94					
BLU-3/0S		3/8"	.89	.87	.12	1.00	2.25					
BLU-3/0S1	4/0 AWG	1/2"	.89	1.12	.12	1.00	2.50	Purple	TDM-250 or TDM-500	15	T-15	1-1/8"
BLU-4/0S19		1/4"	1.00	.78	.14	1.00	2.22					
BLU-4/0S25		5/16"	1.00	.78	.14	1.00	2.22					
BLU-4/0S		3/8"	1.00	.87	.14	1.00	2.31					
BLU-4/0S1	250 kcmil	1/2"	1.00	1.09	.14	1.00	2.50	Yellow	TDM-250 or TDM-500	16	T-16	1-3/16"
BLU-02S54		1/4"	1.09	.78	.15	1.06	2.34					
BLU-02S55		5/16"	1.09	.78	.15	1.06	2.34					
BLU-02S52		3/8"	1.09	1.13	.15	1.06	2.69					
BLU-02S5	300 kcmil	1/2"	1.09	1.13	.15	1.06	2.69	White	TDM-500	17	T-17	1-3/16"
BLU-030S6		5/16"	1.19	.78	.16	1.06	2.41					
BLU-030S7		3/8"	1.19	1.09	.16	1.06	2.75					
BLU-030S		1/2"	1.19	1.09	.16	1.06	2.75					
BLU-030S8	350 kcmil	5/8"	1.19	1.69	.16	1.06	3.31	Red	TDM-500	18	T-18	1-1/4"
BLU-03S51		3/8"	1.28	.88	.17	1.13	2.63					
BLU-03S5		1/2"	1.28	1.16	.17	1.13	2.91					
BLU-03S53	400 kcmil	5/8"	1.28	1.41	.17	1.13	3.16	Blue	TDM-500	19	T-19	1-5/16"
BLU-040S4		1/2"	1.39	1.19	.19	1.19	3.06					
BLU-040S		5/8"	1.39	1.44	.19	1.19	3.31					
BLU-04S51	450 kcmil	1/2"	1.45	1.19	.22	1.19	3.06	Blue	TDM-500	19	T-19	1-5/16"
BLU-04S5		5/8"	1.45	1.44	.22	1.18	3.31					
BLU-050S2	500 kcmil	1/2"	1.53	1.13	.21	1.38	3.28	Brown	TDM-500	20	T-20	1-1/2"
BLU-050S		5/8"	1.53	1.44	.21	1.38	3.63					
BLU-060S	600 kcmil	5/8"	1.72	1.75	.27	1.38	3.97	Green	TDM-500	22	T-22	1-1/2"
BLU-060S1		1/2"	1.72	1.75	.27	1.38	3.97					
BLU-06S54	650 kcmil	5/8"	1.78	1.75	.27	1.38	3.97	Pink	TDM-500	300	T-300	1-1/2"
BLU-06S5S		1/2"	1.78	1.75	.27	1.38	3.97					
BLU-07S5	750 kcmil	5/8"	1.91	1.75	.27	1.63	4.31	Black	TDM-500	24	T-24	1-3/4"
BLU-080S	800 kcmil	5/8"	1.96	1.88	.25	1.63	4.53	Orange	TDM-500	25	T-25P	1-3/4"
BLU-100S	1000 kcmil	5/8"	2.17	1.75	.33	1.88	4.75	White	TDM-500	27	T-27P	2"
BLU-100S4		3/4"	2.17	1.88	.33	1.88	4.88					
BLU-150S	1500 kcmil	3/4"	2.69	2.19	.39	2.00	5.47	Green	TDM-500	31	T-31P	2-1/8"
BLU-200S	2000 kcmil	3/4"	3.07	2.31	.46	2.25	5.94	Brown	TDM-500	34	-	2-3/8"

Δ cULus listed

• Not UL listed

+ Not CSA certified

• Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications

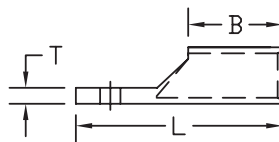
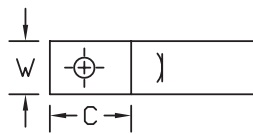
• Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467

• Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



Standard Barrel - One Hole Narrow Tongue with Inspection Window Type BLU-S-NT

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Inspection window to ensure full cable insertion
- **Narrow tongue design for limited space applications**
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



BLU-S-NT

See table for dimensions and installation tooling information

BLU-S-NT DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					INSTALLATION TOOLING				WIRE STRIP LENGTH
			TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	
BLU-8S6-NT	8 AWG	6	.30	.50	.10	.41	1.09	Red	TDM-250 or TDM-500	6	T-49	1/2"
BLU-8S8-NT		8	.30	.50	.10	.41	1.09					
BLU-6S6-NT	6 AWG	6	.31	.50	.12	.81	1.51	Blue	TDM-250 or TDM-500	7	T-7	15/16"
BLU-4S-NT	4 AWG	#10	.40	.56	.11	.81	1.61	Gray	TDM-250 or TDM-500	8	T-8	15/16"
BLU-4S1-NT		1/4"	.40	.69	.11	.81	1.67					
BLU-3S1-NT	3 AWG	1/4"	.49	.69	.10	.88	1.80	White	TDM-250 or TDM-500	9	T-9	1"
BLU-3S2-NT		5/16"	.49	.75	.10	.88	1.86					
BLU-2S15-NT	2 AWG	#10	.50	.69	.13	.87	1.73	Brown	TDM-250 or TDM-500	10	T-10	1"
BLU-2S-NT		1/4"	.50	.69	.13	.87	1.73					
BLU-2S1-NT		5/16"	.50	.75	.13	.87	1.86					
BLU-1S16-NT	1 AWG	#10	.50	.56	.15	.62	1.42	Green	TDM-250 or TDM-500	11	T-11	3/4"
BLU-1S9-NT		1/4"	.50	.56	.15	.62	1.42					
BLU-1/0S10-NT	1/0 AWG	#10	.62	.87	.14	.88	2.05	Pink	TDM-250 or TDM-500	12	T-12	1"
BLU-1/0S19-NT		1/4"	.62	.87	.14	.88	2.05					
BLU-1/0S-NT		5/16"	.62	.87	.14	.88	2.05					
BLU-1/0S1-NT		3/8"	.62	.88	.14	.88	2.05					
BLU-2/0S10-NT	2/0 AWG	#10	.58	.81	.15	.98	2.14	Black	TDM-250 or TDM-500	13	T-13	1-1/8"
BLU-2/0S20-NT		1/4"	.58	.81	.15	.98	2.14					
BLU-2/0S21-NT		5/16"	.58	.81	.15	.98	2.14					
BLU-2/0S-NT	3/0 AWG	3/8"	.58	.87	.15	.98	2.11	Orange	TDM-250 or TDM-500	14	T-14	7/8"
BLU-3/0S14-NT		1/4"	.64	.81	.17	.75	1.94					
BLU-3/0S15-NT		5/16"	.64	.81	.17	.75	1.94					
BLU-3/0S-NT	4/0 AWG	3/8"	.64	.87	.17	1.00	2.25	Purple	TDM-250 or TDM-500	15	T-15	1-1/8"
BLU4/0S19-NT		1/4"	.71	.78	.20	1.00	2.22					
BLU-4/0S25-NT	250 kcmil	5/16"	.71	.78	.20	1.00	2.22	Yellow	TDM-250 or TDM-500	16	T-16	1-3/16"
BLU-4/0S-NT		3/8"	.71	.87	.20	1.00	2.31					
BLU-02S54-NT	300 kcmil	1/4"	.77	.78	.21	1.06	2.34	White	TDM-500	17	T-17	1-3/16"
BLU-02S55-NT		5/16"	.77	.78	.21	1.06	2.34					
BLU-02S52-NT	350 kcmil	3/8"	.77	1.13	.21	1.06	2.69	Red	TDM-500	18	T-18	1-1/4"
BLU-030S2-NT		1/4"	.81	.78	.20	1.03	2.32					
BLU-030S7-NT	400 kcmil	3/8"	.81	1.09	.20	1.03	2.61	Blue	TDM-500	19	T-19	1-5/16"
BLU-03S51-NT		3/8"	.88	.88	.25	1.13	2.63					
BLU-03S5-NT	500 kcmil	1/2"	.88	1.16	.25	1.13	2.91	Brown	TDM-500	20	T-20	1-1/2"
BLU-040S3-NT		3/8"	.96	.88	.27	1.19	2.75					
BLU-040S4-NT	600 kcmil	1/2"	.96	1.19	.27	1.19	3.06	Green	TDM-500	22	T-22	1-1/2"
BLU-050S3-NT		3/8"	1.06	.88	.26	1.38	3.03					
BLU-050S2-NT	750 kcmil	1/2"	1.06	1.07	.26	1.38	3.11	Black	TDM-500	24	T-24	1-3/4"
BLU-060S2-NT		3/8"	1.19	1.50	.33	1.38	3.72					
BLU-060S1-NT	1000 kcmil	1/2"	1.19	1.75	.33	1.38	3.84	White	TDM-500	27	T-27P	2"
BLU-07S51-NT		3/8"	1.30	1.50	.32	1.63	4.06					
BLU-07S53-NT	1005-NT	1/2"	1.30	1.75	.32	1.63	4.22	White	TDM-500	27	T-27P	2"
BLU-07S5-NT		5/8"	1.30	1.75	.32	1.63	4.22					
BLU-100S2-NT	1005-NT	3/8"	1.50	1.50	.38	1.88	4.28	White	TDM-500	27	T-27P	2"
BLU-100S5-NT		1/2"	1.50	1.75	.38	1.88	4.53					
BLU-100S-NT		5/8"	1.50	1.75	.38	1.88	4.53					

Δ cULus listed
 • Not UL listed
 + Not CSA certified

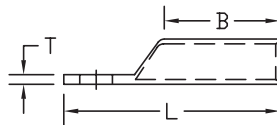
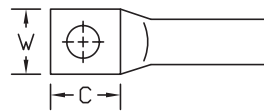
• Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
 • Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
 • Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



Long Barrel - One Hole Tongue with Closed Transition

Type BBLU-S

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Closed transition protects end of cable from environmental conditions
- Long barrel provides high pull out force and added secureness for improved mechanical and electrical properties
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



BBLU-S

See table for dimensions and installation tooling information

BBLU-S DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					INSTALLATION TOOLING				WIRE STRIP LENGTH
			TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO. /TOOL	PENN-UNION DIE CATALOG NO.	
BBLU-8S ■	8 AWG	#10	.41	.69	.08	1.06	2.00	Red	TDM-250 or TDM-500	6	T-49	1-3/16"
BBLU-8S2 ■		1/2"	.41	.69	.08	1.06	2.00					
BBLU-6S	6 AWG	1/4"	.41	.69	.09	1.09	2.03	Blue	TDM-250 or TDM-500	7	T-7	1-1/4"
BBLU-6S1		1/2"	.70	1.07	.09	1.00	2.20					
BBLU-4S	4 AWG	1/4"	.48	.69	.09	1.09	2.06	Gray	TDM-250 or TDM-500	8	T-8	1-1/4"
BBLU-4S1		3/8"	.82	1.23	.10	1.13	2.65					
BBLU-4S2		1/2"	.70	1.07	.09	1.00	2.20					
BBLU-3S3	3 AWG	1/4"	.53	.75	.10	1.12	2.15	White	TDM-250 or TDM-500	9	T-9	1-1/4"
BBLU-3S1		5/16"	.53	.75	.09	1.13	2.16					
BBLU-3S		1/2"	.93	1.12	.10	1.13	2.53					
BBLU-2S9	2 AWG	#10	.59	.75	.11	1.22	2.25	Brown	TDM-250 or TDM-500	10	T-10	1-3/8"
BBLU-2S2		1/4"	.59	.75	.11	1.22	2.25					
BBLU-2S		5/16"	.59	.75	.11	1.22	2.25					
BBLU-2S4		3/8"	.59	.75	.11	1.22	2.25					
BBLU-2S3		1/2"	.75	1.07	.09	1.10	2.33					
BBLU-1S3	1 AWG	#10	.67	.75	.11	1.34	2.38	Green	TDM-250 or TDM-500	11	T-11	1-1/2"
BBLU-1S7		1/4"	.67	.75	.11	1.34	2.38					
BBLU-1S		5/16"	.67	.75	.11	1.34	2.36					
BBLU-1S2		3/8"	.67	.75	.11	1.34	2.38					
BBLU-1S8		1/2"	.75	1.25	.09	1.38	2.86					
BBLU-1/0S	1/0 AWG	5/16"	.73	.75	.13	1.34	2.44	Pink	TDM-250 or TDM-500	12	T-12	1-1/2"
BBLU-1/0S2		3/8"	.75	.81	.12	1.25	2.37					
BBLU-1/0S15		1/2"	.75	1.38	.13	1.38	3.06					
BBLU-2/0S	2/0 AWG	3/8"	.81	.87	.13	1.50	2.72	Black	TDM-250 or TDM-500	13	T-13	1-5/8"
BBLU-2/0S1		1/2"	.81	1.25	.13	1.50	3.06					
BBLU-3/0S2	3/0 AWG	3/8"	.89	1.25	.12	1.50	3.12	Orange	TDM-250 or TDM-500	14	T-14	1-5/8"
BBLU-3/0S		1/2"	.89	1.25	.13	1.50	3.12					
BBLU-4/0S	4/0 AWG	1/2"	1.00	1.25	.14	1.63	3.31	Purple	TDM-250 or TDM-500	15	T-15	1-3/4"
BBLU-025S	250 kcmil	1/2"	1.09	1.25	.16	1.63	3.38	Yellow	TDM-250 or TDM-500	16	T-16	1-3/4"
BBLU-030S	300 kcmil	1/2"	1.19	1.25	.16	2.00	3.81	White	TDM-500	17	T-17	2-1/8"
BBLU-035S	350 kcmil	1/2"	1.28	1.25	.17	2.00	3.84	Red	TDM-500	18	T-18	2-1/8"
BBLU-040S	400 kcmil	5/8"	1.39	1.50	.19	2.13	4.31	Blue	TDM-500	19	T-19	2-1/4"
BBLU-040S1		1/2"	1.39	1.25	.18	2.12	4.06					
BBLU-050S	500 kcmil	5/8"	1.53	1.47	.21	2.31	4.56	Brown		20	T-20	2-3/8"
BBLU-050S2		1/2"	1.53	1.25	.21	2.25	4.25					
BBLU-060S2	600 kcmil	1/2"	1.72	1.50	.27	2.69	5.09	Green		22	T-22	2-13/16"
BBLU-060S		5/8"	1.72	1.75	.27	2.69	5.34					
BBLU-065S	650 kcmil	1/2"	1.78	1.75	.26	2.81	5.40	Pink		300	T-300	2-15/16"
BBLU-065S1		5/8"	1.78	1.75	.27	2.81	5.41					
BBLU-075S	750 kcmil	5/8"	1.91	1.75	.27	2.88	5.56	Black		24	T-24	3"
BBLU-080S	800 kcmil	5/8"	1.96	1.50	.25	2.93	5.46	Orange		25	T-25P	1-3/4"
BBLU-100S	1000 kcmil	5/8"	2.17	1.75	.33	3.00	5.88	White		27	T-27P	3-1/8"
BBLU-150S	1500 kcmil	3/4"	2.69	2.13	.39	3.19	6.53	Green		31	T-31P	3-5/16"
BBLU-200S	2000 kcmil	3/4"	3.07	2.12	.46	3.43	6.87	Brown		34	-	3-9/16"

■ CSAus certified

- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



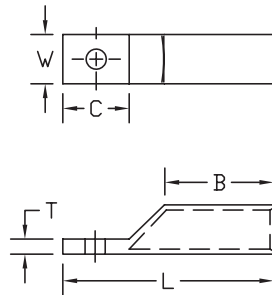
Long Barrel - One Hole Narrow Tongue with Closed Transition

Type BBLU-S-NT

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Closed transition protects end of cable from environmental conditions
- **Narrow tongue design for limited space applications**
- Long barrel provides high pull out force and added secureness for improved mechanical and electrical properties
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



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BBLU-S-NT

See table for dimensions and installation tooling information

BBLU-S-NT DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					INSTALLATION TOOLING				
			TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	WIRE STRIP LENGTH
BBLU-4S5-NT	4 AWG	#10	.40	.69	.11	1.09	2.06	Gray	TDM-250 or TDM-500	8	T-8	1-1/4"
BBLU-4S-NT		1/4"	.40	.69	.11	1.09	2.06					
BBLU-2S9-NT	2 AWG	#10	.50	.75	.13	1.22	2.25	Brown	TDM-250 or TDM-500	10	T-10	1-3/8"
BBLU-2S2-NT		1/4"	.50	.75	.13	1.22	2.25					
BBLU-2S-NT		5/16"	.50	.75	.13	1.22	2.25					
BBLU-1S3-NT	1 AWG	#10	.50	.75	.15	1.34	2.38	Green	TDM-250 or TDM-500	11	T-11	1-1/2"
BBLU-1S7-NT		1/4"	.50	.75	.15	1.34	2.38					
BBLU-1/0S6-NT	1/0 AWG	#10	.62	.75	.14	1.34	2.44	Pink	TDM-250 or TDM-500	12	T-12	1-1/2"
BBLU-1/0S4-NT		1/4"	.62	.75	.14	1.34	2.44					
BBLU-1/0S-NT		5/16"	.62	.75	.14	1.34	2.44					
BBLU-1/0S2-NT		3/8"	.62	.81	.14	1.25	2.38					
BBLU-2/0S5-NT	2/0 AWG	#10	.62	.75	.16	1.50	2.56	Black	TDM-250 or TDM-500	13	T-13	1-5/8"
BBLU-2/0S6-NT		1/4"	.62	.75	.16	1.50	2.56					
BBLU-2/0S3-NT		5/16"	.62	.75	.16	1.50	2.56					
BBLU-2/0S-NT		3/8"	.62	.87	.16	1.50	2.72					
BBLU-3/0S3-NT	3/0 AWG	1/4"	.64	1.25	.17	1.50	3.12	Orange	TDM-250 or TDM-500	14	T-14	1-5/8"
BBLU-3/0S4-NT		5/16"	.64	1.25	.17	1.50	3.12					
BBLU-3/0S2-NT		3/8"	.64	1.25	.17	1.50	3.12					
BBLU-4/0S3-NT	4/0 AWG	5/16"	.71	1.25	.20	1.63	3.31	Purple	TDM-250 or TDM-500	15	T-15	1-3/4"
BBLU-4/0S4-NT		3/8"	.71	1.25	.20	1.63	3.31					
BBLU-4/0S-NT		1/2"	.71	1.25	.20	1.63	3.31					
BBLU-02S52-NT	250 kcmil	5/16"	.77	1.25	.21	1.63	3.38	Yellow	TDM-250 or TDM-500	16	T-16	1-3/4"
BBLU-02S55-NT		3/8"	.77	1.25	.21	1.63	3.38					
BBLU-02S5-NT		1/2"	.77	1.25	.21	1.63	3.38					
BBLU-030S1-NT	300 kcmil	3/8"	.83	1.25	.22	2.00	3.81	White	TDM-500	17	T-17	2-1/8"
BBLU-030S-NT		1/2"	.83	1.25	.22	2.00	3.81					
BBLU-03S51-NT	350 kcmil	3/8"	.88	1.25	.25	2.00	3.84	Red	TDM-500	18	T-18	2-1/8"
BBLU-03S5-NT		1/2"	.88	1.25	.25	2.00	3.84					
BBLU-040S2-NT	400 kcmil	3/8"	.96	1.25	.27	2.13	4.06	Blue	TDM-500	19	T-19	2-1/4"
BBLU-040S1-NT		1/2"	.96	1.25	.27	2.13	4.06					
BBLU-050S3-NT	500 kcmil	3/8"	1.06	1.25	.26	2.25	4.25	Brown	TDM-500	20	T-20	2-3/8"
BBLU-050S2-NT		1/2"	1.06	1.25	.26	2.25	4.25					
BBLU-060S3-NT	600 kcmil	3/8"	1.19	1.50	.39	2.69	5.09	Green	TDM-500	22	T-22	2-13/16"
BBLU-060S2-NT		1/2"	1.19	1.50	.39	2.69	5.09					
BBLU-06S52-NT	650 kcmil	3/8"	1.23	1.75	.40	2.81	5.41	Pink	TDM-500	300	T-300	2-15/16"
BBLU-06S5-NT		1/2"	1.23	1.75	.40	2.81	5.41					
BBLU-07S53-NT	750 kcmil	3/8"	1.30	1.75	.32	2.88	5.56	Black	TDM-500	24	T-24	3"
BBLU-07S52-NT		1/2"	1.30	1.75	.32	2.88	5.56					
BBLU-07S5-NT		5/8"	1.30	1.75	.32	2.88	5.56					
BBLU-100S3-NT	1000 kcmil	3/8"	1.50	1.75	.48	3.00	5.88	White	TDM-500	27	T-27P	3-1/8"
BBLU-100S1-NT		1/2"	1.50	1.75	.48	3.00	5.88					
BBLU-100S-NT		5/8"	1.50	1.75	.48	3.00	5.88					

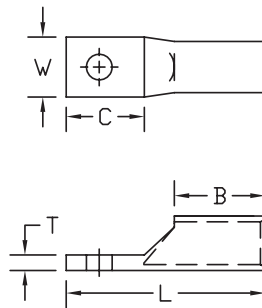
- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



Long Barrel - One Hole Tongue with Inspection Window

Type BBLZ-S

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Inspection window to ensure full cable insertion
- Long barrel provides high pull out force and added secureness for improved mechanical and electrical properties
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



BBLZ-S

See table for dimensions and installation tooling information

BBLZ-S DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					INSTALLATION TOOLING				WIRE STRIP LENGTH
			TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	
BBLZ-8S2	8 AWG	1/4"	.41	.69	.08	1.06	2.00	Red	TDM-250 or TDM-500	6	T-49	1-3/16"
BBLZ-6S	6 AWG	1/4"	.41	.69	.09	1.09	2.03	Blue	TDM-250 or TDM-500	7	T-7	1-3/16"
BBLZ-4S	4 AWG	1/4"	.48	.69	.09	1.09	2.06	Gray	TDM-250 or TDM-500	8	T-8	1-3/16"
BBLZ-3S3	3 AWG	1/4"	.53	.75	.10	1.13	2.16	White	TDM-250 or TDM-500	9	T-9	1-1/4"
BBLZ-3S1		5/16"	.53	.75	.10	1.13	2.16					
BBLZ-2S2	2 AWG	1/4"	.59	.75	.11	1.22	2.25	Brown	TDM-250 or TDM-500	10	T-10	1-3/8"
BBLZ-2S		5/16"	.59	.75	.11	1.22	2.25					
BBLZ-1S7	1 AWG	1/4"	.67	.75	.11	1.34	2.36	Green	TDM-250 or TDM-500	11	T-11	1-1/2"
BBLZ-1S		5/16"	.67	.75	.11	1.34	2.36					
BBLZ-1S2		3/8"	.67	.75	.11	1.34	2.36					
BBLZ-1/0S	1/0 AWG	5/16"	.73	.75	.13	1.34	2.44	Pink	TDM-250 or TDM-500	12	T-12	1-1/2"
BBLZ-1/0S2		3/8"	.75	.81	.13	1.25	2.38					1-3/8"
BBLZ-1/0S15		1/2"	.75	1.38	.13	1.38	3.06					1-1/2"
BBLZ-2/0S	2/0 AWG	3/8"	.81	.87	.13	1.50	2.72	Black	TDM-250 or TDM-500	13	T-13	1-5/8"
BBLZ-2/0S1		1/2"	.81	1.25	.13	1.50	3.06					
BBLZ-3/0S2	3/0 AWG	3/8"	.89	1.25	.13	1.50	3.12	Orange	TDM-250 or TDM-500	14	T-14	1-5/8"
BBLZ-3/0S		1/2"	.89	1.25	.13	1.50	3.12					
BBLZ-4/0S	4/0 AWG	1/2"	1.00	1.25	.14	1.63	3.31	Purple	TDM-250 or TDM-500	15	T-15	1-3/4"
BBLZ-025S	250 kcmil	1/2"	1.09	1.25	.16	1.63	3.38	Yellow	TDM-250 or TDM-500	16	T-16	1-3/4"
BBLZ-030S7	300 kcmil	3/8"	1.19	1.25	.16	2.00	3.81	White	TDM-500	17	T-17	2-1/8"
BBLZ-030S		1/2"	1.19	1.25	.16	2.00	3.81					
BBLZ-035S	350 kcmil	1/2"	1.28	1.25	.17	2.00	3.84	Red	TDM-500	18	T-18	2-1/8"
BBLZ-040S	400 kcmil	5/8"	1.39	1.50	.19	2.13	4.31	Blue	TDM-500	19	T-19	2-1/4"
BBLZ-050S	500 kcmil	5/8"	1.53	1.47	.21	2.31	4.56	Brown	TDM-500	20	T-20	2-3/8"
BBLZ-060S	600 kcmil	5/8"	1.72	1.75	.27	2.69	5.34	Green		22	T-22	2-13/16"
BBLZ-065S	650 kcmil	1/2"	1.78	1.75	.26	2.81	5.41	Pink		300	T-300	2-15/16"
BBLZ-065S1		5/8"	1.78	1.75	.27	2.81	5.41					
BBLZ-075S	750 kcmil	5/8"	1.91	1.75	.27	2.88	5.56	Black		24	T-24	3"
BBLZ-080S	800 kcmil	5/8"	1.96	1.50	.25	2.94	5.46	Orange		25	T-25P	3-1/16"
BBLZ-100S	1000 kcmil	5/8"	2.17	1.75	.33	3.00	5.88	White		27	T-27P	3-1/8"
BBLZ-150S	1500 kcmil	3/4"	2.69	2.13	.39	3.19	6.53	Green		31	T-31P	3-5/16"
BBLZ-200S	2000 kcmil	3/4"	3.07	2.13	.46	3.44	6.88	Brown		34	-	3-9/16"

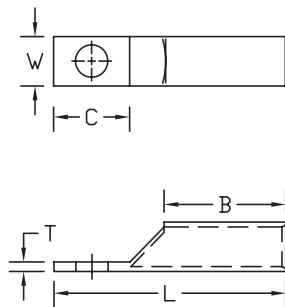
- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



Long Barrel - One Hole Narrow Tongue with Inspection Window

Type BBLZ-S-NT

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Inspection window to ensure full cable insertion
- **Narrow tongue design for limited space applications**
- Long barrel provides high pull out force and added secureness for improved mechanical and electrical properties
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



BBLZ-S-NT

See table for dimensions and installation tooling information

BBLZ-S-NT DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					INSTALLATION TOOLING				WIRE STRIP LENGTH
			TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	
BBLZ-4S5-NT	4 AWG	#10	.40	.69	.11	1.09	2.06	Gray	TDM-250 & TDM-500	8	T-8	1-1/4"
BBLZ-4S-NT		1/4"	.40	.69	.11	1.09	2.06					
BBLZ-2S9-NT	2 AWG	#10	.50	.75	.13	1.22	2.25	Brown	TDM-250 & TDM-500	10	T-10	1-3/8"
BBLZ-2S2-NT		1/4"	.50	.75	.13	1.22	2.25					
BBLZ-2S-NT		5/16"	.50	.75	.13	1.22	2.25					
BBLZ-1S3-NT	1 AWG	#10	.50	.75	.15	1.34	2.38	Green	TDM-250 & TDM-500	11	T-11	1-1/2"
BBLZ-1S7-NT		1/4"	.50	.75	.15	1.34	2.38					
BBLZ-1/0S6-NT	1/0 AWG	#10	.62	.75	.14	1.34	2.44	Pink	TDM-250 & TDM-500	12	T-12	1-1/2"
BBLZ-1/0S4-NT		1/4"	.62	.75	.14	1.34	2.44					
BBLZ-1/0S-NT		5/16"	.62	.75	.14	1.34	2.44					
BBLZ-1/0S2-NT		3/8"	.62	.81	.14	1.25	2.38					
BBLZ-2/0S5-NT	2/0 AWG	#10	.62	.75	.16	1.50	2.56	Black	TDM-250 & TDM-500	13	T-13	1-5/8"
BBLZ-2/0S6-NT		1/4"	.62	.75	.16	1.50	2.56					
BBLZ-2/0S3-NT		5/16"	.62	.75	.16	1.50	2.56					
BBLZ-2/0S-NT		3/8"	.62	.87	.16	1.50	2.72					
BBLZ-3/0S3-NT	3/0 AWG	1/4"	.64	1.25	.17	1.50	3.12	Orange	TDM-250 & TDM-500	14	T-14	1-5/8"
BBLZ-3/0S4-NT		5/16"	.64	1.25	.17	1.50	3.12					
BBLZ-3/0S2-NT		3/8"	.64	1.25	.17	1.50	3.12					
BBLZ-4/0S3-NT	4/0 AWG	5/16"	.71	1.25	.20	1.63	3.31	Purple	TDM-250 & TDM-500	15	T-15	1-1/4"
BBLZ-4/0S4-NT		3/8"	.71	1.25	.20	1.63	3.31					
BBLZ-4/0S-NT		1/2"	.71	1.25	.20	1.63	3.31					
BBLZ-02S52-NT	250 kcmil	5/16"	.77	1.25	.21	1.63	3.38	Yellow	TDM-250 & TDM-500	16	T-16	1-3/4"
BBLZ-02S55-NT		3/8"	.77	1.25	.21	1.63	3.38					
BBLZ-02S5-NT		1/2"	.77	1.25	.21	1.63	3.38					
BBLZ-030S1-NT	300 kcmil	3/8"	.83	1.25	.22	2.00	3.81	White	TDM-500	17	T-17	2-1/8"
BBLZ-030S-NT		1/2"	.83	1.25	.22	2.00	3.81					
BBLZ-03S51-NT	350 kcmil	3/8"	.88	1.25	.25	2.00	3.84	Red	TDM-500	18	T-18	2-1/8"
BBLZ-03S5-NT		1/2"	.88	1.25	.25	2.00	3.84					
BBLZ-040S2-NT	400 kcmil	3/8"	.96	1.25	.27	2.13	4.06	Blue	TDM-500	19	T-19	2-1/4"
BBLZ-040S1-NT		1/2"	.96	1.25	.27	2.13	4.06					
BBLZ-050S3-NT	500 kcmil	3/8"	1.06	1.25	.30	2.25	4.25	Brown	TDM-500	20	T-20	2-3/8"
BBLZ-050S2-NT		1/2"	1.06	1.25	.30	2.25	4.25					
BBLZ-060S3-NT	600 kcmil	3/8"	1.19	1.50	.39	2.69	5.09	Green	TDM-500	22	T-22	2-13/16"
BBLZ-060S2-NT		1/2"	1.19	1.50	.39	2.69	5.09					
BBLZ-06S52-NT	650 kcmil	3/8"	1.23	1.75	.40	2.81	5.41	Pink	TDM-500	300	T-300	2-15/16"
BBLZ-06S5-NT		1/2"	1.23	1.75	.40	2.81	5.41					
BBLZ-07S53-NT	750 kcmil	3/8"	1.30	1.75	.40	2.88	5.56	Black	TDM-500	24	T-24	3"
BBLZ-07S52-NT		1/2"	1.30	1.75	.40	2.88	5.56					
BBLZ-07S5-NT		5/8"	1.30	1.75	.40	2.88	5.56					
BBLZ-100S3-NT	1000 kcmil	3/8"	1.50	1.75	.48	3.00	5.88	White	TDM-500	27	T-27P	3-1/8"
BBLZ-100S1-NT		1/2"	1.50	1.75	.48	3.00	5.88					
BBLZ-100S-NT		5/8"	1.50	1.75	.48	3.00	5.88					

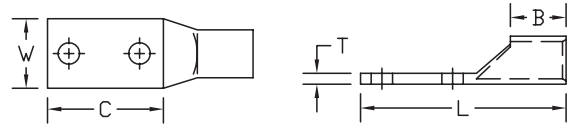
- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



Standard Barrel - Two Hole Tongue with Inspection Window

Type BLU-D

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Inspection window to ensure full cable insertion
- Two hole mounting pad assures maximum secureness
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



BLU-D DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						COLOR CODE	INSTALLATION TOOLING			WIRE STRIP LENGTH
			STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"		PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO. /TOOL	PENN-UNION DIE CATALOG NO.	
BLU-8D2TC10	8 AWG	#10	.63	.37	1.13	.08	.41	1.78	Red	TDM-250 or TDM-500	6	T-49	1/2"
BLU-8D2TC14		1/4"	.63	.41	1.22	.08	.41	1.88					
BLU-8D2TC14E2		1/4"	.75	.41	1.36	.08	.41	2.01					
BLU-8D2TC14E1		1/4"	1.00	.41	1.61	.08	.41	2.26					
BLU-8D2TC38		3/8"	1.00	.60	1.75	.08	.57	2.53					
BLU-6D2TC10	6 AWG	#10	.63	.41	1.22	.09	.81	2.25	Blue	TDM-250 or TDM-500	7	T-7	15/16"
BLU-6D2TC14		1/4"	.63	.41	1.22	.09	.81	2.25					
BLU-6D2TC14E2		1/4"	.75	.41	1.36	.09	.81	2.42					
BLU-6D2TC14E1		1/4"	1.00	.41	1.61	.09	.81	2.67					
BLU-6D2TC516E2		5/16"	.75	.61	1.47	.06	.81	2.54					
BLU-6D2TC516		5/16"	1.00	.59	1.74	.06	.60	2.49					
BLU-6D2TC38		3/8"	1.00	.61	1.83	.06	.81	2.90					
BLU-6DN	1/2"	1.75	.81	2.88	.06	.81	3.95						
BLU-5D2TC10	5 AWG	#10	.63	.44	1.22	.08	.81	2.25	Blue	TDM-250 or TDM-500	7	T-7	15/16"
BLU-5D2TC14		1/4"	.63	.44	1.22	.08	.81	2.25					
BLU-5D2TC14E1		1/4"	1.00	.44	1.60	.08	.81	2.67					
BLU-5D2TC38		3/8"	1.00	.44	1.67	.08	.81	2.73					
BLU-5D2		1/2"	1.75	.81	2.95	.10	.81	4.08					
BLU-4D2TC14	4 AWG	1/4"	.63	.50	1.22	.09	.81	2.33	Gray	TDM-250 or TDM-500	8	T-8	15/16"
BLU-4D2TC14E2		1/4"	.75	.50	1.36	.09	.81	2.43					
BLU-4D2TC14E1		1/4"	1.00	.50	1.61	.09	.81	2.68					
BLU-4D2TC516		5/16"	1.00	.61	1.70	.08	.81	2.78					
BLU-4D2TC38		3/8"	1.00	.61	1.81	.08	.81	2.87					
BLU-4D1		1/2"	1.75	.92	2.83	.10	.81	3.90					
BLU-3D2TC14	3 AWG	1/4"	.63	.65	1.22	.20	.88	2.32	White	TDM-250 or TDM-500	9	T-9	1"
BLU-2D2TC14	2 AWG	1/4"	.63	.59	1.22	.11	.88	2.32	Brown	TDM-250 or TDM-500	10	T-10	1"
BLU-2D2TC14E2		1/4"	.75	.59	1.36	.11	.88	2.50					
BLU-2D2TC14E1		1/4"	1.00	.59	1.56	.11	.88	2.67					
BLU-2D2TC38		3/8"	1.00	.59	1.83	.11	.88	2.96					
BLU-2D2		1/2"	1.75	.81	2.88	.09	.88	3.98					
BLU-1D2TC14	1 AWG	1/4"	.63	.67	1.22	.10	.94	2.41	Green	TDM-250 or TDM-500	11	T-11	1-1/16"
BLU-1D2TC516E6		5/16"	.88	.67	1.62	.10	.94	2.79					
BLU-1D5		1/2"	1.75	.70	2.71	.09	.83	3.69					
BLU-1/0D2TC14	1/0 AWG	1/4"	.63	.74	1.22	.11	.88	2.44	Pink	TDM-250 or TDM-500	12	T-12	1"
BLU-1/0D2TC14E2		1/4"	.75	.74	1.36	.11	.88	2.58					
BLU-1/0D2TC516E6		5/16"	.88	.74	1.62	.11	.88	2.81					

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BLU-D DIMENSIONS & INSTALLATION TOOLING INFORMATION (continued)

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						INSTALLATION TOOLING				WIRE STRIP LENGTH
			STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO. /TOOL	PENN-UNION DIE CATALOG NO.	
BLU-1/0D2TC516	1/0 AWG	5/16"	1.00	.74	1.72	.11	.88	2.94	Pink	TDM-250 or TDM-500	12	T-12	1"
BLU-1/0D2TC38		3/8"	1.00	.74	1.83	.11	.88	3.02					
BLU-1/0D2NTC38		3/8"	1.75	.74	2.58	.11	.88	3.77					
BLU-1/0D2		1/2"	1.75	.82	2.82	.10	.89	3.98					
BLU-2/0D2TC14	2/0 AWG	1/4"	.63	.82	1.22	.12	.94	2.50	Black	TDM-250 or TDM-500	13	T-13	1-1/16"
BLU-2/0D2TC14E2		1/4"	.75	.82	1.36	.12	.94	2.64					
BLU-2/0D2TC14E1		1/4"	1.00	.82	1.61	.12	.94	2.89					
BLU-2/0D2TC516E6		5/16"	.88	.82	1.62	.12	.94	2.88					
BLU-2/0D2TC516E		5/16"	1.00	.82	1.72	.12	.94	3.00					
BLU-2/0D2TC38		3/8"	1.00	.82	1.83	.12	.94	3.08					
BLU-2/0D	1/2"	1.75	.82	2.88	.12	.94	4.13						
BLU-3/0D2TC14E2	3/0 AWG	1/4"	.75	.89	1.36	.13	1.00	2.77	Orange	TDM-250 or TDM-500	14	T-14	1-1/8"
BLU-3/0D11		5/16"	.88	.89	1.62	.13	1.00	3.00					
BLU-3/0D2TC516		5/16"	1.00	.89	1.72	.13	1.00	3.13					
BLU-3/0D2TC38		3/8"	1.00	.89	1.83	.13	1.00	3.24					
BLU-3/0D6		1/2"	1.00	.89	2.13	.13	1.00	3.50					
BLU-3/0D		1/2"	1.75	.89	2.88	.13	1.00	4.25					
BLU-4/0D2TC14E2	4/0 AWG	1/4"	.75	1.00	1.36	.14	1.00	2.83	Purple	TDM-250 or TDM-500	15	T-15	1-1/8"
BLU-4/0D2TC14E1		1/4"	1.00	1.00	1.61	.14	1.00	3.08					
BLU-4/0D2TC516		5/16"	1.00	1.00	1.72	.14	1.00	3.18					
BLU-4/0D2TC38		3/8"	1.00	1.00	1.83	.14	1.00	3.30					
BLU-4/0D		1/2"	1.75	1.00	2.88	.14	1.00	4.31					
BLU-025D2TC38	250 kcmil	3/8"	1.00	1.09	1.83	.16	1.06	3.43	Yellow	TDM-250 or TDM-500	16	T-16	1-3/16"
BLU-025D		1/2"	1.75	1.09	2.88	.16	1.06	4.44					
BLU-030D2TC14	300 kcmil	1/4"	.63	1.19	1.27	.16	1.03	2.82	White	TDM-500	17	T-17	1-3/16"
BLU-030D2TC516		5/16"	1.00	1.19	1.72	.16	1.06	3.37					
BLU-030D2TC38		3/8"	1.00	1.19	1.83	.16	1.06	3.50					
BLU-030D2		1/2"	1.00	1.19	2.06	.16	1.06	3.75					
BLU-030D		1/2"	1.75	1.19	2.88	.16	1.06	4.50					
BLU-035D2TC14E2	350 kcmil	1/4"	.75	1.28	1.36	.17	1.13	3.14	Red	TDM-500	18	T-18	1-1/4"
BLU-035D2NTC516		5/16"	1.75	1.28	2.88	.17	1.13	4.63					
BLU-035D2TC38		3/8"	1.00	1.28	1.83	.17	1.13	3.61					
BLU-035D2TC12		1/2"	1.25	1.28	2.40	.17	1.13	4.18					
BLU-035D		1/2"	1.75	1.28	2.88	.17	1.13	4.63					
BLU-040D2TC516	400 kcmil	5/16"	1.00	1.39	1.72	.19	1.19	3.63	Blue	TDM-500	19	T-19	1-5/16"
BLU-040D2TC38		3/8"	1.00	1.39	1.83	.19	1.19	3.74					
BLU-040D		1/2"	1.75	1.39	2.88	.19	1.19	4.75					
BLU-045D	450 kcmil	1/2"	1.75	1.45	2.88	.21	1.18	4.75	Blue	TDM-500	19	T-19	1-5/16"
BLU-050D2TC14E2	500 kcmil	1/4"	.75	1.53	1.36	.21	1.38	3.52	Brown	TDM-500	20	T-20	1-1/2"
BLU-050D2TC38		3/8"	1.00	1.53	1.83	.21	1.38	3.99					
BLU-050D2TC12		1/2"	1.25	1.53	2.40	.21	1.38	4.56					
BLU-050D		1/2"	1.75	1.53	2.88	.21	1.38	5.00					
BLU-060D2TC38	600 kcmil	3/8"	1.00	1.72	1.83	.27	1.38	4.08	Green	TDM-500	22	T-22	1-1/2"
BLU-060D		1/2"	1.75	1.72	2.88	.27	1.38	5.09					
BLU-065D-2TC38	650 kcmil	3/8"	1.00	1.78	1.83	.27	1.38	4.08	Pink	TDM-500	300	T-300	1-5/8"
BLU-065D2TC12		1/2"	1.25	1.78	2.40	.27	1.38	4.65					
BLU-065D		1/2"	1.75	1.78	2.88	.27	1.38	5.09					
BLU-075D2TC38	750 kcmil	3/8"	1.00	1.91	1.83	.27	1.63	4.43	Black	TDM-500	24	T-24	1-3/4"
BLU-075D2TC12E3		1/2"	1.50	1.91	2.65	.27	1.63	5.25					
BLU-075D		1/2"	1.75	1.91	2.88	.27	1.63	5.44					
BLU-080D2TC38	800 kcmil	3/8"	1.00	1.97	1.83	.25	1.63	4.49	Orange	TDM-500	25	-	1-3/4"
BLU-080D		1/2"	1.75	1.97	2.88	.25	1.63	5.53					
BLU-100D2TC38	1000 kcmil	3/8"	1.00	2.17	1.83	.33	1.88	4.83	White	TDM-500	27	T-27P	2"
BLU-100D2TC12		1/2"	1.25	2.17	2.40	.33	1.88	5.40					
BLU-100D		1/2"	1.75	2.17	2.88	.33	1.88	5.87					
BLU-150D	1500 kcmil	1/2"	1.75	2.69	2.88	2.87	2.00	6.09	Green	TDM-500	31	T-31P	2-1/8"
BLU-200D	2000 kcmil	1/2"	1.75	3.06	2.88	.47	2.00	6.38	Brown	TDM-500	34	-	-

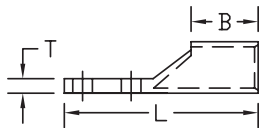
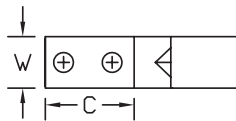
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- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
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Standard Barrel - Two Hole Narrow Tongue with Inspection Window

Type BLU-D-NT

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Inspection window to ensure full cable insertion
- Two hole mounting pad assures maximum secureness
- **Narrow tongue design for limited space applications**
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
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BLU-D-NT

See table for dimensions and installation tooling information

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BLU-D-NT DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						INSTALLATION TOOLING				WIRE STRIP LENGTH
			STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	
BLU-4D-2TC10-NT	4 AWG	#10	.63	.40	1.22	.11	.81	2.33	Gray	TDM-250 or TDM-500	8	T-8	15/16"
BLU-4D-2TC10E1-NT		#10	1.00	.40	1.61	.11	.81	2.68					
BLU-4D-2TC14-NT		1/4"	.63	.40	1.22	.11	.81	2.33					
BLU-4D-2TC14E2-NT		1/4"	.75	.40	1.36	.11	.81	2.43					
BLU-4D-2TC14E1-NT		1/4"	1.00	.40	1.61	.11	.81	2.68					
BLU-2D-2TC14-NT	2 AWG	1/4"	.63	.50	1.22	.13	.88	2.32	Brown	TDM-250 or TDM-500	10	T-10	1"
BLU-2D-2TC14E2-NT		1/4"	.75	.50	1.36	.13	.88	2.49					
BLU-2D-2TC14E1-NT		1/4"	1.00	.50	1.61	.13	.88	2.74					
BLU-1D-2TC14-NT	1 AWG	1/4"	.63	.50	1.22	.13	.94	2.41	Green	TDM-250 or TDM-500	11	T-11	1-1/16"
BLU-1D-2TC14E2-NT		1/4"	.75	.50	1.36	.13	.94	2.55					
BLU-1D-2TC516-NT		5/16"	1.00	.50	1.72	.13	.94	2.88					
BLU-1/0D-2TC14-NT	1/0 AWG	1/4"	.63	.62	1.22	.13	.88	2.44	Pink	TDM-250 or TDM-500	12	T-12	1"
BLU-1/0D-2TC14E1-NT		1/4"	1.00	.62	1.61	.13	.88	2.80					
BLU-1/0D-2TC516E6-NT		5/16"	.88	.62	1.62	.13	.88	2.81					
BLU-1/0D-2TC516-NT	2/0 AWG	5/16"	1.00	.62	1.72	.13	.88	2.94	Black	TDM-250 or TDM-500	13	T-13	1-1/16"
BLU-2/0D-2TC14-NT		1/4"	.63	.62	1.22	.16	.94	2.50					
BLU-2/0D-2TC14E1-NT		1/4"	1.00	.62	1.61	.16	.94	2.89					
BLU-2/0D-2TC516-NT	3/0 AWG	5/16"	1.00	.62	1.83	.16	.94	3.08	Orange	TDM-250 or TDM-500	14	T-14	1-1/8"
BLU-2/0D-2TC38-NT		3/8"	1.00	.62	1.83	.16	.94	3.08					
BLU-3/0D-2TC14-NT		1/4"	.63	.64	1.22	.18	1.00	2.60					
BLU-3/0D-2TC38-NT	4/0 AWG	3/8"	1.00	.64	1.83	.18	1.00	3.24	Purple	TDM-250 or TDM-500	15	T-15	1-1/8"
BLU-3/0D-2TC516-NT		5/16"	1.00	.64	1.72	.18	1.00	3.13					
BLU-4/0D-2TC14-NT		1/4"	.63	.71	1.22	.20	1.00	2.66					
BLU-4/0D-2TC38-NT	250 kcmil	3/8"	1.00	.71	1.83	.20	1.00	3.30	Yellow	TDM-250 or TDM-500	16	T-16	1-3/16"
BLU-4/0D-2TC516-NT		5/16"	1.00	.71	1.72	.20	1.00	3.16					
BLU-025D-2TC14-NT		1/4"	.63	.77	1.22	.23	1.06	2.78					
BLU-025D-2TC38-NT	350 kcmil	3/8"	1.00	.77	1.83	.23	1.06	3.43	Red	TDM-500	18	T-18	1-1/4"
BLU-025D-2TC38E16-NT		3/8"	1.75	.77	2.81	.23	1.06	4.37					
BLU-035D-2TC38-NT		3/8"	1.00	.88	1.83	.25	1.13	3.61					
BLU-035D-2TC38E16-NT	500 kcmil	3/8"	1.75	.88	2.81	.25	1.13	4.57	Brown	TDM-500	20	T-20	1-1/2"
BLU-050D-2TC38-NT		3/8"	1.00	1.06	1.83	.26	1.38	3.87					
BLU-050D-2TC38E16-NT		3/8"	1.75	1.06	2.81	.26	1.38	4.94					
BLU-050D-2TC12E1-NT	600 kcmil	1/2"	1.00	1.06	2.09	.26	1.38	4.22	Green	TDM-500	22	T-22	1-1/2"
BLU-050D-NT		1/2"	1.75	1.06	2.95	.26	1.38	4.99					
BLU-060D-NT		1/2"	1.75	1.19	2.88	.39	1.38	5.09					
BLU-075D-2TC38-NT	750 kcmil	3/8"	1.00	1.30	1.83	.32	1.63	4.30	Black	TDM-500	24	T-24	1-3/4"
BLU-075D-2TC38E16-NT		3/8"	1.75	1.30	2.81	.32	1.63	5.38					
BLU-075D-2TC12E1-NT		1/2"	1.00	1.30	2.09	.32	1.63	4.66					
BLU-075D-NT		1/2"	1.75	1.30	2.85	.32	1.63	5.32					
BLU-100D-2TC38-NT	1000 kcmil	3/8"	1.00	1.50	1.83	.38	1.88	4.61	White	TDM-500	27	T-27P	2"
BLU-100D-2TC38E16-NT		3/8"	1.75	1.50	2.81	.38	1.88	5.81					
BLU-100D-NT		1/2"	1.75	1.50	2.85	.38	1.88	5.65					

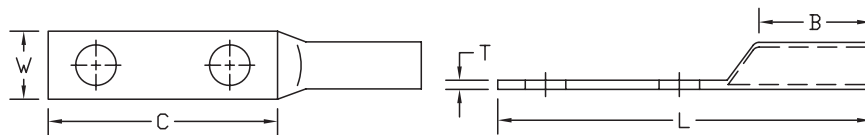
- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



Long Barrel - Two Hole Tongue with Closed Transition

Type BBLU-D

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Closed transition protects end of cable from environmental conditions
- Two hole mounting pad assures maximum secureness
- Long barrel provides high pull out force and added secureness for improved mechanical and electrical properties
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



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BBLU-D DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						INSTALLATION TOOLING				
			STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO. /TOOL	PENN-UNION DIE CATALOG NO.	WIRE STRIP LENGTH
BBLU-8D-2TC14	8 AWG	1/4"	.63	.41	1.22	.08	.94	2.44	Red	TDM-250 or TDM-500	6	T-49	1"
BBLU-8D-2TC14E2		1/4"	.75	.41	1.36	.08	.94	2.58					
BBLU-8D-2TC38E3		3/8"	.81	.56	1.83	.06	.94	3.05					
BBLU-8D-2TC38		3/8"	1.00	.56	1.83	.06	.94	3.05					
BBLU-6D-2TC14	6 AWG	1/4"	.63	.41	1.22	.09	1.13	2.60	Blue	TDM-250 or TDM-500	7	T-7	1-3/16"
BBLU-6D-2TC14E2		1/4"	.75	.41	1.36	.09	1.13	2.74					
BBLU-6D-2TC38E2		3/8"	.75	.61	1.58	.07	.94	2.74					
BBLU-6D-2TC38E3		3/8"	.81	.61	1.83	.06	1.13	3.21					
BBLU-6D-2TC38		3/8"	1.00	.61	1.83	.06	1.13	3.21					
BBLU-6DN		1/2"	1.75	.70	2.77	.09	1.00	3.92					1-1/16"
BBLU-5D-2TC14	5 AWG	1/4"	.63	.44	1.22	.08	1.13	2.60	Blue	TDM-250 or TDM-500	7	T-7	1-3/16"
BBLU-5D-2TC14E2		1/4"	.75	.44	1.36	.08	1.13	2.74					
BBLU-5D-2TC38E2		3/8"	.75	.61	1.58	.07	1.13	2.96					
BBLU-5D-2TC38E3		3/8"	.81	.61	1.83	.07	1.13	3.21					
BBLU-5D-2TC38		3/8"	1.00	.61	1.83	.07	1.13	3.21					
BBLU-4D-2TC14	4 AWG	1/4"	.63	.50	1.22	.09	1.13	2.60	Gray	TDM-250 or TDM-500	8	T-8	1-1/4"
BBLU-4D-2TC14E2		1/4"	.75	.50	1.36	.09	1.13	2.74					
BBLU-4D-2TC38E2		3/8"	.75	.61	1.56	.08	1.13	2.96					
BBLU-4D-2TC38E3		3/8"	.81	.61	1.83	.08	1.13	3.21					
BBLU-4D-2TC38		3/8"	1.00	.61	1.81	.08	1.13	3.21					
BBLU-4D1		1/2"	1.75	.92	3.00	.10	1.13	4.38					

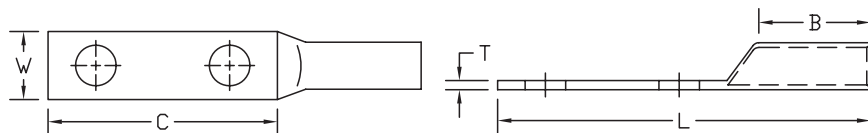
BBLU-D DIMENSIONS & INSTALLATION TOOLING INFORMATION (CONTINUED)

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						INSTALLATION TOOLING				WIRE STRIP LENGTH
			STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO. /TOOL	PENN-UNION DIE CATALOG NO.	
BBLU-3D-2TC14	3 AWG	1/4"	.63	.65	1.22	.20	1.13	2.60	White	TDM-250 or TDM-500	9	T-9	1-1/4"
BBLU-3D-2TC14E2		1/4"	.75	.65	1.36	.20	1.13	2.74					
BBLU-3D-2TC38E2		3/8"	.75	.65	1.58	.20	1.13	2.96					
BBLU-3D-2TC38E3		3/8"	.81	.65	1.83	.20	1.13	3.21					
BBLU-3D-2TC38		3/8"	1.00	.65	1.83	.20	1.13	3.21					
BBLU-3D		5/16"	.88	.53	1.63	.09	1.13	3.03					
BBLU-2D	2 AWG	5/16"	.75	.59	1.58	.11	1.25	3.11	Brown	TDM-250 or TDM-500	10	T-10	1-5/16"
BBLU-2D-2TC14		1/4"	.63	.59	1.22	.11	1.25	2.75					
BBLU-2D-2TC14E2		1/4"	.75	.59	1.36	.11	1.25	2.89					
BBLU-2D-2TC38E2		3/8"	.75	.59	1.58	.11	1.25	3.11					
BBLU-2D-2TC38E3		3/8"	.81	.59	1.83	.11	1.25	3.36					
BBLU-2D-2TC38		3/8"	1.00	.59	1.83	.11	1.25	3.36					
BBLU-2D-2NTC38		3/8"	1.75	.59	2.58	.11	1.25	4.11					
BBLU-2D6		1/2"	1.75	.81	3.00	.10	1.25	4.53					
BBLU-1D	1 AWG	5/16"	.88	.67	1.63	.11	1.38	3.38	Green	TDM-250 or TDM-500	11	T-11	1-1/2"
BBLU-1D-2TC14		1/4"	.63	.67	1.22	.10	1.38	2.94					
BBLU-1D-2TC14E2		1/4"	.75	.67	1.36	.10	1.38	3.08					
BBLU-1D-2TC38E2		3/8"	.75	.67	1.58	.10	1.38	3.30					
BBLU-1D-2TC38E3		3/8"	.81	.67	1.83	.10	1.38	3.55					
BBLU-1D-2TC38		3/8"	1.00	.67	1.83	.10	1.38	3.55					
BBLU-1D2	1/2"	1.75	.70	2.77	.09	1.20	4.12	-	Y644HS	-	-	1-5/16"	
BBLU-1/0D	1/0 AWG	5/16"	.88	.73	1.59	.13	1.38	3.31	Pink	TDM-250 or TDM-500	12	T-12	1-1/2"
BBLU-1/0D-2TC14		1/4"	.63	.74	1.22	.11	1.38	2.94					
BBLU-1/0D-2TC14E2		1/4"	.75	.74	1.36	.11	1.38	3.08					
BBLU-1/0D-2TC38E2		3/8"	.75	.74	1.58	.11	1.38	3.30					
BBLU-1/0D-2TC38E3		3/8"	.81	.74	1.83	.11	1.38	3.55					
BBLU-1/0D-2TC38		3/8"	1.00	.74	1.83	.11	1.38	3.55					
BBLU-1/0D-2NTC38	3/8"	1.75	.74	2.58	.11	1.38	4.30						
BBLU-1/0D3	1/2"	1.75	.81	3.00	.10	1.38	4.63	-	-	-	-	-	
BBLU-2/0D-2TC14	2/0 AWG	1/4"	.63	.82	1.22	.12	1.50	3.06	Black	TDM-250 or TDM-500	13	T-13	1-5/8"
BBLU-2/0D-2TC14E2		1/4"	.75	.82	1.36	.12	1.50	3.20					
BBLU-2/0D-2TC38E2		3/8"	.75	.82	1.58	.12	1.50	3.42					
BBLU-2/0D-2TC38E3		3/8"	.81	.82	1.83	.12	1.50	3.67					
BBLU-2/0D-2TC38		3/8"	1.00	.82	1.83	.12	1.50	3.67					
BBLU-2/0D		1/2"	1.75	.82	3.00	.12	1.50	4.84					
BBLU-3/0D-2TC14	3/0 AWG	1/4"	.63	.89	1.22	.13	1.50	3.13	Orange	TDM-250 or TDM-500	14	T-14	1-5/8"
BBLU-3/0D-2TC14E2		1/4"	.75	.89	1.36	.13	1.50	3.27					
BBLU-3/0D-2TC38E2		3/8"	.75	.89	1.58	.13	1.50	3.49					
BBLU-3/0D-2TC38E3		3/8"	.81	.89	1.83	.13	1.50	3.74					
BBLU-3/0D-2TC38		3/8"	1.00	.89	1.83	.13	1.50	3.74					
BBLU-3/0D		1/2"	1.75	.89	3.00	.13	1.50	4.91					
BBLU-4/0D-2TC14	4/0 AWG	1/4"	.63	1.00	1.22	.14	1.63	3.32	Purple	TDM-250 or TDM-500	15	T-15	1-3/4"
BBLU-4/0D-2TC14E2		1/4"	.75	1.00	1.36	.14	1.63	3.46					
BBLU-4/0D-2TC38E2		3/8"	.75	1.00	1.58	.14	1.63	3.68					
BBLU-4/0D-2TC38E3		3/8"	.81	1.00	1.83	.14	1.63	3.93					
BBLU-4/0D-2TC38		3/8"	1.00	1.00	1.83	.14	1.63	3.93					
BBLU-4/0D-2NTC38		3/8"	1.75	1.00	2.58	.14	1.63	4.68					
BBLU-4/0D-2TC716E2		7/16"	.75	1.00	1.83	.14	1.63	3.93					
BBLU-4/0D		1/2"	1.75	1.00	3.00	.14	1.63	5.10					
BBLU-025D-2TC14E2	250 kcmil	1/4"	.75	1.09	1.36	.16	1.63	3.58	Yellow	TDM-250 or TDM-500	16	T-16	1-3/4"
BBLU-025D-2TC38E3		3/8"	.81	1.09	1.83	.16	1.63	4.05					
BBLU-025D-2TC38		3/8"	1.00	1.09	1.83	.16	1.63	4.05					
BBLU-025D		1/2"	1.75	1.09	3.00	.16	1.63	5.13					
BBLU-030D-2TC14E2	300 kcmil	1/4"	.75	1.19	1.36	.16	2.00	3.95	White	TDM-500	17	T-17	2-1/8"
BBLU-030D-2TC38		3/8"	1.00	1.19	1.83	.16	2.00	4.42					
BBLU-030D		1/2"	1.75	1.19	3.00	.16	2.00	5.59					

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BBLU-D DIMENSIONS & INSTALLATION TOOLING INFORMATION (CONTINUED)



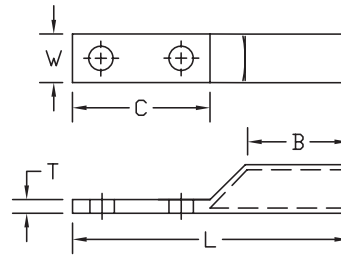
CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						INSTALLATION TOOLING				WIRE STRIP LENGTH
			STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO. /TOOL	PENN-UNION DIE CATALOG NO.	
BBLU-035D-2TC14E2	350 kcmil	1/4"	.75	1.28	1.36	.17	2.00	4.02	Red	TDM-500	18	T-18	2-1/8"
BBLU-035D-2TC38		3/8"	1.00	1.28	1.83	.17	2.00	4.49					
BBLU-035D		1/2"	1.75	1.28	3.00	.17	2.00	5.66					
BBLU-040D-2TC14E2	400 kcmil	1/4"	.75	1.39	1.36	.19	2.13	4.15	Blue	TDM-500	19	T-19	2-1/4"
BBLU-040D-2TC38		3/8"	1.00	1.39	1.83	.19	2.13	4.62					
BBLU-040D		1/2"	1.75	1.39	3.00	.19	2.13	5.79					
BBLU-050D-2TC14E2	500 kcmil	1/4"	.75	1.53	1.36	.21	2.25	4.39	Brown	TDM-500	20	T-20	2-3/8"
BBLU-050D-2TC38		3/8"	1.00	1.53	1.83	.21	2.25	4.86					
BBLU-050D		1/2"	1.75	1.53	3.00	.21	2.25	6.03					
BBLU-060D-2TC38	600 kcmil	3/8"	1.00	1.72	1.83	.27	2.69	5.39	Green	[Hatched]	22	T-22	2-13/16"
BBLU-060D		1/2"	1.75	1.72	3.00	.27	2.69	6.56					
BBLU-065D-2TC38	650 kcmil	3/8"	1.00	1.78	1.83	.27	2.81	5.51	Pink	[Hatched]	300	T-300	2-15/16"
BBLU-065D		1/2"	1.75	1.78	3.00	.27	2.81	6.68					
BBLU-075D-2TC38	750 kcmil	3/8"	1.00	1.91	2.08	.27	2.88	5.93	Black	[Hatched]	24	T-24	3"
BBLU-075D		1/2"	1.75	1.91	3.00	.27	2.88	6.85					
BBLU-080D	800 kcmil	1/2"	1.75	1.97	3.00	.25	2.94	7.00	Orange	[Hatched]	25	T-25P	3-1/16"
BBLU-100D-2TC38	1000 kcmil	3/8"	1.00	2.17	2.08	.33	3.00	6.24	White	[Hatched]	27	T-27P	3-1/8"
BBLU-100D		1/2"	1.25	2.17	2.38	.33	3.00	6.50					
BBLU-100D1		1/2"	1.75	2.17	3.00	.33	3.00	7.16					
BBLU-150D	1500 kcmil	1/2"	1.37	2.68	2.50	.39	3.19	6.90	Green	[Hatched]	31	T-31P	3-5/16"
BBLU-150D1		1/2"	1.75	2.69	3.00	.39	3.19	7.44					
BBLU-200D	2000 kcmil	1/2"	1.50	3.08	2.63	.46	3.44	7.38	Brown	[Hatched]	34	-	3-9/16"
BBLU-200D1		1/2"	1.75	3.08	3.00	.47	3.44	7.78					

- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41

Long Barrel - Two Hole Narrow Tongue with Closed Transition

Type BBLU-D-NT

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Closed transition protects end of cable from environmental conditions
- Two hole mounting pad assures maximum secureness
- **Narrow tongue design for limited space applications**
- Long barrel provides high pull out force and added secureness for improved mechanical and electrical properties
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- **Connectors are UL listed and CSA certified with Penn-Union, Bundy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



BBLU-D-NT DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						INSTALLATION TOOLING				WIRE STRIP LENGTH
			STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	
BBLU-4D-2TC14E2-NT	4 AWG	1/4"	.75	.40	1.36	.11	1.13	2.74	Gray	TDM-250 or TDM-500	8	T-8	1-1/4"
BBLU-2D-2TC14E2-NT	2 AWG	1/4"	.75	.50	1.36	.13	1.25	2.89	White	TDM-250 or TDM-500	9	T-9	1-1/4"
BBLU-2D-2TC38-NT		3/8"	1.00	.50	1.83	.13	1.25	3.36					
BBLU-1D-2TC14E2-NT	1 AWG	1/4"	.75	.50	1.36	.15	1.38	3.08	Green	TDM-250 or TDM-500	11	T-11	1-1/2"
BBLU-1D-2TC38-NT		3/8"	1.00	.50	1.83	.15	1.38	3.55					
BBLU-1/0D-2TC14E2-NT	1/0 AWG	1/4"	.75	.62	1.36	.14	1.38	3.08	Pink	TDM-250 or TDM-500	12	T-12	1-1/2"
BBLU-1/0D-2TC38-NT		3/8"	1.00	.62	1.83	.14	1.38	3.55					
BBLU-2/0D-2TC14E2-NT	2/0 AWG	1/4"	.75	.62	1.36	.16	1.50	3.20	Black	TDM-250 or TDM-500	13	T-13	1-5/8"
BBLU-2/0D-2TC38-NT		3/8"	1.00	.62	1.83	.16	1.50	3.67					
BBLU-3/0D-2TC14E2-NT	3/0 AWG	1/4"	.75	.60	1.36	.17	1.50	3.27	Orange	TDM-250 or TDM-500	14	T-14	1-5/8"
BBLU-3/0D-2TC38-NT		3/8"	1.00	.60	1.83	.17	1.50	3.74					
BBLU-4/0D-2TC14E2-NT	4/0 AWG	1/4"	.75	.70	1.36	.20	1.63	3.46	Purple	TDM-250 or TDM-500	15	T-15	1-3/4"
BBLU-4/0D-2TC38-NT		3/8"	1.00	.70	1.83	.20	1.63	3.93					
BBLU-025D-2TC14E2-NT	250 kcmil	1/4"	.75	.77	1.36	.21	1.63	3.58	Yellow	TDM-250 or TDM-500	16	T-16	1-3/4"
BBLU-025D-2TC38-NT		3/8"	1.00	.77	1.83	.21	1.63	4.05					
BBLU-030D-2TC14E2-NT	300 kcmil	1/4"	.75	.83	1.36	.22	2.00	3.95	White	TDM-500	17	T-17	2-1/8"
BBLU-030D-2TC38-NT		3/8"	1.00	.83	1.83	.22	2.00	4.42					
BBLU-035D-2TC14E2-NT	350 kcmil	1/4"	.75	.88	1.36	.25	2.00	4.02	Red	TDM-500	18	T-18	2-1/8"
BBLU-035D-2TC38-NT		3/8"	1.00	.88	1.83	.25	2.00	4.49					
BBLU-040D-2TC14E2-NT	400 kcmil	1/4"	.75	.96	1.36	.27	2.13	4.15	Red	TDM-500	19	T-19	2-1/4"
BBLU-040D-2TC38-NT		3/8"	1.00	.96	1.83	.27	2.13	4.62					
BBLU-050D-2TC38-NT	500 kcmil	3/8"	1.00	1.06	1.83	.26	2.25	4.76	Brown	TDM-500	20	T-20	2-3/8"
BBLU-050D-NT		1/2"	1.75	1.06	3.00	.26	2.25	5.91					
BBLU-060D-2TC38-NT	600 kcmil	3/8"	1.00	1.19	1.83	.39	2.69	5.39	Green	TDM-500	22	T-22	2-13/16"
BBLU-060D-NT		1/2"	1.75	1.19	3.00	.39	2.69	6.56					
BBLU-065D-2TC38-NT	650 kcmil	3/8"	1.00	1.23	1.83	.40	2.81	5.51	Pink	TDM-500	300	T-300	2-15/16"
BBLU-065D-NT		1/2"	1.75	1.23	3.00	.40	2.81	6.68					
BBLU-075D-2TC38-NT	750 kcmil	3/8"	1.00	1.30	2.08	.32	2.88	5.80	Black	TDM-500	24	T-24	3"
BBLU-075D-NT		1/2"	1.75	1.30	3.00	.32	2.88	6.72					
BBLU-100D-2TC38-NT	1000 kcmil	3/8"	1.00	1.50	2.08	.38	3.00	6.18	White	TDM-500	27	T-27P	3-1/8"
BBLU-100D1-NT		1/2"	1.75	1.50	3.00	.38	3.00	7.10					

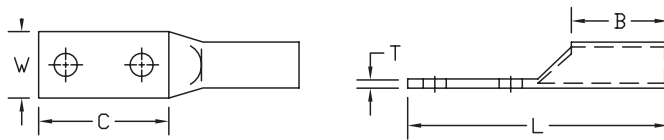
- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



Long Barrel - Two Hole Tongue with Inspection Window

Type BBLZ-D

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Inspection window to ensure full cable insertion
- Two hole mounting pad assures maximum secureness
- Long barrel provides high pull out force and added secureness for improved mechanical and electrical properties
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- **Connectors are UL listed and CSA certified with Penn-Union Bundy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



BBLZ-D

BBLZ-D DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						INSTALLATION TOOLING				WIRE STRIP LENGTH
			STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	
BBLZ-8D-2TC14	8 AWG	1/4"	.63	.41	1.22	.08	.94	2.44	Red	TDM-250 or TDM-500	6	T-49	1-1/16"
BBLZ-8D-2TC14E2		1/4"	.75	.41	1.36	.08	.94	2.58					
BBLZ-8D-2TC38E3		3/8"	.81	.56	1.83	.06	.94	3.05					
BBLZ-8D-2TC38		3/8"	1.00	.60	1.75	.06	.75	2.63					
BBLZ-6D-2TC14	6 AWG	1/4"	.63	.41	1.22	.09	1.13	2.60	Blue	TDM-250 or TDM-500	7	T-7	1-1/4"
BBLZ-6D-2TC14E2		1/4"	.75	.41	1.36	.09	1.13	2.74					
BBLZ-6D-2TC38E2		3/8"	.75	.61	1.58	.06	1.13	2.96					
BBLZ-6D-2TC38E3		3/8"	.81	.61	1.83	.06	1.13	3.21					
BBLZ-6D-2TC38	3/8"	1.00	.60	1.74	.06	1.00	2.87						
BBLZ-6DN		1/2"	1.75	.70	2.77	.09	1.00	3.92					
BBLZ-5D-2TC14	5 AWG	1/4"	.63	.44	1.22	.08	1.13	2.60	Blue	TDM-250 or TDM-500	7	T-7	1-1/4"
BBLZ-5D-2TC14E2		1/4"	.75	.44	1.36	.08	1.13	2.74					
BBLZ-5D-2TC38E2		3/8"	.75	.61	1.58	.07	1.13	2.96					
BBLZ-5D-2TC38E3		3/8"	.81	.61	1.83	.07	1.13	3.21					
BBLZ-5D-2TC38	3/8"	1.00	.61	1.83	.07	1.13	3.21						
BBLZ-4D-2TC14	4 AWG	1/4"	.63	.50	1.22	.09	1.13	2.60	Gray	TDM-250 or TDM-500	8	T-8	1-1/4"
BBLZ-4D-2TC14E2		1/4"	.75	.50	1.36	.09	1.13	2.74					
BBLZ-4D-2TC38E2		3/8"	.75	.61	1.56	.08	1.13	2.96					
BBLZ-4D-2TC38E3		3/8"	.81	.61	1.83	.08	1.13	3.21					
BBLZ-4D-2TC38	3/8"	1.00	.61	1.81	.08	1.13	3.21						
BBLZ-4D1		1/2"	1.75	.94	3.00	.08	1.13	4.38					
BBLZ-3D-2TC14	3 AWG	1/4"	.63	.65	1.22	.20	1.13	2.60	White	TDM-250 or TDM-500	9	T-9	1-1/4"
BBLZ-3D-2TC14E2		1/4"	.75	.65	1.36	.20	1.13	2.74					
BBLZ-3D-2TC38E2		3/8"	.75	.65	1.58	.20	1.13	2.96					
BBLZ-3D-2TC38E3		3/8"	.81	.65	1.83	.20	1.13	3.21					
BBLZ-3D-2TC38	3/8"	1.00	.65	1.83	.20	1.13	3.21						

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BBLZ-D DIMENSIONS & INSTALLATION TOOLING INFORMATION (continued)

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						INSTALLATION TOOLING					
			STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	WIRE STRIP LENGTH	
BBLZ-2D-2TC14	2 AWG	1/4"	.63	.59	1.22	.11	1.25	2.75	Brown	TDM-250 or TDM-500	10	T-10	1-3/8"	
BBLZ-2D-2TC14E2		1/4"	.75	.59	1.36	.11	1.25	2.89						
BBLZ-2D-2TC38E2		3/8"	.75	.59	1.58	.11	1.25	3.11						
BBLZ-2D-2TC38E3		3/8"	.81	.59	1.83	.11	1.25	3.36						
BBLZ-2D-2TC38		3/8"	1.00	.59	1.83	.11	1.25	3.36						
BBLZ-2D-2NTC38		3/8"	1.75	.59	2.58	.11	1.25	4.11						
BBLZ-2D6	1 AWG	1/2"	1.75	.81	3.00	.09	1.25	4.53	Green	TDM-250 or TDM-500	11	T-11	1-1/2"	
BBLZ-1D-2TC14		1/4"	.63	.67	1.22	.10	1.38	2.94						
BBLZ-1D-2TC14E2		1/4"	.75	.67	1.36	.10	1.38	3.08						
BBLZ-1D-2TC38E2		3/8"	.75	.67	1.58	.10	1.38	3.30						
BBLZ-1D-2TC38E3		3/8"	.81	.67	1.83	.10	1.38	3.55						
BBLZ-1D-2TC38		3/8"	1.00	.67	1.83	.10	1.38	3.55						
BBLZ-1D2	1/0 AWG	1/2"	1.75	.70	2.77	.09	1.20	4.12	Pink	TDM-250 or TDM-500	12	T-12	1-1/2"	
BBLZ-1/0D-2TC14		1/4"	.63	.74	1.22	.11	1.38	2.94						
BBLZ-1/0D-2TC14E2		1/4"	.75	.74	1.36	.11	1.38	3.08						
BBLZ-1/0D-2TC38E2		3/8"	.75	.74	1.58	.11	1.38	3.30						
BBLZ-1/0D-2TC38E3		3/8"	.81	.74	1.83	.11	1.38	3.55						
BBLZ-1/0D-2TC38		3/8"	1.00	.74	1.83	.11	1.38	3.55						
BBLZ-1/0D-2NTC38	2/0 AWG	3/8"	1.75	.74	2.58	.11	1.38	4.30	Black	TDM-250 or TDM-500	13	T-13	1-5/8"	
BBLZ-1/0D3		1/2"	1.75	.81	3.00	.10	1.38	4.63						
BBLZ-2/0D-2TC14		1/4"	.63	.82	1.22	.12	1.50	3.06						
BBLZ-2/0D-2TC14E2		1/4"	.75	.82	1.36	.12	1.50	3.20						
BBLZ-2/0D-2TC38E2		3/8"	.75	.82	1.58	.12	1.50	3.42						
BBLZ-2/0D-2TC38E3		3/8"	.81	.82	1.83	.12	1.50	3.67						
BBLZ-2/0D-2TC38	3/0 AWG	3/8"	1.00	.82	1.83	.12	1.50	3.67	Orange	TDM-250 or TDM-500	14	T-14	1-5/8"	
BBLZ-2/0D		1/2"	1.75	.82	3.00	.12	1.50	4.84						
BBLZ-3/0D-2TC14		1/4"	.63	.89	1.22	.13	1.50	3.13						
BBLZ-3/0D-2TC14E2		1/4"	.75	.89	1.36	.13	1.50	3.27						
BBLZ-3/0D-2TC38E2		3/8"	.75	.89	1.58	.13	1.50	3.49						
BBLZ-3/0D-2TC38E3		3/8"	.81	.89	1.83	.13	1.50	3.74						
BBLZ-3/0D-2TC38	4/0 AWG	3/8"	1.00	.89	1.83	.13	1.50	3.74	Purple	TDM-250 or TDM-500	15	T-15	1-3/4"	
BBLZ-3/0D		1/2"	1.75	.89	3.00	.13	1.50	4.91						
BBLZ-4/0D-2TC14		1/4"	.63	1.00	1.22	.14	1.63	3.32						
BBLZ-4/0D-2TC14E2		1/4"	.75	1.00	1.36	.14	1.63	3.46						
BBLZ-4/0D-2TC716E2		7/16"	.75	1.00	1.83	.14	1.63	3.93						
BBLZ-4/0D-2TC38E2		3/8"	.75	1.00	1.58	.14	1.63	3.68						
BBLZ-4/0D-2TC38E3	250 kcmil	3/8"	.81	1.00	1.83	.14	1.63	3.93	Yellow	TDM-250 or TDM-500	16	T-16	1-3/4"	
BBLZ-4/0D-2TC38		3/8"	1.00	1.00	1.83	.14	1.63	3.93						
BBLZ-4/0D-2NTC38		3/8"	1.75	1.00	2.58	.14	1.63	4.68						
BBLZ-4/0D		1/2"	1.75	1.00	3.00	.14	1.63	5.10						
BBLZ-025D-2TC14E2		300 kcmil	1/4"	.75	1.09	1.36	.16	1.63						3.58
BBLZ-025D-2TC38E3			3/8"	.81	1.09	1.83	.16	1.63						4.05
BBLZ-025D	350 kcmil	1/2"	1.75	1.09	3.00	.16	1.63	5.13						
BBLZ-030D-2TC14E2		1/4"	.75	1.19	1.36	.16	2.00	3.95						
BBLZ-030D-2TC38	400 kcmil	3/8"	1.00	1.19	1.83	.16	2.00	4.42						
BBLZ-030D		1/2"	1.75	1.19	3.00	.16	2.00	5.59						
BBLZ-035D-2TC14E2	500 kcmil	1/4"	.75	1.28	1.36	.17	2.00	4.02						
BBLZ-035D-2TC38		3/8"	1.00	1.28	1.83	.17	2.00	4.49						
BBLZ-035D	600 kcmil	1/2"	1.75	1.28	3.00	.17	2.00	5.66						
BBLZ-040D-2TC14E2		1/4"	.75	1.39	1.36	.19	2.13	4.15						
BBLZ-040D-2TC38	650 kcmil	3/8"	1.00	1.39	1.83	.19	2.13	4.62						
BBLZ-040D		1/2"	1.75	1.39	3.00	.19	2.13	5.79						
BBLZ-050D-2TC14E2	750 kcmil	1/4"	.75	1.53	1.36	.21	2.25	4.39						
BBLZ-050D-2TC38		3/8"	1.00	1.53	1.83	.21	2.25	4.86						
BBLZ-050D	800 kcmil	1/2"	1.75	1.53	3.00	.21	2.25	6.03						
BBLZ-060D-2TC38		3/8"	1.00	1.72	1.83	.27	2.69	5.39						
BBLZ-060D	1000 kcmil	1/2"	1.75	1.72	3.00	.27	2.69	6.56						
BBLZ-065D-2TC38		3/8"	1.00	1.78	1.83	.27	2.81	5.51						
BBLZ-065D	1500 kcmil	1/2"	1.75	1.78	3.00	.27	2.81	6.68						
BBLZ-075D-2TC38		3/8"	1.00	1.91	1.83	.27	2.88	5.65						
BBLZ-075D	2000 kcmil	1/2"	1.75	1.91	3.00	.27	2.88	6.85						
BBLZ-080D		1/2"	1.75	1.97	3.00	.25	2.94	7.00						
BBLZ-100D-2TC38	27	3/8"	1.00	2.17	1.83	.33	3.00	5.96						
BBLZ-100D1		1/2"	1.75	2.17	3.00	.33	3.00	7.16						
BBLZ-150D1	31	1/2"	1.75	2.69	3.00	.39	3.19	7.44						
BBLZ-200D1		1/2"	1.75	3.08	3.00	.47	3.44	7.78						

- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



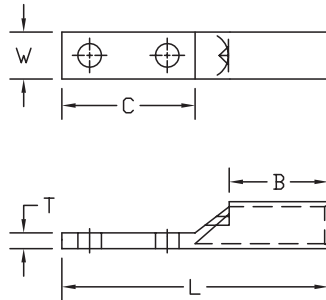
Long Barrel - Two Hole Narrow Tongue with Inspection Window

Type BBLZ-D-NT

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Inspection window to ensure full cable insertion
- **Narrow tongue design for limited space applications**
- Two hole mounting pad assures maximum secureness
- Long barrel provides high pull out force and added secureness for improved mechanical and electrical properties
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



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BBLZ-D-NT

See table for dimensions and installation tooling information

BBLZ-D-NT DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						INSTALLATION TOOLING				WIRE STRIP LENGTH
			STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	
BBLZ-4D-2TC14E2-NT	4 AWG	1/4"	.75	.40	1.36	.11	1.13	2.74	Gray	TDM-250 or TDM-500	8	T-8	1-1/4"
BBLZ-2D-2TC14E2-NT	2 AWG	1/4"	.75	.50	1.36	.13	1.25	2.89	Brown	TDM-250 or TDM-500	10	T-10	1-3/8"
BBLZ-2D-2TC38-NT		3/8"	1.00	.50	1.83	.13	1.25	3.36					
BBLZ-1D-2TC14E2-NT	1 AWG	1/4"	.75	.50	1.36	.15	1.38	3.08	Green	TDM-250 or TDM-500	11	T-11	1-1/2"
BBLZ-1D-2TC38-NT		3/8"	1.00	.50	1.83	.15	1.38	3.55					
BBLZ-1/0D-2TC14E2-NT	1/0 AWG	1/4"	.75	.62	1.36	.14	1.38	3.08	Pink	TDM-250 or TDM-500	12	T-12	1-1/2"
BBLZ-1/0D-2TC38-NT		3/8"	1.00	.62	1.83	.14	1.38	3.55					
BBLZ-2/0D-2TC14E2-NT	2/0 AWG	1/4"	.75	.62	1.36	.16	1.50	3.20	Black	TDM-250 or TDM-500	13	T-13	1-5/8"
BBLZ-2/0D-2TC38-NT		3/8"	1.00	.62	1.83	.16	1.50	3.67					
BBLZ-3/0D-2TC14E2-NT	3/0 AWG	1/4"	.75	.64	1.36	.17	1.50	3.27	Orange	TDM-250 or TDM-500	14	T-14	1-5/8"
BBLZ-3/0D-2TC38-NT		3/8"	1.00	.64	1.83	.17	1.50	3.74					
BBLZ-4/0D-2TC14E2-NT	4/0 AWG	1/4"	.75	.71	1.36	.20	1.63	3.46	Purple	TDM-250 or TDM-500	15	T-15	1-3/4"
BBLZ-4/0D-2TC38-NT		3/8"	1.00	.71	1.83	.20	1.63	3.93					
BBLZ-025D-2TC14E2-NT	250 kcmil	1/4"	.75	.77	1.36	.21	1.63	3.58	Yellow	TDM-250 or TDM-500	16	T-16	1-3/4"
BBLZ-025D-2TC38-NT		3/8"	1.00	.77	1.83	.21	1.63	4.05					
BBLZ-030D-2TC14E2-NT	300 kcmil	1/4"	.75	.83	1.36	.22	2.00	3.95	White	TDM-500	17	T-17	2-1/8"
BBLZ-030D-2TC38-NT		3/8"	1.00	.83	1.83	.22	2.00	4.42					
BBLZ-035D-2TC14E2-NT	350 kcmil	1/4"	.75	.88	1.36	.25	2.00	4.02	Red	TDM-500	18	T-18	2-1/8"
BBLZ-035D-2TC38-NT		3/8"	1.00	.88	1.83	.25	2.00	4.49					
BBLZ-040D-2TC14E2-NT	400 kcmil	1/4"	.75	.96	1.36	.27	2.13	4.15	Blue	TDM-500	19	T-19	2-1/4"
BBLZ-040D-2TC38-NT		3/8"	1.00	.96	1.83	.27	2.13	4.62					
BBLZ-050D-2TC38-NT	500 kcmil	3/8"	1.00	1.06	1.83	.26	2.25	4.86	Brown	TDM-500	20	T-20	2-3/8"
BBLZ-050D-NT		1/2"	1.75	1.06	3.00	.26	2.25	5.91					
BBLZ-060D-2TC38-NT	600 kcmil	3/8"	1.00	1.19	1.83	.39	2.69	5.39	Green		22	T-22	2-13-16"
BBLZ-060D-NT		1/2"	1.75	1.19	3.00	.39	2.69	6.56					
BBLZ-065D-2TC38-NT	650 kcmil	3/8"	1.00	1.23	1.83	.40	2.81	5.48	Pink		300	T-300	2-15-16"
BBLZ-065D-NT		1/2"	1.75	1.23	3.00	.40	2.81	6.68					
BBLZ-075D-2TC38-NT	750 kcmil	3/8"	1.00	1.30	2.08	.32	2.88	5.80	Black		24	T-24	3"
BBLZ-075D-NT		1/2"	1.75	1.30	3.00	.32	2.88	6.85					
BBLZ-100D-2TC38-NT	1000 kcmil	3/8"	1.00	1.50	2.08	.48	3.00	6.24	White		27	T-27P	3-1/8"
BBLZ-100D1-NT		1/2"	1.75	1.50	3.00	.48	3.00	7.16					

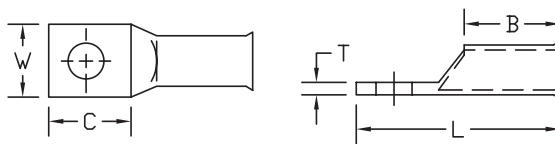
- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



COMPRESSION LUGS

Standard Flared Barrel – One Hole Tongue with Inspection Window Type BLU-S-FL

- Suitable for use with Class B, C, I, K, H, G, M and DLO conductors ♦
- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Inspection window ensures full cable insertion
- Flared barrel entry provides easy cable insertion for fine stranded flexible cables and minimizes strain during flexing and movement
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- Connectors are UL listed and CSA certified with Penn-Union, Burndy T&B, Huskie, Greenlee and Versa-Crimp® style tooling



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BLU-S-FL DIMENSIONS & INSTALLATION TOOLING INFORMATION

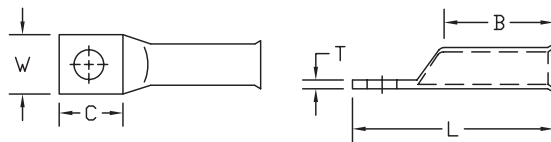
CATALOG NUMBER	DIESEL LOCOMOTIVE CABLE RANGE	STRAND-ING	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					INSTALLATION TOOLING				
					TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICK-NESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	DIE CATALOG NO.	WIRE STRIP LENGTH
BLU-3S2-FL	4 AWG	105/24	3 AWG	5/16"	0.53	0.75	0.09	0.88	1.86	White	TDM-250XF	9	T-9	1"
BLU-1S-FL	2 AWG	150/24	1 AWG	5/16"	0.67	0.75	0.11	0.88	1.86	Green		11	T-11	1"
BLU-1/0S-FL	1 AWG	225/24	1/0 AWG	5/16"	0.73	0.87	0.12	0.88	2.05	Pink		12	T-12	1"
BLU-2/0S21-FL	1/0 AWG	275/24	2/0 AWG	5/16"	0.81	0.81	0.12	0.94	2.06	Black		13	T-13	1-1/16"
BLU-2/0S-FL			3/8"	0.81	0.87	0.12	0.94	2.11	14			T-14	1-1/8"	
BLU-3/0S1-FL	2/0 AWG	325/24	3/0 AWG	1/2"	0.89	1.12	0.12	1.00	2.50	Orange		15	T-15	1-1/8"
BLU-4/0S1-FL	3/0 AWG	450/24	4/0 AWG	1/2"	1.00	1.09	0.14	1.00	2.50	Purple		17	T-17	1-3/16"
BLU-030S-FL	4/0 AWG	550/24	300 kcmil	1/2"	1.19	1.09	0.16	1.06	2.75	White		18	T-18	1-1/4"
BLU-035S-FL	262 MCM	650/24	350 kcmil	1/2"	1.28	1.16	0.17	1.13	2.91	Red		19	T-19	1-5/16"
BLU-040S-FL	313 MCM	775/24	400 kcmil	5/8"	1.39	1.44	0.19	1.19	3.31	Blue		20	T-20	1-1/2"
BLU-050S-FL	373 MCM	925/24	500 kcmil	5/8"	1.53	1.44	0.21	1.38	3.63	Brown	22	T-22	1-1/2"	
BLU-060S-FL	444 MCM	1100/24	600 kcmil	5/8"	1.72	1.75	0.27	1.38	3.97	Green	300	T-300	1-5/8"	
BLU-065S4-FL	535 MCM	1325/24	650 kcmil	5/8"	1.78	1.75	0.27	1.38	3.97	Pink	24	T-24	1-3/4"	
BLU-075S-FL	646 MCM	1600/24	750 kcmil	5/8"	1.91	1.75	0.27	1.63	4.31	Black	27	T-27P	2"	
BLU-100S-FL	777 MCM	1925/24	1000 kcmil	5/8"	2.17	1.75	0.33	1.88	4.75	White	31	T-31P	2-1/8"	
BLU-150S-FL	1111 MCM	2750/24	1500 kcmil	3/4"	2.69	2.19	0.39	2.00	5.47	Green				

- ♦ For additional wire size recommendations please refer to page F-41
- Connectors from 8 AWG-2000 kcmil are UL listed per UL 486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL 467
- Connectors from 8 AWG -250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41

Long Flared Barrel – One Hole Tongue with Closed Transition

Type BBLU-S-FL

- Suitable for use with Class B, C, I, K, H, G, M and DLO conductors ♦
- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Flared barrel entry provides easy cable insertion for fine stranded flexible cables and minimizes strain during flexing and movement
- Closed transition protects end of cable from environmental conditions
- Long barrel provides high pull out force and added secureness for improved mechanical and electrical properties
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- Connectors are UL listed and CSA certified with Penn-Union, Burndy T&B, Huskie, Greenlee and Versa-Crimp® style tooling



BBLU-S-FL DIMENSIONS & INSTALLATION TOOLING INFORMATION

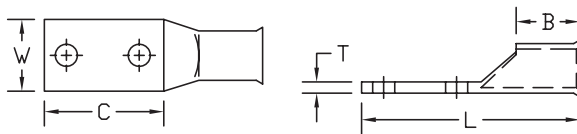
CATALOG NUMBER	DIESEL LOCOMOTIVE CABLE RANGE	STRANDING	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					INSTALLATION TOOLING				
					TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	DIE CATALOG NO.	WIRE STRIP LENGTH
BBLU-3S1-FL	4 AWG	10S/24	3 AWG	5/16"	0.53	0.75	0.09	1.13	2.16	White	TDM-250XF	9	T-9	1-1/4"
BBLU-1S-FL	2 AWG	150/24	1 AWG	5/16"	0.67	0.75	0.11	1.34	2.36	Green		11	T-11	1"
BBLU-1/0S-FL	1 AWG	22S/24	1/0 AWG	5/16"	0.73	0.75	0.13	1.34	2.44	Pink		12	T-12	1-1/2"
BBLU-2/0S-FL	1/0 AWG	27S/24	2/0 AWG	3/8"	0.81	0.87	0.13	1.5	2.72	Black		13	T-13	1-5/8"
BBLU-3/0S-FL	1/0 AWG	27S/24	3/0 AWG	1/2"	0.89	1.25	0.13	1.5	3.12	Orange		14	T-14	1-5/8"
BBLU-4/0S-FL	2/0 AWG	32S/24	4/0 kcmil	1/2"	1	1.25	0.14	1.63	3.31	Purple		15	T-15	1-3/4"
BBLU-030S-FL	3/0 AWG	450/24	300 kcmil	1/2"	1.19	1.25	0.16	2	3.81	White		17	T-17	2-1/8"
BBLU-035S-FL	4/0 AWG	550/24	350 kcmil	1/2"	1.28	1.25	0.17	2	3.84	Red		18	T-18	2-1/8"
BBLU-040S-FL	262 MCM	650/24	400 kcmil	5/8"	1.39	1.5	0.19	2.13	4.31	Blue		19	T-19	2-1/4"
BBLU-050S-FL	313 MCM	77S/24	500 kcmil	5/8"	1.53	1.47	0.21	2.31	4.56	Brown		20	T-20	2-3/8"
BBLU-060S-FL	373 MCM	92S/24	600 kcmil	5/8"	1.72	1.75	0.27	2.69	5.34	Green	22	T-22	2-3/16"	
BBLU-065S1-FL	444 MCM	1100/24	650 kcmil	5/8"	1.78	1.75	0.27	2.81	5.41	Pink	300	T-300	2-15/16"	
BBLU-075S-FL	535 MCM	132S/24	750 kcmil	5/8"	1.91	1.75	0.27	2.88	5.56	Black	24	T-24	3"	
BBLU-100S-FL	646 MCM	1600/24	1000 kcmil	5/8"	2.17	1.75	0.33	3	5.88	White	27	T-27P	3-1/8"	
BBLU-150S-FL	777 MCM	192S/24	1500 kcmil	3/4"	2.69	2.13	0.39	3.19	6.53	Green	31	T-31P	3-5/16"	
BLU-150S-FL	1111 MCM	2750/24	1500 kcmil	3/4"	2.69	2.19	0.39	2.00	5.47	Green	31	T-31P	2-1/8"	

- ♦ For additional wire size recommendations please refer to page F-41
- Connectors from 8 AWG-2000 kcmil are UL listed per UL 486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL 467
- Connectors from 8 AWG -250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



Standard Flared Barrel – Two Hole Tongue with Inspection Window Type BLU-D-FL

- Suitable for use with Class B, C, I, K, H, G, M and DLO conductors ♦
- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Flared barrel entry provides easy cable insertion for fine stranded flexible cables and minimizes strain during flexing and movement
- Two hole mounting pad assures maximum secureness
- Inspection window ensures full cable insertion
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- Connectors are UL listed and CSA certified with Penn-Union, Burndy T&B, Huskie, Greenlee and Versa-Crimp® style tooling



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BLU-D-FL DIMENSIONS & INSTALLATION TOOLING INFORMATION

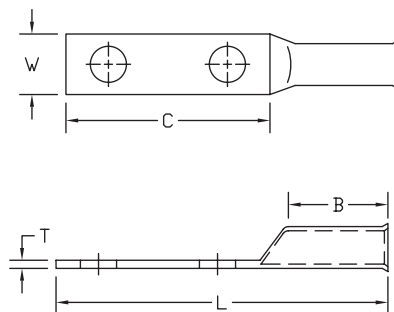
CATALOG NUMBER	DIESEL LOCOMOTIVE CABLE RANGE	STRANDING	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					COLOR CODE	INSTALLATION TOOLING			
					TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"		PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	DIE CATALOG NO.	WIRE STRIP LENGTH
BLU-3D-FL	4 AWG	105/24	3 AWG	0.63	0.53	1.19	0.09	0.88	2.29	White	TDM-250XF	9	T-9	1"
BLU-1D4-FL	2 AWG	150/24	1 AWG	0.88	0.67	1.63	0.1	0.94	2.79	Green		11	T-11	1-1/16"
BLU-1/0D-FL	1 AWG	225/24	1/0 AWG	0.88	0.74	1.63	0.11	0.88	2.81	Pink		12	T-12	1"
BLU-2/0D4-FL	1/0 AWG	275/24	2/0 AWG	1	0.82	1.83	0.12	0.94	3.08	Black		13	T-13	1-1/16"
BLU-3/0D-FL	1/0 AWG	275/24	3/0 AWG	1.75	0.89	2.88	0.13	1	4.25	Orange		14	T-14	1-1/8"
BLU-4/0D-FL	2/0 AWG	325/24	4/0 AWG	1.75	1	2.88	0.14	1	4.31	Purple	15	T-15	1-1/8"	
BLU-030D-FL	3/0 AWG	450/24	300 kcmil	1.75	1.19	2.88	0.16	1.07	4.5	White	17	T-17	1-3/16"	
BLU-035D-FL	4/0 AWG	550/24	350 kcmil	1.75	1.28	2.88	0.17	1.13	4.63	Red	18	T-18	1-1/4"	
BLU-040D-FL	262 MCM	650/24	400 kcmil	1.75	1.39	2.88	0.19	1.19	4.75	Blue	19	T-19	1-5/16"	
BLU-050D-FL	313 MCM	775/24	500 kcmil	1.75	1.53	2.88	0.21	1.38	5	Brown	20	T-20	1-1/2"	
BLU-060D-FL	373 MCM	925/24	600 kcmil	1.75	1.72	2.88	0.27	1.38	5.09	Green	22	T-22	1-1/2"	
BLU-065D-FL	444 MCM	1100/24	650 kcmil	1.75	1.78	2.88	0.27	1.38	5.09	Pink	300	T-300	1-1/2"	
BLU-065D-2NTC38-FL	535 MCM	1325/24		1.75	1.78	2.88	0.27	1.38	5.09					
BLU-075D-FL	646 MCM	1600/24	750 kcmil	1.75	1.91	2.88	0.27	1.63	5.44	Black	24	T-24	1-3/4"	
BLU-100D-FL	777 MCM	1925/24	1000 kcmil	1.75	2.17	2.88	0.33	1.88	5.87	White	27	T-27P	2"	
BLU-150D-FL	1111 MCM	2750/24	1500 kcmil	1.75	2.69	2.87	0.39	2	6.09	Green	31	T-31P	2-1/8"	

- ♦ For additional wire size recommendations please refer to page F-41
- Connectors from 8 AWG-2000 kcmil are UL listed per UL 486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL 467
- Connectors from 8 AWG -250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41

Long Flared Barrel – Two Hole Tongue with Closed Transition

Type BBLU-D-FL

- Suitable for use with Class B, C, I, K, H, G, M and DLO conductors ♦
- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- **Flared barrel entry provides easy cable insertion for fine stranded flexible cables and minimizes strain during flexing and movement**
- Closed transition protects end of cable from environmental conditions
- Two hole mounting pad assures maximum secureness
- Long barrel provides high pull out force and added secureness for improved mechanical and electrical properties
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV
- 45° and 90° angles are UL listed and CSA certified
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



BBLU-D-FL

See table for dimensions and installation tooling information

BBLU-D-FL DIMENSIONS & INSTALLATION TOOLING INFORMATION

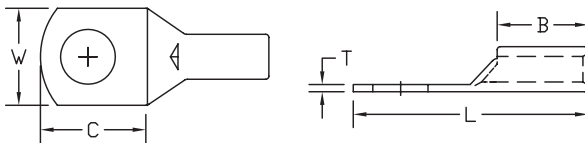
CATALOG NUMBER	DIESEL LOCOMOTIVE CABLE RANGE	STRAND-ING	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						INSTALLATION TOOLING				WIRE STRIP LENGTH
					STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	DIE CATALOG NO.	
BBLU-3D-FL	4 AWG	105/24	3 AWG	5/16"	0.88	0.53	1.63	0.09	1.13	3.03	White	TDM-250XF	9	T-9	1-1/4"
BBLU-1D-FL	2 AWG	150/24	1 AWG	5/16"	0.88	0.67	1.63	0.11	1.38	3.38	Green		11	T-11	1-1/2"
BBLU-1/0D-FL	1 AWG	225/24	1/0 AWG	5/16"	0.88	0.73	1.59	0.13	1.38	3.31	Pink		12	T-12	1-1/2"
BBLU-2/0D-FL	1/0 AWG	275/24	2/0 AWG	1/2"	1.75	0.82	3	0.12	1.5	4.84	Black		13	T-13	1-5/8"
BBLU-3/0D-FL	1/0 AWG	275/24	3/0 AWG	1/2"	1.75	0.89	3	0.13	1.5	4.91	Orange		14	T-14	1-5/8"
BBLU-4/0D-FL	2/0 AWG	325/24	4/0 AWG	1/2"	1.75	1	3	0.14	1.63	5.1	Purple	15	T-15	1-3/4"	
BBLU-030D-FL	3/0 AWG	450/24	300 kcmil	1/2"	1.75	1.19	3	0.16	2	5.59	White	17	T-17	2-1/8"	
BBLU-035D-FL	4/0 AWG	550/24	350 kcmil	1/2"	1.75	1.28	3	0.17	2	5.66	Red	18	T-18	2-1/8"	
BBLU-040D-FL	262 MCM	650/24	400 kcmil	1/2"	1.75	1.39	3	0.19	2.13	5.79	Blue	19	T-19	2-1/4"	
BBLU-050D-FL	313 MCM	775/24	500 kcmil	1/2"	1.75	1.53	3	0.21	2.25	6.03	Brown	20	T-20	2-3/8"	
BBLU-060D-FL	373 MCM	925/24	600 kcmil	1/2"	1.75	1.72	3	0.27	2.69	6.56	Green	22	T-22	2-3/4"	
BBLU-065D-FL	444 MCM	1100/24	650 kcmil	1/2"	1.75	1.78	3	0.27	2.81	6.68	Pink	300	T-300	2-15/16"	
BBLU-075D-FL	535 MCM	1325/24	750 kcmil	1/2"	1.75	1.91	3	0.27	2.88	6.85	Black	24	T-24	3"	
BBLU-080D-FL	646 MCM	1600/24	800 kcmil	1/2"	1.75	1.97	3	0.25	2.94	7	Orange	25	T-25P	3-1/16"	
BBLU-100D1-FL	777 MCM	1925/24	1000 kcmil	1/2"	1.75	2.17	3	0.33	3	7.16	White	27	T-27P	3-1/8"	
BBLU-100D3-FL	777 MCM	1925/24		5/8"	1.75	2.17	3	0.33	3	7.16					
BBLU-150D1-FL	1111 MCM	2750/24	1500 kcmil	1/2"	1.75	2.69	3	0.39	3.19	7.44	Green	31	T-31P	3-5/16"	

◆ For additional wire size recommendations please refer to page F-41

- Connectors from 8 AWG-2000 kcmil are UL listed per UL 486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL 467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41

Standard Barrel - One Hole Rounded Tongue with Inspection Window Type BLY

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Inspection window to ensure full cable insertion
- Rounded tongue accommodates full washer clearance and adjustable lug orientation
- Connectors are suitable for voltages up to 35 KV



BLY DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					INSTALLATION TOOLING						WIRE STRIP LENGTH		
			TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	MECHANICAL		HYDRAULIC		T&B				
								BURNDY	PENN-UNION DIELESS MECHANICAL TOOL	DIE INDEX	BURNDY Y35+ Y39	DIE CAT. NO.	DIE MS90485- DIE MS90485-			
BLY10-T7 • +	10 Str.	4-6	.32	.40	.08	.44	.96	Y8MRBI								
BLY10-L36 • +	12 Sol.	8-#10	.31	.36	.08	.38	.80	MR8G98								7/16"
BLY8C-L14	Aircraft AN 8 8 AWG	8	.42	.47	.08	.37	1.15	Non-Ratchet: MY29-11	TDM-250XF	38	UV8L Nest Y34PLA Indenter (1) Crimp	11781M	-8	1/2"		
BLY8C-L		#10	.42	.51	.08	.37	1.22									
BLY8C-L1		1/4"	.42	.51	.08	.37	1.22									
BLY8C-L2		5/16"	.59	.71	.08	.50	1.30									
BLY8C-L3		3/8"	.59	.71	.08	.50	1.30									
BLY8C-L4	1/2"	.83	.88	.08	.50	1.55										
BLY6C-L1	Aircraft AN 6 6 AWG	#10	.47	.54	.08	.39	1.31	Non-Ratchet: MY29-11	TDM-250XF	39	UV6L Nest Y34PLA Indenter (1) Crimp	11782M	-6	1/2"		
BLY6C-L		1/4"	.47	.54	.08	.39	1.31									
BLY6C-L4		5/16"	.62	.67	.08	.45	1.44									
BLY6C-L2		3/8"	.62	.67	.08	.50	1.44									
BLY6C-L10	1/2"	.83	.88	.08	.50	1.68										
BLY4C-L3	Aircraft AN 4 4 AWG	#10	.63	.58	.10	.45	1.40	Non-Ratchet: MY29-11	TDM-250XF	40	UV4L Nest Y34PLA Indenter (1) Crimp	11783M	-4	1/2"		
BLY4C-L		1/4"	.63	.58	.10	.45	1.40									
BLY4C-L4		5/16"	.63	.66	.10	.50	1.49									
BLY4C-L2		3/8"	.65	.66	.10	.50	1.49									
BLY4C-L5	1/2"	.83	.88	.10	.50	1.72										
BLY2C-L3	Aircraft AN 2 2 AWG	#10	.71	.75	.11	.63	1.73	Non-Ratchet: MY29-11	TDM-250XF	41	UV2L Nest Y34PLA Indenter (1) Crimp	11784M	-2	5/8"		
BLY2C-L1		1/4"	.71	.75	.11	.63	1.73									
BLY2C-L2		5/16"	.71	.75	.11	.63	1.73									
BLY2C-L		3/8"	.71	.75	.11	.63	1.73									
BLY2C-L4	1/2"	.80	.90	.11	.63	1.90										



BLY DIMENSIONS & INSTALLATION TOOLING INFORMATION (CONTINUED)

CATALOG NUMBER	COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					INSTALLATION TOOLING					WIRE STRIP LENGTH	
			TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	MECHANICAL		HYDRAULIC		T&B		
								BURNDY	PENN-UNION DIELESS MECHANICAL TOOL	DIE INDEX	BURNDY Y35+ Y39	DIE CAT. NO.		DIE MS90485- DIE MS90485-
BLY1C-L6	1 Aircraft AN 1 1 AWG	#10	.77	.72	.13	.62	1.67	Non-Ratchet: MY29-11	TDM-250XF	42	UV1CL Nest Y34PLA Indentor (1) Crimp	11785M	-1	5/8"
BLY1C-L1		1/4"	.77	.83	.13	.62	1.85							
BLY1C-L2		5/16"	.77	.83	.13	.62	1.85							
BLY1C-L		3/8"	.77	.83	.13	.62	1.85							
BLY1C-L3		1/2"	.77	.95	.13	.62	1.98							
BLY1C-L4	7/16"	.77	.83	.13	.62	1.85								
BLY25-L1	1/0 Aircraft AN 1/0 1 AWG	1/4"	.85	.93	.13	.68	2.05	Non-Ratchet: MY29-11	TDM-250XF	43	UV25L Nest Y34PLA Indentor (1) Crimp	11786M	-01	11/16"
BLY25-L2		5/16"	.85	.93	.13	.68	2.05							
BLY25-L		3/8"	.85	.93	.13	.68	2.05							
BLY25-L3		1/2"	.85	1.01	.13	.68	2.09							
BLY25-L4		5/8"	.90	1.16	.13	.68	2.31							
BLY25-L6	7/16"	.85	.93	.13	.68	2.05								
BLY26-L1	2/0 Aircraft AN 2/0 2/0 AWG	1/4"	.94	1.05	.13	.81	2.32	Non-Ratchet: MY29-11	TDM-250XF	-	-	11787M	-02	13/16"
BLY26-L2		5/16"	.94	1.05	.13	.81	2.32							
BLY26-L		3/8"	.94	1.05	.13	.81	2.32							
BLY26-L3		1/2"	.94	1.05	.13	.81	2.32							
BLY26-L12		5/8"	.94	1.28	.13	.81	2.54							
BLY26-L4	7/16"	.94	1.05	.13	.81	2.32								
BLY27-L	3/0 Aircraft AN 3/0 3/0 AWG	3/8"	1.05	1.09	.14	.81	2.46	Non-Ratchet: MY29-11	TDM-250XF	-	-	11788M	-03	13/16"
BLY27-L1		1/2"	1.05	1.09	.14	.81	2.46							
BLY27-15		5/8"	1.05	1.28	.14	.81	2.63							
BLY27-L3 +		1/4"	1.05	1.09	.14	.81	2.46							
BLY27-L2		5/16"	1.05	1.09	.14	.81	2.46							
BLY27-6	7/16"	1.05	1.09	.14	.81	2.63								
BLY28-L	4/0 Aircraft AN 4/0 4/0 AWG	3/8"	1.15	1.28	.15	.87	2.76	Non-Ratchet: MY29-11	TDM-250XF	-	-	11789M	-04	7/8"
BLY28-L12		1/2"	1.15	1.28	.15	.87	2.76							
BLY28-L13		5/8"	1.15	1.28	.15	.87	2.76							
BLY28-L14		3/4"	1.27	1.44	.15	.87	2.96							
BLY28-L1 +		1/4"	1.15	1.28	.15	.87	2.76							
BLY28-L2		5/16"	1.15	1.28	.15	.87	2.76							
BLY28-L6		7/16"	1.15	1.28	.15	.87	2.76							
BLY28-L15	7/8"	1.27	1.44	.15	.87	2.96								

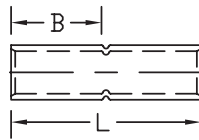
- Not UL listed
- + Not CSA certified

F

Crimp Splice - Standard Barrel

Type BCU

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Positive cable stops to ensure proper insertion of conductors to full depth
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV if taped according to accepted practices, 5 KV is the maximum voltage level in all bare splice applications
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



BCU DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	FIGURE DIMENSIONS (IN.)		COLOR CODE	INSTALLATION TOOLING			WIRE STRIP LENGTH	
		INSERTION LENGTH "B"	OVERALL LENGTH "L"		PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.		
BCU-8	8 AWG	.53	1.75	Red	TDM-250 or TDM-500	6	T-49	9/16"	
BCU-6	6 AWG	.78	1.75	Blue		7	T-7	15/16"	
BCU-5	5 AWG	.78	1.75	Blue		7	T-7	15/16"	
BCU-4	4 AWG	.78	1.75	Gray		8	T-8	15/16"	
BCU-3	3 AWG	.88	1.88	White		9	T-9	1"	
BCU-2	2 AWG	.84	1.87	Brown		10	T-10	1"	
BCU-1	1 AWG	.88	1.88	Green		11	T-11	1"	
BCU-1/0	1/0 AWG	.88	1.88	Pink		12	T-12	1"	
BCU-2/0	2/0 AWG	.94	2.00	Black		13	T-13	1-1/16"	
BCU-3/0	3/0 AWG	1.00	2.13	Orange		14	T-14	1-1/8"	
BCU-4/0	4/0 AWG	1.00	2.13	Purple		15	T-15	1-1/8"	
BCU-025	250 kcmil	1.03	2.25	Yellow		16	T-16	1-3/16"	
BCU-030	300 kcmil	1.06	2.25	White		17	T-17	1-3/16"	
BCU-035	350 kcmil	1.13	2.38	Red		18	T-18	1-1/4"	
BCU-040	400 kcmil	1.19	2.50	Blue		TDM-500	19	T-19	1-5/16"
BCU-045	450 kcmil	1.38	2.88	Blue			19	T-19	1-1/2"
BCU-050	500 kcmil	1.38	2.88	Brown	20		T-20	1-1/2"	
BCU-060	600 kcmil	1.38	2.88	Green	22		T-22	1-1/2"	
BCU-065	650 kcmil	1.38	2.88	Pink	Hatched Area	300	T-300	1-1/2"	
BCU-075	750 kcmil	1.63	3.38	Black		24	T-24	1-3/4"	
BCU-080	800 kcmil	1.59	3.37	Orange		25	T-25P	1-3/4"	
BCU-100	1000 kcmil	1.88	3.88	White		27	T-27P	2"	
BCU-150	1500 kcmil	2.00	4.13	Green		31	T-31P	2-1/8"	
BCU-200	2000 kcmil	2.22	4.62	Brown		34	-	2-3/8"	

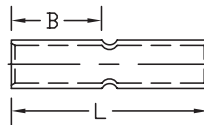
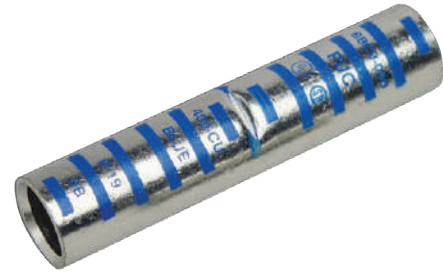
- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



Crimp Splice - Long Barrel

Type BBCU

- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Beveled entry for easy cable insertion
- Positive cable stops to ensure proper insertion of conductors to full depth
- Color coded barrels are marked with die index numbers
- Long barrel provides high pull out force and added secureness for improved mechanical and electrical properties
- Connectors are suitable for voltages up to 35 KV if taped according to accepted practices, 5 KV is the maximum voltage level in all bare splice applications
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



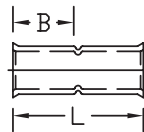
BBCU DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	FIGURE DIMENSIONS (IN.)		COLOR CODE	INSTALLATION TOOLING			WIRE STRIP LENGTH	
		INSERTION LENGTH "B"	OVERALL LENGTH "L"		PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.		
BBCU-8	8 AWG	.99	1.98	Red	TDM-250 or TDM-500	6	T-49	1-1/8"	
BBCU-6	6 AWG	1.19	2.37	Blue		7	T-7	1-5/16"	
BBCU-4	4 AWG	1.09	2.38	Gray		8	T-8	1-3/16"	
BBCU-3	3 AWG	1.13	2.38	White		9	T-9	1-1/4"	
BBCU-2	2 AWG	1.22	2.63	Brown		10	T-10	1-3/8"	
BBCU-1	1 AWG	1.38	2.88	Green		11	T-11	1-1/2"	
BBCU-1/0	1/0 AWG	1.38	2.88	Pink		12	T-12	1-1/2"	
BBCU-2/0	2/0 AWG	1.50	3.12	Black		13	T-13	1-5/8"	
BBCU-3/0	3/0 AWG	1.50	3.13	Orange		14	T-14	1-5/8"	
BBCU-4/0	4/0 AWG	1.63	3.38	Purple		15	T-15	1-3/4"	
BBCU-025	250 kcmil	1.59	3.38	Yellow		16	T-16	1-3/4"	
BBCU-030	300 kcmil	2.00	4.13	White		TDM-500	17	T-17	2-1/8"
BBCU-035	350 kcmil	2.00	4.13	Red			18	T-18	2-1/8"
BBCU-040	400 kcmil	2.13	4.38	Blue			19	T-19	2-1/4"
BBCU-050	500 kcmil	2.25	4.63	Brown			20	T-20	2-3/8"
BBCU-060	600 kcmil	2.69	5.50	Green			22	T-22	2-13/16"
BBCU-065	650 kcmil	2.75	5.63	Pink	300		T-300	2-7/8"	
BBCU-075	750 kcmil	2.88	5.88	Black	24		T-24	3"	
BBCU-080	800 kcmil	2.91	6.00	Orange	25		T-25P	3-1/16"	
BBCU-100	1000 kcmil	3.00	6.13	White	27	T-27P	3-1/8"		
BBCU-150	1500 kcmil	3.19	6.50	Green	31	T-31P	3-5/16"		
BBCU-200	2000 kcmil	3.41	7.00	Brown	34	-	3-9/16"		

- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41

Flared Crimp Splice - Standard Barrel Type BCU-FL

- Suitable for use with Class B, C, I, K, H, G, M and DLO conductors ♦
- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- Flared barrel entry provides easy cable insertion for fine stranded cables and minimizes strain during flexing and movement
- Positive cable stops to ensure proper insertion of conductors to full depth
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV if taped according to accepted practices, 5 KV is the maximum voltage level in all bare splice applications
- Connectors are UL listed and CSA certified with Penn-Union, Burndy T&B, Huskie, Greenlee and Versa-Crimp® style tooling



BCU-FL DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	FIGURE DIMENSIONS (IN.)		COLOR CODE	INSTALLATION TOOLING			WIRE STRIP LENGTH
		INSERTION LENGTH "B"	OVERALL LENGTH "L"		PENN-UNION DIELESS MECHANICAL TOOL	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	
BCU-3-FL	105/24 4 WELD; 3 AWG	.88	1.84	White	TDM-250XF	9	T-9	1"
BCU-1-FL	150/24 2 WELD; 1 AWG	.88	1.84	Green		11	T-11	1"
BCU-1/0-FL	225/24 1 WELD; 1/0 AWG	.88	1.84	Pink		12	T-12	1"
BCU-2/0-FL	275/24 1/0 WELD; 2/0 AWG	.94	1.96	Black		13	T-13	1-1/16"
BCU-3/0-FL	325/24 2/0 WELD; 3/0 AWG	1.00	2.09	Orange		14	T-14	1-1/8"
BCU-4/0-FL	450/24 3/0 WELD; 4/0 AWG	1.00	2.09	Purple		15	T-15	1-1/8"
BCU-030-FL	550/24 4/0 WELD; 300 kcmil	1.06	2.21	White			17	T-17
BCU-035-FL	650/24; 350 kcmil	1.13	2.34	Red		18	T-18	1-1/4"
BCU-040-FL	775/24; 400 kcmil	1.19	2.46	Blue		19	T-19	1-5/16"
BCU-050-FL	925/24; 500 kcmil	1.38	2.84	Brown		20	T-20	1-1/2"
BCU-060-FL	1100/24; 600 kcmil	1.38	2.84	Green		22	T-22	1-1/2"
BCU-065-FL	1325/24; 650 kcmil	1.38	2.84	Pink		300	T-300	1-1/2"
BCU-075-FL	1600/24; 750 kcmil	1.63	3.34	Black		24	T-24	1-3/4"
BCU-100-FL	1925/24; 1000 kcmil	1.88	3.84	White		27	T-27P	2"
BCU-150-FL	2750/24; 1500 kcmil	2.00	4.09	Green		31	T-31P	2-1/8"

♦ For additional wire size recommendations please refer to page XXX

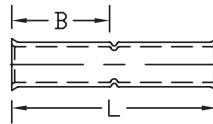
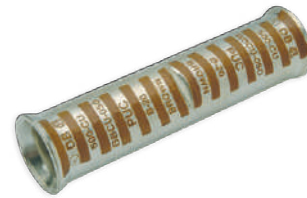
- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41



Flared Crimp Splice - Long Barrel

Type BBCU-FL

- Suitable for use with Class B, C, I, K, H, G, M and DLO conductors ♦
- Manufactured from high conductivity seamless copper tubing
- Tin-plated to inhibit corrosion
- **Flared barrel entry provides easy cable insertion for fine stranded cables and minimizes strain during flexing and movement**
- Positive cable stops to ensure proper insertion of conductors to full depth
- Long barrel provides high pull out force and added secureness for improved mechanical and electrical properties
- Color coded barrels are marked with die index numbers
- Connectors are suitable for voltages up to 35 KV if taped according to accepted practices, 5 KV is the maximum voltage level in all bare splice applications
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy T&B, Huskie, Greenlee and Versa-Crimp® style tooling**



F

BBCU-FL DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE	FIGURE DIMENSIONS (IN.)			INSTALLATION TOOLING			
		INSERTION LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	WIRE STRIP LENGTH
BBCU-3-FL	105/24 4 WELD; 3 AWG	1.13	2.38	White	TDM-250XF	9	T-9	1-1/4"
BBCU-1-FL	150/24 2 WELD; 1 AWG	1.38	2.84	Green		11	T-11	1-1/2"
BBCU-1/0-FL	225/24 1 WELD; 1/0 AWG	1.38	2.84	Pink		12	T-12	1-1/2"
BBCU-2/0-FL	275/24 1/0 WELD; 2/0 AWG	1.50	3.09	Black		13	T-13	1-5/8"
BBCU-3/0-FL	325/24 2/0 WELD; 3/0 AWG	1.50	3.09	Orange		14	T-14	1-5/8"
BBCU-4/0-FL	450/24 3/0 WELD; 4/0 AWG	1.63	3.34	Purple		15	T-15	1-3/4"
BBCU-030-FL	550/24 4/0 WELD; 300 kcmil	2.00	4.09	White		17	T-17	2-1/8"
BBCU-035-FL	650/24; 350 kcmil	2.00	4.09	Red		18	T-18	2-1/8"
BBCU-040-FL	775/24; 400 kcmil	2.13	4.34	Blue		19	T-19	2-1/4"
BBCU-050-FL	925/24; 500 kcmil	2.25	4.59	Brown		20	T-20	2-3/8"
BBCU-060-FL	1100/24; 600 kcmil	2.69	5.46	Green		22	T-22	2-13/16"
BBCU-065-FL	1325/24; 650 kcmil	2.75	5.63	Pink		300	T-300	2-7/8"
BBCU-075-FL	1600/24; 750 kcmil	2.88	5.84	Black		24	T-24	3"
BBCU-100-FL	1925/24; 1000 kcmil	3.00	6.09	White		27	T-27P	3-1/8"
BBCU-150-FL	2750/24; 1500 kcmil	3.19	6.46	Green		31	T-31P	3-5/16"

- ♦ For additional wire size recommendations please refer to page XXX
- Connectors from 8 AWG - 2000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications
- Connectors from 8 AWG - 500 kcmil are UL listed for grounding, bonding and direct burial applications per UL467
- Connectors from 8 AWG - 250 kcmil are CSA certified for grounding, bonding and direct burial applications per C22.2 No.41

ADDITIONAL WIRE SIZE RECOMMENDATIONS FOR COPPER COMPRESSION LUGS & SPLICES

TYPES: BCU, BCU-FL, BBCU, BBCU-FL, BLU, BLU-FL, BBLU, BBLU-FL, BBLZ

COPPER CONNECTOR CATALOG TYPE SPLICES & LUGS (1 & 2 HOLE)										
	CLASS B & C BUILDING WIRE CU CABLE SIZE & STRANDING	CLASS I WELD CABLE (#24 AWG CU STRANDS) SIZE & STRANDING	CLASS K WELD CABLE (#30 AWG CU STRANDS) SIZE & STRANDING	DIESEL LOCOMOTIVE CABLE (#30 AWG CU STRANDS) SIZE & STRANDING	CLASS H CABLE (NO. & DIA. OF WIRE) SIZE & STRANDING	CLASS G CABLE (NO. & DIA. OF WIRE) SIZE & STRANDING	CLASS M FLEXIBLE CABLE (#34 AWG CU STRANDS) SIZE & STRANDING	METRIC CABLE WIRE SIZE RANGE COPPER CABLE ONLY METRIC SIZE & DIA.	NAVY CABLE	AIR CRAFT
BCU-BBCU-BLU-BBLU-BBLZ-8	#8 AWG 7 OR 19	#8 AWG 41/24	NONE	NONE	* #8 AWG 133/.0111	* #8 AWG 49/.0184	#8 AWG 420/34	6MM ² 3.21MM	#23	AN-8
BCU-BBCU-BLU-BBLU-BBLZ-6	#6 AWG 7 OR 19	#6 AWG 63/24	NONE	NONE	* #7 AWG 133/.0125	#7 AWG 49/.0206	#7 AWG 532/34	10MM ² 4.12MM	NONE	NONE
BCU-BBCU-BLU-BBLU-BBLZ-5	#5 AWG 7 OR 19	NONE	NONE	NONE	* #6 AWG 133/.0140	* #6 AWG 49/.0231	#6 AWG 665/34	16MM ² 5.18MM	#30	AN-6
BCU-BBCU-BLU-BBLU-BBLZ-4	#4 AWG 7 OR 19	NONE	NONE	NONE	* #5 AWG 133/.0158	* #5 AWG 49/.0260	#5 AWG 836/34	* 20MM ² 5.72MM	#40	NONE
BCU-BBCU-BLU-BBLU-BBLZ-3	#3 AWG 7 OR 19	#4 AWG 105/24	#4 AWG 420/30	#4 AWG 105/24	#4 AWG 133/.0177	#4 AWG 49/.0292	#4 AWG 1064/34	25MM ² 6.60MM	#50	AN-4
BCU-BBCU-BLU-BBLU-BBLZ-2	#2 AWG 7 OR 19	NONE	NONE	NONE	* #3 AWG 133/.0199	* #3 AWG 49/.0328	#3 AWG 1323/34	* 30MM ² 7.01MM	#60	NONE
BCU-BBCU-BLU-BBLU-BBLZ-1	#1 AWG 19 OR 37	#2 AWG 161/24	#2 AWG 665/30	#2 AWG 150/24	#2 AWG 133/.0223	#2 AWG 49/.0368	#2 AWG 1666/34	* 40MM ² 8.20MM	#75	AN-2
BCU-BBCU-BLU-BBLU-BBLZ-1/0	1/0 AWG 19 OR 37	NONE	#1 AWG 836/30	#1 AWG 225/24	#1 AWG 259/.0180	#1 AWG 133/.0251	#1 AWG 2107/34	50MM ² 9.27MM	#100	AN-1
BCU-BBCU-BLU-BBLU-BBLZ-2/0	2/0 AWG 19 OR 37	1/0 AWG 266/24	1/0 AWG 1064/30	1/0 AWG 275/24	1/0 AWG 259/.0202	1/0 AWG 133/.0282	1/0 AWG 2646/34	70MM ² 10.92MM	#125	AN-1/0
BCU-BBCU-BLU-BBLU-BBLZ-3/0	3/0 AWG 19 OR 37	2/0 AWG 342/24	2/0 AWG 1323/30	2/0 AWG 325/24	2/0 AWG 259/.0227	2/0 AWG 133/.0316	NONE	* 85MM ² 11.94MM	#150	NONE
BCU-BBCU-BLU-BBLU-BBLZ-4/0	4/0 AWG 19 OR 37	NONE	3/0 AWG 1666/30	3/0 AWG 450/24	3/0 AWG 259/.0255	3/0 AWG 133/.0355	2/0 AWG 3325/34	95MM ² 12.80MM	#200	AN-2/0 AN-3/0
BCU-BBCU-BLU-BBLU-BBLZ-025	250 MCM 37 OR 61	NONE	NONE	NONE	NONE	NONE	3/0 AWG 4256/34	120MM ² 14.4MM	NONE	NONE
BCU-BBCU-BLU-BBLU-BBLZ-030	300 MCM 37 OR 61	4/0 AWG 532/24	4/0 AWG 2107/30	4/0 AWG 550/24	* 4/0 AWG 259/.0286	* 4/0 AWG 133/.0399	4/0 AWG 5320/34	150MM ² 16.00MM	#300	AN-4/0
BCU-BBCU-BLU-BBLU-BBLZ-035	350 MCM 37 OR 61	NONE	NONE	262 MCM 650/24	* 250 MCM 427/.0242	* 250 MCM 259/.0311	NONE	180MM ² 17.42MM	#350	NONE
BCU-BBCU-BLU-BBLU-BBLZ-040	400 MCM 37 OR 61	NONE	NONE	313 MCM 775/24	300 MCM 427/.0265	300 MCM 259/.0340	250 MCM 6384/34	185MM ² 17.80MM	#400	NONE
BCU-BBCU-BLU-BBLU-BBLZ-045	450 MCM 37 OR 61	NONE	NONE	NONE	* 350 MCM 427/.0286	* 350 MCM 259/.0368	300 MCM 7581/34	NONE	NONE	NONE
BCU-BBCU-BLU-BBLU-BBLZ-050	500 MCM 37 OR 61	350 MCM 882/24	NONE	373 MCM 925/24	400 MCM 427/.0306	400 MCM 259/.0393	350 MCM 8806/34	240MM ² 20.30MM	NONE	NONE
BCU-BBCU-BLU-BBLU-BBLZ-060	600 MCM 61 OR 91	NONE	NONE	444 MCM 1100/24	450 MCM 427/.0325	450 MCM 259/.0417	400 MCM 10101/34	300MM ² 22.63MM	NONE	NONE
BCU-BBCU-BLU-BBLU-BBLZ-065	650 MCM 61 OR 91	500 MCM 1225/24	NONE	535 MCM 1325/24	500 MCM 427/.0342	500 MCM 259/.0439	450 MCM 11396/34	NONE	NONE	NONE
BCU-BBCU-BLU-BBLU-BBLZ-075	750 MCM 61 OR 91	NONE	NONE	646 MCM 1600/24	* 550 MCM 703/.0280 * 600 MCM 703/.0292	* 550 MCM 427/.0359 * 600 MCM 427/.0375	500 MCM 12691/34	NONE	NONE	NONE
BCU-BBCU-BLU-BBLU-BBLZ-080	800 MCM 61 OR 91	NONE	NONE	NONE	* 650 MCM 703/.0304	* 650 MCM 427/.0390 * 700 MCM 427/.0405	550 MCM 13664/34	400MM ² 26.1MM	NONE	NONE
BCU-BBCU-BLU-BBLU-BBLZ-100	1000 MCM 61 OR 91	750 MCM 1862/24	NONE	777 MCM 1925/24	* 700 MCM 703/.0316 * 750 MCM 703/.0327	* 750 MCM 427/.0419 * 800 MCM 427/.0433	600 MCM 14945/34 650 MCM 16226/34	500MM ² 29.3MM	NONE	NONE

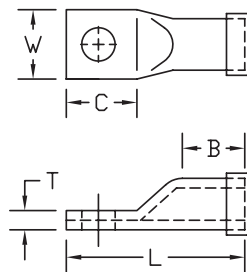
* Not UL listed



Standard Barrel - One Hole Tongue

Type BLUA-S

- Manufactured from seamless aluminum tubing
- Tin-plated and factory prefilled with oxide inhibitor compound
- Beveled entry for easy cable insertion
- Color coding conforms to industry standards ensuring proper die selection and providing for a faster installation
- Connectors are marked with catalog number, wire size, die index and crimp locations
- Connectors are suitable for voltages up to 35 KV
- End caps provided to prevent foreign materials from entering and contaminating the connector prior to usage
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie and Greenlee tooling**



BLUA-S

See table for dimensions and installation tooling information

BLUA-S DIMENSIONS & INSTALLATION TOOLING INFORMATION

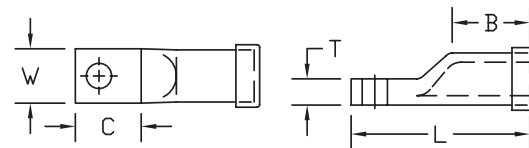
CATALOG NUMBER	ALUMINUM & COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					COLOR CODE	INSTALLATION TOOLING			
			TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"		PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	WIRE STRIP LENGTH
BLUA-85	8 AWG	1/4"	.40	.62	.12	.56	1.56	Blue	TDM-250 or TDM-500	374	T-374	3/4"
BLUA-65	6 AWG	1/4"	.50	.80	.13	.69	1.83	Gray		346	T-346	7/8"
BLUA-6S2		5/16"	.50	.78	.13	.75	1.82					
BLUA-4S3	4 AWG	1/4"	.58	.80	.18	.87	1.89	Green		375	T-375	1"
BLUA-4S2		5/16"	.58	.80	.18	.87	1.89					
BLUA-2S3	2 AWG	1/4"	.70	.85	.21	.78	2.04	Pink		348	T-348	1"
BLUA-2S4		5/16"	.70	.86	.21	.78	2.05					
BLUA-2S		3/8"	.70	.86	.21	.78	2.05					
BLUA-1S1	1 AWG	1/4"	.73	.78	.17	.90	1.92	Gold		471	T-471	1-1/16"
BLUA-1S3		5/16"	.73	.84	.17	.90	1.95					
BLUA-1S		3/8"	.73	1.18	.17	.90	2.53					
BLUA-1S2		1/2"	.82	1.25	.27	.90	2.59					
BLUA-1/0S2	1/0 AWG	1/4"	.84	.85	.23	.87	2.17	Tan		296	T-296	1-1/8"
BLUA-1/0S3		5/16"	.84	.86	.23	.88	2.17					
BLUA-1/0S		3/8"	.84	.85	.23	.87	2.17					
BLUA-1/0S1		1/2"	.85	1.12	.23	1.12	2.43					
BLUA-2/0S4	2/0 AWG	1/4"	.93	.78	.25	1.09	2.25	Olive		297	T-297	1-1/4"
BLUA-2/0S5		5/16"	.93	.84	.25	1.09	2.31					
BLUA-2/0S1		3/8"	.93	1.20	.25	1.09	2.62					
BLUA-2/0S		1/2"	.93	1.20	.25	1.09	2.62					
BLUA-3/0S5	3/0 AWG	5/16"	1.03	.84	.26	1.25	2.59	Ruby		467	T-467	1-3/8"
BLUA-3/0S2		3/8"	1.03	1.06	.26	1.25	2.81					
BLUA-3/0S		1/2"	1.03	1.22	.26	1.25	2.91					
BLUA-4/0S3	4/0 AWG	5/16"	1.17	.84	.29	1.31	2.65	White		298	T-298	1-7/16"
BLUA-4/0S5		3/8"	1.17	1.20	.30	1.28	2.97					
BLUA-4/0S		1/2"	1.17	1.20	.30	1.28	2.97					
BLUA-4/0S4		5/8"	1.17	1.46	.29	1.31	3.28					
BLUA-02S52	250 kcmil	3/8"	1.26	1.06	.33	1.41	3.00	Red		324	T-324	1-9/16"
BLUA-02S5		1/2"	1.25	1.53	.33	1.41	3.44					
BLUA-02S53		5/8"	1.26	1.50	.32	1.40	3.43					
BLUA-030S2	300 kcmil	3/8"	1.39	1.25	.35	1.50	3.62	Blue	470	T-470	1-5/8"	
BLUA-030S1		1/2"	1.37	1.56	.36	1.50	3.88					
BLUA-030S		5/8"	1.39	1.46	.35	1.50	3.65					
BLUA-035S1	350 kcmil	1/2"	1.48	1.55	.39	1.61	3.91	Brown	299	T-299	1-3/4"	
BLUA-035S		5/8"	1.48	1.55	.39	1.61	3.91					
BLUA-040S2	400 kcmil	1/2"	1.62	1.50	.42	1.81	4.53	Green	472	T-472	2"	
BLUA-040S3		5/8"	1.62	1.81	.42	1.81	4.84					
BLUA-050S2	500 kcmil	1/2"	1.79	1.50	.46	1.87	4.31	Pink	300	T-300	2-1/16"	
BLUA-050S3		5/8"	1.79	1.81	.46	1.87	4.62					
BLUA-060S1	600 kcmil	5/8"	1.96	2.03	.51	2.00	5.15	Black	473	T-473	2-1/8"	
BLUA-075S1	750 kcmil	5/8"	2.14	2.18	.57	2.25	5.37	Red	301	T-301P	2-3/8"	
BLUA-080S1	800 kcmil	5/8"	2.37	2.50	.62	2.31	6.40	Gray	474	T-474P	2-7/16"	
BLUA-100S1	1000 kcmil	5/8"	2.50	2.50	.65	2.56	6.71	Brown	302	T-302P	2-11/16"	

- Not UL listed
- Connectors from 8 AWG - 1000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications



Standard Barrel - One Hole Narrow Tongue Type BLUA-S-NT

- Manufactured from seamless aluminum tubing
- Tin-plated and factory prefilled with oxide inhibitor compound
- Beveled entry for easy cable insertion
- **Narrow tongue design for limited space applications**
- Color coding conforms to industry standards ensuring proper die selection and providing for a faster installation
- Connectors are marked with catalog number, wire size, die index and crimp locations
- Connectors are suitable for voltages up to 35 KV
- End caps provided to prevent foreign materials from entering and contaminating the connector prior to usage
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie and Greenlee tooling**



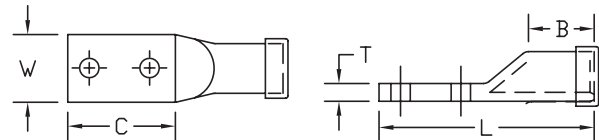
BLUA-S-NT DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	ALUMINUM & COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)					COLOR CODE	INSTALLATION TOOLING										
			TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"		PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	WIRE STRIP LENGTH							
BLUA-8S-NT	8 AWG	1/4"	.40	.62	.12	.56	1.56	Blue	TDM-250 or TDM-500	374	T-374	3/4"							
BLUA-6S-NT	6 AWG	1/4"	.50	.80	.13	.69	1.83	Gray		346	T-346	7/8"							
BLUA-4S3-NT	4 AWG	1/4"	.50	.80	.21	.87	1.89	Green		375	T-375	1"							
BLUA-2S3-NT	2 AWG	1/4"	.55	.86	.27	.78	2.05	Pink		TDM-500	348	T-348	1"						
BLUA-2S4-NT		5/16"	.55	.86	.27	.78	2.05												
BLUA-1S1-NT	1 AWG	1/4"	.55	.78	.23	.91	1.92	Gold			TDM-500	471	T-471	1-1/16"					
BLUA-1S3-NT		5/16"	.55	.84	.23	.91	1.95												
BLUA-1/0S3-NT	1/0 AWG	5/16"	.64	.86	.30	.88	2.17	Tan				TDM-500	296	T-296	1-1/16"				
BLUA-1/0S-NT		3/8"	.64	.86	.30	.88	2.17												
BLUA-2/0S5-NT	2/0 AWG	5/16"	.64	.84	.36	1.09	2.31	Olive					TDM-500	297	T-297	1-1/4"			
BLUA-2/0S1-NT		3/8"	.64	1.20	.36	1.09	2.62												
BLUA-3/0S5-NT	3/0 AWG	5/16"	.78	.84	.34	1.25	2.59	Ruby						TDM-500	467	T-467	1-3/8"		
BLUA-3/0S2-NT		3/8"	.78	1.06	.34	1.25	2.81												
BLUA-4/0S3-NT	4/0 AWG	5/16"	.78	.84	.45	1.31	2.66	White							TDM-500	298	T-298	1-7/16"	
BLUA-4/0S5-NT		3/8"	.78	1.20	.45	1.28	2.97												
BLUA-02S52-NT	250 kcmil	3/8"	.98	1.20	.42	1.41	3.11	Red								TDM-500	324	T-324	1-9/16"
BLUA-02S5-NT		1/2"	.98	1.53	.42	1.41	3.44												
BLUA-030S3-NT	300 kcmil	5/16"	.98	1.25	.51	1.06	2.44	Blue	TDM-500								470	T-470	1-5/8"
BLUA-030S2-NT		3/8"	.98	1.25	.51	1.50	3.63												
BLUA-030S1-NT	350 kcmil	1/2"	.98	1.56	.51	1.50	3.88	Brown		TDM-500							299	T-299	1-3/4"
BLUA-03S53-NT		5/16"	1.00	1.25	.58	1.63	3.50												
BLUA-03S52-NT	400 kcmil	3/8"	1.00	1.25	.58	1.63	3.50	Green			TDM-500						472	T-472	2"
BLUA-03S51-NT		1/2"	1.00	1.55	.58	1.61	3.91												
BLUA-040S1-NT	500 kcmil	5/16"	1.20	1.25	.57	1.81	4.28	Pink				TDM-500					300	T-300	2-1/16"
BLUA-040S4-NT		3/8"	1.20	1.25	.57	1.81	4.28												
BLUA-040S2-NT	600 kcmil	1/2"	1.20	1.50	.57	1.81	4.53	Black					TDM-500				473	T-473	2-1/8"
BLUA-050S1-NT		3/8"	1.32	1.25	.54	1.88	4.06												
BLUA-050S2-NT	750 kcmil	1/2"	1.32	1.50	.54	1.88	4.31	Red						TDM-500			301	T-301P	2-3/8"
BLUA-060S2-NT		1/2"	1.31	2.03	.78	2.00	5.16												
BLUA-060S-NT	750 kcmil	5/8"	1.31	1.72	.78	2.00	4.84	Red							TDM-500		301	T-301P	2-3/8"
BLUA-07S54-NT		1/2"	1.49	2.06	.63	2.25	5.25												
BLUA-07S51-NT	5/8"	1.49	2.19	.63	2.25	5.38													

• Connectors from 8 AWG - 1000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications

Standard Barrel - Two Hole Tongue Type BLUA-D

- Manufactured from seamless aluminum tubing
- Tin-plated and factory prefilled with oxide inhibitor compound
- Beveled entry for easy cable insertion
- Color coding conforms to industry standards ensuring proper die selection and providing for a faster installation
- Connectors are marked with catalog number, wire size, die index and crimp locations
- Connectors are suitable for voltages up to 35 KV
- End caps provided to prevent foreign materials from entering and contaminating the connector prior to usage
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie and Greenlee tooling**



BLUA-D DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	ALUMINUM & COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						COLOR CODE	INSTALLATION TOOLING						
			STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"		PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	WIRE STRIP LENGTH			
BLUA-1D1	1 AWG	1/2"	1.75	.82	2.90	.26	.90	4.04	Gold	TDM-250 or TDM-500	471	T-471	1-1/16"			
BLUA-1/0D1	1/0 AWG	3/8"	1.00	.85	1.87	.23	1.00	3.53	Tan		296	T-296	1-1/8"			
BLUA-1/0D2		3/8"	1.06	.85	2.18	.23	1.00	3.84			297	T-297	1-1/4"			
BLUA-1/0D3	2/0 AWG	1/2"	1.75	.84	3.00	.24	1.00	4.57	Olive		297	T-297	1-1/4"			
BLUA-2/0D2		3/8"	1.00	.93	1.87	.25	1.09	3.37			467	T-467	1-3/8"			
BLUA-2/0D	3/0 AWG	1/2"	1.75	.94	3.18	.25	1.09	4.62	Ruby		298	T-298	1-7/16"			
BLUA-3/0D1		3/8"	1.00	1.03	1.87	.26	1.25	3.90			324	T-324	1-9/16"			
BLUA-3/0D	4/0 AWG	1/2"	1.75	1.03	2.97	.26	1.25	4.66	White		298	T-298	1-7/16"			
BLUA-4/0D2		3/8"	1.00	1.17	2.06	.29	1.31	3.87			Red	470	T-470	1-5/8"		
BLUA-4/0D	250 kcmil	1/2"	1.75	1.16	2.94	.30	1.29	4.73	Blue			299	T-299	1-3/4"		
BLUA-025D1		3/8"	1.00	1.26	2.06	.32	1.40	4.00			324	T-324	1-9/16"			
BLUA-025D	300 kcmil	1/2"	1.75	1.25	2.91	.33	1.79	5.20	Brown		470	T-470	1-5/8"			
BLUA-030D1		3/8"	1.00	1.39	2.37	.35	1.50	4.46		Green	299	T-299	1-3/4"			
BLUA-030D	350 kcmil	1/2"	1.75	1.38	3.00	.36	1.47	5.34	Pink		472	T-472	2"			
BLUA-035D1		3/8"	1.00	1.48	2.06	.39	1.63	4.44		300	T-300	2-1/16"				
BLUA-035D	400 kcmil	1/2"	1.75	1.48	2.94	.39	1.59	5.31	Black	TDM-500	473	T-473	2-1/8"			
BLUA-040D1		3/8"	1.00	1.62	2.06	.42	1.81	4.56			Red	472	T-472	2"		
BLUA-040D2	500 kcmil	1/2"	1.75	1.62	3.12	.42	1.81	5.62	Gray			301	T-301P	2-3/8"		
BLUA-040D		5/8"	1.75	1.62	3.09	.42	1.81	5.59			474	T-474P	2-7/16"			
BLUA-050D1	600 kcmil	3/8"	1.00	1.79	2.06	.46	1.87	4.87	Brown		TDM-500	302	T-302P	2-11/16"		
BLUA-050D2		1/2"	1.75	1.79	3.13	.46	1.88	5.94				Black	473	T-473	2-1/8"	
BLUA-050D	750 kcmil	5/8"	1.75	1.80	3.22	.47	1.87	6.03	Red				473	T-473	2-1/8"	
BLUA-060D1		3/8"	1.00	1.96	2.06	.51	2.00	5.18				Gray	301	T-301P	2-3/8"	
BLUA-060D2	800 kcmil	1/2"	1.75	1.97	3.13	.52	2.00	6.25	Brown				474	T-474P	2-7/16"	
BLUA-060D		5/8"	1.75	1.96	3.21	.51	2.00	6.34				Black	301	T-301P	2-3/8"	
BLUA-075D1	1000 kcmil	1/2"	1.75	2.14	3.12	.57	2.25	6.31	Gray				TDM-500	301	T-301P	2-3/8"
BLUA-075D		5/8"	1.75	2.14	3.21	.57	2.25	6.40				Brown		474	T-474P	2-7/16"
BLUA-080D1	800 kcmil	1/2"	1.75	2.37	3.21	.62	2.31	7.12	Gray	TDM-500				474	T-474P	2-7/16"
BLUA-080D		5/8"	1.75	2.37	3.21	.62	2.31	7.12				Brown		302	T-302P	2-11/16"
BLUA-100D2	1000 kcmil	1/2"	1.75	2.50	3.13	.66	2.56	7.34	Brown					TDM-500	302	T-302P
BLUA-100D		5/8"	1.75	2.50	3.21	.65	2.56	7.43				Black			474	T-474P

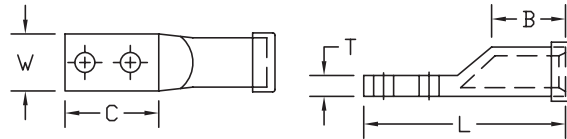
• Connectors from 8 AWG - 1000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications

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Standard Barrel - Two Hole Narrow Tongue

Type BLUA-D-NT

- Manufactured from seamless aluminum tubing
- Tin-plated and factory prefilled with oxide inhibitor compound
- Beveled entry for easy cable insertion
- **Narrow tongue design for limited space applications**
- Color coding conforms to industry standards ensuring proper die selection and providing for a faster installation
- Connectors are marked with catalog number, wire size, die index and crimp locations
- Connectors are suitable for voltages up to 35 KV
- End caps provided to prevent foreign materials from entering and contaminating the connector prior to usage
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie and Greenlee tooling**



BLUA-D-NT DIMENSIONS & INSTALLATION TOOLING INFORMATION

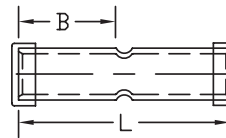
CATALOG NUMBER	ALUMINUM & COPPER CONDUCTOR SIZE	STUD HOLE SIZE	FIGURE DIMENSIONS (IN.)						INSTALLATION TOOLING				
			STUD HOLE SPACING	TONGUE WIDTH "W"	TONGUE LENGTH "C"	TONGUE THICKNESS "T"	BARREL LENGTH "B"	OVERALL LENGTH "L"	COLOR CODE	PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	WIRE STRIP LENGTH
BLUA-035D1-NT	350 kcmil	3/8"	1.00	1.25	2.06	.46	1.59	4.44	Brown	TDM-500	299	T-299	1-3/4"
BLUA-035D-NT		1/2"	1.75	1.25	2.94	.46	1.59	5.31					
BLUA-040D1-NT	400 kcmil	3/8"	1.00	1.25	2.06	.55	1.81	4.56	Green		472	T-472	2"
BLUA-040D2-NT		1/2"	1.75	1.25	3.13	.55	1.81	5.63					
BLUA-050D1-NT	500 kcmil	3/8"	1.00	1.32	2.06	.54	1.88	4.88	Pink		300	T-300	2-1/16"
BLUA-050D2-NT		1/2"	1.75	1.32	3.13	.54	1.88	5.94					
BLUA-060D1-NT	600 kcmil	3/8"	1.00	1.30	2.06	.79	2.00	5.19	Black	473	T-473	2-1/8"	
BLUA-060D2-NT		1/2"	1.75	1.30	3.13	.79	2.00	6.25					
BLUA-075D1-NT	750 kcmil	1/2"	1.75	1.49	3.13	.63	2.25	6.31	Red	301	T-301P	2-3/8"	
BLUA-075D-NT		5/8"	1.75	1.49	3.22	.63	2.25	6.41					
BLUA-100D2-NT	1000 kcmil	1/2"	1.75	1.61	3.13	1.02	2.56	7.34	Brown	302	T-302P	2-11/16"	

• Connectors from 8 AWG - 1000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications

Crimp Splice - Standard Barrel

Type BCUA

- Manufactured from high conductivity seamless aluminum tubing
- Tin-plated and factory prefilled with oxide inhibitor compound
- Beveled entry for easy cable insertion
- Positive cable stops to ensure proper insertion of conductors to full depth
- Color coding conforms to industry standards ensuring proper die selection and providing for a faster installation
- Connectors are marked with catalog number, wire size, die index and crimp locations
- End caps provided to prevent foreign materials from entering and contaminating the connector prior to usage
- Connectors are suitable for voltages up to 35 KV if taped according to accepted practices, 5 KV is the maximum voltage level in all bare splice applications
- **Connectors are UL listed and CSA certified with Penn-Union, Burndy, T&B, Huskie and Greenlee tooling**



BCUA DIMENSIONS & INSTALLATION TOOLING INSTRUCTIONS

CATALOG NUMBER	ALUMINUM & COPPER CONDUCTOR SIZE	FIGURE DIMENSIONS (IN.)		COLOR CODE	INSTALLATION TOOLING			
		INSERTION LENGTH "B"	OVERALL LENGTH "L"		PENN-UNION DIELESS MECHANICAL TOOLS	BURNDY DIE INDEX NO.	PENN-UNION DIE CATALOG NO.	WIRE STRIP LENGTH
BCUA-8	8 AWG	.81	1.75	Blue	TDM-250 or TDM-500	374	T-374	7/8"
BCUA-6	6 AWG	.81	1.75	Gray		346	T-346	7/8"
BCUA-4	4 AWG	.88	1.88	Green		375	T-375	1"
BCUA-2	2 AWG	1.13	2.38	Pink		348	T-348	1-1/4"
BCUA-1	1 AWG	.91	1.94	Gold		471	T-471	1-1/16"
BCUA-1/0	1/0 AWG	1.00	2.13	Tan		296	T-296	1-1/8"
BCUA-2/0	2/0 AWG	1.09	2.31	Olive		297	T-297	1-1/4"
BCUA-3/0	3/0 AWG	1.25	2.63	Ruby		467	T-467	1-3/8"
BCUA-4/0	4/0 AWG	1.31	2.75	White		298	T-298	1-7/16"
BCUA-025	250 kcmil	1.41	2.94	Red		324	T-324	1-9/16"
BCUA-030	300 kcmil	1.50	3.13	Blue		470	T-470	1-5/8"
BCUA-035	350 kcmil	1.63	2.38	Brown		299	T-299	1-3/4"
BCUA-040	400 kcmil	1.81	3.75	Green		472	T-472	2"
BCUA-050	500 kcmil	1.88	3.88	Pink		300	T-300	2-1/16"
BCUA-060	600 kcmil	2.00	4.13	Black	473	T-473	2-3/16"	
BCUA-075	750 kcmil	2.25	4.63	Red	301	T-301P	2-7/16"	
BCUA-080	800 kcmil	2.31	4.75	Gray	474	T-474P	2-1/2"	
BCUA-100	1000 kcmil	2.56	5.25	Brown	302	T-302P	2-3/4"	
BCUA-150	1500 kcmil	3.19	6.50	-	478	-	3-5/16"	
BCUA-200	2000 kcmil	3.69	7.50	-	479	-	3-11/16"	

Connectors from 6 AWG - 1000 kcmil are UL listed per UL486A-B and CSA certified per C22.2 No.65 for POWER applications

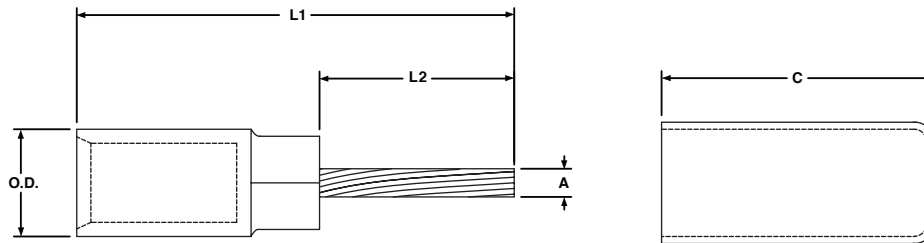


Bi-Metallic Terminal Plugs

Type TPC



- Body is manufactured from high strength aluminum alloy
- Pigtail is manufactured from high conductivity copper
- Entire connector is electro-tin plated for corrosion resistance
- Designed to facilitate the termination of aluminum conductors to a copper or aluminum/copper rated mechanical lug
- Barrel is pre-filled with oxide inhibitor to seal out moisture and minimize conductor oxidation
- Color coded end plugs are inserted into barrel to seal out contaminants and facilitate proper compression die selection
- Insulating covers are supplied with each connector and are rated 600 V
- Connector is marked with catalog number, die index, color code and required number of crimps
- Rated for 600 V, 90°C applications



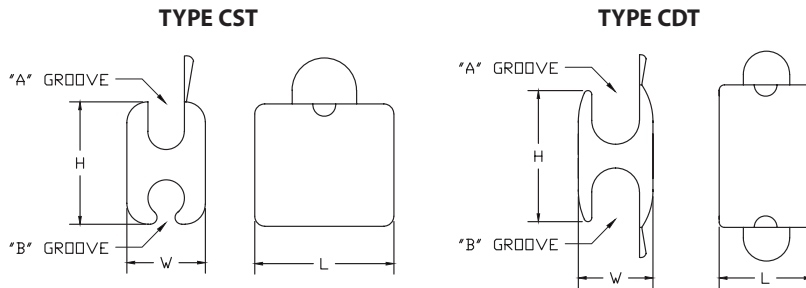
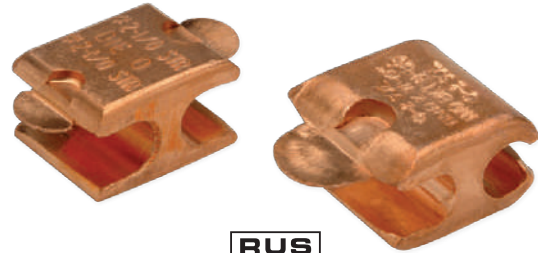
CATALOG NUMBER	ALUMINUM CONDUCTOR SIZE	EQUIVALENT PIN SIZE	APPROXIMATE DIMENSIONS (IN.)					CRIMPING TOOL REFERENCE		
			A	O.D.	L1	L2	C	DIE COLOR CODE	PENN-UNION DIE CATALOG NO.	BURNDY DIE INDEX NO.
TPC-6*	6 Str.	#8 AWG	.14	.60	2.13	.88	3.07	Orange	T-14	14
TPC-4	4 Str.	#6 AWG	.19	.60	2.46	.91	3.07			
TPC-2	2 Str.	#4 AWG	.23	.60	2.46	.93	3.07			
TPC-1	1 Str.	#3 AWG	.28	.60	2.54	1.01	3.07			
TPC-1/0*	1/0 Str.	#2 AWG	.29	.85	3.41	1.26	3.15	Red	T-324	324
TPC-2/0	2/0 Str.	#1 AWG	.32	.85	3.34	1.25	3.15			
TPC-3/0	3/0 Str.	1/0	.36	.85	3.60	1.46	3.15			
TPC-4/0	4/0 Str.	2/0	.40	.85	3.52	1.46	3.15			
TPC-250	250 kcmil	3/0	.44	1.10	3.86	1.55	3.55	Brown	T-299	299
TPC-300	300 kcmil	4/0	.52	1.10	4.09	1.70	3.55			
TPC-350	350 kcmil	4/0	.50	1.10	4.09	1.71	3.55	Pink	T-300	300
TPC-400	400 kcmil	250 kcmil	.58	1.32	4.36	1.98	3.74			
TPC-500	500 kcmil	350 kcmil	.68	1.32	4.19	1.84	3.74			
TPC-600	600 kcmil	350 kcmil	.69	1.46	4.95	1.90	4.14			
TPC-750	750 kcmil	500 kcmil	.79	1.46	5.01	2.00	4.14	Yellow	-	936

*cULus pending

Copper Press-Ons

Types CST and CDT

- Manufactured from high conductivity copper
- Tabs allow conductor to be easily held in place before crimping
- Center barrier separates conductors
- Suitable for direct burial in earth and concrete



Single Tab Press-Ons - Type CST

CATALOG NUMBER	A GROOVE	B GROOVE	APPROXIMATE DIMENSIONS (IN.)			DIE SETS FOR HYD. TOOLS TPU-12B*
			L	H	W	
CST-301	6 Sol., 6 Str., 4 Sol.	8 Sol., 8 Str., 6 Sol. 6 Str., 4 Sol.	.81	.73	.47	U-BG or U-243
CST-302	4 Sol., 4 Str., 2 Sol.	6 Sol., 6 Str., 4 Sol. 4 Str., 2 Sol.	.81	.83	.55	

Double Tab Press-Ons - Type CDT

CATALOG NUMBER	A GROOVE	B GROOVE	APPROXIMATE DIMENSIONS (IN.)			DIE SETS FOR HYD. TOOLS TPU-12B*
			L	H	W	
CDT-399-8	6 Sol., 6 Str., 4 Sol.	8 Sol., 6 Str., 4 Sol.	.81	.75	.48	U-BG or U-243
CDT-398-8	4 Sol., 4 Str., 2 Sol.	4 Sol., 4 Str., 2 Sol.	.81	.80	.55	
CDT-304-8	2 Str., 1 Str., 1/0 Str.	6 Sol., 4 Sol., 4 Str., 2 Sol.	.86	1.13	.64	0
CDT-303-8		2 Str., 1 Str., 1/0 Str.	.83	1.13	.72	
• CDT-308-8	2/0 Str., 4/0 Str.	2 Str., 1 Str., 1/0 Str.	1.06	1.41	.91	D3
• CDT-307-8		2/0 Str., 4/0 Str.	1.06	1.38	.91	

* Burndy Y-35 and Alcoa 12A tools both accept same dies
 • For Canada, must add suffix "-C" for UL 467 listed product with oxide inhibitor for grounding and bonding



Mechanical Compression Tooling

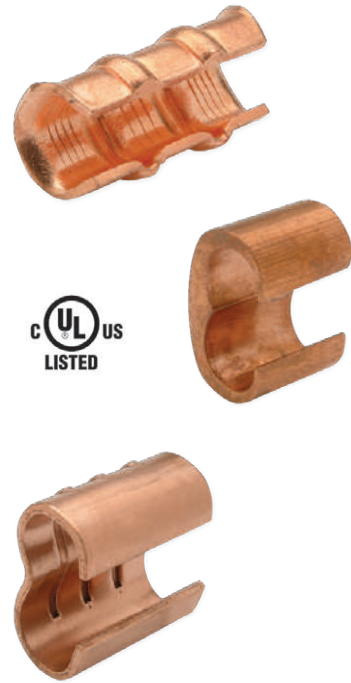
CATALOG NUMBER	"0" TYPE TOOL DIE SETS	"W" DIE TYPE TOOL	
		TOOLS	DIE SET
CST-301	T	TMU-0D3	W-BG
CDT-399-8		MD6-8	
CST-302	K	TMU-0D3	W-KK
CDT-398-8		MD6-8	



Copper Range Taking C-Taps

Type RTC

- Manufactured from high conductivity wrought copper
- Applications include copper to copper tapping, splicing or pigtailing
- Compact size allows for easy taping and insulation of connection
- Color-coded for proper crimp die selection
- Design provides for low installation cost
-  to UL 486A-486B for power applications
-  to UL 467 for grounding, bonding and direct burial applications*
- Rated for 600 V applications at 90°C
- Range taking connector allows for lower inventory requirements



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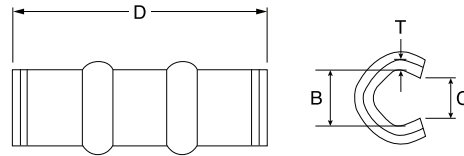


Fig. 1

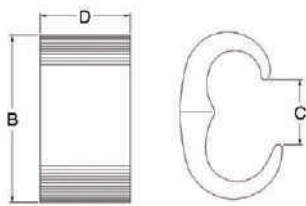


Fig. 2

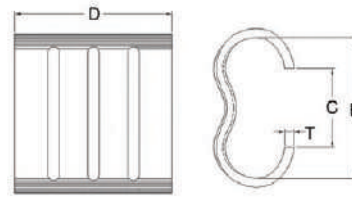


Fig. 3

See table for dimensions and installation tooling information

TYPE RTC DIMENSIONS & INSTALLATION TOOLING INFORMATION

CATALOG NUMBER	COPPER CONDUCTOR SIZE RANGES		FIG. NO.	NO. OF RIBS	APPROXIMATE DIMENSIONS (IN.)				WIRE STRIP LENGTH	CRIMP DIE COLOR CODE	COMPETITORS (Items noted as alternates are mostly due to wire range differences. Refer to competitor catalog for specifics.)			
	RUN	TAP			B	C	D	T			BURNDY	T&B	PANDUIT	NSI
RTC-1	14	14 - 16	1	0	.18	.10	.33	.07	1/2"	Red	YC10L12	54705	CTAPF10-16-C	CT-101
	12	12 - 16												
	10	14												
RTC-2	10	10	1	0	.24	.14	.61	.07	5/8"	Blue	YC8L12	54710	CTAPF8-12-C	CT-102
	8	12												
RTC-3	8	8-10	1	0	.32	.19	.61	.07	5/8"	Gray	YC6L12	54715 (alt.)	CTAPF6-12-C	CT-103
	6	10 - 12												
RTC-4	6	6 - 8	1	1	.39	.28	1.17	.07	1-1/4"	Brown	YC4L12	54720	CTAPF4-12-C	CT-104
	4	8 - 12												
RTC-5	4	4 - 6	1	1	.45	.26	1.17	.07	1-1/4"	Green	YC3L12	54725 (alt.)	CTAPF3-12-C	CT-105
	3	6 - 12												
RTC-6	4	4	1	1	.49	.30	1.17	.07	1-1/4"	Pink	YC2L12	54730 (alt.)	CTAPF2-12-C	CT-106
	3	4 - 6												
	2	6 - 12												
RTC-7	3	3 - 4	1	2	.53	.31	1.75	.07	2"	Black	YC1L12	54735	CTAPF1-12-C	CT-107
	2	4 - 6												
	1	4 - 12												
RTC-8	2	2 - 4	1	2	.61	.41	1.75	.09	2"	Orange	YC25L12	54740	CTAPF1/0-12-L	CT-108
	1	3 - 4												
	1/0	4 - 12												
RTC-9	1	1 - 2	1	2	.69	.42	1.75	.09	2"	Purple	YC26L12	54745	CTAPF2/0-12-Q	CT-109
	1/0	2 - 3												
	2/0	3 - 12												
RTC-10	1/0	1/0 - 1	1	2	.81	.46	1.75	.09	2"	Yellow	YC27L12	54750	CTAPF3/0-12-Q	CT-110
	2/0	1 - 2												
	3/0	2 - 12												
RTC-11	1	1	2	—	1.30	.51	.79	—	1"	Blue	YGH26C2 AND YGHC26C26 (both alt.)	54755	—	CTH-111
	1/0	1/0 - 2												
	2/0	2/0 - 4												
	3/0 - 4/0	1/0 - 6												
RTC-12	4/0	1 - 8	2	—	1.46	.57	.78	—	1"	Brown	—	54760	—	CTH-112
	2/0	2/0 - 1												
	3/0	3/0 - 2												
	4/0	4/0 - 4												
RTC-13	250	1/0 - 8	2	—	1.67	.67	1.03	—	1-1/8"	Pink	—	54765	—	CTH-113
	2/0	2/0 - 1												
	3/0	3/0 - 2												
	4/0	4/0 - 4												
RTC-14	250	1/0 - 8	2	—	1.71	.73	1.03	—	1-1/8"	Black	YGH-C29C26 & YGHC29C29 (both alt.)	54770	—	CTH-114
	2/0	2/0 - 1												
	300	4/0 - 4												
	350	3/0 - 6												
RTC-15*	250	250	2	—	1.85	.81	1.28	—	1-5/16"	Yellow	YGH34C26 AND YGHC34C29 (both alt.)	54775	—	CTH-115
	300	300 - 3/0												
	350	350 - 1/0												
	400	300 - 2												
	450	250 - 4												
RTC-16*	500	250 - 6	2	—	2.20	0.81	1.29	—	1-5/16"	White	YGH34C4 (alt.)	54780	—	CTH-116
	350	350 - 4/0												
	400	400 - 2/0												
	450	450 - 1												
RTC-17*	750-500	4/0 - 6	3	—	2.42	1.36	2.72	.16	2-3/4"	—	—	54785	—	CTH-117
	750	750 - 4/0										54790		

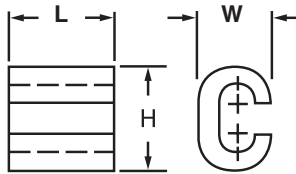
*Items are not LISTED for grounding and bonding applications. BURNDY, T&B, PANDUIT and NSI are registered trademarks of their respective companies



Copper C-Taps

Type CCT

- Manufactured from high conductivity copper alloy
- Used for making tap or parallel copper connections
- Provides consistent reliability with heavy wall construction that prevents relaxation of the joint after installation
- Installation time is reduced because of its “C” shape



CATALOG NUMBER	CONDUCTOR RANGE		APPROXIMATE DIMENSIONS (IN.)			WIRE STRIP LENGTH	INSTALLATION TOOLING		
	RUN	TAP	L	H	W		PENN-UNION TOOL	DIE INDEX	NO. OF CRIMPS
CCT-46	6 Sol. - 4 Str.	6 Sol. - 6 Str.	.63	.75	.44	3/4"	TPU-12B	BG	1
CCT-44	6 Sol. - 4 Str.	4 Sol. - 4 Str.	.63	.81	.44	3/4"		BG	
CCT-24	2 Sol. - 2 Str.	8 Sol. - 4 Str.	.75	1.00	.63	7/8"		C	
CCT-22	2 Sol. - 2 Str.	2 Sol. - 2 Str.	.75	1.00	.63	7/8"		C	
CCT-2020	1/0 Str. - 2/0 Str.	1/0 Str. - 2/0 Str.	.94	1.38	.81	5/8"		O	
CCT-4020	3/0 Str. - 4/0 Str.	1/0 Str. - 2/0 Str.	1.06	1.63	1.00	13/16"		D3	
CCT-4040	3/0 Str. - 4/0 Str.	3/0 Str. - 4/0 Str.	1.06	1.56	1.00	13/16"		D3	

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Copper and Brass Plated Steel Pigtail Connectors

Type PT

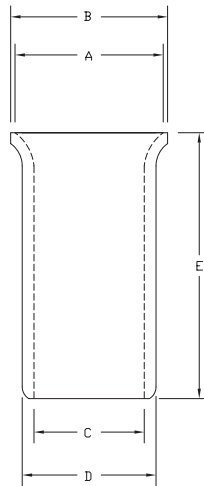


Copper Pigtail Connectors

- Manufactured from seamless copper tube for excellent electrical and mechanical performance

Brass Plated Steel Pigtail Connectors

- Manufactured from malleable steel tubing with brass plating for a quality low resistance connection
- Designed to accommodate a wide range of copper conductor sizes and combinations
- Funneled barrel design allows for easy cable insertion
- Crimp design provides a permanent non-reversible connection



CATALOG NUMBER	CONNECTOR MATERIAL	COPPER CONDUCTOR RANGE (AWG)	APPROXIMATE DIMENSIONS (IN.)					INSTALLATION TOOL
			A	B	C	D	E	
PT-1810	Copper	18-10	.26	.29	.20	.24	.37	HTC-1808
PT-1408	Copper	14-8	.34	.36	.25	.31	.61	
PT-1810S	Brass Plated Steel	18-10	.26	.29	.20	.24	.37	
PT-1408S	Brass Plated Steel	14-8	.34	.36	.25	.31	.61	

See page XXX for pigtail connector crimping tool HTC-1808



Oxide Inhibitors



Cual-Gel

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- Non-melting, non-petroleum base compound that prevents oxidation and corrosion
- Multiple uses with conductors, connectors, and conduits
- Able to perform and protect under various environmental elements
- Has little or no effect on rubber and other insulating materials
- Cleans up easily with soap and water

CATALOG NUMBER	UNIT PACKAGING	CARTON QTY.
CUALGEL4OZ	4 oz. Squeeze Bottle	12
CUALGEL8OZ	8 oz. Squeeze Bottle	12
PTCUALGEL	1 pint Can	1
QTCUALGEL	1 quart Can	1
GALCUALGEL	1 gal. Can	1
5GALCUALGEL	5 gal. Can	1
CUALGEL55GAL	55 gal. Drum	1

Oxide Inhibitors

Cual-Aid #11C

- Use with compression lugs and splices
- Recommended for aluminum to aluminum, aluminum to copper, conduit threads, and bolted applications
- Non-melting, non-petroleum base compound with suspended zinc particles
- Has little or no effect on rubber or other insulating materials



CATALOG NUMBER	UNIT PACKAGING	CARTON QTY.
40ZN011C	4 oz. Squeeze Tube	12
1/2PTN011C	8 oz. Squeeze Bottle	12
PTN011C	1 pint Can	1
QTN011C	1 quart Can	1
GALN011C	1 gal. Can	1
5GALN011C	5 gal. Can	1
55GALN011C	55 gal. Drum	1

Cual-Aid #12C

- Recommended for aluminum to aluminum and aluminum to copper compression applications
- Non-melting, non-petroleum base compound with suspended zinc particles and abrasive grit
- Abrasive grit breaks down surface oxides improving conductivity
- Not for use on threads or bolted applications
- Has little or no effect on rubber or other insulating materials

CATALOG NUMBER	UNIT PACKAGING	CARTON QTY.
1/2PTN012C	8 oz. Squeeze Bottle	12
PTN012C	1 pint Can	1
QTN012C	1 quart Can	1
GALN012C	1 gal. Can	1
5GALN012C	5 gal. Can	1
55GALN012C	55 gal. Drum	1



Copper Blue Pre-Insulated Power Bars Single-Sided Conductor Entry

Type IMLC

Heavy duty copper mechanical connectors:

- Manufactured from high conductivity copper alloy
- Ideal for use in demanding motor applications
- Reusable, ideal for use when installing, testing or replacing motors
- Suitable for use in cabletrays, raceways, ducts and troughs when the conductivity of a copper connection is required



Wide conductor range: 500 kcmil - 18 Sol.

- Allows flexibility in the field and reduces number of connectors in inventory
- Join two or three conductors together



Rated for use with solid, stranded, Hypalon and DLO copper conductors, 600 Volt, 90° C

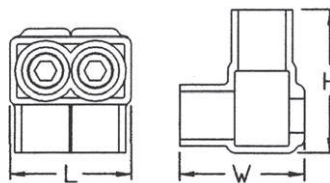
Copper alloy set screws for a lower resistance connection

Supplied with removable access plugs over screw ports

- Provides protection against contaminants

Pre-insulated at factory with high dielectric strength plastisol

- Saves time, eliminates taping, reduces overall installation costs
- Abrasion and chemical resistant
- Will not support combustion



SINGLE SIDED ENTRY

CATALOG NUMBER	NUMBER OF CONDUCTORS	CONDUCTOR RANGE			APPROXIMATE DIMENSIONS (IN.)			
		AWG - CU	DIESEL LOCOMOTIVE CABLE	HYPALON® CABLE	L	W	H	HEX SIZE
IMLC-4-25	2	4 Str. - 18 Sol.	6 (61/24) - 14 (19/24)	6 - 18 AWG	1.32	1.25	1.25	5/32
IMLC-4-35	3				1.92	1.25	1.25	
IMLC-1/0-25	2	1/0 Str. - 8 Sol.	2 (150/24) - 8 (37/24)	1 - 8 AWG	1.70	1.50	1.48	1/4
IMLC-1/0-35	3				2.46	1.50	1.48	
IMLC-350-25	2	350 kcmil - 4 Sol.	4/0 (550/24) - 2 (150/24)	4/0 - 4 AWG	2.41	2.25	2.38	3/8
IMLC-350-35	3				3.52	2.25	2.38	
IMLC-500-25	2	500 kcmil - 4 Sol.	313 (775/24) - 2 (150/24)	4/0 - 4 AWG	2.74	2.38	2.63	3/8
IMLC-500-35	3				3.98	2.38	2.63	

Hypalon® is a registered trademark of DuPont Dow Elastomers L.L.C.

Aluminum Clear/Black Pre-Insulated Power Bars Single-Sided Conductor Entry

Type IPB-S/Type IPBB-S

Manufactured from high strength aluminum alloy

Dual rated for aluminum and copper conductors, 600 Volt, 90°C

Wide conductor range: 750 kcmil - 14 Sol.

- Allows flexibility in the field and reduces number of connectors in inventory

Multiple conductor configurations: 2 through 14 position

- Choose the right connector for the application

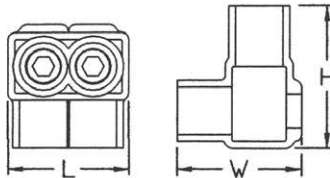
Suitable for use in panelboards, cable trays, raceways, ducts and troughs

Pre-filled with oxide inhibitor, prevents oxidation, moisture and contaminants from entering contact area

Supplied with removable access plugs over screw and conductor ports providing protection against contaminants

Pre-insulated at factory with high dielectric strength plastisol

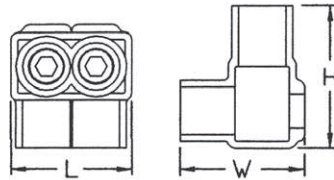
- Black insulation is UV resistant
- Clear insulation allows for visual confirmation that conductor is properly inserted
- Saves time, eliminates taping, reduces overall installation costs
- Abrasion and chemical resistant
- Will not support combustion



SINGLE SIDED ENTRY



CLEAR PART NO.	BLACK PART NO.	NUMBER OF CONDUCTORS	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			
				L	W	H	HEX SIZE
IPB-NA4-2S	IPBB-NA4-2S	2	4 Str. - 14 Sol.	1.39	1.13	1.25	1/8
IPB-NA4-3S	IPBB-NA4-3S	3		1.99	1.13	1.25	
IPB-NA4-4S	IPBB-NA4-4S	4		2.59	1.13	1.25	
IPB-NA4-5S	IPBB-NA4-5S	5		3.19	1.13	1.25	
IPB-NA4-6S	IPBB-NA4-6S	6		3.79	1.13	1.25	
IPB-NA4-8S	IPBB-NA4-8S	8		4.99	1.13	1.25	
IPB-NA4-10S	IPBB-NA4-10S	10		6.19	1.13	1.25	
IPB-NA4-12S	IPBB-NA4-12S	12		7.39	1.13	1.25	
IPB-NA4-14S	IPBB-NA4-14S	14		8.59	1.13	1.25	
IPB-NA2/0-2S	IPBB-NA2/0-2S	2		2/0 Str. - 14 Sol.	1.64	1.32	
IPB-NA2/0-3S	IPBB-NA2/0-3S	3	2.37		1.32	1.38	
IPB-NA2/0-4S	IPBB-NA2/0-4S	4	3.09		1.32	1.38	
IPB-NA2/0-5S	IPBB-NA2/0-5S	5	3.82		1.32	1.38	
IPB-NA2/0-6S	IPBB-NA2/0-6S	6	4.54		1.32	1.38	
IPB-NA2/0-8S	IPBB-NA2/0-8S	8	5.99		1.32	1.38	
IPB-NA2/0-10S	IPBB-NA2/0-10S	10	7.44		1.32	1.38	
IPB-NA2/0-12S	IPBB-NA2/0-12S	12	8.89		1.32	1.38	
IPB-NA2/0-14S	IPBB-NA2/0-14S	14	10.34		1.32	1.38	



SINGLE SIDED ENTRY

Type IPB-S/Type IPBB-S (continued)

CLEAR PART NO.	BLACK PART NO.	NUMBER OF CONDUCTORS	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			
				L	W	H	HEX SIZE
IPB-NA250-2S	IPBB-NA250-2S	2	250 kcmil - 10 Sol.	2.15	2.08	2.13	5/16
IPB-NA250-3S	IPBB-NA250-3S	3		3.15	2.08	2.13	
IPB-NA250-4S	IPBB-NA250-4S	4		4.15	2.08	2.13	
IPB-NA250-5S	IPBB-NA250-5S	5		5.15	2.08	2.13	
IPB-NA250-6S	IPBB-NA250-6S	6		6.15	2.08	2.13	
IPB-NA250-8S	IPBB-NA250-8S	8		8.15	2.08	2.13	
IPB-NA250-10S	IPBB-NA250-10S	10		10.15	2.08	2.13	
IPB-NA250-12S	IPBB-NA250-12S	12		12.15	2.08	2.13	
IPB-NA250-14S	IPBB-NA250-14S	14	14.15	2.08	2.13		
IPB-NA350-2S	IPBB-NA350-2S	2	350 kcmil - 10 Sol.	2.40	2.32	2.50	5/16
IPB-NA350-3S	IPBB-NA350-3S	3		3.53	2.32	2.50	
IPB-NA350-4S	IPBB-NA350-4S	4		4.65	2.32	2.50	
IPB-NA350-5S	IPBB-NA350-5S	5		5.78	2.32	2.50	
IPB-NA350-6S	IPBB-NA350-6S	6		6.90	2.32	2.50	
IPB-NA350-8S	IPBB-NA350-8S	8		9.15	2.32	2.50	
IPB-NA350-10S	IPBB-NA350-10S	10		11.40	2.32	2.50	
IPB-NA350-12S	IPBB-NA350-12S	12		13.65	2.32	2.50	
IPB-NA350-14S	IPBB-NA350-14S	14	15.90	2.32	2.50		
IPB-NA600-2S	IPBB-NA600-2S	2	600 kcmil - 4 Str.	2.80	2.38	2.75	3/8
IPB-NA600-3S	IPBB-NA600-3S	3		4.13	2.38	2.75	
IPB-NA600-4S	IPBB-NA600-4S	4		5.45	2.38	2.75	
IPB-NA600-5S	IPBB-NA600-5S	5		6.78	2.38	2.75	
IPB-NA600-6S	IPBB-NA600-6S	6		8.10	2.38	2.75	
IPB-NA600-8S	IPBB-NA600-8S	8		10.75	2.38	2.75	
IPB-NA600-10S	IPBB-NA600-10S	10		13.40	2.38	2.75	
IPB-NA600-12S	IPBB-NA600-12S	12		16.05	2.38	2.75	
IPB-NA600-14S	IPBB-NA600-14S	14	18.70	2.38	2.75		
IPB-NA750-2S	IPBB-NA750-2S	2	750 kcmil - 2 Str.	3.02	2.75	3.00	3/8
IPB-NA750-3S	IPBB-NA750-3S	3		4.46	2.75	3.00	
IPB-NA750-4S	IPBB-NA750-4S	4		5.89	2.75	3.00	
IPB-NA750-5S	IPBB-NA750-5S	5		7.33	2.75	3.00	
IPB-NA750-6S	IPBB-NA750-6S	6		8.76	2.75	3.00	
IPB-NA750-8S	IPBB-NA750-8S	8		11.63	2.75	3.00	
IPB-NA750-10S	IPBB-NA750-10S	10		14.50	2.75	3.00	
IPB-NA750-12S	IPBB-NA750-12S	12		17.37	2.75	3.00	
IPB-NA750-14S	IPBB-NA750-14S	14	20.24	2.75	3.00		

F

Aluminum Clear/Black Pre-Insulated Power Bars

Double-Sided Conductor Entry

Type IPB-D/Type IPBB-D

Manufactured from high strength aluminum alloy

Dual rated for aluminum and copper conductors, 600 Volt, 90°C

Wide conductor range: 750 kcmil - 14 Sol.

- Allows flexibility in the field and reduces number of connectors in inventory

Multiple conductor configurations: 2 through 14 position

- Choose the right connector for the application

Double sided configuration allows conductors to be installed from either side of connector

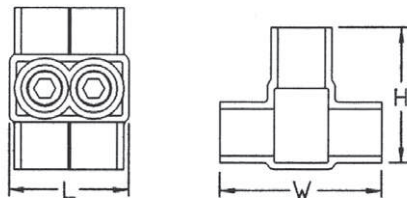
Suitable for use in panelboards, cable trays, raceways, ducts and troughs

Pre-filled with oxide inhibitor, prevents oxidation, moisture and contaminants from entering contact area

Supplied with removable access plugs over screw and conductor ports providing protection against contaminants

Pre-insulated at factory with high dielectric strength plastisol

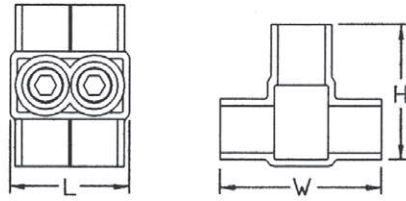
- Black insulation is UV resistant
- Clear insulation allows for visual confirmation that conductor is properly inserted
- Saves time, eliminates taping, reduces overall installation costs
- Abrasion and chemical resistant
- Will not support combustion



DOUBLE SIDED ENTRY

CLEAR PART NO.	BLACK PART NO.	NUMBER OF CONDUCTORS	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			HEX SIZE
				L	W	H	
IPB-NA4-2D	IPBB-NA4-2D	2	4 Str - 14 Sol.	1.39	1.5	1.25	1/8
IPB-NA4-3D	IPBB-NA4-3D	3		1.99	1.5	1.25	
IPB-NA4-4D	IPBB-NA4-4D	4		2.59	1.5	1.25	
IPB-NA4-5D	IPBB-NA4-5D	5		3.19	1.5	1.25	
IPB-NA4-6D	IPBB-NA4-6D	6		3.79	1.5	1.25	
IPB-NA4-8D	IPBB-NA4-8D	8		4.99	1.5	1.25	
IPB-NA4-10D	IPBB-NA4-10D	10		6.19	1.5	1.25	
IPB-NA4-12D	IPBB-NA4-12D	12		7.39	1.5	1.25	
IPB-NA4-14D	IPBB-NA4-14D	14		8.59	1.5	1.25	
IPB-NA2/0-2D	IPBB-NA2/0-2D	2		2/0 Str - 14 Sol.	1.64	1.56	
IPB-NA2/0-3D	IPBB-NA2/0-3D	3	2.37		1.56	1.38	
IPB-NA2/0-4D	IPBB-NA2/0-4D	4	3.09		1.56	1.38	
IPB-NA2/0-5D	IPBB-NA2/0-5D	5	3.82		1.56	1.38	
IPB-NA2/0-6D	IPBB-NA2/0-6D	6	4.54		1.56	1.38	
IPB-NA2/0-8D	IPBB-NA2/0-8D	8	5.99		1.56	1.38	
IPB-NA2/0-10D	IPBB-NA2/0-10D	10	7.44		1.56	1.38	
IPB-NA2/0-12D	IPBB-NA2/0-12D	12	8.89		1.56	1.38	
IPB-NA2/0-14D	IPBB-NA2/0-14D	14	10.34		1.56	1.38	





DOUBLE SIDED ENTRY

Type IPB-D/Type IPBB-D (continued)

CLEAR PART NO.	BLACK PART NO.	NUMBER OF CONDUCTORS	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			HEX SIZE
				L	W	H	
IPB-NA250-2D	IPBB-NA250-2D	2	250 kcmil - 10 Sol.	2.15	2.63	2.13	5/16
IPB-NA250-3D	IPBB-NA250-3D	3		3.15	2.63	2.13	
IPB-NA250-4D	IPBB-NA250-4D	4		4.15	2.63	2.13	
IPB-NA250-5D	IPBB-NA250-5D	5		5.15	2.63	2.13	
IPB-NA250-6D	IPBB-NA250-6D	6		6.15	2.63	2.13	
IPB-NA250-8D	IPBB-NA250-8D	8		8.15	2.63	2.13	
IPB-NA250-10D	IPBB-NA250-10D	10		10.15	2.63	2.13	
IPB-NA250-12D	IPBB-NA250-12D	12		12.15	2.63	2.13	
IPB-NA250-14D	IPBB-NA250-14D	14		14.15	2.63	2.13	
IPB-NA350-2D	IPBB-NA350-2D	2	350 kcmil - 10 Sol.	2.4	3	2.5	5/16
IPB-NA350-3D	IPBB-NA350-3D	3		3.53	3	2.5	
IPB-NA350-4D	IPBB-NA350-4D	4		4.65	3	2.5	
IPB-NA350-5D	IPBB-NA350-5D	5		5.78	3	2.5	
IPB-NA350-6D	IPBB-NA350-6D	6		6.9	3	2.5	
IPB-NA350-8D	IPBB-NA350-8D	8		9.15	3	2.5	
IPB-NA350-10D	IPBB-NA350-10D	10		11.4	3	2.5	
IPB-NA350-12D	IPBB-NA350-12D	12		13.65	3	2.5	
IPB-NA350-14D	IPBB-NA350-14D	14		15.9	3	2.5	
IPB-NA600-2D	IPBB-NA600-2D	2	600 kcmil - 4 Str.	2.8	3	2.75	3/8
IPB-NA600-3D	IPBB-NA600-3D	3		4.13	3	2.75	
IPB-NA600-4D	IPBB-NA600-4D	4		5.45	3	2.75	
IPB-NA600-5D	IPBB-NA600-5D	5		6.78	3	2.75	
IPB-NA600-6D	IPBB-NA600-6D	6		8.1	3	2.75	
IPB-NA600-8D	IPBB-NA600-8D	8		10.75	3	2.75	
IPB-NA600-10D	IPBB-NA600-10D	10		13.4	3	2.75	
IPB-NA600-12D	IPBB-NA600-12D	12		16.05	3	2.75	
IPB-NA600-14D	IPBB-NA600-14D	14		18.7	3	2.75	
IPB-NA750-2D	IPBB-NA750-2D	2	750 kcmil - 2 Str.	3.02	3.38	3	3/8
IPB-NA750-3D	IPBB-NA750-3D	3		4.46	3.38	3	
IPB-NA750-4D	IPBB-NA750-4D	4		5.89	3.38	3	
IPB-NA750-5D	IPBB-NA750-5D	5		7.33	3.38	3	
IPB-NA750-6D	IPBB-NA750-6D	6		8.76	3.38	3	
IPB-NA750-8D	IPBB-NA750-8D	8		11.63	3.38	3	
IPB-NA750-10D	IPBB-NA750-10D	10		14.5	3.38	3	
IPB-NA750-12D	IPBB-NA750-12D	12		17.37	3.38	3	
IPB-NA750-14D	IPBB-NA750-14D	14		20.24	3.38	3	

F

Aluminum Clear/Black Pre-Insulated Power Bars Two Port with Alternate Conductor Entry

Type IPB-A/Type IPBB-A

Manufactured from high strength aluminum alloy

Dual rated for aluminum and copper conductors, 600 Volt, 90°C

Wide conductor range: 750 kcmil - 14 Sol.

- Allows flexibility in the field and reduces number of connectors in inventory

Design is ideal for splicing applications when conductor offset is required

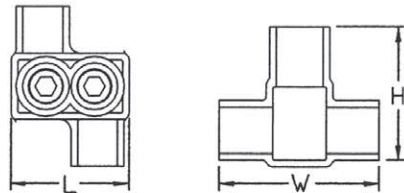
Suitable for use in panelboards, cable trays, raceways, ducts and troughs

Pre-filled with oxide inhibitor, prevents oxidation, moisture and contaminants from entering contact area

Supplied with removable access plugs over screw and conductor ports providing protection against contaminants

Pre-insulated at factory with high dielectric strength plastisol

- Black insulation is UV resistant
- Clear insulation allows for visual confirmation that conductor is properly inserted
- Saves time, eliminates taping, reduces overall installation costs
- Abrasion and chemical resistant
- Will not support combustion



ALTERNATE SIDED ENTRY

CLEAR PART NO.	BLACK PART NO.	NUMBER OF CONDUCTORS	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			HEX SIZE
				L	W	H	
IPB-NA4-2A	IPBB-NA4-2A	2	4 Str. - 14 Sol.	1.39	1.5	1.25	1/8
IPB-NA2/0-2A	IPBB-NA2/0-2A	2	2/0 Str. - 14 Sol.	1.64	1.56	1.38	3/16
IPB-NA250-2A	IPBB-NA250-2A	2	250 kcmil - 10 Sol.	2.15	2.63	2.13	5/16
IPB-NA350-2A	IPBB-NA350-2A	2	350 kcmil - 10 Sol.	2.4	3	2.5	5/16
IPB-NA600-2A	IPBB-NA600-2A	2	600 kcmil - 4 Str.	2.8	3	2.75	3/8
IPB-NA750-2A	IPBB-NA750-2A	2	750 kcmil - 2 Str.	3.02	3.38	3	3/8



Aluminum Clear/Black Pre-Insulated Power Bars Mountable Version with Single Sided Conductor Entry

Type IPBM-S/Type IPBBM-S

Manufactured from high strength aluminum alloy

Dual rated for aluminum and copper conductors, 600 Volt, 90°C

Wide conductor range: 750 kcmil - 14 Sol.

- Allows flexibility in the field and reduces number of connectors in inventory

Designed for applications where secure mounting of connector is required

Suitable for use in panelboards, cable trays, raceways, ducts and troughs

Multiple conductor configurations: 2 through 12 position

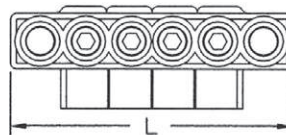
- Choose the right connector for the application

Pre-filled with oxide inhibitor, prevents oxidation, moisture and contaminants from entering contact area

Supplied with removable access plugs over screw and conductor ports providing protection against contaminants

Pre-insulated at factory with high dielectric strength plastisol

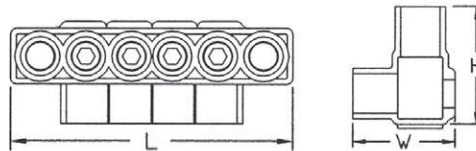
- Black insulation is UV resistant
- Clear insulation allows for visual confirmation that conductor is properly inserted
- Saves time, eliminates taping, reduces overall installation costs
- Abrasion and chemical resistant
- Will not support combustion



SINGLE SIDED ENTRY MOUNTING TYPE

CLEAR PART NO.	BLACK PART NO.	NUMBER OF CONDUCTORS	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			HEX SIZE
				L	W	H	
IPBM-NA2/0-2S	IPBBM-NA2/0-2S	2	2/0 Str. - 14 Sol.	3.09	1.32	1.38	3/16
IPBM-NA2/0-3S	IPBBM-NA2/0-3S	3		3.82	1.32	1.38	
IPBM-NA2/0-4S	IPBBM-NA2/0-4S	4		4.54	1.32	1.38	
IPBM-NA2/0-5S	IPBBM-NA2/0-5S	5		5.27	1.32	1.38	
IPBM-NA2/0-6S	IPBBM-NA2/0-6S	6		5.99	1.32	1.38	
IPBM-NA2/0-8S	IPBBM-NA2/0-8S	8		7.44	1.32	1.38	
IPBM-NA2/0-10S	IPBBM-NA2/0-10S	10		8.89	1.32	1.38	
IPBM-NA2/0-12S	IPBBM-NA2/0-12S	12		10.34	1.32	1.38	

F



SINGLE SIDED ENTRY MOUNTING TYPE

Type IPBM-S/Type IPBBM -S (continued)

CLEAR PART NO.	BLACK PART NO.	NUMBER OF CONDUCTORS	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			HEX SIZE
				L	W	H	
IPBM-NA250-2S	IPBBM-NA250-2S	2	250 kcmil - 10 Sol.	4.15	2.08	2.13	5/16
IPBM-NA250-3S	IPBBM-NA250-3S	3		5.15	2.08	2.13	
IPBM-NA250-4S	IPBBM-NA250-4S	4		6.15	2.08	2.13	
IPBM-NA250-5S	IPBBM-NA250-5S	5		7.15	2.08	2.13	
IPBM-NA250-6S	IPBBM-NA250-6S	6		8.15	2.08	2.13	
IPBM-NA250-8S	IPBBM-NA250-8S	8		10.15	2.08	2.13	
IPBM-NA250-10S	IPBBM-NA250-10S	10		12.15	2.08	2.13	
IPBM-NA250-12S	IPBBM-NA250-12S	12		14.15	2.08	2.13	
IPBM-NA350-2S	IPBBM-NA350-2S	2	350 kcmil - 10 Sol.	4.65	2.32	2.5	5/16
IPBM-NA350-3S	IPBBM-NA350-3S	3		5.78	2.32	2.5	
IPBM-NA350-4S	IPBBM-NA350-4S	4		6.9	2.32	2.5	
IPBM-NA350-5S	IPBBM-NA350-5S	5		8.03	2.32	2.5	
IPBM-NA350-6S	IPBBM-NA350-6S	6		9.15	2.32	2.5	
IPBM-NA350-8S	IPBBM-NA350-8S	8		11.4	2.32	2.5	
IPBM-NA350-10S	IPBBM-NA350-10S	10		13.65	2.32	2.5	
IPBM-NA350-12S	IPBBM-NA350-12S	12		15.9	2.32	2.5	
IPBM-NA600-2S	IPBBM-NA600-2S	2	600 kcmil - 4 Str.	5.45	2.38	2.75	3/8
IPBM-NA600-3S	IPBBM-NA600-3S	3		6.78	2.38	2.75	
IPBM-NA600-4S	IPBBM-NA600-4S	4		8.1	2.38	2.75	
IPBM-NA600-5S	IPBBM-NA600-5S	5		9.43	2.38	2.75	
IPBM-NA600-6S	IPBBM-NA600-6S	6		10.75	2.38	2.75	
IPBM-NA600-8S	IPBBM-NA600-8S	8		13.4	2.38	2.75	
IPBM-NA600-10S	IPBBM-NA600-10S	10		16.05	2.38	2.75	
IPBM-NA600-12S	IPBBM-NA600-12S	12		18.7	2.38	2.75	
IPBM-NA750-2S	IPBBM-NA750-2S	2	750 kcmil - 2 Str.	5.89	2.75	3	3/8
IPBM-NA750-3S	IPBBM-NA750-3S	3		7.33	2.75	3	
IPBM-NA750-4S	IPBBM-NA750-4S	4		8.76	2.75	3	
IPBM-NA750-5S	IPBBM-NA750-5S	5		10.2	2.75	3	
IPBM-NA750-6S	IPBBM-NA750-6S	6		11.63	2.75	3	
IPBM-NA750-8S	IPBBM-NA750-8S	8		14.5	2.75	3	
IPBM-NA750-10S	IPBBM-NA750-10S	10		17.37	2.75	3	
IPBM-NA750-12S	IPBBM-NA750-12S	12		20.24	2.75	3	



Aluminum Clear/Black Pre-Insulated Power Bars Mountable Version with Double-Sided Conductor Entry

Type IPBM-D / Type IPBBM-D

Manufactured from high strength aluminum alloy

Dual rated for aluminum and copper conductors, 600 Volt, 90°C

Wide conductor range: 750 kcmil - 14 Sol.

- Allows flexibility in the field and reduces number of connectors in inventory

Designed for applications where secure mounting of connector is required

Suitable for use in panelboards, cable trays, raceways, ducts and troughs

Double sided configuration allows conductors to be installed from either side of connector

Multiple conductor configurations: 2 through 12 position

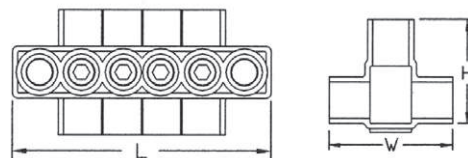
- Choose the right connector for the application

Pre-filled with oxide inhibitor, prevents oxidation, moisture and contaminants from entering contact area

Supplied with removable access plugs over screw and conductor ports providing protection against contaminants

Pre-insulated at factory with high dielectric strength plastisol

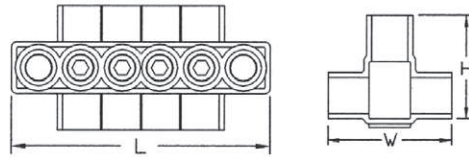
- Black insulation is UV resistant
- Clear insulation allows for visual confirmation that conductor is properly inserted
- Saves time, eliminates taping, reduces overall installation costs
- Abrasion and chemical resistant
- Will not support combustion



DOUBLE SIDED ENTRY MOUNTING TYPE

CLEAR PART NO.	BLACK PART NO.	NUMBER OF CONDUCTORS	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			HEX SIZE
				L	W	H	
IPBM-NA2/0-2D	IPBBM-NA2/0-2D	2	2/0 Str. - 14 Sol.	3.09	1.56	1.38	3/16
IPBM-NA2/0-3D	IPBBM-NA2/0-3D	3		3.82	1.56	1.38	
IPBM-NA2/0-4D	IPBBM-NA2/0-4D	4		4.54	1.56	1.38	
IPBM-NA2/0-5D	IPBBM-NA2/0-5D	5		5.27	1.56	1.38	
IPBM-NA2/0-6D	IPBBM-NA2/0-6D	6		5.99	1.56	1.38	
IPBM-NA2/0-8D	IPBBM-NA2/0-8D	8		7.44	1.56	1.38	
IPBM-NA2/0-10D	IPBBM-NA2/0-10D	10		8.89	1.56	1.38	
IPBM-NA2/0-12D	IPBBM-NA2/0-12D	12		10.34	1.56	1.38	

F



DOUBLE SIDED ENTRY MOUNTING TYPE

Type IPBM-D/Type IPBBM -D (continued)

CLEAR PART NO.	BLACK PART NO.	NUMBER OF CONDUCTORS	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			HEX SIZE
				L	W	H	
IPBM-NA250-2D	IPBBM-NA250-2D	2	250 kcmil - 10 Sol.	4.15	2.63	2.13	5/16
IPBM-NA250-3D	IPBBM-NA250-3D	3		5.15	2.63	2.13	
IPBM-NA250-4D	IPBBM-NA250-4D	4		6.15	2.63	2.13	
IPBM-NA250-5D	IPBBM-NA250-5D	5		7.15	2.63	2.13	
IPBM-NA250-6D	IPBBM-NA250-6D	6		8.15	2.63	2.13	
IPBM-NA250-8D	IPBBM-NA250-8D	8		10.15	2.63	2.13	
IPBM-NA250-10D	IPBBM-NA250-10D	10		12.15	2.63	2.13	
IPBM-NA250-12D	IPBBM-NA250-12D	12		14.15	2.63	2.13	
IPBM-NA350-2D	IPBBM-NA350-2D	2	350 kcmil - 10 Sol.	4.65	3	2.5	5/16
IPBM-NA350-3D	IPBBM-NA350-3D	3		5.78	3	2.5	
IPBM-NA350-4D	IPBBM-NA350-4D	4		6.9	3	2.5	
IPBM-NA350-5D	IPBBM-NA350-5D	5		8.03	3	2.5	
IPBM-NA350-6D	IPBBM-NA350-6D	6		9.15	3	2.5	
IPBM-NA350-8D	IPBBM-NA350-8D	8		11.4	3	2.5	
IPBM-NA350-10D	IPBBM-NA350-10D	10		13.65	3	2.5	
IPBM-NA350-12D	IPBBM-NA350-12D	12		15.9	3	2.5	
IPBM-NA600-2D	IPBBM-NA600-2D	2	600 kcmil - 4 Str.	5.45	3	2.75	3/8
IPBM-NA600-3D	IPBBM-NA600-3D	3		6.78	3	2.75	
IPBM-NA600-4D	IPBBM-NA600-4D	4		8.1	3	2.75	
IPBM-NA600-5D	IPBBM-NA600-5D	5		9.43	3	2.75	
IPBM-NA600-6D	IPBBM-NA600-6D	6		10.75	3	2.75	
IPBM-NA600-8D	IPBBM-NA600-8D	8		13.4	3	2.75	
IPBM-NA600-10D	IPBBM-NA600-10D	10		16.05	3	2.75	
IPBM-NA600-12D	IPBBM-NA600-12D	12		18.7	3	2.75	
IPBM-NA750-2D	IPBBM-NA750-2D	2	750 kcmil - 2 Str.	5.89	3.38	3	3/8
IPBM-NA750-3D	IPBBM-NA750-3D	3		7.33	3.38	3	
IPBM-NA750-4D	IPBBM-NA750-4D	4		8.76	3.38	3	
IPBM-NA750-5D	IPBBM-NA750-5D	5		10.2	3.38	3	
IPBM-NA750-6D	IPBBM-NA750-6D	6		11.63	3.38	3	
IPBM-NA750-8D	IPBBM-NA750-8D	8		14.5	3.38	3	
IPBM-NA750-10D	IPBBM-NA750-10D	10		17.37	3.38	3	
IPBM-NA750-12D	IPBBM-NA750-12D	12		20.24	3.38	3	



Aluminum Clear/Black Pre-Insulated In-Line Splicer/Reducers

Type IISR/Type IISRB

Manufactured from high strength aluminum alloy

Dual rated for aluminum and copper conductors, 600 Volt, 90°C

Wide conductor range: 500 kcmil - 14 Sol.

- Allows flexibility in the field and reduces number of connectors in inventory

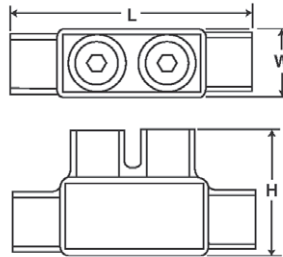
Suitable for use in cable trays, raceways, ducts and troughs

Pre-filled with oxide inhibitor, prevents oxidation, moisture and contaminants from entering contact area

Supplied with removable access plugs over screw and conductor ports providing protection against contaminants

Pre-insulated at factory with clear high dielectric strength plastisol

- Black insulation is UV resistant
- Saves time, eliminates taping, reduces overall installation costs
- Abrasion and chemical resistant
- Will not support combustion



F

CLEAR PART NO.	BLACK PART NO.	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			HEX SIZE
			L	W	H	
IISR-2	IISRB-2	2 Str. - 14 Sol.	2.38	.75	1.22	5/32
IISR-1/0	IISRB-1/0	1/0 Str. - 14 Sol.	2.91	.91	1.38	3/16
IISR-250	IISRB-250	250 kcmil - 10 Sol.	4.00	1.19	2.10	5/16
IISR-350	IISRB-350	350 kcmil - 10 Sol.	4.63	1.34	2.35	5/16
IISR-500	IISRB-500	500 kcmil - 6 Str.	5.25	1.63	2.63	3/8

Copper Alloy Split Bolt Connectors

Types S and SEL

- Manufactured from high strength copper alloy - highly resistant to corrosion and season cracking
- For use with a wide range of copper solid, compact, compressed, concentric, copperweld conductors, and rebar
- Approved for electrical power, grounding/bonding, and direct burial applications



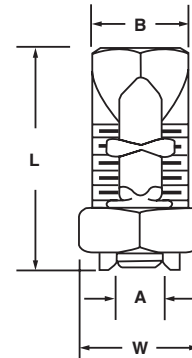
Application/Use:

- **Type S** is for use with two conductors in electrical power applications; 2 conductors or conductor to rebar in grounding/bonding and direct burial applications in earth and concrete
- **Type SEL** is for use with two or three conductors in electrical power, grounding/bonding, and direct burial applications in earth and concrete
- DB permanently marked on head for conductor sizes up to 500 kcmil



High Quality Design:

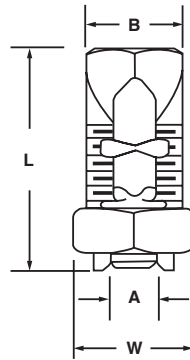
- True hex design allows easy installation with standard tooling
- Under torque, this design provides high contact pressure between conductors or conductor to rebar
- Pressure bar design features give assurance of high “pull-out” and secure connection on all combinations of conductors
- Wide wire range
- Rated for copper conductors, 600 V, 90°C



Installation:

- Use with torque wrench, standard socket, box or open-end wrenches
- Reusable with proper installation practice

Continued on next page...



Type S - Two Conductors

CATALOG NUMBER	RANGE OF EQUAL RUN & TAP	MIN. TAP W/ ONE MAX. MAIN	MAX. CONDUCTOR COPPERWELD		UL ONLY REBAR W/ 6 OR 8 AWG	APPROXIMATE DIMENSIONS (IN.)				TORQUE (IN-LBS)
			STR.	TYPE A		L	W	B	A	
S-10*	16 Str. - 10 Str.	16 Str.	-	-	-	.72	.50	.34	.13	80
S-8*	16 Str. - 8 Str.	16 Str.	-	-	-	.84	.50	.38	.15	80
S-6*	10 Sol. - 6 Sol.	16 Sol.	-	-	-	1.05	.63	.50	.17	165
S-4*	8 Sol. - 4 Sol.	16 Sol.	3 No. 12	8A	-	1.05	.69	.56	.22	165
S-3*	6 Sol. - 2 Sol.	12 Sol.	3 No. 9	5A	-	1.32	.81	.69	.33	275
S-2*	6 Sol. - 2 Str.	14 Str.	3 No. 7	3A	-	1.32	.81	.69	.33	275
S-1/0*	4 Sol. - 1/0 Str.	14 Sol.	3 No. 6	2A	-	1.64	.88	.75	.38	385
S-2/0	2 Sol. - 2/0 Str.	14 Str.	3 No. 5	-	#3 (3/8)	1.82	1.00	.81	.42	385
S-3/0	2 Sol. - 3/0 Str.	12 Sol.	7 No. 7	-	-	2.00	1.13	.88	.47	500
S-4/0-250	1/0 Sol. - 250 kcmil	10 Sol.	7 No. 5	-	#4 (1/2)	2.08	1.31	1.00	.58	650
S-350+	4/0 Str. - 350 kcmil	8 Sol.	19 No. 7	-	#5 (5/8)	2.63	1.63	1.50	.75	650
S-500+	250 - 500 kcmil	8 Sol.	19 No. 6	-	#6 (3/4)	3.00	1.81	1.63	.83	825
S-750++	350 - 750 kcmil	8 Sol.	19 No. 5	-	-	3.75	2.13	1.94	1.03	1000
S-1000++	500 - 1000 kcmil	8 Sol.	-	-	-	4.00	2.50	2.25	1.22	1100

+UL Only Grounding, Bonding, Direct Burial (350 & 500)

++Not Approved Grounding, Bonding, Direct Burial

* RUS REA Accepted

Type SEL - Two or Three Conductors

CATALOG NUMBER	RANGE OF EQUAL RUN & TAP	MIN. TAP W/ ONE MAX. MAIN	MAX. CONDUCTOR COPPERWELD		APPROXIMATE DIMENSIONS (IN.)				TORQUE (IN-LBS)
			STR.	TYPE A	L	W	B	A	
SEL-8*	16 Str. - 8 Str.	16 Str.	-	-	.84	.50	.38	.14	80
SEL-6*	10 Sol. - 6 Sol.	16 Sol.	-	-	1.09	.63	.50	.17	165
SEL-4*	8 Sol. - 4 Sol.	16 Sol.	3 No. 12	8A	1.27	.69	.56	.22	165
SEL-2*	6 Sol. - 2 Str.	14 Str.	3 No. 7	3A	1.55	.81	.69	.33	275

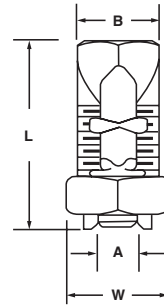
CONNECTOR TYPE	POWER	UL-467 GROUNDING			CSA C22.2 NO. 41 GROUNDING		
	UL 486A-B CSA 22.2 NO. 65 WIRE RANGE	UL GROUNDING MAX. WIRE	GROUNDING & BONDING	DIRECT BURIAL REBAR	CSA GROUNDING MAX. WIRE	GROUNDING & BONDING	DIRECT BURIAL
S SEL	16 Str. - 1000 kcmil	500 kcmil	Yes	Yes	250 kcmil	Yes	Yes

Copper Alloy Split Bolt Connectors

Type SW

For copper to copper, copper to aluminum & aluminum to aluminum

- Manufactured from high strength copper alloy - highly resistant to corrosion and season cracking
- True hex design allows easy installation with standard tooling
- The design provides, under torque, high contact pressure between conductors
- Electro-tin plated bolt, nut, spacer, and pressure bar
- Use of an oxide inhibiting compound is recommended with this connector



CU
90°C

CATALOG NUMBER	COPPER AND ALUMINUM		ACSR RANGE OF MAIN OR TAP	GUY STR. (IN.)	MAX. CONDUCTOR COPPERWELD		APPROXIMATE DIMENSIONS (IN.)				TORQUE (IN-LBS)
	RANGE OF EQUAL MAIN & TAP	MIN. TAP WITH ONE MAX. MAIN			STR.	TYPE A	L	W	B	A	
SW-3	14 Str. - 8 Str.	14 Str.	8	.16	-	-	1.11	.63	.44	.17	165
SW-4	10 Str. - 6 Str.	10 Sol.	6	.22	3 No. 12	8A	1.26	.69	.50	.22	165
SW-5▲	8 Sol. - 4 Str.*	8 Sol.	6-4	.25	3 No. 9	5A	1.55	.81	.63	.33	275
SW-6▲	8 Sol. - 2 Str.	8 Sol.	6-2	.31	3 No. 7	3A	1.55	.81	.63	.33	275

▲ RUS accepted

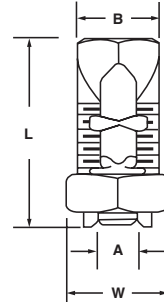
*UL486A-B listed with 2 Sol. cu

Copper Alloy Split Bolt Connectors

Type SW

For copper to copper*

- Made from high strength copper alloy - highly resistant to corrosion and season cracking
- True hex design allows easy installation with standard tooling
- The design provides, under torque, high contact pressure between conductors
- Electro-tin plated bolt, nut, spacer, and pressure bar



CU
90°C

CATALOG NUMBER	COPPER CONDUCTOR RANGE*		ALUMINUM CONDUCTOR RANGE (NOT UL LISTED)		COPPERWELD MAX. STR.	APPROXIMATE DIMENSIONS (IN.)				TORQUE (IN-LBS)
	EQUAL MAIN & TAP	MIN. TAP WITH ONE MAX. MAIN	ALUMINUM	ACSR		L	W	B	A	
SW-1▲	16 Str. - 10 Str.	16 Str.	16 Str. - 10 Str.	-	-	.83	.50	.38	.14	80
SW-2▲	16 Str. - 8 Str.	16 Str.	16 Str. - 8 Str.	-	-	.83	.50	.38	.14	80
SW-7▲	6 Sol. - 1/0 Str.	10 Sol.	6 Sol. - 1/0 Str.	6-1	3 No. 6	1.66	.88	.69	.38	385
SW-8▲	6 Str. - 2/0 Str.	10 Sol.	6 Str. - 2/0 Str.	6-1/0	3 No. 5	1.79	1.00	.75	.42	385
SW-9A	4 Str. - 3/0 Str.	6 Sol.	4 Str. - 3/0 Str.	6-2/0	7 No. 7	2.00	1.19	1.06	.48	500
SW-10	4 Str. - 250 kcmil	4 Str.	4 Str. - 250 kcmil	4-4/0	7 No. 5	2.33	1.31	1.13	.58	650
SW-11	3/0 Str. - 350 kcmil	1 Sol.	3/0 Str. - 350 kcmil	2/0-336.4 18/1	19 No. 7	2.63	1.50	1.63	.75	650
SW-12	3/0 Str. - 500 kcmil	1/0 Str.	3/0 Str. - 500 kcmil	2/0-477 18/1	19 No. 6	3.00	1.44	1.63	.83	825
SW-13	250 - 750 kcmil	2/0 Str.	250 - 750 kcmil	4/0-666.6	19 No. 5	3.75	2.13	1.94	1.02	1000
SW-14	350 - 1000 kcmil	4/0 Str.	350 - 1000 kcmil	300-900	-	4.00	2.50	2.25	1.22	1100

*Can be used on aluminum conductor, however they are not UL listed for that application

▲ RUS accepted



Aluminum Split Bolt Connectors

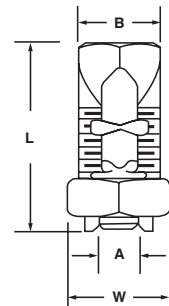
Type SWA

For aluminum to aluminum, copper to aluminum & copper to copper

- Made from high strength, heat treated aluminum alloy - highly resistant to corrosion
- True hex design allows easy installation with standard tooling
- The design provides, under torque, high contact pressure between conductors
- Electro-tin plated bolt, nut, spacer, and pressure bar
- Meets and exceeds requirements of the UL486A-B standard
- Use of an oxide inhibitor is recommended with this connector



CATALOG NUMBER	RANGE OF EQUAL MAIN & TAP (COPPER AND ALUMINUM)	APPROXIMATE DIMENSIONS (IN.)				TORQUE (IN-LBS)
		L	W	B	A	
SWA-7	6 Sol. - 1/0 Str.	1.81	1.00	.75	.38	385
SWA-8	2 Sol. - 2/0 Str.	2.12	1.12	.88	.42	390
SWA-10	1/0 Str. - 250 kcmil	2.63	1.50	.19	.58	650
SWA-11	2/0 Str. - 350 kcmil	2.91	1.63	1.31	.75	650
SWA-12	3/0 Str. - 500 kcmil	3.28	1.81	1.44	.83	825



F

Bronze Service Post Connectors

Type SSS and SCS

Male design

- Manufactured from high copper content wrought alloy for maximum conductivity
- Designed to ground one or two cables to steel structures, bus bars, or transformers
- True hex design for body and nut simplifies installation with standard socket, box, or open end wrenches
- Split bolt design provides maximum conductor pull-out performance
- UL listed for use as a power connector per UL486A-B and for grounding and bonding applications per UL467
- Suitable for direct burial in earth or concrete
- Suffix “-A1” for 1/2” longer mounting stud
- For stud mounting hardware, suffix catalog number with “-SMH”



CATALOG NUMBER	CONDUCTOR RANGE	CATALOG NUMBER	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)				
				STUD THREAD SIZE	NUT HEX	C	H	BODY HEX
FIG. 1 (ONE CABLE)		FIG. 2 (TWO CABLES)						
SSS-0	12 Sol. - 8 Str.	SCS-0	12 Sol. - 8 Str.	1/4-20	1/2	.50	.63	3/8
SSS-0A1		SCS-0A1				1.00		
SSS-1	8 Sol. - 7 Str.	SCS-1	10 Sol. - 7 Str.	1/4-20	11/16	.50	.88	1/2
SSS-1A1		SCS-1A1				1.00		
SSS-2	10 Sol. - 4 Str.	SCS-2	10 Sol. - 4 Str.	5/16-18	3/4	.56	.94	9/16
SSS-2A1		SCS-2A1				1.00		
SSS-3	6 Sol. - 3 Str.	SCS-3	10 Sol. - 3 Str.	3/8-16	13/16	.63	1.06	5/8
SSS-3A1		SCS-3A1				1.13		
SSS-4	4 Str. - 2 Str.	SCS-4	10 Sol. - 2 Str.	3/8-16	7/8	.63	1.06	11/16
SSS-4A1		SCS-4A1				1.13		
SSS-5	6 Sol. - 1/0 Str.	SCS-5	2 Sol. - 1/0 Str.	1/2-13	1	.75	1.31	3/4
SSS-5A1		SCS-5A1				1.25		
SSS-6	1 Sol. - 2/0 Str.	SCS-6	2 Sol. - 2/0 Str.	1/2-13	1 1/8	.75	1.44	7/8
SSS-6A1		SCS-6A1				1.25		
SSS-8	3/0 Sol. - 4/0 Str.	SCS-8	1 Sol. - 4/0 Str.	5/8-11	1 3/8	1.00	1.69	1 1/8
SSS-8A1		SCS-8A1				1.50		
SSS-9	4/0 Str. - 350 kcmil	SCS-9	1 Str. - 350 kcmil	5/8-11	1 1/2	1.00	2.00	1 1/4
SSS-9A1		SCS-9A1				1.50		
SSS-10	250 - 500 kcmil	SCS-10	3/0 Str. - 500 kcmil	3/4-10	1 13/16	1.38	2.31	1 1/2
SSS-10A1		SCS-10A1				1.75		
*SSS-11	300 - 750 kcmil	*SCS-11	350 - 750 kcmil	3/4-10	2 1/4	1.38	2.50	1 7/8
*SSS-11A1		*SCS-11A1				1.88		
*SSS-12	750 - 1000 kcmil	*SCS-12	500 - 1000 kcmil	1-8	2 5/8	1.50	3.00	2 3/8
*SSS-12A1		*SCS-12A1				2.00		

*UL listing is limited to 500 kcmil

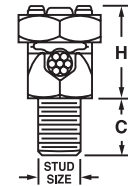


FIG. 1

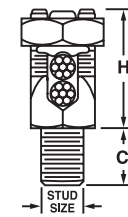


FIG. 2



Bronze Service Post Connectors

Type STS and SDS

Female design

- Manufactured from high copper content wrought alloy for maximum conductivity
- Designed to ground one or two cables to steel structures, bus bars, or transformers
- True hex design for body and nut simplifies installation with standard socket, box, or open end wrenches
- Split bolt design provides maximum conductor pull-out performance
- UL listed for use as a power connector per UL486A-B and for grounding and bonding applications per UL467
- Suitable for direct burial in earth or concrete

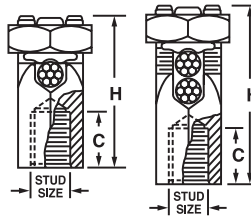
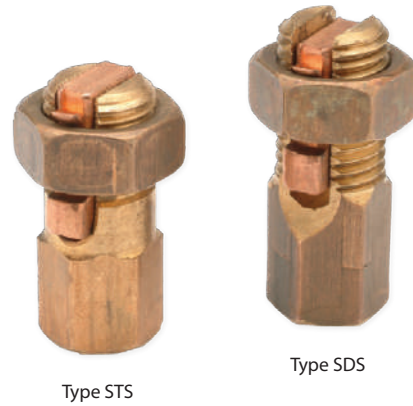


FIG. 1

FIG. 2

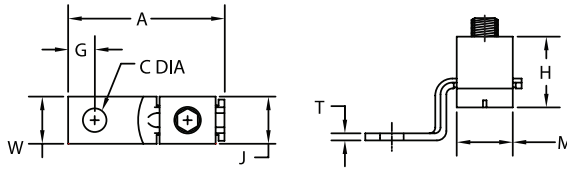
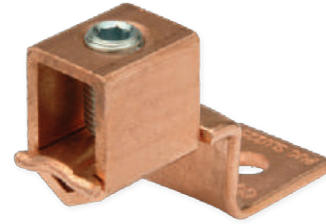
CATALOG NUMBER	CONDUCTOR RANGE	CATALOG NUMBER	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)				
				STUD THREAD SIZE	NUT HEX	C	H	BODY HEX
FIG. 1 (ONE CABLE)		FIG. 2 (TWO CABLES)						
STS-0	12 Sol. - 8 Str.	SDS-0	12 Sol. - 8 Str.	1/4-20	1/2	.25	.91	3/8
STS-1	10 Sol. - 7 Str.	SDS-1	10 Sol. - 7 Str.	1/4-20	11/16	.25	1.13	1/2
STS-2	8 Sol. - 4 Str.	SDS-2	10 Sol. 4 Str.	5/16-18	3/4	.31	1.44	9/16
STS-3	6 Str. - 3 Str.	SDS-3	10 Sol. - 3 Str.	3/8-16	13/16	.38	1.50	5/8
STS-4	6 Str. - 2 Str.	SDS-4	10 Sol. - 2 Str.	3/8-16	7/8	.38	1.63	11/16
STS-5	2 Sol. - 1/0 Str.	SDS-5	2 Sol. - 1/0 Str.	1/2-13	1	.44	1.88	3/4
STS-6	1 Sol. - 2/0 Str.	SDS-6	2 Sol. - 2/0 Str.	1/2-13	1 1/8	.50	2.06	7/8
STS-8	1/0 Str. - 4/0 Str.	SDS-8	1 Sol. - 4/0 Str.	5/8-11	1 3/8	.63	2.38	1 1/8
STS-9	4/0 Str. - 350 kcmil	SDS-9	1 Str. - 350 kcmil	5/8-11	1 1/2	.63	2.63	1 1/4
STS-10	300 - 500 kcmil	SDS-10	3/0 Str. - 500 kcmil	3/4-10	1 13/16	.75	3.13	1 1/2
*STS-11	600 - 750 kcmil	*SDS-11	350 - 750 kcmil	3/4-10	2 1/4	.88	3.50	2
*STS-12	750 - 1000 kcmil	*SDS-12	500 - 1000 kcmil	1-8	2 5/8	1.13	4.13	2 3/8

*UL listing is limited to 500 kcmil

Copper Mechanical Lugs - One Hole, Single Collar

Types SLU and SAU

- Manufactured from electrolytic copper for maximum conductivity and strength
- Unique design of the concave pressure bar and V-bottom collar assures positive contact and firm permanent grip
- Offset tongue for joining a wide range of cable to equipment pads or bars
- Plated steel set screws resist corrosion
- For tin plating, suffix catalog number “-TN”



CATALOG NUMBER	COPPER CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)								AMPERE RATING NEC
		A	W	G	C (DIA.)	T	M	H	J	
SLU-25†*	10 Str. - 14 Str.	.91	.31	.19	.16	.07	.28	.36	.25	25
SLU-35†	6 Str. - 14 Str.	1.31	.38	.23	.20	.07	.43	.50	.33	35-50
SAU-70†	4 Str. - 14 Str.	1.41	.50	.25	.27	.08	.43	.56	.38	70
SLU-70†	2 Str. - 8 Str.	1.55	.50	.25	.27	.09	.50	.65	.47	70-90
SLU-125	1/0 Str. - 8 Str.	1.97	.63	.50	.27	.13	.63	.88	.62	125
SLU-175	3/0 Str. - 4 Str.	2.19	.75	.44	.41	.13	.75	1.03	.71	175
SLU-225	4/0 Str. - 2 Str.	2.38	1.00	.47	.34	.13	1.00	1.17	.75	225
SLU-300	350 kcmil - 1/0 Str.	3.16	1.00	.50	.41	.19	1.23	1.39	1.00	300
SLU-400	500 kcmil - 1/0 Str.	4.25	1.50	.88	.41	.19	1.50	1.57	1.16	400
SLU-650	1000 - 600 kcmil	4.63	2.00	1.16	.53	.25	1.88	2.34	1.68	650

† Slotted screw

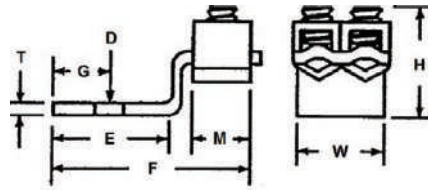
* UL listed and CSA certified



Copper Mechanical Lugs - One Hole, Double Collar

Type LU

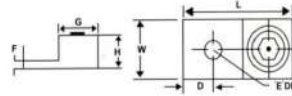
- Manufactured from electrolytic copper for maximum conductivity and strength
- Unique design of the concave pressure bar and V-bottom collar assures positive contact and firm, permanent grip
- Offset tongue for joining a wide range of cable to equipment pads or bars
- Plated steel set screws resist corrosion
- For tin plating, suffix catalog number “-TN”



CATALOG NUMBER	COPPER CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)								AMPERE RATING NEC
		D (DIA.)	E	F	G	H	M	T	W	
LU-2	4/0 Str. - 2/0 Str.	.41	1.94	3.34	.94	1.88	1.00	.18	1.50	400
LU-4	350 kcmil - 1/0 Str.	.41	1.75	3.50	.66	2.22	1.25	.19	1.75	600
LU-6	500 kcmil - 4/0 Str.	.53	2.19	4.44	.84	2.56	1.50	.25	2.00	800

ALUMINIUM SINGLE BARREL CONNECTORS – ONE HOLE MOUNT

- Made of high strength aluminium - 6061-T6
- Used for copper and or aluminium conductors.
- Electro - Tin plated for low contact resistance and protection against corrosion.
- East installation, no tools required.
- Connectors are re-usable.
- cULus 486B listed
- Rated 600 volts / 90°C

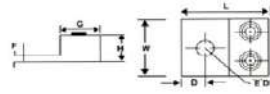


PART NO	CONDUCTOR RANGE		DIMENSION IN INCHES				
	MIN	MAX	L	W	D	E	BOLT HOLE
LA6	14 AWG	4 STR	1.10	0.50	0.23	0.09	1/4
LA2	14 AWG	2 STR	1.16	0.50	0.30	0.11	1/4
LA1/0	14 AWG	1/0 STR	1.46	0.63	0.44	0.19	1/4
LA2/0	14 AWG	2/0 STR	1.46	0.63	0.44	0.19	1/4
LA250	6 STR	250 KCMIL	2.00	0.86	0.50	0.25	5/16
LA300	6 STR	300 KCMIL	2.00	0.86	0.47	0.25	5/16
LA350	6 STR	350 KCMIL	2.25	1.25	0.50	0.25	3/8
LA500	4 STR	500 KCMIL	2.81	1.50	0.75	0.32	3/8
LA600	2 STR	600 KCMIL	3.19	1.50	0.81	0.44	3/8
LA800	300 KCMIL	800 KCMIL	3.37	1.75	0.87	0.50	5/8
LA1000	500 KCMIL	1000 KCMIL	3.37	1.75	0.87	0.50	5/8

F

ALUMINIUM TWO BARREL CONNECTORS – ONE HOLE MOUNT

- Made of high strength aluminium - 6061-T6
- Used for copper and or aluminium conductors.
- Electro - Tin plated for low contact resistance and protection against corrosion.
- East installation, no tools required.
- Connectors are re-usable.
- cULus 486B listed
- Rated 600 volts / 90°C

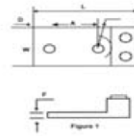


PART NO	CONDUCTOR RANGE		DIMENSION IN INCHES				
	MIN	MAX	L	W	D	E	BOLT HOLE
L2A0	14 AWG	1/0 STR	1.46	1.22	0.44	0.19	1/4
L2A2/0	14 AWG	2/0 STR	1.46	1.25	0.42	0.19	1/4
L2A250	6 STR	250 KCMIL	2.56	1.64	0.88	0.25	3/8
L2A350	6 STR	350 KCMIL	2.87	1.91	0.88	0.25	1/2
L2A600	2 STR	600 KCMIL	3.19	2.40	0.63	0.44	1/2
L2A800*	300 KCMIL	800 KCMIL	3.37	3.19	0.88	0.50	5/8
L2A1000*	500 KCMIL	1000 KCMIL	3.37	3.19	0.88	0.50	5/8

* Not UL Listed

ALUMINIUM TWO BARREL CONNECTORS - TWO HOLE MOUNT

- Made of high strength aluminium - 6061-T6
- Used for copper and or aluminium conductors.
- Electro - Tin plated for low contact resistance and protection against corrosion.
- East installation, no tools required.
- Connectors are re-usable.
- cULus 486B listed
- Rated 600 volts / 90°C



PART NO	CONDUCTOR RANGE		STUD HOLE	DIMENSION IN INCHES					
	MIN	MAX		L	W	F	D	A	FIG NO
L2A3502	6 STR	350 KCMIL	1/2	4.12	1.91	0.31	0.62	1.75	1
L2A6002	4 STR	600 MCM	1/2	5.58	2.40	0.44	0.62	1.75	2
L2A8002*	350 KCMIL	800 MCM	1/2	5.82	3.19	0.50	0.62	1.75	2

* Not UL Listed

ALUMINIUM THREE BARREL CONNECTORS - TWO HOLE MOUNT

- Made of high strength aluminium - 6061-T6
- Used for copper and or aluminium conductors.
- Electro - Tin plated for low contact resistance and protection against corrosion.
- East installation, no tools required.
- Connectors are re-usable.
- cULus 486B listed
- Rated 600 volts / 90°C

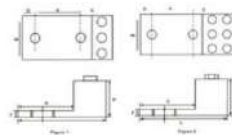


FIG. 1



FIG. 2

PART NO	CONDUCTOR RANGE		STUD HOLE	DIMENSION IN INCHES					
	MIN	MAX		L	W	F	D	A	FIG NO
L3A3/02	6 STR	3/0 STR	1/2	3.87	2.81	0.31	0.62	1.75	1
L3A2502	6 STR	250 MCM	1/2	4.12	2.83	0.31	0.62	1.75	1
L3A3502	6 STR	350 MCM	1/2	4.12	3.00	0.31	0.62	1.75	1
L3A6002	2 STR	600 MCM	1/2	5.58	3.75	0.44	0.62	1.75	2
L3A8002*	300 MCM	800 MCM	1/2	5.82	4.50	0.50	0.62	1.75	2
L3A10002*	500 MCM	1000 MCM	1/2	5.82	4.54	0.50	0.62	1.75	2

* Not UL Listed

ALUMINIUM THREE BARREL CONNECTORS – FOUR HOLE MOUNT

- Made of high strength aluminium - 6061-T6
- Used for copper and or aluminium conductors.
- Electro - Tin plated for low contact resistance and protection against corrosion.
- East installation, no tools required.
- Connectors are re-usable.
- cULus 486B listed
- Rated 600 volts / 90°C

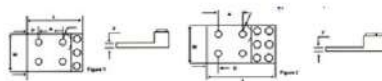


FIG. 1



FIG. 2

PART NO	CONDUCTOR RANGE		STUD HOLE	DIMENSION IN INCHES					
	MIN	MAX		L	W	F	D	A	FIG NO
L3A3/04	6 STR	3/0 STR	3/8	3.87	2.81	0.31	0.62	1.75	1
L3A2504	6 STR	250 KCMIL	1/2	4.12	2.83	0.31	0.62	1.75	1
L3A3504	6 STR	350 KCMIL	1/2	4.12	3	0.31	0.62	1.75	1
L3A6004	2 STR	600 MCM	1/2	5.58	3.75	0.44	0.62	1.75	2
L3A8004*	350 KCMIL	800 MCM	1/2	5.82	4.5	0.5	0.62	1.75	2
L3A10004*	500 KCMIL	1000 MCM	1/2	5.85	4.55	0.5	0.62	1.75	2

* Not UL Listed

ALUMINIUM FOUR BARREL CONNECTORS – FOUR HOLE MOUNT

- Made of high strength aluminium - 6061-T6
- Used for copper and or aluminium conductors.
- Electro - Tin plated for low contact resistance and protection against corrosion.
- East installation, no tools required.
- Connectors are re-usable.
- Rated 600 volts / 90°C

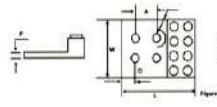
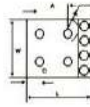


FIG. 1

FIG. 2

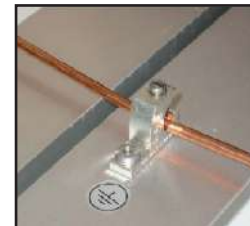


PART NO	CONDUCTOR RANGE		STUD HOLE	DIMENSION IN INCHES					
	MIN	MAX		L	W	F	D	A	FIG NO
LA4M4250	6 STR	250 KCMIL	1/2	4.12	3.69	0.31	0.62	1.75	1
LA4M4350	6 STR	350 KCMIL	1/2	4.12	3.94	0.31	0.62	1.75	1
LA4D4600	2 STR	600 MCM	1/2	5.58	5.00	0.44	0.62	1.75	2
LA4D4800	350 KCMIL	800 MCM	1/2	5.82	5.62	0.50	0.62	1.75	2

COPPER LAY IN LUGS

- Made from high strength copper alloy
- Acceptable for direct burial earth or concrete.
- Use with copper conductor only.
- Lay in feature
- cULus 467 listed.

Great For Solar Panel Grounding



PART NO	CONDUCTOR RANGE		SPECIFICATIONS
	MIN	MAX	
CL50DB	14 AWG	4 AWG	With Stainless Steel Screw
CL50DBTN	14 AWG	4 AWG	Tin Plated With Stainless Steel Screw HD



ALUMINIUM LAY IN LUGS

- Made from high strength extruded alluminium alloy.
- Electra tin plated.
- Provides low contact resistance.
- Suitable for use with copper or aluminum conductors for grounding & continuous loop application
- cULus 467 Listed.



PART NO	CONDUCTOR RANGE	
	MAX	MIN
LI50S	14 AWG	4 AWG
LI112S	1/0 AWG	14 AWG
LI200S	3/0 AWG	6 AWG
LI252S	250 MCM	6 AWG

- Made from high strength extruded alluminium alloy.
- Tin Plated with Stainless Steel Screw
- Provides low contact resistance.
- Suitable for use with copper or aluminum conductors for grounding & continuous loop application
- cULus 467 Listed.

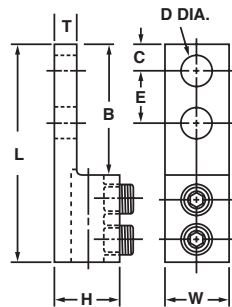
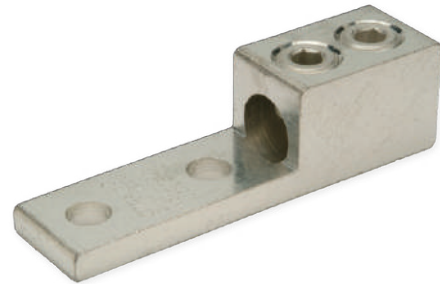


PART NO	CONDUCTOR RANGE	
	MAX	MIN
LI50SS	14 AWG	4 AWG

Aluminum Dual Rated Lugs - Two Hole Tongue with Tandem Set Screws Type LLA2

For use with one copper or aluminum conductor

- Manufactured from high strength aluminum alloy extrusion
- Electro-tin plated to ensure minimum contact resistance and protection against corrosion when used with copper wire
- Two hole mounting pad allows for maximum surface contact in heavy duty applications
- Tandem set screws provide superior mechanical performance
- Connectors are rated for 600 V, 90°C applications
- The use of oxide inhibitor is recommended for all aluminum terminations



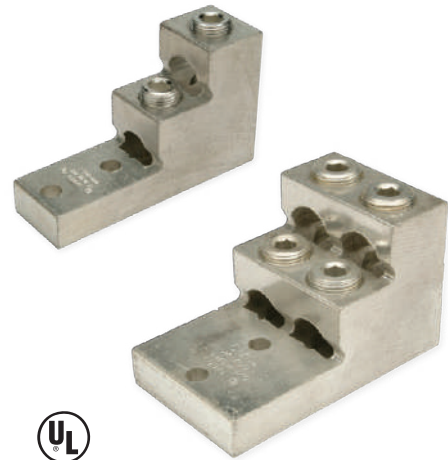
CATALOG NUMBER	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)								MTG. BOLT SIZE	HEX SIZE
		L	W	H	T	B	C	D (DIA.)	E		
LLA2-500-S1	4/0 Str. - 500 kcmil	5.50	1.38	1.50	.38	3.25	.63	.56	1.75	1/2	3/8
LLA2-750-S1	300 - 800 kcmil	6.19	1.45	1.88	.56	3.44	.63	.56	1.75		1/2

Aluminum Panelboard Lugs

Type PB

For use with two, three or four copper or aluminum conductors

- Manufactured from high strength aluminum alloy extrusion
- Electro-tin plated to ensure minimum contact resistance and protection against corrosion when used with copper wire
- Stack design allows for easy installation where space is limited
- Connectors are rated for 600 V, 90°C applications
- The use of oxide inhibitor is recommended for all aluminum terminations



486A-486B LISTED AL9CU



RoHS COMPLIANT

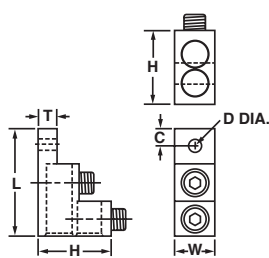
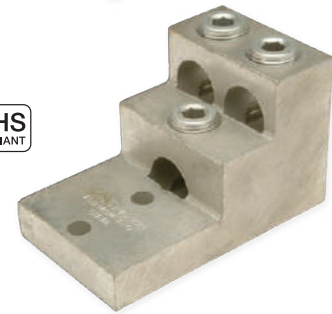


FIG. 1

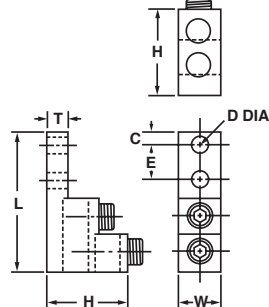


FIG. 2

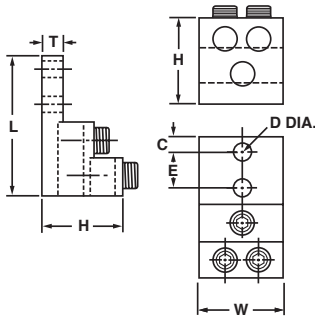


FIG. 3

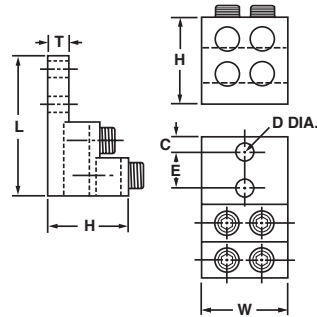


FIG. 4

CATALOG NUMBER	FIG. NO.	NUMBER OF CONDUCTORS	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)							MTG. BOLT SIZE	HEX SIZE
				L	W	H	T	C	D (DIA.)	E		
PB2-300	1	2	6 Str. - 300 kcmil	3.00	1.00	2.00	.31	.47	.33	-	5/16	5/16
PB2-600	2	2	2 Str. - 600 kcmil	4.91	1.50	3.00	.75	.38	.41	1.38	3/8	3/8
PB2-750	2	2	1/0 Str. - 750 kcmil	4.91	1.56	3.00	.75	.38	.41	1.38	3/8	3/8
PB3-600	3	3	2 Str. - 600 kcmil	4.91	2.50	3.00	.75	.38	.41	1.38	3/8	3/8
PB3-750	3	3	1/0 Str. - 750 kcmil	4.91	2.84	3.00	.75	.38	.41	1.38	3/8	3/8
PB4-600	4	4	2 Str. - 600 kcmil	4.91	2.50	3.00	.75	.38	.41	1.38	3/8	3/8
PB4-750	4	4	1/0 Str. - 750 kcmil	4.91	2.84	3.00	.75	.38	.41	1.38	3/8	3/8



Transformer Lug Kits

Type LASK

- Kits contain Type LA aluminum dual rated lugs, steel nuts and bolts
- Available in four sizes and can be used with any dry-type transformer
- Plated steel hardware for corrosion resistance
- Nuts have special captive conical pressure washers that maintain bolted contact pressure when properly torqued
- Each lug is clearly marked "AL9CU"
- Rated for 600 V, 90°C applications
- The use of oxide inhibitor is recommended for all aluminum terminations



F

CATALOG NUMBER	TRANSFORMER KVA SIZE	KIT CONTENTS				
		QTY.	LUGS	CONDUCTOR RANGE	QTY.	HARDWARE
LASK-1	15-37 1/2 1-Phase 15-45 3-Phase	8	LA-2	14 Str. - 2 Str.	8	1/4 - 20 x 3/4" Bolts
		4	LA-250	6 Str. - 250 kcmil	8	1/4 - 20 Flange Nuts
LASK-2	50-75 1-Phase 75-112 1/2 3-Phase	12	LA-250	6 Str. - 250 kcmil	8	1/4 - 20 x 3/4" Bolts
					8	1/4 - 20 x 1 3/4" Bolts
					16	1/4 - 20 Flange Nuts
LASK-3	100-167 1-Phase 150-300 3-Phase	3	LA-250	6 Str. - 250 kcmil	3	1/4 - 20 x 3/4" Bolts
					3	1/4 - 20 Flange Nuts
					16	3/8 - 16 x 2" Bolts
LASK-4	500 3-Phase	22	LA-600	2 Str. - 600 kcmil	16	3/8 - 16 Flange Nuts
					18	3/8 - 16 x 2" Bolts
					18	3/8 - 16 Flange Nuts

Aluminum Splicer / Reducers

Type SR

For use when splicing/reducing a wide range of copper and aluminum conductors

- Manufactured from high strength aluminum alloy extrusion
- Electro-tin plated to ensure minimum contact resistance and protect against corrosion
- Plated steel set screws provide a high strength connection
- Internal cable stop or inspection window ensures full cable insertion
- Rated for 600 V, 90°C applications
- The use of oxide inhibitor is recommended for all aluminum terminations

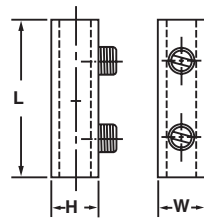


FIG. 1

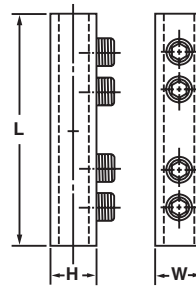


FIG. 2

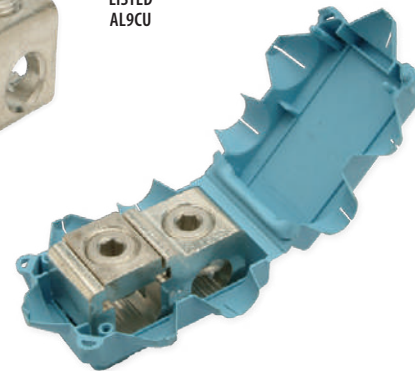
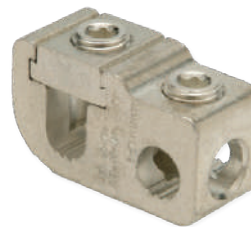
CATALOG NUMBER	FIG. NO.	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			HEX SIZE
			H	W	L	
SR-2	1	14 Str. - 2 Str.	.56	.50	1.38	SLOT
SR-0	1	14 Str. - 1/0 Str.	.75	.75	1.91	3/16
SR-250	2	6 Str. - 250 kcmil	1.13	1.00	3.94	5/16
SR-250-2	1	6 Str. - 250 kcmil	1.13	1.00	1.94	5/16
SR-350	2	6 Str. - 350 kcmil	1.19	1.13	4.19	5/16
SR-350-2	1	6 Str. - 350 kcmil	1.19	1.13	2.63	5/16
SR-500	2	2 Str. - 500 kcmil	1.50	1.38	5.00	3/8
SR-750	2	250 - 750 kcmil	1.75	1.63	6.25	3/8



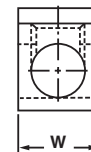
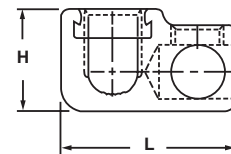
Aluminum Parallel T-Tap Connectors

Type GPT

- Manufactured from high strength aluminum alloy extrusion
- Dual rated for copper and aluminum conductors
- Design permits parallel or 90° angle tap connections
- Lay-in feature allows for easy installation on main conductor
- Electro-tin plated to ensure minimum contact resistance and protection against corrosion when used with copper wire
- The use of oxide inhibitor is recommended for all aluminum terminations



CATALOG NUMBER	CONDUCTOR RANGE		APPROXIMATE DIMENSIONS (IN.)			HEX SIZE	
	MAIN	TAP	H	W	L	MAIN	TAP
GPT-2	12 Sol. - 2 Str.	14 Sol. - 4 Str. CU 12 Sol. - 4 Str. AL	.88	.63	1.39	SLOT	SLOT
GPT-1/0	2 Str. - 1/0 Str.	14 Sol. - 1/0 Str. CU 12 Sol. - 1/0 Str. AL	1.00	.75	1.75	3/16	3/16
GPT-250-0	1/0 Str. - 250 kcmil	14 Sol. - 1/0 Str. CU 12 Sol. - 1/0 Str. AL	1.31	1.06	2.03	5/16	3/16
GPT-250	1/0 Str. - 250 kcmil	6 Str. - 250 kcmil	1.31	1.06	2.28	5/16	5/16
GPT-350	4/0 Str. - 350 kcmil	6 Str. - 350 kcmil	1.44	1.25	2.56	5/16	5/16
GPT-500	350 - 500 kcmil	2 Str. - 500 kcmil	1.75	1.38	3.13	3/8	3/8
GPT-750	500 - 750 kcmil	2 Str. - 500 kcmil	2.00	1.50	3.38	3/8	3/8



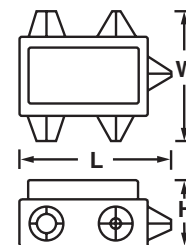
Insulating Covers for GPT Connectors

Type GTC

- Manufactured from 105°C rated material, 600 volt maximum
- Snap-lock feature eliminates the need for taping reducing labor time



CATALOG NUMBER	COVER FOR MODEL NUMBER	COVER COLOR	APPROXIMATE DIMENSIONS (IN.)		
			H	W	L
GTC-2	GPT-2	Yellow	1.11	1.91	2.22
GTC-1/0	GPT-1/0	Gray	1.25	2.16	2.63
GTC-250	GPT-250	Red	1.63	2.88	3.44
GTC-250	GPT-250-0	Red	1.63	2.88	3.44
GTC-350	GPT-350	Yellow	1.75	3.19	3.75
GTC-500	GPT-500	Blue	2.09	3.31	4.38
GTC-750	GPT-750	Orange	2.34	3.44	4.63

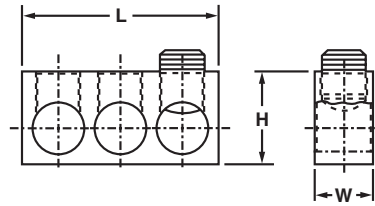


Aluminum Street Light Connector with Insulating Cover

Type SLK

For any combination of copper or aluminum conductors

- Manufactured from high strength aluminum alloy extrusion
- Electro-tin plated to ensure minimum contact resistance and protection against corrosion
- 105°C rated black Plastisol insulating cover is provided with connector



CATALOG NUMBER	CONDUCTOR RANGE	NUMBER OF CONDUCTORS	APPROXIMATE DIMENSIONS (IN.)			HEX SIZE
			H	W	L	
SLK-2/0	14 Str. - 2/0 Str.	3	.74	.57	1.69	3/16

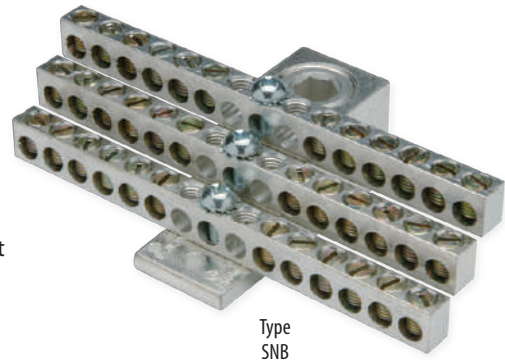


Aluminum Stacked Neutral Bars

Type SNB

For aluminum or copper conductors

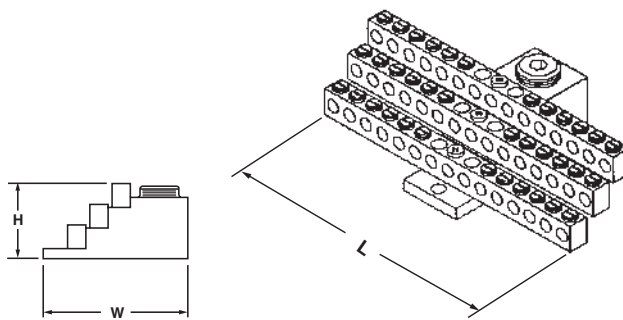
- Assembly is suitable for grounding applications
- Preassembled, stacked neutral bars provide a compact design offering range taking flexibility
- Electro-tin plated neutral bars and stacking lugs provide low contact resistance suitable for bimetallic applications
- The stacking lugs are UL 486A-486B listed AL9CU
- The neutral bars are UL component recognized
- Available with phenolic base, catalog number R-16



Type
SNB



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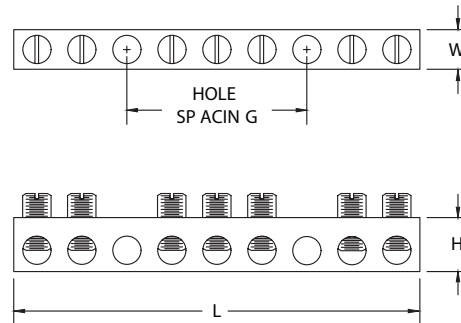
R-16

CATALOG NUMBER	CONDUCTOR RANGE (AWG)		NUMBER OF TAPS	APPROXIMATE DIMENSIONS (IN.)		
	MAIN	TAP		H	W	L
SNB350-12	6 Str. - 350 kcmil	14 Str. - 6 Str.	12	1.53	2.53	4.73
SNB350-24			24			4.73
SNB350-30			30			4.08
SNB350-36			36			4.73
SNB350-42			42			5.31
R-16	Mounting block of general purpose phenolic suitable for mounting any SNB neutral bars			1.00	2.50	2.50

Aluminum and Copper Neutral Bars Types NA and NC

**NEW
PRODUCT**

- Aluminum Neutral Bars are manufactured from high strength aluminum alloy
- Copper Neutral Bars are manufactured from high strength copper
- For use in a variety of neutral and grounding applications
- Aluminum Neutral Bars are tin plated
- Screws are made of mild steel and plated
- Aluminum Neutral Bars are dual rated for copper or aluminum conductors
- Copper Neutral Bars are for copper conductors only
- UL 467 listed



Aluminum Neutral Bars

CATALOG NUMBER	CONDUCTOR RANGE	NUMBER OF CIRCUITS	TOTAL NUMBER OF HOLES	APPROXIMATE DIMENSIONS (IN.)			HOLE SPACING	MOUNTING HOLE POSITION
				L	W	H		
NA-401	14 - 4	2	3	.95	.31	.44	.31	2
NA-402		4	5	1.57	.31	.44	.31	3
NA-403		5	6	1.88	.31	.44	.31	3
NA-404		6	7	2.25	.31	.44	.31	4
NA-405		4	6	1.88	.31	.44	.31	1 & 4
NA-406		5	7	2.25	.31	.44	.31	1 & 7
NA-407		5	7	2.25	.31	.44	.31	2 & 6
NA-408		6	8	2.56	.31	.44	.31	4 & 7
NA-409		7	9	2.87	.31	.44	.31	3 & 7
NA-410		9	11	3.50	.31	.44	.31	1 & 11
NA-411		10	12	3.81	.31	.44	.31	1 & 12
NA-412		12	14	4.43	.31	.44	.31	1 & 14
NA-413		15	17	5.37	.31	.44	.31	1 & 17
NA-414		20	22	6.93	.31	.44	.31	1 & 22
NA-415		190	190	60.00	.31	.44	.31	-
NA-416	14 - 2	10	12	4.12	.38	.50	.34	3 & 11
NA-417	14 - 2/0	2	3	1.75	.56	.75	.60	2
NA-418		3	5	2.95	.56	.75	.60	2 & 4
NA-419		6	8	4.75	.56	.75	.60	1 & 8

Copper Neutral Bars

CATALOG NUMBER	CONDUCTOR RANGE	NUMBER OF CIRCUITS	TOTAL NUMBER OF HOLES	APPROXIMATE DIMENSIONS			HOLE SPACING	MOUNTING HOLE POSITION
				L	W	H		
NC-420	14 - 4	4	6	1.94	.31	.44	.31	1 & 6
NC-421		5	7	2.25	.31	.44	.31	1 & 7
NC-422		6	8	2.56	.31	.44	.31	1 & 8
NC-423		12	14	4.43	.31	.44	.31	1 & 14
NC-424		13	15	4.74	.31	.44	.31	3 & 13
NC-425		13	15	4.74	.31	.44	.31	6 & 11
NC-426		190	190	60.00	.31	.44	.31	-
NC-427	14 - 2	3	5	2.00	.38	.50	.40	1 & 5
NC-428		6	8	3.25	.38	.50	.40	2 & 7



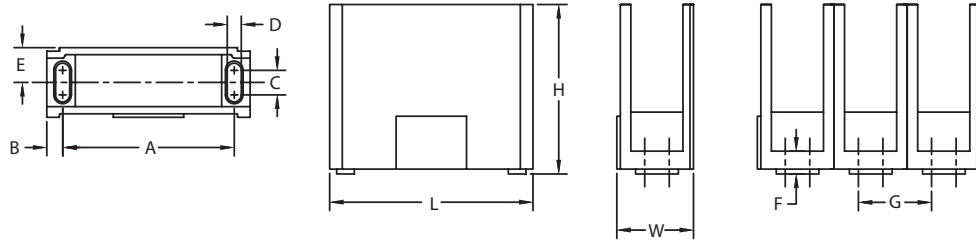
Aluminum Power Distribution Blocks

Type ADB

- Tongue and groove design enables blocks to be easily assembled - just slip and lock into place the number of poles needed for a specific job
- All block sizes will interlock with one another allowing for custom configurations
- Modular design eliminates the need to carry 2 pole and 3 pole blocks in stock, reducing inventory costs and improving customer satisfaction
- Aluminum Power Distribution Blocks are manufactured from high strength aluminum alloy and tin-plated for corrosion resistance
- DUAL RATED - UL recognized and CSA certified 600 V and 90°C rated for both aluminum and copper conductors
- Range taking provides tapping flexibility over a broad wire range
- Molded blocks are manufactured from a high strength glass-filled polyester insulating material providing excellent overall electrical properties and flame resistance
- Clear, high impact resistant snap-on covers are available























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TYPE APDB / ASRB APPROXIMATE DIMENSIONS (IN.)										
BLOCK SIZE	W	H	L	A	B	C	D	E	F	G (MIN.-MAX.)
Small (S)	1.04	2.34	2.90	2.53	.18	.35	.20	.46	.19	.63 - 1.25
Medium (M)	1.71	2.62	4.00	3.50	.25	.37	.20	.79	.20	1.25 - 1.88
Large (L)	2.90	3.25	5.50	5.00	.25	.50	.27	1.39	.29	2.25 - 3.25

Single Run with Multiple Taps

CATALOG NUMBER	RUN			TAP			AMP RATING PER POLE	BLOCK SIZE*	APPROXIMATE DIMENSIONS (IN.)		
	WIRE RANGE	OPENINGS PER POLE	HEX SIZE	WIRE RANGE	OPENINGS PER POLE	HEX SIZE			L	W	H
ADB-14-2/0-1	2/0 - 14		3/16	4 - 14		Slot	175	S	2.90	1.04	2.34
ADB-16-2/0-1	2/0 - 14		3/16	4 - 14		Slot	175	S	2.90	1.04	2.34
ADB-162-350-1	350 kcmil - 6		3/8	4 - 14		Slot	310	M	4.00	1.71	2.62
ADB-18-350-1	350 kcmil - 6		3/8	4 - 14		Slot	310	M	4.00	1.71	2.62
ADB-112-350-1	350 kcmil - 6		3/8	4 - 14		Slot	310	M	4.00	1.71	2.62
ADB-112-500-1	500 kcmil - 4		3/8	4 - 14		Slot	380	M	4.00	1.71	2.62
ADB-14-500-1	500 kcmil - 4		3/8	4/0 - 6		5/16	380	L	5.50	2.90	3.25
ADB-16-350-1	350 kcmil - 6		3/8	2/0 - 14		3/16	310	L	5.50	2.90	3.25
ADB-16-500-1	500 kcmil - 4		3/8	2/0 - 14		3/16	380	L	5.50	2.90	3.25
ADB-16-1000-1	1000 kcmil - 250 kcmil		1/2	2/0 - 14		3/16	545	L	5.50	2.90	3.25

NOTE: All wire sizes unless noted otherwise are American Wire Gauge (AWG)

POWER DISTRIBUTION BLOCK CLEAR INSULATING COVERS	
CATALOG NUMBER	BLOCK SIZE
CS	Small (S)
CM	Medium (M)
CL	Large (L)

Type ADB (continued next page)



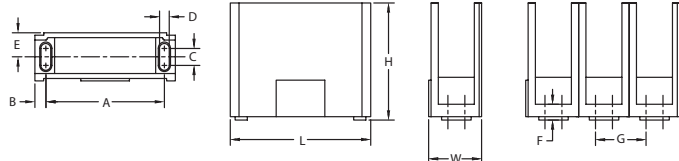
Type ADB (continued)

Double Run with Multiple Taps

CATALOG NUMBER	RUN			TAP			AMP RATING PER POLE	BLOCK SIZE*	APPROXIMATE DIMENSIONS (IN.)		
	WIRE RANGE	OPENINGS PER POLE	HEX SIZE	WIRE RANGE	OPENINGS PER POLE	HEX SIZE			L	W	H
ADB-26A-2/0-1	2/0 - 14		3/16	4 - 14		Slot	350	S	2.90	1.04	2.34
ADB-26B-2/0-1	2/0 - 14		3/16	4 - 14		Slot	350	M	4.00	1.71	2.62
ADB-28-2/0-1	2/0 - 14		3/16	4 - 14		Slot	350	M	4.00	1.71	2.62
ADB-212-2/0-1	2/0 - 14		3/16	4 - 14		Slot	350	M	4.00	1.71	2.62
ADB-26-2/0-1	2/0 - 14		3/16	2 - 14		Slot	350	M	4.00	1.71	2.62
ADB-212-350-1	350 kcmil - 6		3/8	4 - 14		Slot	620	L	5.50	2.90	3.25
ADB-26-350-1	350 kcmil - 6		3/8	2/0 - 14		3/16	620	L	5.50	2.90	3.25
ADB-212-500-1	500 kcmil - 4		3/8	4 - 14		Slot	760	L	5.50	2.90	3.25
ADB-26-500-1	500 kcmil - 4		3/8	2/0 - 14		3/16	760	L	5.50	2.90	3.25
ADB-24-500-1	500 kcmil - 4		3/8	4/0 - 6		5/16	760	L	5.50	2.90	3.25

NOTE: All wire sizes unless noted otherwise are American Wire Gauge (AWG)

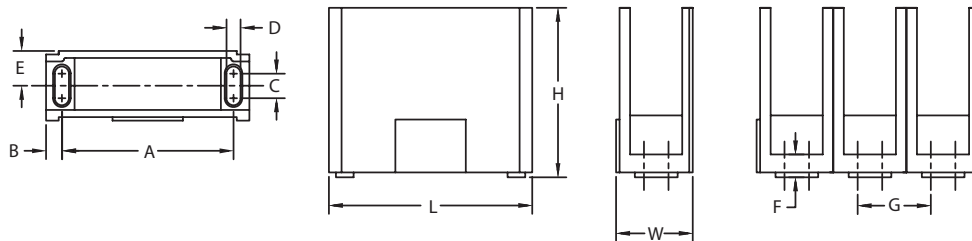
POWER DISTRIBUTION BLOCK CLEAR INSULATING COVERS	
CATALOG NUMBER	BLOCK SIZE
CS	Small (S)
CM	Medium (M)
CL	Large (L)



Aluminum Splicer/Reducer Blocks

Type ADB

- Tongue and groove design enables blocks to be easily assembled - just slip and lock into place the number of poles needed for a specific job
- All block sizes will interlock with one another allowing for custom configurations
- Modular design eliminates the need to carry 2 and 3 pole blocks in stock, reducing inventory costs and improving customer satisfaction
- Blocks are manufactured from high strength aluminum alloy and tin plated for corrosion resistance
- DUAL RATED - UL recognized and CSA certified 600 V and 90°C rated for both aluminum and copper conductors
- Wide wire ranges provide the flexibility to use the connectors as an in-line splice or to reduce conductor size
- Molded blocks are manufactured from a high strength glass-filled polyester insulating material providing excellent overall electrical properties and flame resistance
- Clear, high impact resistant covers are available



TYPE APDB / ASRB APPROXIMATE DIMENSIONS (IN.)										
BLOCK SIZE	W	H	L	A	B	C	D	E	F	G (MIN.-MAX.)
Small (S)	1.04	2.34	2.90	2.53	.18	.35	.20	.46	.19	.63 - 1.25
Medium (M)	1.71	2.62	4.00	3.50	.25	.37	.20	.79	.20	1.25 - 1.88
Large (L)	2.90	3.25	5.50	5.00	.25	.50	.27	1.39	.29	2.25 - 3.25



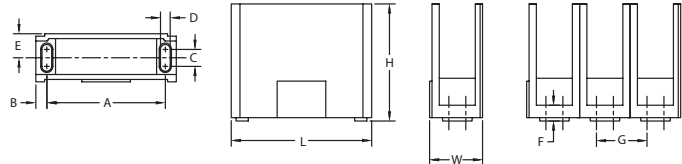
Type ADB (continued)

CATALOG NUMBER	RUN			TAP			AMP RATING PER POLE	BLOCK SIZE*	APPROXIMATE DIMENSIONS (IN.)		
	WIRE RANGE	OPENINGS PER POLE	HEX SIZE	WIRE RANGE	OPENINGS PER POLE	HEX SIZE			L	W	H
ADB-11-2-1	2 - 14		Slot	2 - 14		Slot	115	S	2.90	1.04	2.34
ADB-11-2/0-1	2/0 - 14		3/16	2/0 - 14		3/16	175	S	2.90	1.04	2.34
ADB-11-250-1	250 kcmil - 6		5/16	250 kcmil - 6		5/16	310	M	4.00	1.71	2.62
ADB-11-350-1	350 kcmil - 6		3/8	350 kcmil - 6		3/8	310	M	4.00	1.71	2.62
ADB-11-500-1	500 kcmil - 4		3/8	500 kcmil - 4		3/8	380	M	4.00	1.71	2.62
ADB-22-2/0-1	2/0 - 14		3/16	2/0 - 14		3/16	350	S	2.90	1.04	3.25
ADB-22-350-1	350 kcmil - 6		3/8	350 kcmil - 6		3/8	620	L	5.50	2.90	3.25
ADB-22-500-1	500 kcmil - 4		3/8	500 kcmil - 4		3/8	760	L	5.50	2.90	3.25

NOTE: All wire sizes unless noted otherwise are American Wire Gauge (AWG)

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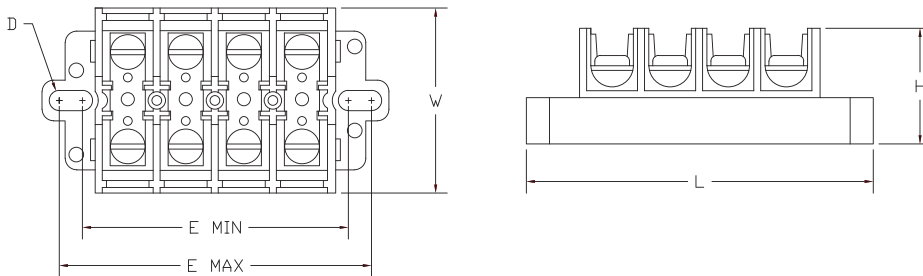
ALUMINUM SPLICER/ REDUCER BLOCK CLEAR INSULATING COVERS	
CATALOG NUMBER	BLOCK SIZE
CS	Small (S)
CM	Medium (M)
CL	Large (L)



Noryl® Commercial Grade Terminal Blocks

Type 15-1600

- For use in service equipment, switchboards, panelboards, and service entrance devices
- Constructed with 94V-1 grade Noryl®
- Design utilizes adjustable, metal mounting eyelets that allow for easy installation and evenly distributed mounting screw pressure
- Screws are friction locked to prevent loosening
- Rated for service at 600V
- Ratings:
 - Wire Range: Line Side - CU max. 6 (UL); 8 (CSA)
Load Side - CU max. 10 (UL); 8 (CSA)
 - Temp. Rating: 80°C
 - Amp Rating: 60 amp with #6 wire
30 amp with other wire
 - Torque: 20 in-lbs.
- Meets 125V UL service entrance equipment requirements
- All blocks can accommodate lugs up to .44" pad width



CATALOG NUMBER	NUMBER OF WIRES PER SIDE	APPROXIMATE DIMENSIONS (IN.)					
		W	H	L	MOUNTING HOLE		D
					E MIN.	E MAX.	
15-1604	4	2.00	1.25	3.75	2.88	3.38	.22
15-1606	6			5.00	4.13	4.63	
15-1608	8			6.25	5.38	5.88	
15-1612	12			8.75	7.88	8.38	

Noryl® is a trademark of General Electric Company

Ordering Information:

For terminal blocks with shorting strips, suffix catalog number with "-SC"

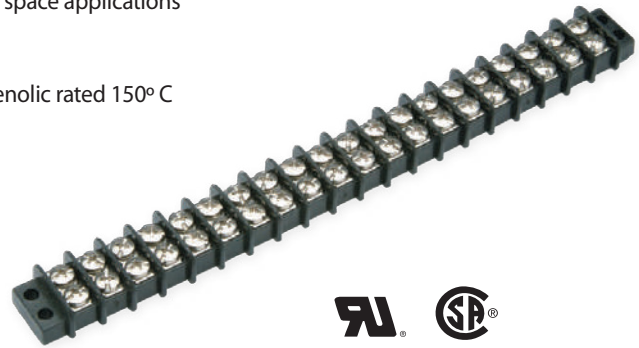
For terminal blocks with clear plastic hinged lids, suffix catalog number with "-C"



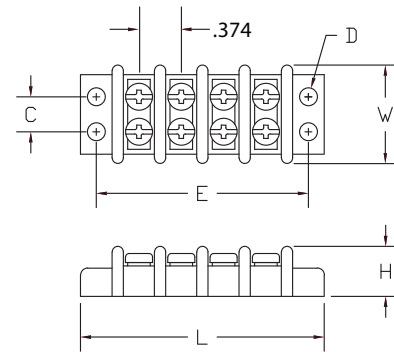
Double Row Terminal Blocks

Type 3000

- Compact size of Series 3000 lends itself for use in limited space applications
- Wire range: 12-22 AWG Sol./Str.
- Molded base is manufactured from general purpose phenolic rated 150° C
- Ratings: 20 amps, 300V



CATALOG NUMBER	NUMBER OF WIRES PER SIDE	APPROXIMATE DIMENSIONS (IN.)					
		W	H	L	E	D	C
3002	2	.87	.44	1.41	1.13	.13	.31
3003	3			1.78	1.50		
3004	4			2.16	1.88		
3005	5			2.53	2.25		
3006	6			2.91	2.63		
3007	7			3.28	3.00		
3008	8			3.66	3.38		
3009	9			4.03	3.75		
3010	10			4.41	4.13		
3011	11			4.78	4.50		
3012	12			5.16	4.88		
3013	13			5.53	5.25		
3014	14			5.91	5.63		
3015	15			6.28	6.00		
3016	16			6.66	6.38		
3017	17			7.03	6.75		
3018	18			7.41	7.13		
3019	19			7.78	7.50		
3020	20			8.16	7.88		
3021	21			8.53	8.25		
3022	22			8.91	8.63		
3023	23			9.28	9.00		
3024	24			9.66	9.38		
3025	25			10.03	9.75		
3026	26			10.41	10.13		
3027	27			10.78	10.50		
3028	28			11.16	10.88		
3029	29			11.53	11.25		
3030	30			11.91	11.63		



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GROUND PIPE CLAMPS – DIRECT BURIAL

- Made from cast copper alloy.
- Supplied with Bronze screws or stainless steel screws.
- Provides maximum conductivity & strength.
- Suitable for direct burial in soil & concrete.
- Used to connect copper conductor to water pipe, ground rods & copper water tubing.
- cULs 467 listed.



PART NO	COPPER TUBE / WATER PIPE SIZE (IPS)	CONDUCTOR RANGE	
		MIN	MAX
KP1DB	1/2" - 1"	10 SOL	2 STR
KP2DB	1-1/4" - 2"	10 SOL	2 STR

GROUND ROD CLAMP – DIRECT BURIAL

- Made from high strength copper alloy
- Suitable for direct burial in soil & concrete.
- Connects copper conductor to ground rod or rebar.
- cULus 467 listed.



FIG. 1

FIG. 2

PART NO	ROD SIZE	REBAR SIZER	CONDUCTOR RANGE		FIGURE NOS
			MIN	MAX	
CAB0	3/8"	-	10 SOL	2 STR	1
CAB1	1/2"	3/8"	10 SOL	2 STR	1
CAB2	5/8"	1/2"	10 SOL	1/0 STR	1
CAB3	3/4"	5/8"	10 SOL	1 STR	1
OE-MRC	1/2" , 5/8" & 3/4"	3/8" , 1/2" & 5/8"	10 SOL	1/0 STR	2

GROUND PIPE CLAMPS

- Made from cast copper alloy.
- Supplied with steel screws, plated for corrosion resistance.
- Provides maximum conductivity & strength.
- Used to connect copper grounding conductor to water pipe, ground rods & copper water tubing.
- cULus 467 listed.



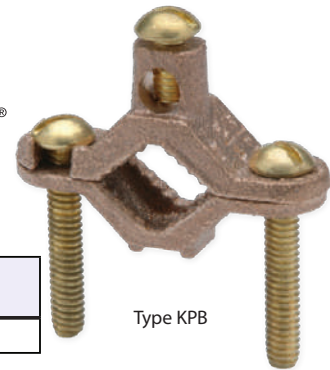
PART NO	COPPER TUBE / WATER PIPE SIZE (IPS)	CONDUCTOR RANGE	
		MIN	MAX
KP1	1/2" - 1"	10 SOL	2 STR
KP2	1-1/4" - 2"	10 SOL	2 STR



Standard Bronze Ground Clamps

Types KPB

- Cast from high strength, copper alloy for high conductivity
- Designed to connect grounding conductor to water pipe or copper tube
- Standards: UL 467, CSA C22.2 NO.41



Type KPB

CATALOG NUMBER	WATER PIPE RANGE	CONDUCTOR RANGE	REBAR	GROUND ROD	SCREW MATERIAL
KPB-1	1/2" - 1"	10 Sol. - 2 Str.	5 & 6	1/2" - 1"	Brass

Direct Burial Bronze Ground Clamps

Types KPL

- Cast from high strength, high conductivity copper alloy
- Designed to connect grounding conductor to water pipe, copper tube, ground rod, or rebar
- Connectors are suitable for direct burial applications in earth and concrete
- Type KPL has a lay-in feature which allows the tap conductor to be easily installed without cutting
- Standards: UL 467, CSA C22.2 NO.41



Type KPL

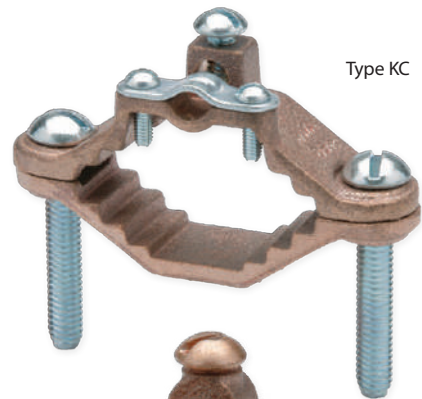
CATALOG NUMBER	WATER PIPE RANGE	CONDUCTOR RANGE	REBAR	GROUND ROD	SCREW MATERIAL
KPL-1-DB	1/2" - 1"	10 Sol. - 2 Str.	3, 4, 5, 6, & 8	1/2" - 1"	Silicon Bronze

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Bronze Ground Clamps for Armored Cable

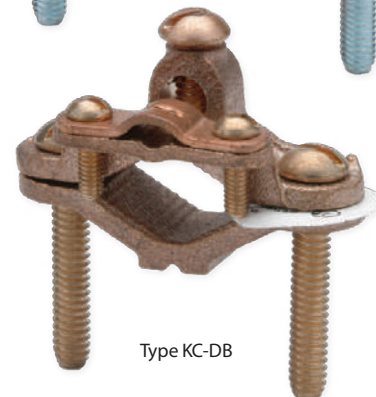
Type KC

- Cast from high strength, high conductivity copper alloy
- Designed to connect bare or armored copper wire to galvanized steel water pipe or copper tubing
- Integral clamp securely holds armor in place
- Standards: UL 467, CSA C22.2NO.41



Type KC

CATALOG NUMBER	WATER PIPE RANGE	CONDUCTOR RANGE	COPPER ROD RANGE	SCREW MATERIAL
KC-1	1/2" - 1"	8 Sol. - 4 Str.	1/2" - 1"	Zinc Plated Steel
KC-2	1-1/4" - 2"		-	
KC-4	2-1/2" - 4"		-	
KC-6	4-1/2" - 6"		-	
KC-1-DB*	1/2" - 1"		1/2" - 1"	Bronze



Type KC-DB

*Suitable for grounding, bonding, and direct burial in earth or concrete

Bronze Ground Clamps for Armored Cable with 360° Swivel Hub

Type KW

- Cast from high strength, high conductivity copper alloy
- Designed to connect bare copper or armored copper wire to galvanized steel or copper water pipe
- 360° integral clamp securely holds armor in place and allows for easy alignment
- Standards: UL 467, CSA C22.2NO.41



CATALOG NUMBER	WATER PIPE RANGE	CONDUCTOR RANGE	SCREW MATERIAL
KW-1	1/2" - 1"	10 Sol. - 6 Str.	Zinc Plated Steel
KW-2	1 1/4" - 2"		
KW-4	2 1/2" - 4"		

Bronze Ground Clamps for Rigid Conduit

Type KH

- Cast from high strength, high conductivity copper alloy
- Designed to connect copper grounding conductor in rigid or intermediate metal conduit (IMC) to galvanized steel or copper water pipe
- Standards: UL 467, CSA C22.2NO.41



CATALOG NUMBER	WATER PIPE RANGE	CONDUCTOR RANGE	CONDUIT HUB SIZE	SCREW MATERIAL		
KH-1	1/2" - 1"	8 Sol. - 4 Str.	1/2"	Zinc Plated Steel		
KH-134			3/4"			
KH-11			1"			
KH-2	1 1/4" - 2"		1/2"			
KH-234			3/4"			
KH-21			1"			
KH-4	2 1/2" - 4"		1/2"		Zinc Plated Steel	
KH-434			3/4"			
KH-41			1"			
KH-6	4 1/2" - 6"		1/2"			Zinc Plated Steel
KH-634			3/4"			
KH-61			1"			
KHB-1	1/2" - 1"		1/2"	Brass		

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Bronze Ground Clamps for Rigid Conduit with 360° Swivel Hub

Type KL

- Cast from high strength, high conductivity copper alloy
- Designed to connect copper grounding conductor in rigid or intermediate metal conduit (IMC) to galvanized steel or copper water pipe
- Integral clamp swivels 360° and allows for easy alignment
- Standards: UL 467, CSA C22.2NO.41

CATALOG NUMBER	FIG. NO.	WATER PIPE RANGE	CONDUCTOR RANGE	CONDUIT HUB SIZE	SCREW MATERIAL
KL-0	1	1/2" - 1"	10 Sol. - 6 Str.	1/2"	Zinc Plated Steel
KL-1	2		10 Sol. - 2/0 Str.	3/4"	
KL-1A	2		10 Sol. - 3/0 Str.	1"	
KL-20	1	1 1/4" - 2"	10 Sol. - 6 Str.	1/2"	
KL-2	2		10 Sol. - 2/0 Str.	3/4"	
KL-2A	2		10 Sol. - 3/0 Str.	1"	
KL-40	1	2 1/2" - 4"	10 Sol. - 6 Str.	1/2"	
KL-4	2		10 Sol. - 2/0 Str.	3/4"	
KL-4A	2		10 Sol. - 3/0 Str.	1"	

Fig. 1



Fig. 2



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Bronze Ground Clamps for Rigid Conduit, IMC, or EMT with 360° Swivel Hub

Type KS

- Cast from high strength, high conductivity copper alloy
- Designed to connect copper grounding conductor in rigid conduit, intermediate metal conduit (IMC), or EMT to galvanized steel or copper water pipe
- Integral hub accommodates rigid, IMC, or EMT conduit and swivels 360° for easy alignment
- Standards: UL 467, CSA C22.2NO.41

CATALOG NUMBER	WATER PIPE RANGE	CONDUCTOR RANGE	RIGID & IMC CONDUIT SIZE	EMT CONDUIT SIZE	SCREW MATERIAL
KS-1	1/2" - 1"	10 Sol. - 6 Str.	1/2"	3/4"	Zinc Plated Steel
KS-2	1 1/4" - 2"				
KS-4	2 1/2" - 4"				

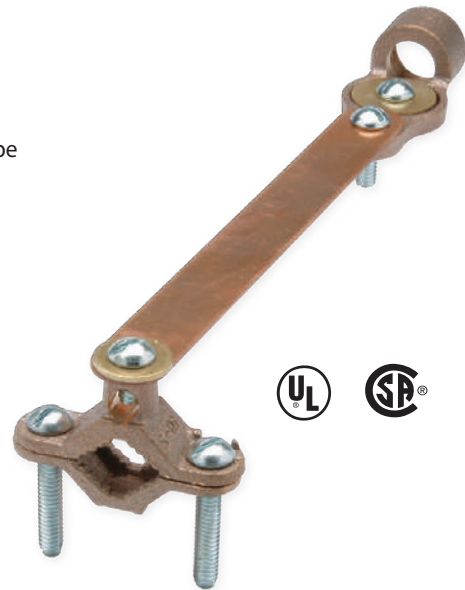


Bronze Ground Clamps for Rigid Conduit with Copper Straps

Types KLS and KLS-S

- Cast from high strength, high conductivity copper alloy
- Designed to connect copper grounding conductor in rigid conduit or intermediate metal conduit (IMC) to galvanized steel or copper water pipe
- Copper straps allow for flexibility during and after installation - protects conduit from vibration
- Type KLS-S is same design as Type KLS except with a 360° integral swivel for easy alignment
- Standards: UL 467, CSA C22.2NO.41

CATALOG NUMBER	WATER PIPE RANGE	CONDUCTOR RANGE	CONDUIT SIZE	SCREW MATERIAL
KLS-0	1/2" - 1"	8 Sol. - 4 Str.	1/2"	Zinc Plated Steel
KLS-1			3/4"	
KLS-1A			1"	
KLS-0S		10 Sol. - 6 Str.	1/2"	
KLS-1S		10 Sol. - 2/0 Str.	3/4"	
KLS-1AS		10 Sol. - 3/0 Str.	1"	



Bronze Conduit Hubs

Type KHH

- Cast from high strength, high conductivity copper alloy
- Designed to be used with bronze grounding pipe clamps to connect rigid conduit to water pipe
- Standards: UL 467, CSA C22.2NO.41

CATALOG NUMBER	CONDUIT SIZE
KHH-12	1/2"
KHH-34	3/4"
KHH-1	1"



Bronze Conduit Hubs with 360° Swivel

Type KLH

- Cast from high strength, high conductivity copper alloy
- Designed to be used with bronze grounding pipe clamps to connect rigid conduit to water pipe for grounding applications
- Hub swivels 360° for easy alignment
- Standards: UL 467, CSA C22.2NO.41

CATALOG NUMBER	FIG. NO.	CONDUIT SIZE	CONDUCTOR RANGE	SCREW MATERIAL
KLH-12	1	1/2"	10 Sol. - 6 Str.	Zinc Plated Steel
KLH-34	2	3/4"	10 Sol. - 2/0 Str.	
KLH-1	2	1"	10 Sol. - 3/0 Str.	



Fig. 1

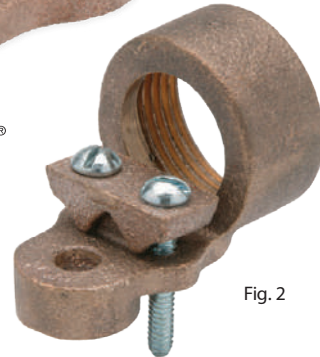


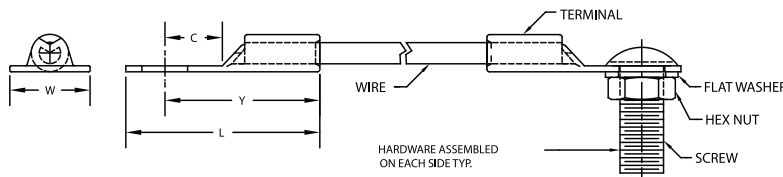
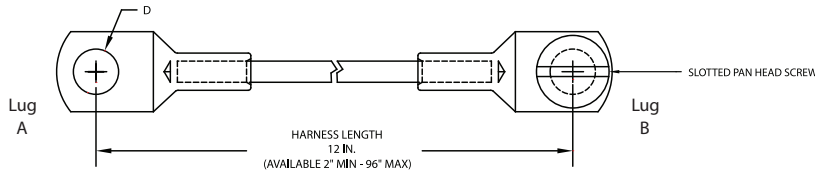
Fig. 2

Copper Grounding Harnesses

Type CH

NEW PRODUCT

- Harnesses are manufactured using bare stranded copper wire and tin plated heavy duty copper compression lugs
- Copper lugs are factory crimped to the wire ensuring a low resistance connection
- Suitable for use in industrial, commercial, and residential grounding applications where space is limited
- Copper stranded conductor is rigid enough to be preformed and maintain desired shape, while also remaining flexible enough to account for vibration
- Suitable for direct burial applications in earth or concrete when used with stainless steel mounting hardware



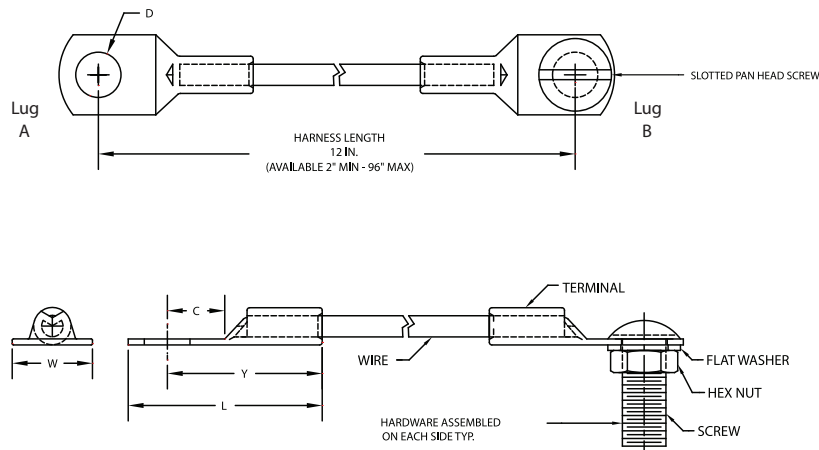
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Catalog Number Breakdown

CATALOG NUMBER PREFIX	WIRE SIZE DESIGNATION (AWG)	STUD SIZE LUG A	STUD SIZE LUG B	HARNESS LENGTH (IN.)	HARDWARE DESIGNATION
CH	8	#8 (8)	#8 (8)	2" - 96"	<p>For stainless steel hardware, add suffix "-SSH"</p> <p>To order without mounting hardware, omit suffix "-SSH"</p>
	6	#10 (10)	#10 (10)		
	4	1/4" (14)	1/4" (14)		
	2	5/16" (516)	5/16" (516)		
	1	3/8" (38)	3/8" (38)		
	1/0	7/16" (716)	7/16" (716)		
	2/0	1/2" (12)	1/2" (12)		
	3/0	5/8" (58)	5/8" (58)		
	4/0	3/4" (34)	3/4" (34)		
			7/8" (78)		

Continued on next page...

Grounding Harnesses - Type CH (continued)



Standard 12" Harnesses

CATALOG NUMBER (WITH STAINLESS STEEL MOUNTING HARDWARE)	COPPER CONDUCTOR SIZE/ CLASS	REFERENCE COMPRESSION TERMINAL	STUD SIZE (EACH END)	APPROXIMATE DIMENSIONS (IN.)				
				W	L	Y	C	D
CH8-88-12-SSH	8 AWG Class B	BLY8C-L14	#8	.42	1.15	.95	.23	.18
CH8-1010-12-SSH		BLY8C-L	#10	.42	1.15	.94	.23	.20
CH8-1414-12-SSH		BLY8C-L1	1/4	.42	1.22	.99	.27	.28
CH8-516516-12-SSH		BLY8C-L2	5/16	.59	1.30	1.01	.30	.34
CH8-3838-12-SSH		BLY8C-L3	3/8	.59	1.30	1.00	.33	.40
CH8-1212-12-SSH		BLY8C-L4	1/2	.83	1.55	1.16	.44	.53
CH6-1010-12-SSH	6 AWG Class B	BLY6C-L1	#10	.47	1.31	1.07	.24	.20
CH6-1414-12-SSH		BLY6C-L	1/4	.47	1.31	1.06	.27	.28
CH6-516516-12-SSH		BLY6C-L4	5/16	.62	1.44	1.14	.31	.34
CH6-3838-12-SSH		BLY6C-L2	3/8	.62	1.44	1.13	.33	.40
CH6-1212-12-SSH		BLY6C-L10	1/2	.83	1.68	1.28	.44	.53
CH4-1010-12-SSH	4 AWG Class A, B	BLY4C-L3	#10	.63	1.40	1.13	.28	.20
CH4-1414-12-SSH		BLY4C-L	1/4	.63	1.40	1.12	.28	.28
CH4-516516-12-SSH		BLY4C-L4	5/16	.63	1.49	1.18	.31	.34
CH4-3838-12-SSH		BLY4C-L2	3/8	.65	1.49	1.18	.33	.40
CH4-1212-12-SSH		BLY4C-L5	1/2	.83	1.72	1.31	.44	.53
CH2-1010-12-SSH	2 AWG Class A, B	BLY2C-L3	#10	.71	1.73	1.39	.34	.20
CH2-1414-12-SSH		BLY2C-L1	1/4	.71	1.73	1.39	.34	.28
CH2-516516-12-SSH		BLY2C-L2	5/16	.71	1.73	1.38	.34	.34
CH2-3838-12-SSH		BLY2C-L	3/8	.71	1.73	1.38	.34	.40
CH2-1212-12-SSH		BLY2C-L4	1/2	.80	1.90	1.50	.45	.53
CH1-1010-12-SSH	1 AWG Class A	BLY1C-L6	#10	.77	1.67	1.32	.25	.20
CH1-1414-12-SSH		BLY1C-L1	1/4	.77	1.85	1.46	.38	.28
CH1-516516-12-SSH		BLY1C-L2	5/16	.77	1.85	1.46	.38	.34
CH1-3838-12-SSH		BLY1C-L	3/8	.77	1.85	1.46	.38	.40
CH1-716716-12-SSH		BLY1C-L4	7/16	.77	1.85	1.43	.38	.46
CH1-1212-12-SSH		BLY1C-L3	1/2	.77	1.98	1.60	.45	.53

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Grounding Harnesses - Type CH (continued)
Standard 12" Harness

CATALOG NUMBER (WITH STAINLESS STEEL MOUNTING HARDWARE)	COPPER CONDUCTOR SIZE/ CLASS	REFERENCE COMPRESSION TERMINAL	STUD SIZE (EACH END)	APPROXIMATE DIMENSIONS (IN.)				
				W	L	Y	C	D
CH1/0-1414-12-SSH	1/0 AWG Class A, AA	BLY25-L1	1/4	.85	2.05	1.63	.42	.28
CH1/0-516516-12-SSH		BLY25-L2	5/16	.85	2.05	1.63	.42	.34
CH1/0-3838-12-SSH		BLY25-L	3/8	.85	2.05	1.63	.42	.40
CH1/0-716716-12-SSH		BLY25-L6	7/16	.85	2.05	1.61	.42	.46
CH1/0-1212-12-SSH		BLY25-L3	1/2	.85	2.09	1.65	.45	.53
CH1/0-5858-12-SSH		BLY25-L4	5/8	.90	2.31	1.80	.62	.66
CH2/0-1414-12-SSH	2/0 AWG Class A, AA	BLY26-L1	1/4	.94	2.32	1.84	.47	.28
CH2/0-516516-12-SSH		BLY26-L2	5/16	.94	2.32	1.84	.47	.34
CH2/0-3838-12-SSH		BLY26-L	3/8	.94	2.32	1.85	.47	.40
CH2/0-716716-12-SSH		BLY26-L4	7/16	.94	2.32	1.84	.47	.46
CH2/0-1212-12-SSH		BLY26-L3	1/2	.94	2.32	1.85	.47	.53
CH2/0-5858-12-SSH		BLY26-L12	5/8	.94	2.54	2.01	.72	.66
CH3/0-1414-12-SSH	3/0 AWG Class A, AA	BLY27-L3	1/4	1.05	2.46	1.94	.51	.28
CH3/0-516516-12-SSH		BLY27-L2	5/16	1.05	2.46	1.94	.51	.34
CH3/0-3838-12-SSH		BLY27-L	3/8	1.05	2.46	1.94	.51	.40
CH3/0-716716-12-SSH		BLY27-L6	7/16	1.05	2.63	2.11	.51	.46
CH3/0-1212-12-SSH		BLY27-L1	1/2	1.05	2.46	1.93	.51	.53
CH3/0-5858-12-SSH		BLY27-L15	5/8	1.05	2.63	2.05	.70	.66
CH4/0-1414-12-SSH	4/0 AWG Class A, AA	BLY28-L1	1/4	1.15	2.76	2.20	.56	.28
CH4/0-516516-12-SSH		BLY28-L2	5/16	1.15	2.76	2.20	.56	.34
CH4/0-3838-12-SSH		BLY28-L	3/8	1.15	2.76	2.20	.56	.40
CH4/0-716716-12-SSH		BLY28-L6	7/16	1.15	2.76	2.19	.56	.46
CH4/0-1212-12-SSH		BLY28-L12	1/2	1.15	2.76	2.19	.56	.53
CH4/0-5858-12-SSH		BLY28-L13	5/8	1.15	2.76	2.19	.56	.67
CH4/0-3434-12-SSH		BLY28-L14	3/4	1.27	2.96	2.33	.56	.79
CH4/0-7878-12-SSH		BLY28-L15	7/8	1.27	2.96	2.34	.77	.90



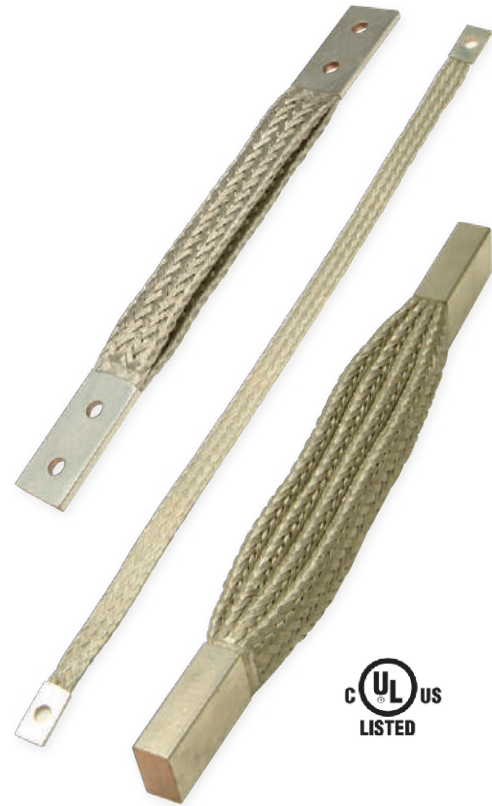
Ordering Information:

- Cable harness length can range from 2" up to 96"
- The "12" in the catalog number indicates a standard length of the cable harness
- To order other lengths, substitute the "12" with the desired length dimension in inches
- Hardware consists of stainless steel screw/bolt, flat washer and hex nut as shown
- Standard bolt length is 1" - for other lengths, contact factory
- To order without mounting hardware, remove suffix "-SSH" from catalog number
- Standard harnesses have same size mounting holes on each end
- Custom variations can be ordered by changing the stud sizes within the catalog number as shown below
- Example: A 12" long #2 AWG cable harness which will accommodate 1/4" and 3/8" mounting hardware, catalog number will be CH2-1438-12-SSH

Flexible Copper Braid Connectors

Type FXB

- Manufactured from flexible pure copper for high conductivity
- Seamless, pure copper ferrules are tin plated and cold pressed to each end
- Ideally suited for the following applications:
 - Isolation of vibration common in generator, transformer, turbine and substation installations
 - Compensation for component misalignment
 - Thermal expansion and contraction
 - Perimeter grounding and fencing
- Braid is tin plated to protect against corrosion
- Inside ends of ferrules are chamfered to prevent strand degradation
- UL listed to UL467 and certified to CSA C22.2, No. 41 Grounding and Bonding Equipment Standards for lengths up to 48 in.
- Size/combinations not shown can be readily supplied upon request



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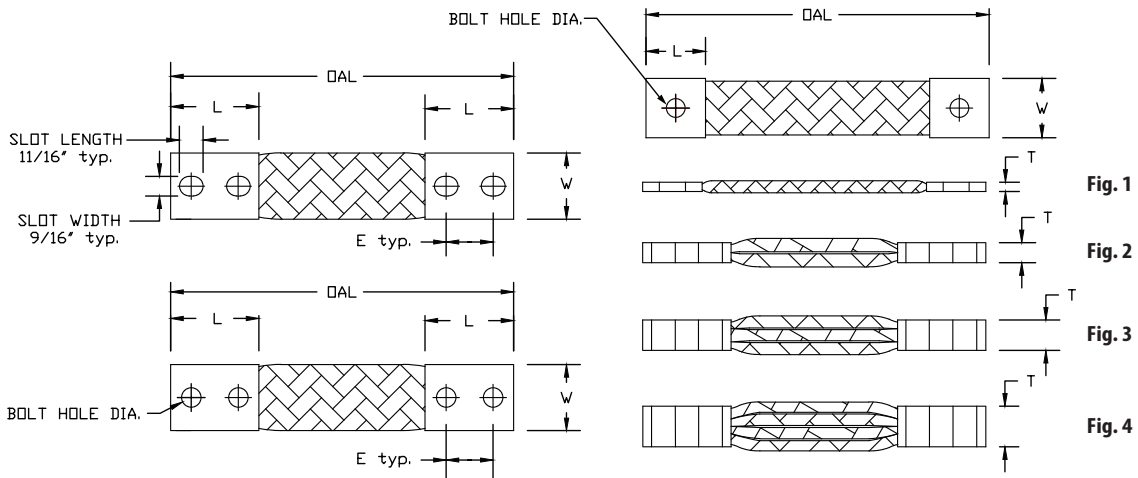


Fig. 1

Fig. 2

Fig. 3

Fig. 4

TYPE FXB DIMENSIONS & INDEX REFERENCE

PREVIOUS CATALOG NUMBER	NEW CATALOG NUMBER	FIG. NO.	AMPERE RATING (INDOORS)*	CIRCULAR MILS	APPROXIMATE DIMENSIONS (IN.)				
					FERRULE DIMENSIONS		OVERALL LENGTH (OAL)	BOLT HOLE DIA./SLOT DIM.	E
					L	W x T			
-	FXB1-12-Q1	1	95	24,000	.75	.63 x .09	12.00	.25	-
-	FXB21-12-Q1	2	169	48,000	.75	.63 x .13	12.00	.25	-
-	FXB31-12-Q-2TC14	3	228	72,000	1.25	.63 x .16	12.00	.25	.63
-	FXB41-12-Q-2TC14	4	293	96,000	1.25	.63 x .19	12.00	.25	.63
-	FXB2-12-Q1	1	140	48,000	.75	.75 x .13	12.00	.25	-
-	FXB22-12-Q-2TC14	2	249	96,000	1.25	.75 x .17	12.00	.25	.63
-	FXB32-12-Q-2TC14	3	336	144,000	1.25	.75 x .23	12.00	.25	.63
-	FXB42-12-Q-2TC14	4	431	192,000	1.25	.75 x .28	12.00	.25	.63
FXBA-12-Q	FXB3-12-Q	1	190	76,800	2.50	1.00 x .16	12.00	.44	1.25
FXB2A-12-Q	FXB23-12-Q	2	338	153,600	2.50	1.00 x .22	12.00	.44	1.25
FXB3A-12-Q	FXB33-12-Q	3	456	230,400	2.50	1.13 x .25	12.00	.44	1.25
FXB4A-12-Q	FXB43-12-Q	4	585	307,200	2.50	1.13 x .31	12.00	.44	1.25
FXBA-12-SQ	FXB3-12-SQ	1	190	76,800	3.00	1.00 x .16	12.00	.56 x .69	1.50 to 1.75
FXB2A-12-SQ	FXB23-12-SQ	2	338	153,600	3.00	1.00 x .22	12.00	.56 x .69	1.50 to 1.75
FXB3A-12-SQ	FXB33-12-SQ	3	456	230,400	3.00	1.13 x .25	12.00	.56 x .69	1.50 to 1.75
FXB4A-12-SQ	FXB43-12-SQ	4	252	307,200	3.00	1.13 x .31	12.00	.56 x .69	1.50 to 1.75
FXBB-12-SQ	FXB4-12-SQ	1	300	134,400	3.00	1.00 x .25	12.00	.56 x .69	1.50 to 1.75
FXB2B-12-SQ	FXB24-12-SQ	2	534	268,800	3.00	1.50 x .25	12.00	.56 x .69	1.50 to 1.75
FXB3B-12-SQ	FXB34-12-SQ	3	720	403,200	3.00	1.50 x .38	12.00	.56 x .69	1.50 to 1.75
FXB4B-12-SQ	FXB44-12-SQ	4	924	537,600	3.00	1.50 x .50	12.00	.56 x .69	1.50 to 1.75
FXBC-12-SQ	FXB5-12-SQ	1	335	168,000	3.00	1.50 x .19	12.00	.56 x .69	1.50 to 1.75
FXB2C-12-SQ	FXB25-12-SQ	2	596	336,000	3.00	1.50 x .25	12.00	.56 x .69	1.50 to 1.75
FXB3C-12-SQ	FXB35-12-SQ	3	804	504,000	3.00	1.50 x .34	12.00	.56 x .69	1.50 to 1.75
FXB4C-12-SQ	FXB45-12-SQ	4	1032	672,000	3.00	1.50 x .50	12.00	.56 x .69	1.50 to 1.75
FXBD-12-SQ	FXB6-12-SQ	1	360	201,600	3.00	1.38 x .25	12.00	.56 x .69	1.50 to 1.75
FXB2D-12-SQ	FXB26-12-SQ	2	641	403,200	3.00	1.50 x .41	12.00	.56 x .69	1.50 to 1.75
FXB3D-12-SQ	FXB36-12-SQ	3	864	604,800	3.00	1.50 x .47	12.00	.56 x .69	1.50 to 1.75
FXB4D-12-SQ	FXB46-12-SQ	4	1109	806,400	3.00	1.50 x .56	12.00	.56 x .69	1.50 to 1.75
-	FXB7-12-SQ	1	400	230,400	3.00	1.50 x .25	12.00	.56 x .69	1.50 to 1.75
-	FXB27-12-SQ	2	712	460,800	3.00	1.50 x .41	12.00	.56 x .69	1.50 to 1.75
-	FXB37-12-SQ	3	960	691,200	3.00	1.50 x .47	12.00	.56 x .69	1.50 to 1.75
-	FXB47-12-SQ	4	1232	921,600	3.00	1.50 x .56	12.00	.56 x .69	1.50 to 1.75
FXBE-12-SQ	FXB8-12-SQ	1	430	302,400	3.00	1.50 x .25	12.00	.56 x .69	1.50 to 1.75
FXB2E-12-SQ	FXB28-12-SQ	2	765	604,800	3.00	1.50 x .50	12.00	.56 x .69	1.50 to 1.75
FXB3E-12-SQ	FXB38-12-SQ	3	1032	907,200	3.00	1.50 x .69	12.00	.56 x .69	1.50 to 1.75
FXB4E-12-SQ	FXB48-12-SQ	4	1324	1,209,600	3.00	1.50 x .88	12.00	.56 x .69	1.50 to 1.75
-	FXB9-12-SQ	1	500	307,200	3.00	1.50 x .25	12.00	.56 x .69	1.50 to 1.75
-	FXB29-12-SQ	2	890	605,400	3.00	1.50 x .50	12.00	.56 x .69	1.50 to 1.75
-	FXB39-12-SQ	3	1200	908,100	3.00	1.50 x .69	12.00	.56 x .69	1.50 to 1.75
-	FXB49-12-SQ	4	1540	1,210,800	3.00	1.50 x .88	12.00	.56 x .69	1.50 to 1.75

*Ampere ratings are a suggested guide only. Actual values used for a given application will depend on permissible temperature rise, permissible voltage drop, number of cables together, and other conditions of service.

Ordering Information:

- "-S" suffix denotes slotted holes which are suitable for 1/2 in. or 3/8 in. mounting hardware on 1-1/2" or 1-3/4 in. hole centers
- For NEMA drilling, substitute "-N" for "-S" in catalog number suffix
- For lengths other than 12 in., change catalog number accordingly (i.e. if an 18 in. length is desired, change -12 to -18)
- Remove "-Q" from catalog number suffix for silver plated ferrules



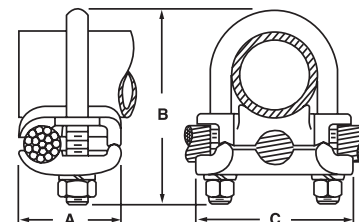
Bronze Ground Clamp Connectors

Type GPL

- Clamp is manufactured from high copper content alloy
- Used to connect copper ground conductor to water pipe, rod, or structured tube
- Furnished with silicon bronze u-bolt, nuts, and lockwashers for corrosion resistance
- Clamp design allows ground conductor to run parallel to pipe or to be installed at a right angle for grounding several parallel pipes
- Suitable for direct burial in earth or concrete
- Single wrench installation
- UL 467 listed



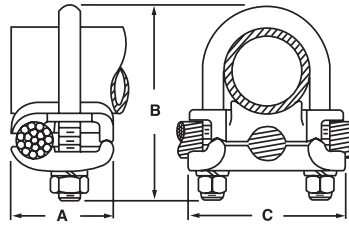
CATALOG NUMBER	ACCOMMODATES		CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			BOLT SIZE
	ROD	IPS		A	B	C	
GPL-1*	1/2	1/4	8 Sol. - 4 Str.	1.38	2.50	1.88	3/8
GPL-2*			4 Sol. - 2/0 Str.	1.63	2.50	1.88	3/8
GPL-3*			2/0 Sol. - 250 kcmil	1.88	2.50	1.88	3/8
GPL-4	5/8 or 3/4	3/8	8 Sol. - 4 Str.	1.38	2.75	2.00	3/8
GPL-5			4 Sol. - 2/0 Str.	1.63	2.75	2.00	3/8
GPL-6			2/0 Sol. - 250 kcmil	1.88	2.75	2.00	3/8
GPL-7*	5/8 or 1	3/8 or 3/4	300 - 500 kcmil	2.25	3.50	2.38	1/2
GPL-8	7/8 or 1	1/2 or 3/4	8 Sol. - 4 Str.	1.38	2.63	2.38	3/8
GPL-9			4 Sol. - 2/0 Str.	1.63	2.63	2.38	3/8
GPL-10			2/0 Sol. - 250 kcmil	1.88	3.00	2.38	3/8
GPL-12*			500 - 750 kcmil	2.63	3.75	2.75	1/2
GPL-13*			750 - 1000 kcmil	3.00	4.00	3.50	1/2
GPL-14			8 Sol. - 4 Str.	1.38	2.75	2.63	3/8
GPL-15	4 Sol. - 2/0 Str.	1.63	2.75	2.63	3/8		
GPL-16	-	1	2/0 Sol. - 250 kcmil	1.88	3.25	2.63	3/8
GPL-17*			300 - 500 kcmil	2.38	4.50	3.00	1/2
GPL-18*			500 - 750 kcmil	2.63	4.50	3.00	1/2
GPL-19*			750 - 1000 kcmil	3.00	4.75	3.50	1/2
GPL-20			8 Sol. - 4 Str.	1.38	3.50	3.00	3/8
GPL-21	4 Sol. - 2/0 Str.	1.63	3.50	3.00	3/8		
GPL-22	-	1 1/4	2/0 Sol. - 250 kcmil	1.88	3.50	3.00	3/8
GPL-23*			300 - 500 kcmil	2.38	4.25	3.38	1/2
GPL-24*			500 - 750 kcmil	2.75	5.00	3.75	1/2
GPL-25*			750 - 1000 kcmil	3.00	5.50	4.25	1/2
GPL-26	-	1 1/2	8 Sol. - 4 Str.	1.38	4.00	3.25	3/8
GPL-27			4 Sol. - 2/0 Str.	1.63	4.00	3.25	3/8
GPL-28			2/0 Sol. - 250 kcmil	1.88	4.00	3.25	3/8
GPL-29*			300 - 500 kcmil	2.38	4.63	3.63	1/2
GPL-30*			500 - 750 kcmil	2.75	5.25	4.00	1/2
GPL-31*			750 - 1000 kcmil	3.00	5.75	4.50	1/2



* Not UL listed for 1/4" pipe

• UL listing is limited to a maximum wire size of 250 kcmil

**Bronze Ground Clamp Connectors
Type GPL (continued)**



CATALOG NUMBER	ACCOMMODATES		CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			BOLT SIZE
	ROD	IPS		A	B	C	
GPL-32	-	2	8 Sol. - 4 Str.	1.38	4.25	3.75	3/8
GPL-33			4 Sol. - 2/0 Str.	1.63	4.25	3.75	3/8
GPL-34			2/0 Sol. - 250 kcmil	1.88	4.25	3.75	3/8
GPL-35*			300 - 500 kcmil	2.38	5.25	4.00	1/2
GPL-36*			500 - 750 kcmil	2.75	5.50	4.50	1/2
GPL-37*			750 - 1000 kcmil	3.00	6.00	5.00	1/2
GPL-38	-	2 1/2	8 Sol. - 4 Str.	1.38	5.00	4.25	3/8
GPL-39			4 Sol. - 2/0 Str.	1.63	5.00	4.25	3/8
GPL-40			2/0 Sol. - 250 kcmil	1.88	5.00	4.25	3/8
GPL-41			300 - 500 kcmil	2.38	5.63	4.25	1/2
GPL-42			500 - 750 kcmil	2.75	6.00	5.00	1/2
GPL-43			750 - 1000 kcmil	3.00	6.50	5.50	1/2
GPL-44	-	3	8 Sol. - 4 Str.	1.38	5.50	4.75	3/8
GPL-45			4 Sol. - 2/0 Str.	1.63	5.50	4.75	3/8
GPL-46			2/0 Sol. - 250 kcmil	1.88	5.50	4.75	3/8
GPL-47*			300 - 500 kcmil	2.38	6.25	5.25	1/2
GPL-48*			500 - 750 kcmil	2.75	6.75	5.50	1/2
GPL-49*			750 - 1000 kcmil	3.00	7.25	6.00	1/2
GPL-50	-	3 1/2	8 Sol. - 4 Str.	1.38	6.25	5.25	3/8
GPL-51			4 Sol. - 2/0 Str.	1.63	6.25	5.25	3/8
GPL-52			2/0 Sol. - 250 kcmil	1.88	6.25	5.25	3/8
GPL-53*			300 - 500 kcmil	2.38	6.75	5.75	1/2
GPL-54*			500 - 750 kcmil	2.75	7.25	6.00	1/2
GPL-55*			750 - 1000 kcmil	3.00	8.00	6.50	1/2
GPL-56	-	4	8 Sol. - 4 Str.	1.38	6.38	5.75	3/8
GPL-57			4 Sol. - 2/0 Str.	1.63	6.38	5.75	3/8
GPL-58			2/0 Sol. - 250 kcmil	1.88	6.38	5.75	3/8
GPL-59*			300 - 500 kcmil	2.38	6.75	6.25	1/2
GPL-60*			500 - 750 kcmil	2.75	8.00	6.50	1/2
GPL-61*			750 - 1000 kcmil	3.00	8.50	7.00	1/2
GPL-68	-	5	8 Sol. - 4 Str.	1.38	6.38	6.75	3/8
GPL-69			4 Sol. - 2/0 Str.	1.53	5.63	6.81	3/8
GPL-70			2/0 Sol. - 250 kcmil	1.88	6.13	6.81	3/8
GPL-71*	-	6	300 - 500 kcmil	2.31	6.13	7.13	1/2
GPL-75			4 Sol. - 2/0 Str.	1.53	5.88	7.88	3/8
GPL-76			2/0 Sol. - 250 kcmil	1.88	7.13	7.81	3/8
GPL-77*	-	8	300 - 500 kcmil	2.31	6.19	8.19	1/2
GPL-87			4 Sol. - 2/0 Str.	1.53	7.13	9.88	3/8

* Not UL listed for 1/4" pipe

• UL listing is limited to a maximum wire size of 250 kcmil



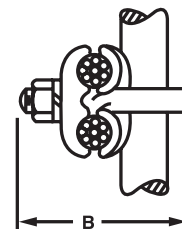
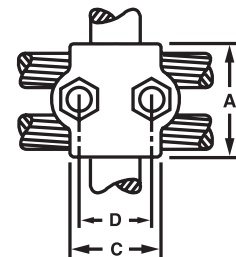
Bronze Ground Clamp Connectors

Type GT

- Clamp is manufactured from high copper content alloy
- Used to connect a range of parallel conductors perpendicular to rod, water pipe, or structured tube
- Furnished with silicon bronze bolt, nuts, and lockwashers for corrosion resistance
- Use one groove for run and other for tap to equipment
- Suitable for direct burial in earth or concrete
- Single wrench installation
- UL 467 listed

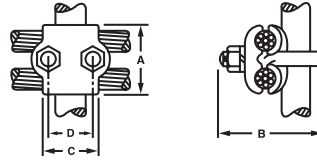


CATALOG NUMBER	ACCOMMODATES		CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)				BOLT SIZE
	ROD	IPS		A	B	C	D	
GT-1	1/2	1/4	8 Sol. - 4 Str.	1.63	2.00	1.63	1.00	3/8
GT-2			4 Sol. - 2/0 Str.	2.00	2.13	1.75	1.00	3/8
GT-3			2/0 Sol. - 250 kcmil	2.50	2.25	1.88	1.00	3/8
GT-4	5/8 or 3/4	3/8	8 Sol. - 4 Str.	1.63	2.13	1.63	1.13	3/8
GT-5			4 Sol. - 2/0 Str.	2.00	2.50	1.75	1.13	3/8
GT-6			2/0 Sol. - 250 kcmil	2.50	2.63	1.88	1.13	3/8
GT-7			300 - 500 kcmil	2.75	2.75	2.00	1.13	3/8
GT-8	7/8 or 1	1/2 or 3/4	8 Sol. - 4 Str.	1.63	2.50	1.63	1.50	3/8
GT-9			4 Sol. - 2/0 Str.	2.00	2.75	1.75	1.50	3/8
GT-10			2/0 Sol. - 250 kcmil	2.50	2.88	1.88	1.50	3/8
GT-11			300 - 500 kcmil	2.75	3.00	2.00	1.50	3/8
GT-12			500 - 750 kcmil	3.13	3.75	2.25	1.63	1/2
GT-13	-	1	8 Sol. - 4 Str.	1.63	2.75	1.63	1.75	3/8
GT-14			4 Sol. - 2/0 Str.	2.00	3.00	1.75	1.75	3/8
GT-15			2/0 Sol. - 250 kcmil	2.50	3.88	3.13	1.75	3/8
GT-16			300 - 500 kcmil	2.75	3.75	2.00	1.75	3/8
GT-17			500 - 750 kcmil	3.13	4.13	2.25	1.88	1/2
GT-18	-	1 1/4	8 Sol. - 4 Str.	1.63	3.00	1.88	2.06	3/8
GT-19			4 Sol. - 2/0 Str.	2.00	3.25	2.00	2.06	3/8
GT-20			2/0 Sol. - 250 kcmil	2.50	3.50	2.13	2.06	3/8
GT-21			300 - 500 kcmil	2.75	4.13	2.25	2.19	1/2
GT-22			500 - 750 kcmil	3.75	4.38	2.50	2.31	5/8
GT-23			750 - 1000 kcmil	4.00	4.63	2.75	2.31	5/8
GT-24	-	1 1/2	8 Sol. - 4 Str.	1.63	3.25	2.25	2.38	3/8
GT-25			4 Sol. - 2/0 Str.	2.00	3.50	2.38	2.38	3/8
GT-26			2/0 Sol. - 250 kcmil	2.50	3.88	2.50	2.38	3/8
GT-27			300 - 500 kcmil	2.75	4.38	2.63	2.50	1/2
GT-28			500 - 750 kcmil	3.75	4.75	2.75	2.63	5/8
GT-29			750 - 1000 kcmil	4.00	5.00	2.88	2.63	5/8



• UL listing is limited to maximum wire size of 250 kcmil

**Bronze Ground Clamp Connectors
Type GT (continued)**



CATALOG NUMBER	ACCOMMODATES		CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)				BOLT SIZE
	ROD	IPS		A	B	C	D	
GT-30	-	2	8 Sol. - 4 Str.	1.75	3.88	2.75	2.81	3/8
GT-31			4 Sol. - 2/0 Str.	2.00	4.13	2.88	2.81	3/8
GT-32			2/0 Sol. - 250 kcmil	2.63	4.25	3.00	2.81	3/8
GT-33 •			300 - 500 kcmil	2.88	4.63	3.13	2.94	1/2
GT-34 •			500 - 750 kcmil	3.75	5.25	3.25	3.06	5/8
GT-35 •			750 - 1000 kcmil	4.00	5.50	3.25	3.06	5/8
GT-36	-	2 1/2	8 Sol. - 4 Str.	1.75	4.38	3.38	3.63	3/8
GT-37			4 Sol. - 2/0 Str.	2.00	4.50	3.38	3.31	3/8
GT-38			2/0 Sol. - 250 kcmil	2.63	4.75	3.50	3.31	3/8
GT-39 •			300 - 500 kcmil	2.88	5.13	3.63	3.44	1/2
GT-40 •			500 - 750 kcmil	3.75	5.63	3.75	3.56	5/8
GT-41 •			750 - 1000 kcmil	4.00	5.75	3.75	3.56	5/8
GT-42	-	3	8 Sol. - 4 Str.	1.75	5.00	3.63	3.94	3/8
GT-43			4 Sol. - 2/0 Str.	2.00	5.25	3.75	3.94	3/8
GT-44			2/0 Sol. - 250 kcmil	2.63	5.50	3.75	3.94	3/8
GT-45 •			300 - 500 kcmil	2.88	5.88	3.88	4.06	1/2
GT-46 •			500 - 750 kcmil	3.75	6.50	4.13	4.19	5/8
GT-47 •			750 - 1000 kcmil	4.00	6.75	4.13	4.19	5/8
GT-48	-	3 1/2	8 Sol. - 4 Str.	1.75	5.50	3.88	4.44	3/8
GT-49			4 Sol. - 2/0 Str.	2.00	5.88	3.88	4.44	3/8
GT-50			2/0 Sol. - 250 kcmil	2.63	6.13	4.00	4.44	3/8
GT-51 •			300 - 500 kcmil	2.88	6.50	4.25	4.56	1/2
GT-52 •			500 - 750 kcmil	3.75	7.13	4.63	4.69	5/8
GT-53 •			750 - 1000 kcmil	4.00	7.38	4.63	4.69	5/8
GT-54 •		1250 - 1500 kcmil	4.25	7.63	4.75	4.69	5/8	
GT-55	-	4	2/0 Sol. - 250 kcmil	2.63	6.50	4.75	4.94	3/8
GT-56 •			300 - 500 kcmil	2.88	7.00	5.00	5.06	1/2

• UL listing is limited to maximum wire size of 250 kcmil



Bronze Ground Clamp Connectors

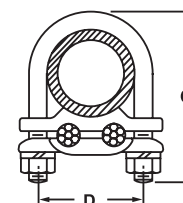
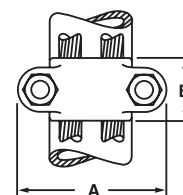
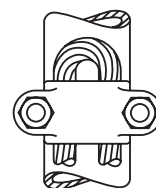
Type GU

- Clamp is manufactured from high copper content alloy
- Used to connect two parallel cables or a looped cable to water pipe or tube
- Furnished with silicon bronze bolt, nuts, and lockwashers for corrosion resistance
- Suitable for direct burial in earth or concrete
- Single wrench installation
- UL 467 listed



CATALOG NUMBER	IPS SIZE	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)				BOLT SIZE
			A	B	C	D	
GU-0	3/4	8 Sol. - 4 Str.	2.50	.88	2.63	1.50	3/8
GU-00		4 Sol. - 2/0 Str.	2.50	.88	2.63	1.50	3/8
GU-1	1	8 Sol. - 4 Str.	2.75	1.13	3.00	1.75	3/8
GU-2		4 Sol. - 2/0 Str.	2.75	1.13	3.25	1.75	3/8
GU-3	1 1/4	2/0 Sol. - 250 kcmil	2.75	1.25	3.50	1.75	3/8
GU-4		8 Sol. - 4 Str.	3.00	1.13	3.25	2.06	3/8
GU-5	1 1/2	4 Sol. - 2/0 Str.	3.00	1.25	3.50	2.06	3/8
GU-6		2/0 Sol. - 250 kcmil	3.00	1.38	3.75	2.06	3/8
GU-7	1 1/2	8 Sol. - 4 Str.	3.38	1.25	3.50	2.38	3/8
GU-8		4 Sol. - 2/0 Str.	3.38	1.38	3.63	2.38	3/8
GU-9	2	2/0 Sol. - 250 kcmil	3.38	1.50	3.75	2.38	3/8
GU-10		8 Sol. - 4 Str.	3.75	1.38	3.88	2.81	3/8
GU-11	2	4 Sol. - 2/0 Str.	3.75	1.38	4.13	2.81	3/8
GU-12		2/0 Sol. - 250 kcmil	3.75	1.38	4.25	2.81	3/8
GU-13	2 1/2	300 - 500 kcmil	4.00	1.50	4.63	2.94	1/2
GU-14		8 Sol. - 4 Str.	4.25	1.38	5.00	3.31	3/8
GU-15	2 1/2	4 Sol. - 2/0 Str.	4.25	1.38	5.13	3.31	3/8
GU-16		2/0 Sol. - 250 kcmil	4.25	1.38	5.25	3.31	3/8
GU-17	3	300 - 500 kcmil	4.50	1.50	5.50	3.44	1/2
GU-18		500 - 750 kcmil	4.50	1.50	5.75	3.44	1/2
GU-19	3	8 Sol. - 4 Str.	5.00	1.38	5.25	3.94	3/8
GU-20		4 Sol. - 2/0 Str.	5.00	1.38	5.50	3.94	3/8
GU-21	3 1/2	2/0 Sol. - 250 kcmil	5.00	1.38	5.75	3.94	3/8
GU-22		300 - 500 kcmil	5.25	1.50	6.00	4.06	1/2
GU-23	3 1/2	500 - 750 kcmil	5.50	1.75	6.38	4.19	5/8
GU-25		8 Sol. - 4 Str.	5.50	1.50	6.00	4.44	3/8
GU-26	4	4 Sol. - 2/0 Str.	5.50	1.50	6.13	4.44	3/8
GU-27		2/0 Sol. - 250 kcmil	5.50	1.50	6.25	4.44	3/8
GU-28	4	300 - 500 kcmil	5.75	1.75	6.38	4.56	1/2
GU-29		500 - 750 kcmil	6.00	1.88	6.63	4.69	5/8
GU-30	4	750 - 1000 kcmil	6.00	2.13	7.00	4.69	5/8
GU-31		8 Sol. - 4 Str.	6.00	1.50	6.50	4.94	3/8
GU-32	4	4 Sol. - 2/0 Str.	6.00	1.50	6.75	4.94	3/8
GU-33		2/0 Sol. - 250 kcmil	6.00	1.63	7.00	4.94	3/8
GU-34	4	300 - 500 kcmil	6.25	1.63	7.25	5.06	1/2
GU-35		500 - 750 kcmil	6.50	1.88	7.50	5.19	5/8
GU-36	4	750 - 1000 kcmil	6.50	2.13	7.75	5.19	5/8
GU-37		1200 - 1500 kcmil	6.50	2.38	8.13	5.19	5/8

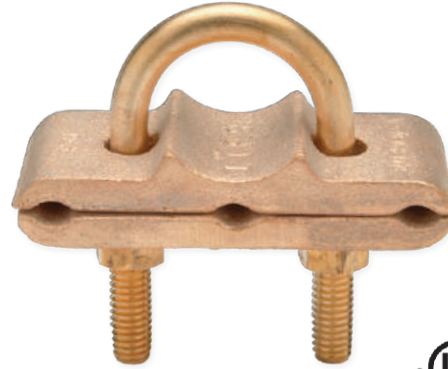
• UL listing is limited to a maximum wire size of 250 kcmil



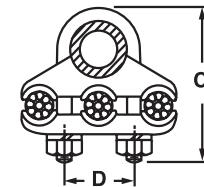
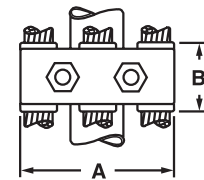
Bronze Ground Clamp Connectors

Type GR

- Manufactured from high copper content alloy
- Used to connect three equal size cables to rod, water pipe, or structured tube
- Furnished with silicon bronze bolt, nuts, and lockwashers for corrosion resistance
- Suitable for direct burial in earth or concrete
- Single wrench installation
- UL 467 listed



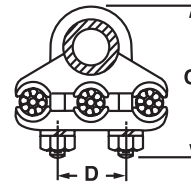
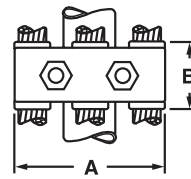
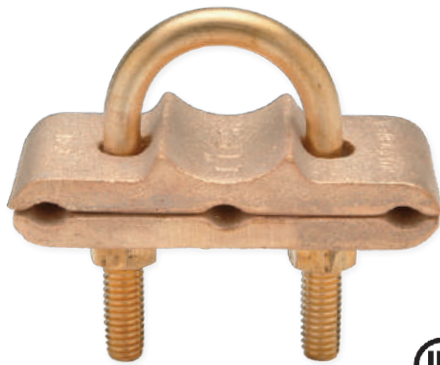
CATALOG NUMBER	ACCOMMODATES		CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)				BOLT SIZE
	ROD	IPS		A	B	C	D	
GR-1	1/2	1/4	8 Sol. - 4 Str.	2.50	1.50	2.25	1.00	3/8
GR-2			4 Sol. - 2/0 Str.	3.00	1.50	2.50	1.00	3/8
GR-3			2/0 Sol. - 250 kcmil	3.63	1.50	2.75	1.00	3/8
GR-4	5/8 or 3/4	3/8	8 Sol. - 4 Str.	2.75	1.50	2.50	1.13	3/8
GR-5			4 Sol. - 2/0 Str.	3.00	1.50	2.75	1.13	3/8
GR-6			2/0 Sol. - 250 kcmil	3.50	1.63	3.00	1.13	3/8
GR-7			300 - 500 kcmil	4.00	1.63	3.25	1.13	1/2
GR-8	7/8 or 1	1/2 or 3/4	8 Sol. - 4 Str.	2.88	1.50	3.00	1.50	3/8
GR-9			4 Sol. - 2/0 Str.	3.50	1.50	3.25	1.50	3/8
GR-10			2/0 Sol. - 250 kcmil	3.88	1.63	3.38	1.50	1/2
GR-11			300 - 500 kcmil	4.38	1.63	3.50	1.50	1/2
GR-12			500 - 750 kcmil	5.00	1.75	4.00	1.63	1/2
GR-13			-	1	8 Sol. - 4 Str.	3.25	1.50	3.00
GR-14	4 Sol. - 2/0 Str.	3.63			1.50	3.25	1.75	3/8
GR-15	2/0 Sol. - 250 kcmil	4.13			1.63	3.50	1.75	3/8
GR-16	300 - 500 kcmil	4.50			1.63	3.75	1.75	1/2
GR-17	500 - 750 kcmil	5.13			1.75	4.25	1.88	1/2
GR-18	750 - 1000 kcmil	5.50			1.75	4.50	1.88	1/2
GR-19	-	1 1/4	8 Sol. - 4 Str.	3.50	1.50	3.50	2.06	3/8
GR-20			4 Sol. - 2/0 Str.	4.00	1.50	3.75	2.06	3/8
GR-21			2/0 Sol. - 250 kcmil	4.50	1.63	3.88	2.06	3/8
GR-22			300 - 500 kcmil	5.13	1.75	4.38	2.19	1/2
GR-23			500 - 750 kcmil	5.75	2.00	5.13	2.31	5/8
GR-24	750 - 1000 kcmil	6.25	2.00	5.38	2.31	5/8		
GR-25	-	1 1/2	8 Sol. - 4 Str.	3.75	1.50	3.75	2.38	3/8
GR-26			4 Sol. - 2/0 Str.	4.25	1.50	4.00	2.38	3/8
GR-27			2/0 Sol. - 250 kcmil	4.75	1.75	4.25	2.38	3/8
GR-28			300 - 500 kcmil	5.50	2.00	4.75	2.50	1/2
GR-29			500 - 750 kcmil	6.25	2.25	5.25	2.63	5/8
GR-30			750 - 1000 kcmil	6.50	2.25	5.50	2.63	5/8



• UL listing is limited to maximum wire size of 250 kcmil

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Bronze Ground Clamp Connectors Type GR (continued)

CATALOG NUMBER	ACCOMMODATES		CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)				BOLT SIZE
	ROD	IPS		A	B	C	D	
GR-31	-	2	8 Sol. - 4 Str.	4.38	1.50	4.25	2.81	3/8
GR-32			4 Sol. - 2/0 Str.	4.88	1.50	4.50	2.81	3/8
GR-33			2/0 Sol. - 250 kcmil	5.25	1.75	5.00	2.81	1/2
GR-34 •			300 - 500 kcmil	5.75	2.00	5.00	2.94	1/2
GR-35 •			500 - 750 kcmil	6.63	2.25	5.75	3.06	1/2
GR-36 •			750 - 1000 kcmil	7.00	2.25	6.00	3.06	5/8
GR-37	-	2 1/2	8 Sol. - 4 Str.	4.88	1.50	4.63	3.31	3/8
GR-38			4 Sol. - 2/0 Str.	5.38	1.50	5.00	3.31	3/8
GR-39			2/0 Sol. - 250 kcmil	5.88	1.75	5.25	3.31	1/2
GR-40 •			300 - 500 kcmil	6.50	2.00	5.75	3.44	1/2
GR-41 •			500 - 750 kcmil	7.25	2.25	6.25	3.56	5/8
GR-42 •			750 - 1000 kcmil	7.50	2.25	6.50	3.56	5/8
GR-43	-	3	8 Sol. - 4 Str.	5.50	1.50	5.25	3.94	3/8
GR-44			4 Sol. - 2/0 Str.	6.00	1.50	5.63	3.94	3/8
GR-45			2/0 Sol. - 250 kcmil	6.38	1.75	5.75	3.94	1/2
GR-46 •			300 - 500 kcmil	6.88	2.00	6.25	4.06	1/2
GR-47 •			500 - 750 kcmil	7.50	2.25	6.63	4.19	5/8
GR-48 •			750 - 1000 kcmil	8.13	2.25	6.88	4.19	5/8
GR-49	-	3 1/2	8 Sol. - 4 Str.	6.00	1.50	5.63	4.44	3/8
GR-50			4 Sol. - 2/0 Str.	6.38	1.50	5.88	4.44	1/2
GR-51			2/0 Sol. - 250 kcmil	6.75	1.75	6.38	4.44	1/2
GR-60	-	4	8 Sol. - 4 Str.	6.38	1.50	6.38	4.94	3/8
GR-61			4 Sol. - 2/0 Str.	6.69	1.50	6.38	4.94	1/2
GR-62			2/0 Sol. - 250 kcmil	7.25	1.75	6.75	4.94	1/2

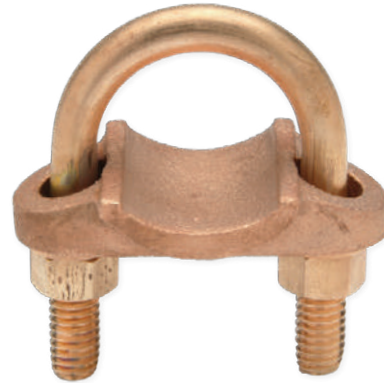
• UL listing is limited to maximum wire size of 250 kcmil

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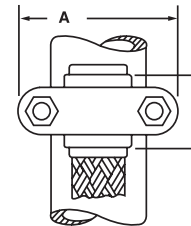
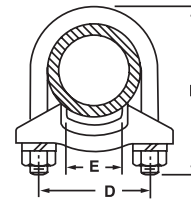
Bronze Ground Clamp Connectors

Type G0

- Clamp is manufactured from high copper content alloy
- Used to connect copper braid, cable, strap, or bar to water pipe or tube
- Furnished with silicon bronze bolt, nuts, and lockwashers for corrosion resistance
- Suitable for direct burial in earth or concrete
- Single wrench installation
- UL 467 listed



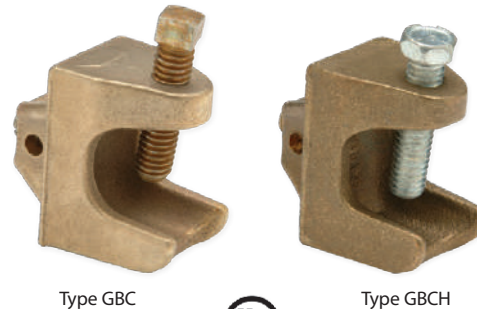
CATALOG NUMBER	IPS SIZE	APPROXIMATE DIMENSIONS (IN.)					BOLT SIZE
		A	B	C	D	E	
G0-0	3/4	2.50	2.50	1.13	1.50	1.00	3/8
G0-1	1	2.75	3.25	1.25	1.75	1.00	3/8
G0-2	1 1/4	3.00	3.50	1.38	2.06	1.00	3/8
G0-3	1 1/2	3.38	3.50	1.50	2.38	1.00	3/8
G0-4		3.38	3.50	1.50	2.38	1.50	3/8
G0-4A		3.38	3.50	1.50	2.38	2.00	1/2
G0-5	2	3.75	4.25	1.50	2.81	1.00	3/8
G0-6		3.75	4.25	1.50	2.81	1.50	3/8
G0-7		4.00	4.38	1.75	2.94	2.00	1/2
G0-7A	2 1/2	4.50	5.00	1.75	3.44	1.50	1/2
G0-8		4.50	5.00	1.88	3.44	2.00	1/2
G0-9		4.50	5.00	2.00	3.44	2.50	1/2
G0-10	3	5.25	6.25	2.00	4.06	2.00	1/2
G0-11		5.25	6.25	2.00	4.06	2.50	1/2
G0-12		5.25	6.25	2.00	4.06	3.00	1/2
G0-13	3 1/2	5.75	5.88	2.25	4.56	2.00	1/2
G0-14		5.75	5.88	2.25	4.56	2.50	1/2
G0-15		5.75	5.88	2.25	4.56	3.00	1/2
G0-16	4	6.25	6.50	2.25	5.06	2.00	1/2
G0-17		6.25	6.50	2.38	5.06	2.50	1/2
G0-18		6.25	6.50	2.50	5.06	3.00	1/2
G0-19		6.25	6.50	2.75	5.06	3.50	1/2



Bronze Ground Beam Clamps

Types GBC and GBCH

- Clamp is manufactured from high strength, corrosion resistant copper alloy
- Used to ground trailer frames, cable trays, telephone and CATV pedestals
- Design allows copper ground wire installation from four directions
- 7/16" hex head bolt installs with cam-wrench, socket, or crescent wrench
- Square head bolt installs with pliers when tighter connection is needed
- UL 467 listed

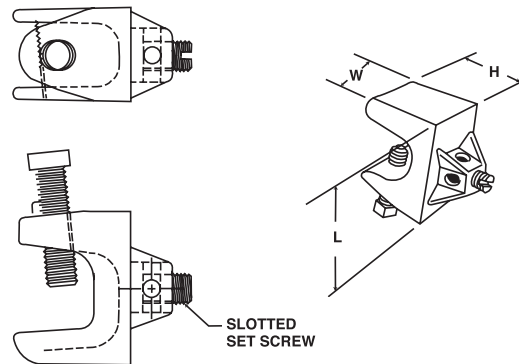


Type GBC

Type GBCH



CATALOG NUMBER	CONDUCTOR RANGE	BEAM BOLT	APPROXIMATE DIMENSIONS (IN.)		
			L	W	H
GBC-6	6 Sol. - 14 Sol.	Square HD 5/16 - 18	1.63	1.00	1.19
GBCH-6		Hex HD 5/16 - 18			

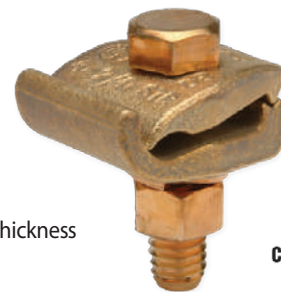


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Bronze Ground Clamp Connectors

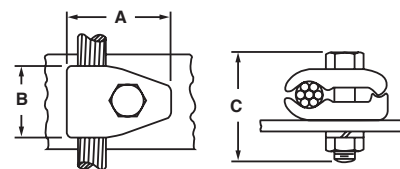
Type GM

- Clamp is manufactured from high copper content alloy
- Designed to clamp a single copper conductor to a flat surface or 1/4" thick bus bar
- Furnished with silicon bronze bolt, nut, and lockwasher for corrosion resistance
- Standard catalog items accommodate 1/4" bar; for other applications, specify bar thickness
- Suitable for direct burial in earth or concrete
- UL 467 listed



CATALOG NUMBER	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			BOLT SIZE
		A	B	C	
GM-1	8 Sol. - 4 Str.	1.25	1.00	1.63	3/8
GM-2	4 Sol. - 2/0 Str.	1.63	1.13	1.75	3/8
GM-3	2/0 Sol. - 250 kcmil	2.13	1.50	2.00	1/2
GM-4	300 - 500 kcmil	2.38	1.63	2.50	1/2
GM-5	500 - 750 kcmil	3.00	1.75	3.00	5/8
GM-6	750 - 1000 kcmil	3.50	1.88	3.13	5/8

• UL listing is limited to a maximum wire size of 250 kcmil



Bronze Ground Clamp Connectors

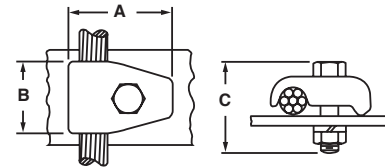
Type GMS

- Clamp is manufactured from high copper content alloy
- Designed to clamp a single copper conductor to flat a surface or 1/4" thick bus bar
- Furnished with silicon bronze bolt, nut, and lockwasher for corrosion resistance
- Standard catalog items accommodate 1/4" bar; for other applications, specify bar thickness
- Suitable for direct burial in earth or concrete
- UL 467 listed



CATALOG NUMBER	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			BOLT SIZE
		A	B	C	
GMS-1	8 Sol. - 4 Str.	1.25	1.00	1.63	3/8
GMS-2	4 Sol. - 2/0 Str.	1.63	1.13	1.75	3/8
GMS-3	2/0 Sol. - 250 kcmil	2.13	1.50	2.00	1/2
GMS-4	300 - 500 kcmil	2.38	1.63	2.50	1/2
GMS-5	500 - 750 kcmil	3.00	1.75	3.00	5/8
GMS-6	750 - 1000 kcmil	3.50	1.88	3.13	5/8

• UL listing is limited to a maximum wire size of 250 kcmil



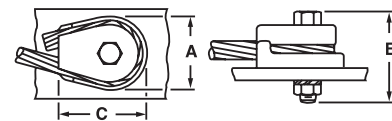
Bronze Ground Clamp Connectors

Type GWL

- Clamp is manufactured from high copper content alloy
- Designed to clamp a single copper conductor to flat a surface or 1/4" thick bus bar
- Furnished with silicon bronze bolt, nut, and lockwasher for corrosion resistance
- Conductor is gripped by looping around the clamping bolt in connector groove
- Standard catalog items accommodate 1/4" bar; for other applications, specify bar thickness
- Suitable for direct burial in earth or concrete
- UL 467 listed



CATALOG NUMBER	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)			BOLT SIZE
		A	B	C	
GWL-1	8 Str. - 4 Str.	1.13	1.50	1.38	3/8
GWL-2		1.75	1.75	1.88	1/2
GWL-3	3 Str. - 2/0 Str.	1.69	2.00	1.88	3/8
GWL-4		1.81	2.13	1.88	1/2
GWL-5	3/0 Str. - 250 kcmil	2.25	2.25	2.38	3/8
GWL-6		2.25	2.38	2.38	1/2
GWL-7		2.25	2.50	2.38	5/8



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Bronze Ground Clamp Connectors

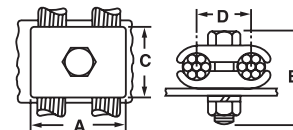
Type GH

- Clamp is manufactured from high copper content alloy
- Designed to clamp two copper conductors to a flat surface or 1/4" thick bus bar
- Furnished with silicon bronze bolt, nut, and lockwasher for corrosion resistance
- Standard catalog items accommodate 1/4" bar; for other applications, specify bar thickness
- Suitable for direct burial in earth or concrete
- UL 467 listed



CATALOG NUMBER	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)				BOLT SIZE
		A	B	C	D	
GH-1	8 Sol. - 4 Str.	1.25	1.50	1.38	.75	3/8
GH-2	4 Sol. - 2/0 Str.	1.50	2.00	1.63	1.00	3/8
GH-3	2/0 Sol. - 250 kcmil	2.00	2.25	1.75	1.25	1/2
GH-4	300 - 500 kcmil	2.50	2.88	2.00	1.50	1/2
GH-5	500 - 750 kcmil	3.25	3.38	2.38	1.75	5/8
GH-6	750 - 1000 kcmil	3.63	3.75	2.50	2.00	5/8
GH-7	1000 - 1250 kcmil	4.00	4.00	2.75	2.25	5/8

• UL listing is limited to a maximum wire size of 250 kcmil



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Bronze Ground Clamp Connectors

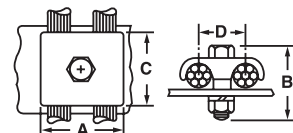
Type GHS

- Clamp is manufactured from high copper content alloy
- Designed to clamp two copper conductors to a flat surface or 1/4" thick bus bar
- Furnished with silicon bronze bolt, nut, and lockwasher for corrosion resistance
- Standard catalog items accommodate 1/4" bar; for other applications, specify bar thickness
- Suitable for direct burial in earth or concrete
- UL 467 listed



CATALOG NUMBER	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)				BOLT SIZE
		A	B	C	D	
GHS-1	8 Sol. - 4 Str.	1.25	1.38	1.38	.75	3/8
GHS-2	4 Sol. - 2/0 Str.	1.50	1.50	1.63	1.00	3/8
GHS-3	2/0 Sol. - 250 kcmil	2.00	1.88	1.75	1.25	1/2
GHS-4	300 - 500 kcmil	2.50	2.38	2.00	1.50	1/2
GHS-5	500 - 750 kcmil	3.25	2.75	2.38	1.75	5/8
GHS-6	750 - 1000 kcmil	3.63	2.88	2.50	2.00	5/8
GHS-7	1000 - 1250 kcmil	4.00	3.00	2.75	2.25	5/8

• UL listing is limited to a maximum wire size of 250 kcmil



Bronze Ground Clamp Connectors

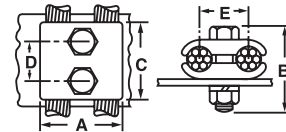
Type GJ

- Clamp is manufactured from high copper content alloy
- Designed to clamp two copper conductors to a flat surfaces or 1/4" thick bus bar
- Furnished with silicon bronze bolts, nuts, and lockwashers for corrosion resistance
- Standard catalog items accommodate 1/4" bar; for other applications, specify bar thickness
- Suitable for direct burial in earth or concrete
- UL 467 listed



CATALOG NUMBER	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)					BOLT SIZE
		A	B	C	D	E	
GJ-1	8 Sol. - 4 Str.	1.25	1.50	2.00	.94	.75	3/8
GJ-2	4 Sol. - 2/0 Str.	1.50	2.00	2.00	1.00	1.00	3/8
GJ-3	2/0 Sol. - 250 kcmil	2.00	2.25	2.50	1.31	1.31	1/2
GJ-4	300 - 500 kcmil	2.50	2.88	2.50	1.38	1.50	1/2
GJ-5	500 - 750 kcmil	3.25	3.38	3.00	1.56	1.75	5/8
GJ-6	750 - 1000 kcmil	3.63	3.75	3.00	1.56	2.00	5/8
GJ-7	1000 - 1200 kcmil	4.00	4.00	3.50	1.75	2.25	5/8

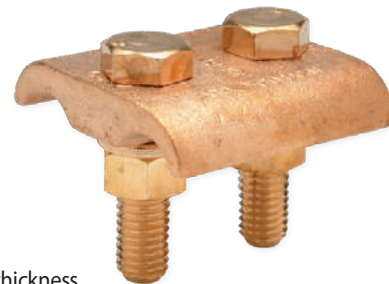
• UL listing is limited to a maximum wire size of 250 kcmil



Bronze Ground Clamp Connectors

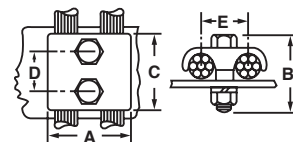
Type GJS

- Clamp is manufactured from high copper content alloy
- Designed to clamp two copper conductors to a flat surface or 1/4" thick bus bar
- Furnished with silicon bronze bolts, nuts, and lockwashers for corrosion resistance
- Standard catalog items accommodate 1/4" bar; for other applications, specify bar thickness
- Suitable for direct burial in earth or concrete
- UL 467 listed



CATALOG NUMBER	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)					BOLT SIZE
		A	B	C	D	E	
GJS-1	8 Sol. - 4 Str.	1.25	1.38	2.00	.94	.75	3/8
GJS-2	4 Sol. - 2/0 Str.	1.50	1.50	2.00	1.00	1.00	3/8
GJS-3	2/0 Sol. - 250 kcmil	2.00	1.88	2.50	1.31	1.31	1/2
GJS-4	300 - 500 kcmil	2.50	2.38	2.50	1.38	1.50	1/2
GJS-5	500 - 750 kcmil	3.25	2.75	3.00	1.56	1.75	5/8
GJS-6	750 - 1000 kcmil	3.63	2.88	3.00	1.56	2.00	5/8
GJS-7	1000 - 1250 kcmil	4.00	3.00	3.50	1.75	2.25	5/8

• UL listing is limited to a maximum wire size of 250 kcmil



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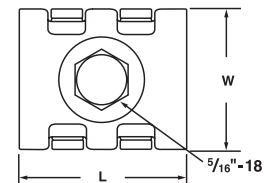
Bronze Jumper Clamp Connectors

Type JC

- Manufactured from high strength copper alloy
- Designed for use as a ground connector in CATV and telecom installations
- Furnished with silicon bronze hex washer head bolt
- Interlocking design ensures proper conductor alignment
- Single wrench installation
- Available tin plated, unplated, or with plating in one groove



CATALOG NUMBER	CONDUCTOR RANGE	FINISH OF GROOVES	BOLT MATERIAL	APPROXIMATE DIMENSIONS (IN.)	
				L	W
JC-1-AC†	6 Sol. - 1/0 Str.	1-Groove Tin Plated	Steel	1.13	1.31
JC-UL-AC	6 Sol. - 1/4, 5/16 Guy	1-Groove Bronze	Silicon Bronze		
JC-2-AA †	6 Sol. - 1/0 Str.	Tin Plated	Steel		
JC-UL	6 Sol. - 1/4, 5/16 Guy		Silicon Bronze		
JC-3-CC †	6 Sol. - 1/0 Str.	Bronze	Steel		
JC-UL-CC	6 Sol. - 1/4, 5/16 Guy		Silicon Bronze		



• RUS accepted
 † Not UL listed

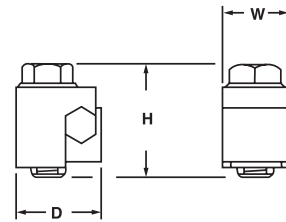
Vise Style Parallel Connectors

Type FF

- Body and clamp are manufactured from high strength bronze alloy
- Silicon bronze washer head bolt
- Designed to be used as a copper to copper grounding splice or tap connection in utility, telecom, CATV, and residential applications
- Non-swiveling design with full thread engagement
- UL 467 listed



CATALOG NUMBER	CONDUCTOR RANGE		APPROXIMATE DIMENSIONS (IN.)			BOLT SIZE	HEX SIZE ACROSS FLATS
	MAXIMUM 2 CONDUCTORS	MINIMUM 2 CONDUCTORS	D	H	W		
FF-6*	6 Sol.	8 Sol.	.75	1.00	.63	1/4 - 28	3/8
FF-4	4 Str.	6 Sol.	.81	1.16	.63	5/16 - 24	9/16
FF-2	2 Str.	4 Sol.	.81	1.38	.81	5/16 - 24	9/16
FF-2/0	2/0 Str.	2 Sol.	1.13	1.88	.97	3/8 - 24	9/16
FF-4/0	4/0 Str.	1/0 Sol.	1.19	2.13	.94	3/8 - 24	9/16



* Supplied with slotted hex head bolts only

Aluminum Wide Range Double Tab Press-Ons Types KO-R and KD-R

- Manufactured from high conductivity aluminum
- Designed for overhead line tap applications with copper*, aluminum, ACSR, and compact conductors
- In copper to aluminum applications, H-shaped profile with solid barrier provides conductor separation, prevents strand cutting, and minimizes galvanic corrosion
- Deep indent crimp lines make crimp location clearly visible
- Bendable tabs secure both run and tap conductors, enabling the user to easily operate installation tool
- Pre-filled with oxide inhibitor and individually boxed



*Note: Not recommended for copper to copper applications

7 Connector Program - Mechanical or Hydraulic Tool

CATALOG NUMBER	PROGRAM NUMBER	GROOVE	STANDARD CONDUCTOR			COMPACT CONDUCTOR		NO. OF CRIMPS		DIE SIZE
			ACSR & ALUMINUM ALLOY	AL OR CU STRANDED	AL OR CU SOLID	ACSR	STRANDED	MECH. TOOL	HYD. TOOL	
KO-R06	1	A	6, 4, 2, 6/1	6, 4, 3-7, 2	6, 4, 3, 2	6, 4, 3, 2	6, 4, 3, 2,	4	2	0
		B	6, 4, 2, 6/1	6, 4, 3-7, 3	6, 4, 3, 2	6, 4, 3, 2	6, 4, 3, 2,			
KO-R08	2	A	3, 2, 1, 1/0	3-3, 2, 1/0, 2/0	1, 1/0, 2/0	2, 1, 1/0	2, 1, 1/0, 2/0	5	2	0
		B	6, 4, 3, 2,	6, 4, 3, 2, 1-19	6, 4, 3, 2, 1, 1/0	6, 4, 3, 2, 1	6, 4, 3, 2, 1			
KD-R02	3	A	1/0, 2/0	2/0, 3/0	3/0, 4/0,	2/0, 3/0	3/0	4	2	D
		B	6, 4, 3, 2	6, 4, 3, 2, 1-19	6, 4, 3, 2, 1, 1/0	6, 4, 3, 2, 1	6, 4, 3, 2, 1			
KD-R04	4	A	1, 1/0, 2/0	1-3, 1/0, 2/0, 3/0	2/0, 3/0, 4/0	1/0, 2/0, 3/0	1/0, 2/0, 3/0	5	2	D
		B	1, 1/0, 2/0	1-3, 1/0, 2/0	2/0, 3/0	1/0, 2/0, 3/0	1/0, 2/0, 3/0			
KD-R03	5	A	3/0, 4/0	4/0	250, 266, 300	4/0, 266 18/1	4/0, 250, 266	4	2	D
		B	6, 4, 3, 2	6, 4, 3, 2, 1-19	6, 4, 3, 2, 1, 1/0	6, 4, 3, 2, 1	6, 4, 3, 2, 1			
KD-R05	6	A	3/0, 4/0	3/0, 4/0		3/0, 4/0, 266 18/1	4/0, 250, 266	7	3	D
		B	1, 1/0, 2/0	1-3, 1/0, 2/0	2/0, 3/0	1/0, 2/0	1/0, 2/0, 3/0			
KD-R28	7	A	3/0, 4/0	3/0, 4/0	-	3/0, 4/0, 266 18/1	4/0, 250, 266	7	3	D
		B	3/0, 4/0	3/0, 4/0		3/0, 4/0, 266 18/1	4/0, 250, 266			
KO-R10	-	A	4, 3, 2, 1, 1/0	4, 3, 2, 1, 1/0, 2/0	2, 1, 1/0	4, 3, 2, 1, 1/0	4, 3, 2, 1, 1/0, 2/0	5	2	0
		B	4, 3, 2, 1, 1/0	4, 3, 2, 1, 1/0, 2/0	2, 1, 1/0	4, 3, 2, 1, 1/0	4, 3, 2, 1, 1/0, 2/0			
KO-R33	-	A	6, 4	6, 4, 3-7	6, 4, 3, 2	6, 4, 3,	6, 4	4	2	0
		B	6, 4	6, 4, 3-7	6, 4, 3, 2	6, 4, 3	6, 4			

4 Connector Program - Hydraulic Tool Only

CATALOG NUMBER	GROOVE	STANDARD CONDUCTOR			COMPACT CONDUCTOR		NO. OF CRIMPS (HYD. TOOL)	DIE SIZE
		ACSR & AL ALLOY	AL OR CU STRANDED	AL OR CU SOLID	ACSR	STRANDED		
KO-R01	A	6, 4, 3, 2, 1, 1/0	6, 4, 3, 2, 1, 1/0	6, 4, 3, 2, 1, 1/0	6, 4, 3, 2, 1, 1/0	6, 4, 3, 2, 1, 1/0	2	0
	B	6, 4, 3, 2	6, 4, 3, 2, 1-19	6, 4, 3, 2, 1, 1/0	6, 4, 3, 2, 1	6, 4, 3, 2, 1		
KD-R03	A	1, 1/0, 2/0, 3/0, 4/0	1-3, 1/0, 2/0, 3/0, 4/0	2/0, 3/0, 4/0	1/0, 2/0, 3/0, 4/0, 266 18/1,	1/0, 2/0, 3/0, 4/0, 250, 266	2	D
	B	6, 4, 3, 2	6, 4, 3, 2, 1-19	6, 4, 3, 2, 1/0	6, 4, 3, 2, 1	6, 4, 3, 2, 1		
KD-R05	A	1, 1/0, 2/0, 3/0, 4/0	1-3, 1/0, 2/0, 3/0, 4/0	2/0, 3/0, 4/0	1/0, 2/0, 3/0, 4/0, 266 18/1	1/0, 2/0, 3/0, 4/0, 250, 266	3	D
	B	1, 1/0, 2/0	1-3, 1/0, 2/0	2/0, 3/0	1/0, 2/0	1/0, 2/0, 3/0		
KD-R28	A	2/0, 3/0, 4/0	3/0, 4/0	-	3/0, 4/0, 266 18/1	3/0, 4/0, 250, 266	3	D
	B	2/0, 3/0, 4/0	3/0, 4/0		3/0, 4/0, 266 18/1	3/0, 4/0, 250, 266		

Street Lighting KO-R21 & 22

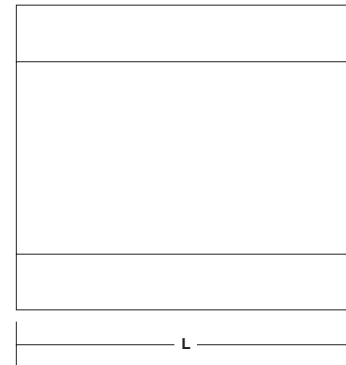
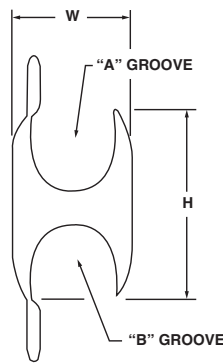
Double tab design for making connections to street lights (packed two per box)

Multi-Tap Connection KO-R24

Single tab design for making one to four taps with one press-on and for making service connections

CATALOG NUMBER	GROOVE	CONDUCTOR RANGE	NO. OF CRIMPS		DIE SIZE
			0-52 HAND	HYD.	
KO-R21	A	4 Str. - 4 ACSR	3	-	5/8"-Nose
	B	12 Sol. - 10 Str.			
KO-R22	A	6 Sol. - 4 Sol.	3	-	5/8"-Nose
	B	12 Sol. - 10 Str.			
KO-R24	A	4 ACSR - 2/0 Str.	3	1	0
	B	10 Str., 10 Sol., 6 Sol.			
	C	14 Sol., 10 Sol.			

CATALOG NUMBER	APPROXIMATE DIMENSIONS (IN.)		
	L	W	H
KO-R06	1.50	.70	1.13
KO-R08	1.50	.70	1.13
KD-R02	1.50	.89	1.47
KD-R04	1.88	.89	1.48
KD-R03	1.50	.89	1.47
KD-R05	2.25	.89	1.44
KD-R28	2.25	.89	1.44
KO-R10	1.50	.70	1.13
KO-R01	1.75	.72	1.16
KO-R21	.63	.59	.61
KO-R22	.81	.91	.59
KO-R24	1.06	.72	1.11
KO-R33	1.50	.70	1.11



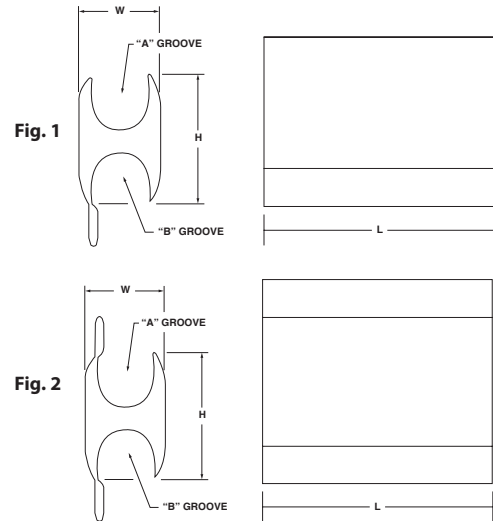
Aluminum Expanded Range Press-Ons

Types KN and KN-R



- Manufactured from high conductivity aluminum
- Designed for overhead line tap applications with copper*, aluminum, ACSR, and compact conductors
- In copper to aluminum applications, H-shaped profile with solid barrier provides conductor separation, prevents strand cutting, and minimizes galvanic corrosion
- Deep indent crimp lines make crimp locations clearly visible
- Bendable tabs secure both run and tap conductors, enabling the user to easily operate installation tool
- Pre-filled with oxide inhibitor and individually boxed

*Note: Not recommended for copper to copper applications



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CATALOG NUMBER	GROOVE	STANDARD CONDUCTOR			COMPRESSED CONDUCTOR		NO. OF CRIMPS (HYD.)	DIE SIZE
		ACSR* & ALUMINUM ALLOY	AL OR CU STRANDED	AL OR CU SOLID	ACSR*	STRANDED		
KN-0	A	266.8, 300, 336.4, 397.5 18/1	250, 266.8, 300, 336.4, 350, 397.5, 400	-	336 18/1, 397 18/1, 477 18/1	336, 350, 397.5, 477	2	N
	B	6, 4	6, 4, 3-7	6, 4, 3, 2	6, 4, 3	6, 4		
KN-1	A	266.8, 300, 336.4, 397.5 18/1	250, 266.8, 300, 336.4, 350, 397.5, 400	-	336 18/1, 397 18/1, 477 18/1	336, 350, 397.5, 477	2	
	B	2, 1, 1/0, 2/0	2, 1, 1/0, 2/0	1, 1/0, 2/0, 3/0	2, 1, 1/0, 2/0	1, 1/0, 2/0, 3/0		
KN-R2	A	266.8, 300, 336.4, 397.5 18/1	250, 266.8, 300, 336.4, 350, 397.5, 400	-	336 18/1, 397.5 18/1, 477 18/1	336, 350, 397.5, 477	2	
	B	2/0, 3/0, 4/0	3/0, 4/0	4/0	3/0, 4/0, 266 18/1	3/0, 4/0, 250, 266		
KN-4	A	266.8, 300, 336.4, 397.5 18/1	250, 266.8, 300, 336.4, 350, 397.5, 400	-	336 18/1, 397.5 18/1, 477 18/1	336, 350, 397.5, 477	3	
	B	336.4, 397.5 18/1	336.4, 350, 397.5, 400	-	397 18/1, 477 18/1	397, 477, 500		
KN-R5	A	300, 336.4, 397.5, 477 18/1	336.4, 350, 397.5, 400, 450, 477, 500	-	397 18/1, 477 18/1, 556 18/1	477, 500, 556	2	
	B	6, 4	6, 4, 3-7	6, 4, 3, 2	6, 4, 3	6, 4, 2		
KN-R6	A	300, 336.4, 397.5, 477 18/1	336.4, 350, 397.5, 400, 450, 477, 500	-	397 18/1, 477 18/1, 556 18/1	477, 500, 556	2	
	B	3, 2, 1, 1/0	3-3, 2, 1, 1/0, 2/0	1, 1/0, 2/0, 3/0	2, 1, 1/0, 2/0	2, 1, 1/0, 2/0, 3/0		
KN-R7	A	300, 336.4, 397.5, 477 18/1	336.4, 350, 397.5, 400, 450, 477, 500	-	397 18/1, 477 18/1, 556 18/1	477, 500, 556	2	
	B	2/0, 3/0, 4/0	3/0, 4/0	4/0	3/0, 4/0, 266 18/1	4/0, 250, 266		
KN-8	A	300, 336.4, 397.5, 477 18/1	336.4, 350, 397.5, 400, 450, 477, 500	-	397 18/1, 477 18/1, 556 18/1	477, 500, 556	3	
	B	266.8, 300, 336.4 18/1	250, 266.8, 300, 336.4, 350	-	336 18/1, 397 18/1	336, 350, 397		

*Conductor sizes listed include all strandings except where 18/1 is shown after conductor size

CATALOG NUMBER	FIG. NO.	APPROXIMATE DIMENSIONS (IN.)		
		L	W	H
KN-0	1	2.00	1.25	1.97
KN-1	1	2.00	1.25	2.00
KN-R2	2	2.00	1.25	2.00
KN-4	1	3.50	1.25	2.03

CATALOG NUMBER	FIG. NO.	APPROXIMATE DIMENSIONS (IN.)		
		L	W	H
KN-R5	2	2.00	1.25	2.00
KN-R6	2	2.00	1.25	2.00
KN-R7	2	2.00	1.25	1.97
KN-8	1	3.50	1.25	2.00

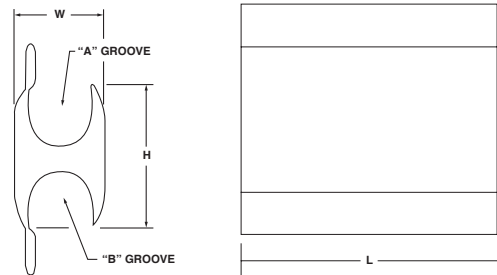
Aluminum Wide Range Double Tab Press-Ons

Type KR-R

- Manufactured from high conductivity aluminum
- Designed for overhead line tap applications with copper*, aluminum, ACSR, and compact conductors
- In copper to aluminum applications, H-shaped profile with solid barrier provides conductor separation, prevents strand cutting, and minimizes galvanic corrosion
- Deep indent crimp lines make crimp locations clearly visible
- Bendable tabs secure both run and tap conductors, enabling the user to easily operate installation tool
- Pre-filled with oxide inhibitor and individually boxed



*Note: Not recommended for copper to copper applications



CATALOG NUMBER	GROOVE	STANDARD CONDUCTOR			COMPRESSED CONDUCTOR		NO. OF CRIMPS (HYD.)	DIE SIZE
		ACSR & ALUMINUM ALLOY	AL OR CU STRANDED	AL OR CU SOLID	ACSR	STRANDED		
KR-R03	A	300, 336, 397, 477, 556 18/1	336, 350, 397, 400, 450, 477, 500, 550, 556, 600	-	397, 477, 556, 636	477, 500, 556, 636	3	R
	B	1/0, 2/0, 3/0, 4/0, 266, 336 18/1	2/0, 3/0, 4/0, 250, 266, 300, 336, 350	3/0, 4/0	2/0, 3/0, 4/0, 266, 336, 397 18/1	3/0, 4/0, 250, 266, 300, 336, 350, 397		
KR-R04	A	300, 336, 397, 477, 556 18/1	336, 350, 397, 400, 450, 477, 500, 550, 556, 600	-	397, 477, 556, 636	477, 500, 556, 636	4	
	B	300, 336, 397, 477, 556 18/1	336, 350, 397, 400, 450, 477, 500, 550, 556, 600	-	397, 477, 556, 636	477, 500, 556, 636		
KR-R05	A	477 30/7, 556, 605, 636, 653, 666, 715, 795 26/7	600, 636, 700, 715, 750, 795, 800, 874, 900	-	795, 874, 954	795, 874, 954	3	
	B	1/0, 2/0, 3/0, 4/0, 266, 336 18/1	2/0, 3/0, 4/0, 250, 266, 300, 336, 350	3/0, 4/0	2/0, 3/0, 4/0, 266, 336, 397 18/1	3/0, 4/0, 250, 266, 300, 336, 350, 397		
KR-R06	A	477 30/7, 556, 605, 636, 653, 666, 715, 795 26/7	600, 636, 700, 715, 750, 795, 800, 874, 900	-	795, 874, 954	795, 874, 954	4	
	B	300, 336, 397, 477, 556 18/1	336, 350, 397, 400, 450, 477, 500, 550, 556	-	397, 477, 556, 636	477, 500, 556, 636		
KR-R07	A	477 30/7, 556, 605, 636, 653, 666, 715, 795 26/7	600, 636, 700, 715, 750, 795, 800, 874, 900	-	795, 874, 954	795, 874, 954	4	
	B	477 30/7, 556, 605, 636, 653, 666, 715, 795 26/7	600, 636, 700, 715, 750, 795, 800, 874, 900	-	795, 874, 954	795, 874, 954		

CATALOG NUMBER	APPROXIMATE DIMENSIONS (IN.)		
	L	W	H
KR-R03	3.50	1.75	3.02
KR-R04	4.63	1.75	3.06
KR-R05	3.50	1.75	3.02
KR-R06	4.63	1.75	3.05
KR-R07	4.63	1.75	3.03



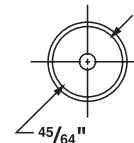
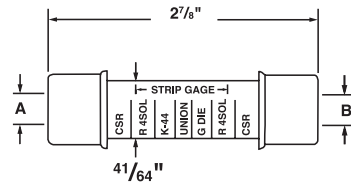
Aluminum Pre-Insulated Service Entrance Sleeves

Type PIK

5/8" OD



- Forged from pure aluminum with integral solid center barrier
- For insulated combinations of copper, aluminum, and ACSR
- Designed for overhead commercial service and residential installations
- Solid center barrier allows for proper conductor insertion and eliminates the effects of galvanic corrosion in aluminum to copper connections
- Easy push-thru polyethelene color coded caps seal out contaminants
- Connectors are pre-filled with oxide inhibitor to keep air and moisture out
- Aluminum insert is anchored to jacket assuring that the insert remains positioned where crimp markings are indicated
- Strip gage and number of crimps are marked on connector sleeve for ease of installation
- Nylon jacket insulates connector electrically and protects against water and weather
- Nylon jacket material increases shelf life and improves crimpability even at sub-zero temperatures
- Conforms to ANSI C 119.4 when properly installed



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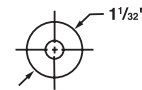
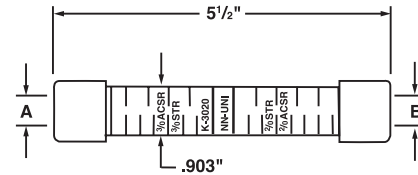
CATALOG NUMBER	A RANGE				B RANGE				DIE SIZE
	ACSR	AL OR CU STRANDED	AL OR CU SOLID	CAP COLOR	ACSR	AL OR CU STRANDED	AL OR CU SOLID	CAP COLOR	
PIK-88	-	10	8	Brown	-	10	8	Brown	5/8, BG
PIK-68	-	8	6	Green	-	10	8	Brown	
PIK-66	-	8	6	Green	-	8	6	Green	
PIK-48	-	5-6	4	Blue	-	10	8	Brown	
PIK-46	6 6/1	5-6	4	Blue	-	8	6	Green	
PIK-44	6 6/1	5-6	4	Blue	6 6/1	5-6	4	Blue	
PIK-28	-	3-4	2	Orange	-	10	8	Brown	
PIK-26	-	3-4	2	Orange	-	8	6	Green	
PIK-24	4 6/1, 7/1	3-4	2	Orange	6 6/1	5-6	4	Blue	
PIK-22	4 6/1, 7/1	3-4	2	Orange	4 6/1, 7/1	3-4	2	Orange	
PIK-18	-	1-2	-	Red	-	10	8	Brown	
PIK-16	-	1-2	-	Red	-	8	6	Green	
PIK-14	2 6/1, 7/1	1-2	-	Red	6 6/1	5-6	4	Blue	
PIK-12	2 6/1, 7/1	1-2	-	Red	4 6/1, 7/1	3-4	2	Orange	
PIK-11	2 6/1, 7/1	1-2	-	Red	2 6/1, 7/1	1-2	-	Red	
PIK-08	-	1/0	-	Yellow	-	10	8	Brown	
PIK-06	-	1/0	-	Yellow	-	8	6	Green	
PIK-04	-	1/0	-	Yellow	6 6/1	5-6	4	Blue	
PIK-02	-	1/0	-	Yellow	4 6/1, 7/1	3-4	2	Orange	
PIK-01	-	1/0	-	Yellow	2 6/1, 7/1	1-2	-	Red	
PIK-00	-	1/0	-	Yellow	-	1/0	-	Yellow	

Aluminum Pre-Insulated Service Entrance Sleeves

Type PIK

.840" OD

- Forged from pure aluminum with integral solid center barrier
- For insulated combinations of copper, aluminum, and ACSR
- Designed for overhead commercial service and residential installations
- Solid center barrier allows for proper conductor insertion and eliminates the effects of galvanic corrosion in aluminum to copper connections
- Easy push-thru polyethylene color coded caps seal out contaminants
- Connectors are pre-filled with oxide inhibitor to keep air and moisture out
- Aluminum insert is anchored to jacket assuring that the insert remains positioned where crimp markings are indicated
- Strip gage and number of crimps are marked on connector sleeve for ease of installation
- Nylon jacket insulates connector electrically and protects against water and weather
- Nylon jacket material increases shelf life and improves crimpability even at sub-zero temperatures
- Conforms to ANSI C 119.4 when properly installed



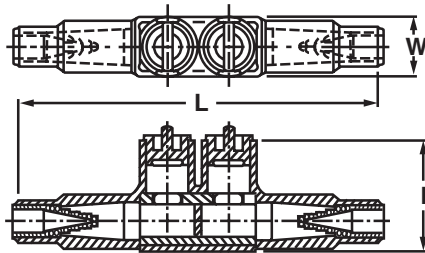
CATALOG NUMBER	A RANGE			B RANGE				DIE SIZE	
	ACSR	AL OR CU STRANDED	CAP COLOR	ACSR	AL OR CU STRANDED	AL OR CU SOLID	CAP COLOR	HAND	HYD.
PIK-01R	1/0	1/0	Yellow	2	1-2	1/0	Red	.840	249, EEI 11A
PIK-00R				1/0	1/0	-	Yellow		
PIK-204	2/0	2/0	Gray	6	5-6	4	Blue		
PIK-202				4	3-4	2	Orange		
PIK-201				2	1-2	1/0	Red		
PIK-200				1/0	1/0	-	Yellow		
PIK-2020				2/0	2/0	-	Gray		
PIK-302				3/0	3/0	Black	4		
PIK-301	2	1-2	1/0				Red		
PIK-300	1/0	1/0	-				Yellow		
PIK-3020	2/0	2/0	-				Gray		
PIK-3030	3/0	3/0	-				Black		
PIK-402	4/0	4/0	Pink	4	3-4	2	Orange		
PIK-401				2	1-2	1/0	Red		
PIK-400				1/0	1/0	-	Yellow		
PIK-4020				2/0	2/0	-	Gray		
PIK-4030				3/0	3/0	-	Black		
PIK-4040				4/0	4/0	-	Pink		



Underground Watertight In-Line Splice

Type ULS

- Manufactured from high strength aluminum alloy and clear plated for low contact resistance and high conductivity
- Mechanical insulated splice for repairing or splicing aluminum or copper conductors in direct burial applications
- Pre-filled with oxide inhibitor
- Accepts wide conductor range
- Rated for 600V, 90°C applications
- Meets specifications:
 - ANSI 119.1
 - Western Underground Guide 2.5
 - ANSI 119.4 for Class A connectors
 - UL 486D



CATALOG NUMBER	CONDUCTOR RANGE	APPROXIMATE DIMENSIONS (IN.)		
		H	W	L
ULS2-350	12 - 350 kcmil	2.48	1.34	8.09

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TECHNICAL INFORMATION

Wherever there is a conductor carrying electric current, it is necessary to make a connection. This is true whether the conductor is a solid or stranded wire, a rectangular bus bar or a piece of copper pipe. This is also true whether the conductor is an inch in length, a foot in length, or several hundred feet in length. Conductors are joined by several methods. The oldest methods are the fusion of conductors by means of soldering, brazing or welding, with the very oldest being the blacksmith form of welding. Joining techniques of this type require special skill and special equipment, consequently, other means have been developed which are more generally applied. These are the pressure methods which are divided between the bolted or mechanical type joint and the compression type connector which uses special tools to develop the necessary forces. One other joining technique that is frequently used is soldering. However, this has its limitations, because of the possibility of the joints melting out during temporary overload conditions.

Connector Materials

Since most electrical conductors are either copper or aluminum, it also has become standard of the connector industry to make connectors of copper and aluminum. The category of copper connectors includes pure copper and alloys of bronze and brasses. The materials can be fabricated by casting, forging, extruding, punching, or any combination of these processes. The aluminum connectors are made of alloys used to provide the best electrical conductivity. However, in some cases, a compromise material is used to give optimum combination of electrical conductivity and mechanical strength. A general practice has been to use copper connectors for copper conductor and aluminum connectors for aluminum conductor. In some cases where a transition from copper to aluminum conductors must be made, it is advantageous to use a bi-metallic connector, thus making the transition in the connector rather than in the junction of the connector and conductor.

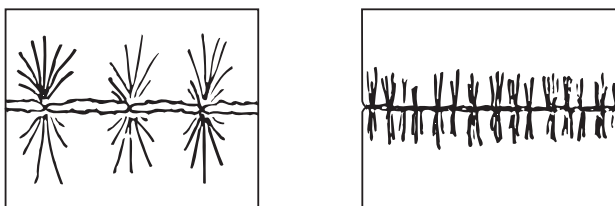


Figure 1. As force is increased, the surface roughness flattens out creating a multiplicity of parallel paths

Welding Connectors

Welding, particularly of aluminum bus, has become increasingly popular because the materials are united in a homogeneous bond. The bus can be joined directly or through the use of weldments. Weldments eliminate the need for field cutting and matching. They also act as fixtures and help align the bus structure during erection. Tungsten inert gas (TIG) has become increasingly popular for joining of aluminum conductors.

Pressure Connectors - Bolted and Compression

The simplest and most widely used method of joining conductors is by means of externally applied pressure. This pressure can be developed by means of clamp type connectors using bolts and nuts or by compression connectors using special compression tools to develop the necessary forces.

As two surfaces are brought together to make a joint, the microscopic peaks touch each other as shown in Figure 1. As force continues to be applied, the relatively few peaks flatten out into a large number of plateaus and current is transferred across the interface. The relationship is clearly shown in Figure 2 in which resistance is plotted against force. The important thing about this relationship is that once sufficient force has been applied to establish a safe value of resistance, considerable relaxation can occur before the resistance starts to rise again. A well designed clamp or compression connector thus has some safety factor built into it.

All clamp type connectors depend upon the thrust developed by the bolts to deliver the force necessary for a sound, stable connection. For a bolt to do its job, it must have adequate strength so that it can be torqued properly, it must develop correct thrust for the installation torque recommended, and above all, it must be reliable and not fail during service.

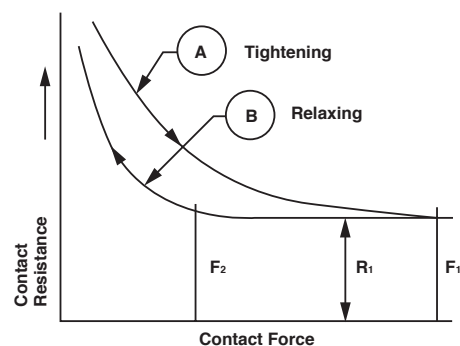


Figure 2. Contact resistance curves

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Table I shows the recommended tightening torques for silicon bronze, stainless steel, galvanized steel and lubricated aluminum alloy hardware. Torque values presently recommended by NEMA-CC1 2009 specification.

TABLE I - TIGHTENING TORQUES

BOLT DIAMETER	NOMINAL TORQUE VALUES			
	SILICON BRONZE, GALVANIZED OR STAINLESS STEEL		ALUMINUM ALLOY (LUBRICATED)	
	FT.-LBS.	INCH.-LBS.	FT.-LBS.	INCH.-LBS.
1/4	7	80	-	-
5/16	15	180	-	-
3/8	20	240	14	168
1/2	40	480	25	300
5/8	55	660	40	480
3/4	87	1050	54	650

For optimum efficiency, it is necessary that the correct bolt, nut and washer combination be used with the correct combination of conductor materials. Table II shows acceptable methods of joining different combinations of bus bar. Where different combinations of metals are being joined, a follow-up device such as a conical pressure washer is usually recommended if one, or both, bus materials are soft drawn aluminum. If both bars are hard drawn, large flat washers will suffice regardless of the bolt materials.

Other considerations which should be taken into account when selecting hardware are corrosion and vibration. For example, if severe corrosion is anticipated, non-corrosive materials such as stainless steel or silicon bronze, should be selected in preference to galvanized steel. If vibration is anticipated, the use of locking washers should be considered.

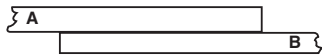


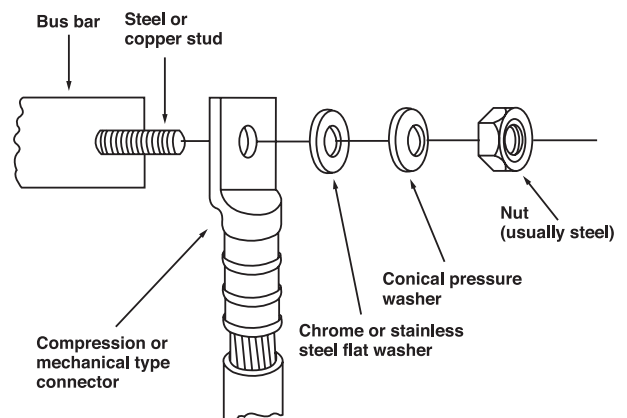
TABLE II - METHODS OF JOINING BUS BARS

IF "A" BAR IS AND IF "B" BAR IS	COPPER	ALUMINUM	STEEL	ALUMINUM	STEEL
	COPPER	COPPER	COPPER	ALUMINUM	ALUMINUM
Hard Drawn Bus such as aluminum alloy 	(1) Silicon Bronze (2) Stainless Steel	(1) Silicon Bronze (2) Aluminum (3) Stainless Steel	(1) Silicon Bronze (2) Stainless Steel	(1) Aluminum (2) Stainless Steel (3) Silicon Bronze, Plated	(1) Aluminum (2) Stainless Steel
Soft Drawn Bus such as EC-H13 Aluminum 	(1) Silicon Bronze (2) Stainless Steel	(1) Silicon Bronze (2) Aluminum (3) Stainless Steel (4) Conical Pressure Washer Plated or Stainless Steel	(1) Silicon Bronze (2) Stainless Steel	(1) Aluminum (2) Stainless Steel (3) Silicon Bronze, Plated (4) Conical Pressure Washer Plated or Stainless Steel	(1) Aluminum (2) Stainless Steel (3) Conical Pressure Washer Plated or Stainless Steel

(1) Denotes preferred hardware usage
 Note: Contact oxide inhibitor recommended between aluminum to aluminum and aluminum to copper connections, unless other protective measures are taken

Bar Connections

The tongue of a compression or a mechanical connector is a bus bar that connects to another bus bar. Bare aluminum bus bars should be cleaned thoroughly, wire brushed to remove surface oxide, and a coating of oxide inhibitor applied immediately prior to installation. Plated parts should be cleaned with a solvent if they are dirty, but never abrade or otherwise disturb the plating. The illustration to the right shows a typical bar connection and the type of hardware used.



Note: Contact surfaces must be clean. Use a joint compound with bare aluminum. A conical pressure washer is usually recommended if one, or both, bus materials are soft drawn aluminum.

MECHANICAL CONNECTOR RECOMMENDED TIGHTENING TORQUE

Per UL486A-486B

TEST WIRE SIZE INSTALLED IN CONNECTOR AWG OR MCM (mm)		TIGHTENING TORQUE, POUND-INCHES (N-M)			
		SLOTTED HEAD NO. 10 AND LARGER ¹		HEXAGONAL HEAD - EXTERNAL DRIVE SOCKET WRENCH	
		SLOT WIDTH - .047 INCH (1.2 mm) OR LESS AND SLOT LENGTH - 1/4 INCH (6.4 mm) OR LESS	SLOT WIDTH - OVER .047 INCH (1.2 mm) OR SLOT LENGTH - OVER 1/4 INCH (6.4 mm)	SPLIT-BOLT CONNECTORS	OTHER CONNECTORS
18-10	(.082-5.3)	20 (2.3)	35 (4.0)	80 (9.0)	75 (8.5)
8	(8.4)	25 (2.8)	40 (4.5)	80 (9.0)	75 (8.5)
6-4	(13.3-21.2)	35 (4.0)	45 (5.1)	165 (18.6)	110 (12.4)
3	(26.7)	35 (4.0)	50 (5.6)	275 (31.1)	150 (16.9)
2	(33.6)	40 (4.5)	50 (5.6)	275 (31.1)	150 (16.9)
1	(42.4)	-	50 (5.6)	275 (31.1)	150 (16.9)
1/0-2/0	(53.5-67.4)	-	50 (5.6)	385 (43.5)	180 (20.3)
3/0-4/0	(85.0-107.2)	-	50 (5.6)	500 (56.5)	250 (28.2)
250-350	(127-177)	-	50 (5.6)	650 (73.4)	325 (36.7)
400	(203)	-	50 (5.6)	825 (93.2)	325 (36.7)
500	(253)	-	50 (5.6)	825 (93.2)	375 (42.4)
600-750	(304-380)	-	50 (5.6)	1000 (113.0)	375 (42.4)
800-1000	(406-508)	-	50 (5.6)	1100 (124.3)	500 (56.5)
1250-2000	(635-1010)	-	-	1100 (124.3)	600 (67.8)

¹For values of slot width or length not corresponding to those specified, select the largest torque value associated with the conductor size.
Slot width is the nominal design value. Slot length shall be measured at the bottom of the slot.

TIGHTENING TORQUE FOR SLOTTED HEAD SCREWS SMALLER THAN NO. 10 INTENDED FOR USE WITH 8 AWG (8.4 mm²) OR SMALLER CONDUCTORS

SLOT LENGTH OF SCREW INCH (mm) ¹	TIGHTENING TORQUE, POUND-INCHES (N-M)	
	SLOT WIDTH OF SCREW INCH (mm ²)	
	SMALLER THAN .047 (1.2) ²	.047 (1.2) AND LARGER ²
Less than 5/32 (4)	7 (.79)	9 (1.0)
5/32 (4)	7 (.79)	12 (1.4)
3/16 (4.8)	7 (.79)	12 (1.4)
7/32 (5.6)	7 (.79)	12 (1.4)
1/4 (6.4)	9 (1.0)	12 (1.4)
9/32 (7.1)	-	15 (1.7)
Above 9/32 (7.1)	-	20 (2.3)

¹For slot lengths of intermediate values, select torques pertaining to next shorter slot lengths. Slot length shall be measured at the bottom of the slot


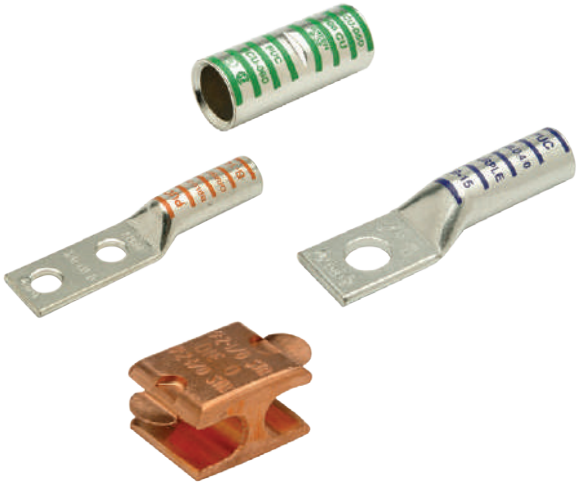
²Slot width is the nominal design value

TIGHTENING TORQUE FOR SCREWS WITH RECESSED ALLEN OR SQUARE DRIVES

SOCKET SIZE ACROSS FLATS INCH (mm)	TIGHTENING TORQUE, POUND-INCHES (N-M)
1/8 (3.2)	45 (5.1)
5/32 (4.0)	100 (11.3)
3/16 (4.8)	120 (13.6)
7/32 (5.6)	150 (16.9)
1/4 (6.4)	200 (22.6)
5/16 (7.9)	275 (31.1)
3/8 (9.5)	375 (42.4)
1/2 (12.7)	500 (56.5)
9/16 (14.3)	600 (67.8)

CONNECTOR COMPARISON CHART MECHANICAL VS. COMPRESSION

The variety of connectors available can be broken down into two general categories—mechanical and compression. The following chart has been prepared in an effort to clarify the difference between these two categories.

	
MECHANICAL OR CLAMP CONNECTORS	CRIMP OR COMPRESSION CONNECTORS
Range taking and non-range taking. For pipe, cable, bar shapes, etc.	Range taking and non-range taking. For cable conductors only
Many designs are universal for copper and aluminum	Separate designs required for aluminum, copper or aluminum to copper
Salvageable. Conductor can be removed and replaced if necessary. Wiring changes easily made	Not salvageable. Conductor and connector must be cut off and scrapped if necessary
Short runs and specials easily handled by manufacturer with better delivery	Non-standard designs and modifications may be difficult to supply
Taping depends on design	Easily taped
Installed cost comparable on small jobs--higher on large volume jobs	Installed cost generally lower, particularly when large quantities are involved
No special tools to install. Can use screwdriver, pliers, wrench	Special tools and dies required. If wrong tool or die is used, poor joint results

F

Compression Connector Crimping Methods

To retain UL and CSA rating, installation tools and methods must be matched to the connectors used

Of all the methods used to make electrical connections, compression of the connector onto the cable with some type of compression tool is considered by most installers to be the most permanent of the common connection methods. To maintain Underwriters Laboratories listing (UL) or Canadian Standards Association certification (CSA) for a completed compression connection, it is necessary to use the installation tools and installation methods which have been qualified for the connectors by those organizations during the listing/certification processes.

Cable Preparation

It is imperative that the cable strands and the compression connector be clean and free of dirt and/or corrosion. This is particularly important when making connections on cables which have been installed for a period of time.

Connectors that are UL listed or CSA certified may contain installation instructions in the connector carton which may include information such as usable cable types, insulation strip lengths, and crimping tools for specific connectors. Proper preparation of the cable can make the difference between a permanent connection and a connection which may require a service call at some point in the future.

The cable material will dictate the type of connector that can be used in the compression connection. Copper cable can be installed in a copper compression connector that has a "CU" rating or in an aluminum compression connector that has an "AL9CU" rating. Aluminum cable can only be installed in an aluminum compression connector that has a rating of "AL" or "AL7CU." Aluminum cable can never be installed in a copper compression connector.

Once the cable preparation has been completed and the proper type and size compression connector has been selected, the connector manufacturer's recommendations for choice of compression tooling and compression methods should be followed to maintain the UL and/or CSA rating for the completed connection. Connector manufacturers will often be in position to specify several equivalent UL/CSA crimping recommendations for a specific connector installation. For connectors from No. 22 AWG through No. 10 AWG, the compression tools most often have mechanical operation. For No. 8 AWG through 4/0 AWG, the compression tools could use either mechanical or hydraulic means to apply the crimping force. Historically at 250 kcmil and above in wire size, the crimping force was almost always applied by a hydraulic

crimping tool. With the advent of the TDM-500 that has changed to 500 kcmil due to the extra available leverage generated by the extendable handles. Mechanical tools for small wire sizes are generally single leverage types, while those for medium sized cables apply the crimping force via a compound leverage system. Mechanical crimping tools make either a surrounding type of crimp (Fig. 1A) or a nest and indentor crimp shape (Fig. 1B).

The hydraulic crimping tools used for the medium and large cable sizes can have quite a variety of crimping die systems and hydraulic pressure sources.

Die-type Crimpers

Die-type tools require a separate set of inserts to be placed into the crimping tool head for each different size and type (AL or CU) of connector that is to be crimped. These crimping die inserts are shaped to compress the specific connector size the correct amount when the full force of the hydraulic tool is applied to them. Die-type crimping tools generally produce crimps that surround the barrel of the connector with either a rounded oval or a hexagonal shaped profile.

Many of the copper and aluminum connectors used in the electrical contracting industry have a color code applied to them which matches up with a crimping die reference of the same color. This color code is meant to allow the installer to be able to find the correct die more quickly.

Certain styles of connectors used in the electric utility industry are designed to minimize the number of crimping die sets that each line crew must carry. These special connectors are designed to have a constant outside diameter on the crimp barrel portion of the connector with various inside diameters to match the conductor size. For example, a popular grouping of electric utility connectors has a constant outside diameter of .640 inches for a series of cable sizes from No. 10 AWG through 1/0 AWG and all of the individual connectors are crimped with the same die insert. Electric utilities also use a series of compression taps with a cross section shape similar to the letter "H" which are grouped to install most cable size combinations between No. 6 AWG and 500 kcmil with only three crimping die sizes.

Compression Connector Crimping Methods

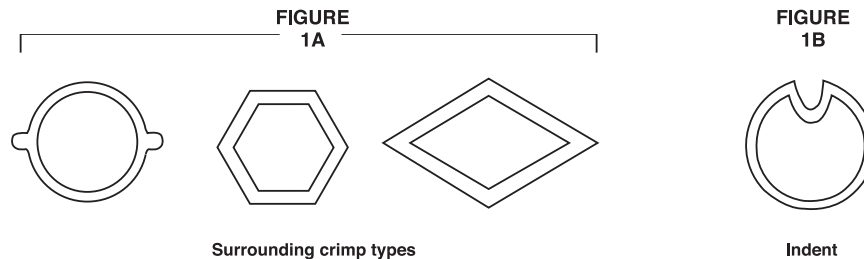
Dieless Crimpers

The other class of hydraulic crimping tools is that of the dieless design. Dieless actually means that there is no die insert change needed when one needs to crimp a different connector size within the range of the tool. The dieless hydraulic tools can be further classified by the three general crimp shapes that are made. One group of dieless tools makes crimps that are the nest and indentor style. A second grouping of dieless tools makes use of multiple indentors which indent the connector from multiple sides without the use of a nest. The third group of dieless tools provides a crimp that surrounds the connector barrel and has an appearance more like that of a die-type tool. All of the dieless tool types are capable of crimping cylindrical connector barrels as recommended by their respective manufacturers.

Some dieless tools of each type are also often recommended by their manufacturers to be able to provide range-taking capabilities (a single connector could be used to terminate more than one conductor size). It is always important to follow the connector manufacturer's installation instructions with regard to connector selection, conductor sizes and types, and the approved installation tooling in order to obtain a UL listed and/or CSA certified connection.

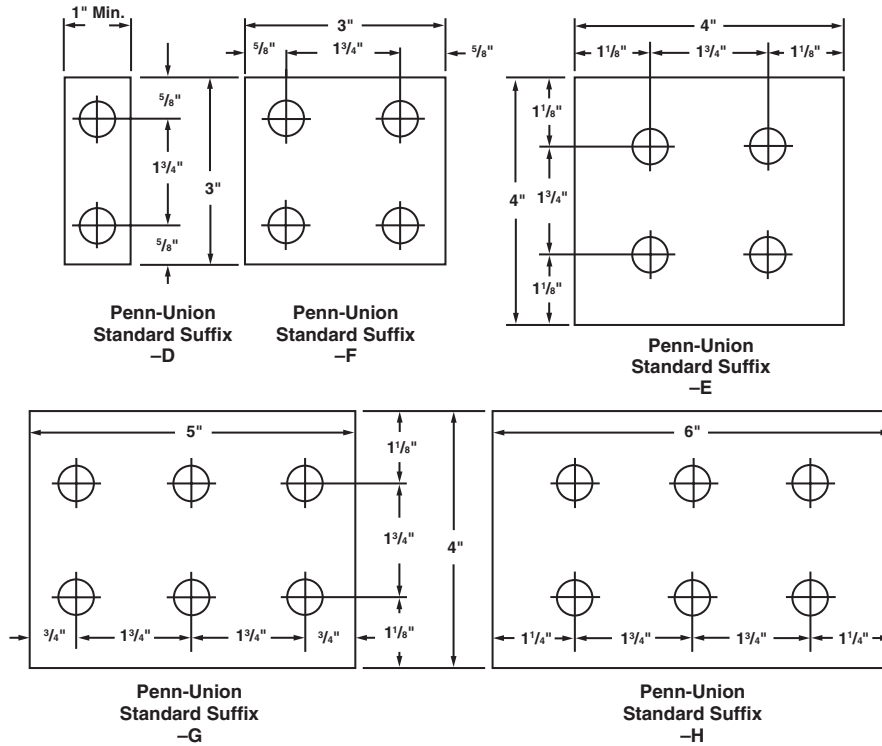
The necessity to maintain UL listing and/or CSA certification for a connector installation can limit the available combinations of connectors and crimp tools that can be used in a specific situation. Dieless compression tool systems offer decided advantages in installation flexibility and time saving, particularly if both cylindrical and H-frame connectors can be installed with a single dieless tool.

F



NEMA STANDARD PAD CONFIGURATIONS

These figures show the arrangements of 9/16" bolt holes which are standardized for electrical power connectors under NEMA Standard CC1.



STUD SIZE CHART (INCHES)

Standard Stud Size	#2	#4	#5	#6	#8	#10	1/4"	5/16"	3/8"	7/16"
Stud Size Decimal Equivalent	.086"	.112"	.127"	.138"	.164"	.190"	.250"	.312"	.375"	.438"
Terminal Hole Diameter	.090"	.118"	.130"	.147"	.173"	.204"	.270"	.343"	.392" .406"	.456"

Standard Stud Size	1/2"	5/8"	3/4"	7/8"	1"
Stud Size Decimal Equivalent	.500"	.625"	.750"	.875"	1.00"
Terminal Hole Diameter	.531"	.656"	.810"	.906"	1.031"

AWG VS. METRIC WIRE SIZES

Circ. Mils	Equivalent Circ. Mils	Avg. Size	Metric Wire Size mm ²	Stranding/Wire Diameter Per Strand		Approximate Overall Diameter		Circ. Mils	Equivalent Circ. Mils	Avg. Size	Metric Wire Size mm ²	Stranding/Wire Diameter Per Strand		Approximate Overall Diameter	
				in	mm	in	mm					in	mm		
-	987	-	0.50	1/.032	1/.813	.032	0.81	83690	-	1	-	19/.0664	19/1.69	.332	8.43
1020	-	20	-	7/.0121	7/.307	.036	0.91	-	98680	-	50	19/.073	19/1.85	.365	9.27
-	1480	-	0.75	1/.039	1/.991	.039	0.99	105600	-	1/0	-	19/.0745	19/1.89	.373	9.46
1620	-	18	-	1/.0403	1/.1.02	.040	1.02	133100	-	2/0	-	19/.0837	19/2.13	.419	10.6
1620	-	18	-	7/.0152	7/.386	.046	1.16	-	138100	-	70	19/.086	19/2.18	.430	10.9
-	1974	-	1.0	1/.045	1/.1.14	.045	1.14	167800	-	3/0	-	19/.094	19/2.39	.470	11.9
-	1974	-	1.0	7/.017	7/.432	.051	1.30	167800	-	3/0	-	37/.0673	37/1.71	.471	12.0
2580	-	16	-	1/.0508	1/.1.29	.051	1.29	-	187500	-	95	19/.101	19/2.57	.505	12.8
2580	-	16	-	7/.0192	7/.488	.058	1.46	-	187500	-	95	37/.072	37/1.83	.504	12.8
-	2960	-	1.5	1/.055	1/.1.40	.055	1.40	211600	-	4/0	-	19/.1055	19/2.68	.528	13.4
-	2960	-	1.5	7/.021	7/.5.33	.063	1.60	-	237.8 MCM	-	120	37/.081	37/2.06	.567	14.4
4110	-	14	-	1/.0641	1/.1.63	.064	1.63	250 MCM	-	-	-	37/.0822	37/2.09	.575	14.6
4110	-	14	-	7/.0242	7/.615	.073	1.84	300 MCM	-	-	-	37/.090	37/2.29	.630	16.0
-	4934	-	2.5	1/.071	1/.1.80	.071	1.80	350 MCM	-	-	-	37/.0973	37/2.47	.681	17.3
-	4934	-	2.5	7/.027	7/.686	.081	2.06	-	365.1 MCM	-	185	37/.100	37/2.54	.700	17.8
6530	-	12	-	1/.0808	1/2.05	.081	2.05	400 MCM	-	-	-	37/.104	37/2.64	.728	18.5
6530	-	12	-	7/.0305	7/.775	.092	2.32	-	473.6 MCM	-	240	37/.114	37/2.90	.798	20.3
-	7894	-	4	1/.089	1/2.26	.089	2.26	-	473.6 MCM	-	240	61/.089	61/2.26	.801	20.3
-	7894	-	4	7/.034	7/.864	.102	2.59	500 MCM	-	-	-	37/.1162	37/2.95	.813	20.7
-	-	-	-	-	-	-	-	500 MCM	-	-	-	61/.0905	61/2.30	.814	20.7
10380	-	10	-	1/.1019	1/2.59	.102	2.59	-	592.1 MCM	-	300	61/.099	61/2.51	.891	22.6
10380	-	10	-	7/.0385	7/.978	.116	2.93	-	-	-	-	61/.0992	61/2.52	.893	22.7
-	11840	-	6	1/.109	1/2.77	.109	2.77	600 MCM	-	-	-	61/.1071	61/2.72	.964	24.5
-	11840	-	6	7/.042	7/.1.07	.126	3.21	700 MCM	-	-	-	61/.1109	61/2.82	.998	25.4
13090	-	9	-	1/.1144	1/2.91	.1144	2.91	750 MCM	-	-	-	91/.0908	91/2.31	.999	25.4
13090	-	9	-	7/.0432	7/1.10	.130	3.30	-	789.4 MCM	-	400	61/.114	61/2.90	1.026	26.1
16510	-	8	-	1/.1285	1/3.26	.128	3.26	-	-	-	-	61/.1145	61/2.91	1.031	26.2
16510	-	8	-	7/.0486	7/1.23	.146	3.70	800 MCM	-	-	-	91/.0938	91/2.38	1.032	26.2
-	19740	-	10	1/.141	1/3.58	.141	3.58	800 MCM	-	-	-	61/.1280	61/3.25	1.152	29.3
-	19740	-	10	7/.054	7/1.37	.162	4.12	1000 MCM	986.8 MCM	-	500	91/.1048	91/2.66	1.153	29.3
20820	-	7	-	1/.1443	1/3.67	.144	3.67	1000 MCM	-	-	-	91/.117	91/2.97	1.287	32.7
20820	-	7	-	7/.0545	7/1.38	.164	4.15	-	1233.7 MCM	-	625	-	-	-	-
26240	-	6	-	1/.162	1/4.11	.162	4.11	1250 MCM	-	-	-	91/.1172	91/2.98	1.289	32.7
26240	-	6	-	7/.0612	7/1.55	.184	4.66	1250 MCM	-	-	-	127/.0992	127/2.52	1.290	32.8
-	31580	-	16	7/.068	7/1.73	.204	5.18	1500 MCM	-	-	-	91/.1284	91/3.26	1.412	35.9
33090	-	5	-	7/.0688	7/1.75	.206	5.24	1500 MCM	-	-	-	127/.1087	127/2.76	1.413	35.9
41740	-	4	-	7/.0772	7/1.96	.232	5.88	-	1578.8 MCM	-	800	91/.132	91/3.35	1.452	36.9
-	49340	-	25	7/.085	7/2.16	.255	6.48	-	1973.5 MCM	-	1000	91/.147	91/3.73	1.617	41.1
-	49340	-	25	19/.052	19/1.32	.260	6.60	2000 MCM	-	-	-	127/.1255	127/3.19	1.632	41.5
52620	-	3	-	7/.0867	7/2.20	.260	6.61	2000 MCM	-	-	-	169/.1088	169/2.76	1.632	41.5
66360	-	2	-	7/.0974	7/2.47	.292	7.42	-	-	-	-	-	-	-	-
-	69070	-	35	7/1.00	7/2.54	.300	7.62	-	-	-	-	-	-	-	-
-	69070	-	35	19/.061	19/1.55	.305	7.75	-	-	-	-	-	-	-	-



DIESEL LOCOMOTIVE CABLE

Conductor Stranding	Approx. Size Awg	Circular Mil Area	Conductor Diameter Inches
19/0117	16	2601	.060
19/27	14	3831	.070
19/25	12	6088	.090
27/24	10	10910	.123
37/24	8	14950	.140
61/24	6	24640	.180
91/24	5	36760	.220
105/24	4	42420	.240
125/24	3	50500	.260
150/24	2	60600	.325
225/24	1	90900	.390
275/24	1/0	111100	.420
325/24	2/0	131300	.460
450/24	3/0	181800	.565
550/24	4/0	222200	.590
650/24		262600	.660
775/24		313100	.740
925/24		373700	.790
1100/24		444400	.870
1325/24		535300	.940
1600/24		646400	1.025
1925/24		777700	1.120
2300/24		929200	1.230
2750/24		1111000	1.370

ADDITIONAL WIRE SIZE RECOMMENDATIONS FOR COPPER COMPRESSION LUGS & SPLICES

TYPES: BCU, BCU-FL, BBCU, BBCU-FL, BLU, BLU-FL, BBLU, BBLU-FL, BBLZ

COPPER CONNECTOR CATALOG TYPE SPLICES & LUGS (1 & 2 HOLE)											
	CLASS B & C BUILDING WIRE CU CABLE SIZE & STRANDING	CLASS I WELD CABLE (#24 AWG CU STRANDS) SIZE & STRANDING	CLASS K WELD CABLE (#30 AWG CU STRANDS) SIZE & STRANDING	DIESEL LOCOMOTIVE CABLE (#30 AWG CU STRANDS) SIZE & STRANDING	CLASS H CABLE (NO. & DIA. OF WIRE) SIZE & STRANDING	CLASS G CABLE (NO. & DIA. OF WIRE) SIZE & STRANDING	CLASS M FLEXIBLE CABLE (#34 AWG CU STRANDS) SIZE & STRANDING	METRIC CABLE WIRE SIZE RANGE COPPER CABLE ONLY METRIC SIZE & DIA.	NAVY CABLE	AIR CRAFT	
BCU-BBCU-BLU-BBLU-BBLZ- 8	#8 AWG 7 OR 19	#8 AWG 41/24	NONE	NONE	* #8 AWG 133/.0111	* #8 AWG 49/.0184	#8 AWG 420/34	6MM ² 3.21MM	#23	AN-8	
BCU-BBCU-BLU-BBLU-BBLZ- 6	#6 AWG 7 OR 19	#6 AWG 63/24	NONE	NONE	* #7 AWG 133/.0125	#7 AWG 49/.0206	#7 AWG 532/34	10MM ² 4.12MM	NONE	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 5	#5 AWG 7 OR 19	NONE	NONE	NONE	* #6 AWG 133/.0140	* #6 AWG 49/.0231	#6 AWG 665/34	16MM ² 5.18MM	#30	AN-6	
BCU-BBCU-BLU-BBLU-BBLZ- 4	#4 AWG 7 OR 19	NONE	NONE	NONE	* #5 AWG 133/.0158	* #5 AWG 49/.0260	#5 AWG 836/34	* 20MM ² 5.72MM	#40	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 3	#3 AWG 7 OR 19	#4 AWG 105/24	#4 AWG 420/30	#4 AWG 105/24	#4 AWG 133/.0177	#4 AWG 49/.0292	#4 AWG 1064/34	25MM ² 6.60MM	#50	AN-4	
BCU-BBCU-BLU-BBLU-BBLZ- 2	#2 AWG 7 OR 19	NONE	NONE	NONE	* #3 AWG 133/.0199	* #3 AWG 49/.0328	#3 AWG 1323/34	* 30MM ² 7.01MM	#60	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 1	#1 AWG 19 OR 37	#2 AWG 161/24	#2 AWG 665/30	#2 AWG 150/24	#2 AWG 133/.0223	#2 AWG 49/.0368	#2 AWG 1666/34	* 40MM ² 8.20MM	#75	AN-2	
BCU-BBCU-BLU-BBLU-BBLZ- 1/0	1/0 AWG 19 OR 37	NONE	#1 AWG 836/30	#1 AWG 225/24	#1 AWG 259/.0180	#1 AWG 133/.0251	#1 AWG 2107/34	50MM ² 9.27MM	#100	AN-1	
BCU-BBCU-BLU-BBLU-BBLZ- 2/0	2/0 AWG 19 OR 37	1/0 AWG 266/24	1/0 AWG 1064/30	1/0 AWG 275/24	1/0 AWG 259/.0202	1/0 AWG 133/.0282	1/0 AWG 2646/34	70MM ² 10.92MM	#125	AN-1/0	
BCU-BBCU-BLU-BBLU-BBLZ- 3/0	3/0 AWG 19 OR 37	2/0 AWG 342/24	2/0 AWG 1323/30	2/0 AWG 325/24	2/0 AWG 259/.0227	2/0 AWG 133/.0316	NONE	* 85MM ² 11.94MM	#150	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 4/0	4/0 AWG 19 OR 37	NONE	3/0 AWG 1666/30	3/0 AWG 450/24	3/0 AWG 259/.0255	3/0 AWG 133/.0355	2/0 AWG 3325/34	95MM ² 12.80MM	#200	AN-2/0 AN-3/0	
BCU-BBCU-BLU-BBLU-BBLZ- 025	250 MCM 37 OR 61	NONE	NONE	NONE	NONE	NONE	3/0 AWG 4256/34	120MM ² 14.4MM	NONE	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 030	300 MCM 37 OR 61	4/0 AWG 532/24	4/0 AWG 2107/30	4/0 AWG 550/24	* 4/0 AWG 259/.0286	* 4/0 AWG 133/.0399	4/0 AWG 5320/34	150MM ² 16.00MM	#300	AN-4/0	
BCU-BBCU-BLU-BBLU-BBLZ- 035	350 MCM 37 OR 61	NONE	NONE	262 MCM 650/24	* 250 MCM 427/.0242	* 250 MCM 259/.0311	NONE	180MM ² 17.42MM	#350	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 040	400 MCM 37 OR 61	NONE	NONE	313 MCM 775/24	300 MCM 427/.0265	300 MCM 259/.0340	250 MCM 6384/34	185MM ² 17.80MM	#400	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 045	450 MCM 37 OR 61	NONE	NONE	NONE	* 350 MCM 427/.0286	* 350 MCM 259/.0368	300 MCM 7581/34	NONE	NONE	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 050	500 MCM 37 OR 61	350 MCM 882/24	NONE	373 MCM 925/24	400 MCM 427/.0306	400 MCM 259/.0393	350 MCM 8806/34	240MM ² 20.30MM	NONE	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 060	600 MCM 61 OR 91	NONE	NONE	444 MCM 1100/24	450 MCM 427/.0325	450 MCM 259/.0417	400 MCM 10101/34	300MM ² 22.63MM	NONE	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 065	650 MCM 61 OR 91	500 MCM 1225/24	NONE	535 MCM 1325/24	500 MCM 427/.0342	500 MCM 259/.0439	450 MCM 11396/34	NONE	NONE	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 075	750 MCM 61 OR 91	NONE	NONE	646 MCM 1600/24	* 550 MCM 703/.0280 * 600 MCM 703/.0292	* 550 MCM 427/.0359 * 600 MCM 427/.0375	500 MCM 12691/34	NONE	NONE	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 080	800 MCM 61 OR 91	NONE	NONE	NONE	* 650 MCM 703/.0304	* 650 MCM 427/.0390 * 700 MCM 427/.0405	550 MCM 13664/34	400MM ² 26.1MM	NONE	NONE	
BCU-BBCU-BLU-BBLU-BBLZ- 100	1000 MCM 61 OR 91	750 MCM 1862/24	NONE	777 MCM 1925/24	* 700 MCM 703/.0316 * 750 MCM 703/.0327	* 750 MCM 427/.0419 * 800 MCM 427/.0433	600 MCM 14945/34 650 MCM 16226/34	500MM ² 29.3MM	NONE	NONE	

* Not UL listed



FLEXIBLE COPPER STRANDED CABLE

CONDUCTOR SIZE AWG or kcmil	STRANDING AND DIAMETER	NOMINAL DIAMETER	CLASS
8	41/.0201	.156	I
	49/.0184	.166	G
	133/.0111	.167	H
	168/.010	.157	K
	420/.0063	.162	M
7	49/.0206	.185	G
	52/.0201	.185	I
	133/.0125	.188	H
	210/.010	.179	K
	532/.0063	.196	M
6	49/.0231	.208	G
	63/.0201	.207	I
	133/.0140	.210	H
	266/.010	.210	K
	665/.0063	.215	M
5	49/.0260	.234	G
	84/.0201	.235	I
	133/.0158	.237	H
	336/.010	.235	K
	836/.0063	.240	M
4	49/.0292	.263	G
	105/.0201	.263	I
	133/.0177	.266	H
	420/.010	.272	K
	1064/.0063	.269	M
3	49/.0328	.295	G
	133/.0199	.299	H
	133/.0201	.291	I
	532/.010	.304	K
	1323/.0063	.305	M
2	49/.0368	.331	G
	133/.0223	.335	H
	161/.0201	.319	I
	665/.010	.338	K
	1666/.0063	.337	M
1	133/.0251	.377	G
	210/.0201	.367	I
	259/.018	.378	H
	836/.010	.397	K
	2107/.0063	.376	M
1/0	133/.0282	.423	G
	259/.0202	.424	H
	266/.0201	.441	I
	1064/.010	.451	K
	2646/.0063	.423	M
2/0	133/.0316	.474	G
	259/.0227	.477	H
	342/.0201	.500	I
	1323/.010	.470	K
	3325/.0063	.508	M
3/0	133/.0355	.533	G
	259/.0255	.536	H
	418/.0201	.549	I
	1666/.010	.533	K
	4256/.0063	.576	M
4/0	133/.0399	.599	G
	259/.0286	.601	H
	532/.0201	.613	I
	2107/.010	.627	K
	5320/.0063	.645	M

CONDUCTOR SIZE AWG or kcmil	STRANDING AND DIAMETER	NOMINAL DIAMETER	CLASS
250	259/.0311	.650	G
	427/.0242	.653	H
	637/.0201	.682	I
	2499/.010	.682	K
	6384/.0063	.713	M
300	259/.0340	.714	G
	427/.0265	.716	H
	735/.0201	.737	I
	2989/.010	.768	K
	7581/.0063	.768	M
350	259/.0368	.773	G
	427/.0286	.772	H
	882/.0201	.800	I
	3458/.010	.809	K
	8806/.0063	.825	M
400	259/.0393	.825	G
	427/.0306	.826	H
	980/.0201	.831	I
	3990/.010	.878	K
	10101/.0063	.901	M
450	259/.0417	.876	G
	427/.0325	.878	H
	1127/.0201	.894	I
	4522/.010	.933	K
	11396/.0063	.940	M
500	259/.0439	.922	G
	427/.0342	.923	H
	1225/.0201	.941	I
	5054/.010	.988	K
	12691/.0063	.997	M
600	427/.0375	1.013	G
	703/.0292	1.022	H
	1470/.0201	1.027	I
	5985/.010	1.125	K
	14945/.0063	1.084	M
700	427/.0405	1.094	G
	703/.0316	1.106	H
	1729/.0201	1.194	I
	6916/.010	1.207	K
	17507/.0063	1.183	M
800	427/.0433	1.169	G
	703/.0337	1.180	H
	1995/.0201	1.290	I
	7980/.010	1.305	K
	20069/.0063	1.256	M
900	427/.0459	1.239	G
	703/.0358	1.253	H
	2261/.0201	1.372	I
	9065/.010	1.323	K
	22631/.0063	1.331	M
1000	427/.0484	1.307	G
	703/.0377	1.320	H
	2527/.0201	1.427	I
	10101/.010	1.419	K
	25193/.0063	1.404	M

F

COPPER COMPACT STRANDED CONDUCTOR SIZES

ALUMINUM COMPACT STRANDED CONDUCTOR SIZES

CONDUCTOR SIZE AWG OR KCMIL	NO. OF STRANDS	CONDUCTOR DIAMETER (IN.)	CLASS
#8	7	.134	Compact
#6	7	.169	
#4	7	.213	
#2	7	.268	
#1	19	.299	
1/0	19	.336	
2/0	19	.376	
3/0	19	.423	
4/0	19	.475	
250	37	.520	
300	37	.570	
350	37	.616	
400	37	.659	
450	37	.700	
500	37	.736	
550	61	.775	
600	61	.813	
650	61	.845	
700	61	.877	
750	61	.908	
800	61	.938	
900	61	.999	
1000	61	1.060	

CONDUCTOR SIZE AWG OR KCMIL	NO. OF STRANDS	CONDUCTOR DIAMETER (IN.)	CLASS ASTM B400
#8	7	.134	A, B
#6	7	.169	A, B
#4	7	.213	A, B
#3	7	.238	A, B
#2	7	.268	AA, A, B
#1	7	.299	AA, A
#1	19	.299	B
1/0	7	.336	AA, A
1/0	19	.336	B
2/0	7	.376	AA, A
2/0	19	.376	B
3/0	7	.423	AA, A
3/0	19	.423	B
4/0	7	.475	AA, A
4/0	19	.475	B
250	7	.520	AA
250	19	.520	A
250	37	.520	B
266	7	.337	AA
266	19	.337	A
300	7	.570	AA
300	19	.570	A
300	37	.570	B
336	7	.603	AA
336	19	.603	A
350	19	.616	A
350	37	.616	B
397	19	.659	AA, A
400	37	.659	B
450	37	.700	B
477	19	.722	AA
500	19	.736	AA
500	37	.736	B
550	61	.775	B
556	19	.780	AA
600	61	.813	B
650	61	.845	B
700	61	.877	B
750	61	.908	B
800	61	.938	B
900	61	.999	B
1000	61	1.060	B



PROPERTIES OF COPPER PIPE

	NOMINAL SIZE INCHES (IPS)	OUTSIDE DIAMETER INCHES+	INSIDE DIAMETER INCHES	WALL THICKNESS INCHES	AREA		APPROX. WEIGHT LBS./FT.	INDOOR CAPACITY FOR 30° TEMP. RISE	
					SQUARE INCHES	SQUARE CM		NEMA CC1-2009 RATINGS	
								INDOORS AMPS.	OUTDOORS AMPS.
Standard Copper Pipe Sizes Schedule 40	3/8	.675	.494	.0905	.166	1.06	.641	-	-
	1/2	.840	.625	.1075	.247	1.59	.955	380	510
	3/4	1.050	.822	.1140	.335	2.16	1.30	540	710
	1	1.315	1.062	.1265	.472	3.04	1.83	650	850
	1 1/4	1.660	1.368	.1460	.694	4.48	2.69	870	1,120
	1 1/2	1.900	1.600	.1500	.825	5.32	3.20	1,020	1,280
	2	2.375	2.062	.1565	1.09	7.03	4.23	1,250	1,550
	2 1/2	2.875	2.500	.1875	1.58	10.2	6.12	1,700	2,000
	3	3.500	3.062	.2190	2.26	14.6	8.75	2,175	2,550
	3 1/2	4.000	3.500	.2500	2.95	19.0	11.4	2,575	3,050
	4	4.500	4.000	.2500	3.34	21.5	12.9	2,850	3,400
	5	5.563	5.063	.2500	4.17	26.9	16.2	3,450	4,100
	6	6.625	6.125	.2500	5.01	32.3	19.4	4,000	4,700
	8	8.625	8.000	.3125	8.16	52.6	31.6	-	-
	10	10.750	10.019	.3655	11.9	76.8	46.2	-	-
Extra Heavy Copper Pipe Sizes Schedule 80	1/4	.540	.294	.123	.161	1.04	.624	-	-
	3/8	.675	.421	.127	.219	1.41	.847	-	-
	1/2	.840	.542	.149	.323	2.08	1.25	420	580
	3/4	1.050	.736	.157	.440	2.84	1.71	590	780
	1	1.315	.951	.182	.648	4.18	2.51	750	1,010
	1 1/4	1.660	1.272	.194	.893	5.67	3.46	975	1,250
	1 1/2	1.900	1.494	.203	1.08	6.97	4.19	1,150	1,450
	2	2.375	1.933	.221	1.49	9.68	5.79	1,500	1,850
	2 1/2	2.875	2.315	.280	2.29	14.7	8.84	1,975	2,400
	3	3.500	2.892	.304	3.05	19.7	11.8	2,475	2,950
	3 1/2	4.000	3.358	.321	3.71	23.9	14.4	2,875	3,400
	4	4.500	3.818	.341	4.45	28.8	17.3	3,100	3,800
	5	5.563	4.813	.375	6.11	39.4	23.7	3,850	4,600
	6	6.625	5.751	.437	8.49	54.8	32.9	4,500	5,200
	8	8.625	7.625	.500	12.76	82.6	49.5	-	-
10	10.750	9.750	.500	16.10	104	62.4	-	-	

ASTM-B188
+Standard OD same as rigid steel conduit

PROPERTIES OF EXTRUDED ALUMINUM PIPE 6063-T6 ALUMINUM ALLOY - 53% IACS

SCHEDULE 40							SCHEDULE 80						
IPS SIZE	NOMINAL OUTSIDE DIAMETER INCHES	NOMINAL INSIDE DIAMETER INCHES	NOMINAL WALL THICKNESS INCHES	NOMINAL WEIGHT LBS./FT.	CURRENT RATING AMPERES		IPS SIZE	NOMINAL OUTSIDE DIAMETER INCHES	NOMINAL INSIDE DIAMETER INCHES	NOMINAL WALL THICKNESS INCHES	NOMINAL WEIGHT LBS./FT.	CURRENT RATING AMPERES	
					INDOORS*	OUTDOORS+						INDOORS*	OUTDOORS+
1/2	.840	.622	.109	.294	315	400	1/2	.840	.546	.147	.376	360	455
3/4	1.050	.824	.113	.391	400	495	3/4	1.050	.742	.154	.510	455	565
1	1.315	1.049	.133	.581	535	650	1	1.315	.957	.179	.751	605	740
1 1/4	1.660	1.380	.140	.786	680	810	1 1/4	1.660	1.278	.191	1.037	780	930
1 1/2	1.900	1.610	.145	.940	790	930	1 1/2	1.900	1.500	.200	1.256	910	1070
2	2.375	2.067	.154	1.264	1000	1155	2	2.375	1.939	.218	1.737	1175	1355
2 1/2	2.875	2.469	.203	2.004	1365	1550	2 1/2	2.875	2.323	.276	2.650	1570	1780
3	3.500	3.068	.216	2.621	1670	1895	3	3.500	2.900	.300	3.547	1935	2195
3 1/2	4.000	3.548	.226	3.151	1945	2170	3 1/2	4.000	3.364	.318	4.326	2265	2530
4	4.500	4.026	.237	3.733	2230	2460	4	4.500	3.826	.337	5.183	2605	2880
5	5.563	5.047	.258	5.057	2845	3080	5	5.536	4.813	.375	7.188	3355	3635
6	6.625	6.065	.280	6.564	3500	3735	6	6.625	5.761	.432	9.884	4205	4490

*Indoor ratings are calculated for a 30°C rise above an ambient temperature of 40°C in still but unconfined air
+Outdoor ratings are given for a wind velocity of 2 feet per second, an ambient air temperature of 40°C, a conductor temperature of 70°C (30°C rise), and a surface emissivity, e, equal to .35 (NEMA CC1-2009)
ANSI-H35.2-1990 (For Dimensional Data)

MILLIMETER/ DECIMAL/ FRACTION CONVERSION CHART

MILLI-METER	DECIMAL	FRACTION (INCHES)	MILLI-METER	DECIMAL	FRACTION (INCHES)	MILLI-METER	DECIMAL	FRACTION (INCHES)	MILLI-METER	DECIMAL	FRACTION (INCHES)	MILLI-METER	DECIMAL	FRACTION (INCHES)
.1	.0039		5.159	.2031	13/64	10.2	.4016		15.3	.6024		20.3	.7992	
.2	.0079		5.2	.2047		10.3	.4055		15.4	.6063		20.4	.8031	
.3	.0118		5.3	.2087		10.319	.4063	13/32	15.478	.6094	39/64	20.5	.8071	
.397	.0156	1/64	5.4	.2126		10.4	.4094		15.5	.6102		20.6	.8110	
.4	.0157		5.5	.2165		10.5	.4134		15.6	.6142		20.638	.8125	13/16
.5	.0197		5.556	.2188	7/32	10.6	.4173		15.7	.6181		20.7	.8150	
.6	.0236		5.6	.2205		10.7	.4213		15.8	.6220		20.8	.8189	
.7	.0276		5.7	.2244		10.716	.4219	27/64	15.875	.6250	5/8	20.9	.8228	
.794	.0313	1/32	5.8	.2283		10.8	.4252		15.9	.6260		21.0	.8268	
.8	.0315		5.9	.2323		10.9	.4291		16.0	.6299		21.034	.8281	53/64
.9	.0354		5.953	.2344	15/64	11.0	.4331		16.1	.6339		21.1	.8307	
1.0	.0394		6.0	.2362		11.1	.4370		16.2	.6378		21.2	.8346	
1.1	.0433		6.1	.2402		11.113	.4375	7/16	16.272	.6406	41/64	21.3	.8386	
1.191	.0469	3/64	6.2	.2441		11.2	.4409		16.3	.6417		21.4	.8425	
1.2	.0472		6.3	.2480		11.3	.4449		16.4	.6457		21.431	.8438	27/32
1.3	.0512		6.350	.2500	1/4	11.4	.4488		16.5	.6496		21.5	.8465	
1.4	.0551		6.4	.2520		11.5	.4528		16.6	.6535		21.6	.8504	
1.5	.0591		6.5	.2559		11.509	.4531	29/64	16.669	.6563	21/32	21.7	.8543	
1.588	.0625	1/16	6.6	.2598		11.6	.4567		16.7	.6575		21.8	.8583	
1.6	.0630		6.7	.2638		11.7	.4606		16.8	.6614		21.828	.8594	55/64
1.7	.0669		6.747	.2656	17/64	11.8	.4646		16.9	.6654		21.9	.8622	
1.8	.0709		6.8	.2677		11.9	.4685		17.0	.6693		22.0	.8661	
1.9	.0748		6.9	.2717		11.906	.4688	15/32	17.066	.6719	43/64	22.1	.8701	7/8
1.984	.0781	5/64	7.0	.2756		12.0	.4724		17.1	.6732		22.2	.8740	
2.0	.0787		7.1	.2795		12.1	.4764		17.2	.6772		22.225	.8750	
2.1	.0827		7.144	.2813	9/32	12.2	.4803		17.3	.6811		22.3	.8780	
2.2	.0866		7.2	.2835		12.3	.4843		17.4	.6850		22.4	.8819	
2.3	.0906		7.3	.2874		12.303	.4844	31/64	17.463	.6875	11/16	22.5	.8858	
2.381	.0938	3/32	7.4	.2913		12.4	.4882		17.5	.6890		22.6	.8898	
2.4	.0945		7.5	.2953		12.5	.4921		17.6	.6929		22.622	.8906	57/64
2.5	.0984		7.541	.2969	19/64	12.6	.4961		17.7	.6968		22.7	.8937	
2.6	.1024		7.6	.2992		12.7	.5000	1/2	17.8	.7008		22.8	.8976	
2.7	.1063		7.7	.3031		12.8	.5039		17.859	.7031	45/64	22.9	.9016	
2.778	.1094	7/64	7.8	.3071		12.9	.5079		17.9	.7047		23.0	.9055	
2.8	.1102		7.9	.3110		13.0	.5118		18.0	.7087		23.019	.9063	29/32
2.9	.1142		7.938	.3125	5/16	13.097	.5156	33/64	18.1	.7126		23.1	.9094	
3.0	.1181		8.0	.3150		13.1	.5157		18.2	.7165		23.2	.9134	
3.1	.1220		8.1	.3189		13.2	.5197		18.256	.7188	23/32	23.3	.9173	
3.175	.1250	1/8	8.2	.3228		13.3	.5236		18.3	.7205		23.4	.9213	
3.2	.1260		8.3	.3268		13.4	.5276		18.4	.7244		23.416	.9219	59/64
3.3	.1299		8.334	.3281	21/64	13.494	.5313	17/32	18.5	.7283		23.5	.9252	
3.4	.1339		8.4	.3307		13.5	.5315		18.6	.7323		23.6	.9291	
3.5	.1378		8.5	.3346		13.6	.5354		18.653	.7344	47/64	23.7	.9331	
3.572	.1406	9/64	8.6	.3386		13.7	.5394		18.7	.7362		23.8	.9370	
3.6	.1417		8.7	.3425		13.8	.5433		18.8	.7402		23.813	.9375	15/16
3.7	.1457		8.731	.3438	11/32	13.891	.5469	35/64	18.9	.7441		23.9	.9409	
3.8	.1496		8.8	.3465		13.9	.5472		19.0	.7480		24.0	.9449	
3.9	.1535		8.9	.3504		14.0	.5512		19.050	.7500	3/4	24.1	.9488	
3.969	.1563	5/32	9.0	.3543		14.1	.5551		19.1	.7520		24.2	.9528	
4.0	.1575		9.1	.3583		14.2	.5591		19.2	.7559		24.209	.9531	61/64
4.1	.1614		9.128	.3594	23/64	14.288	.5625	9/16	19.3	.7598		24.3	.9567	
4.2	.1654		9.2	.3622		14.3	.5630		19.4	.7638		24.4	.9606	
4.3	.1693		9.3	.3661		14.4	.5669		19.447	.7656	49/64	24.5	.9646	
4.366	.1719	11/64	9.4	.3701		14.5	.5709		19.5	.7677		24.6	.9685	
4.4	.1732		9.5	.3740		14.6	.5748		19.6	.7717		24.606	.9688	31/32
4.5	.1772		9.525	.3750	3/8	14.684	.5781	37/64	19.7	.7756		24.7	.9724	
4.6	.1811		9.6	.3780		14.7	.5787		19.8	.7795		24.8	.9764	
4.7	.1850		9.7	.3819		14.8	.5827		19.844	.7813	25/32	24.9	.9803	
4.763	.1875	3/16	9.8	.3858		14.9	.5866		19.9	.7835		25.0	.9843	
4.8	.1890		9.9	.3898		15.0	.5906		20.0	.7874		25.003	.9844	63/64
4.9	.1929		9.922	.3906	25/64	15.081	.5938	19/32	20.1	.7913		25.1	.9882	
5.0	.1969		10.0	.3937		15.1	.5945		20.2	.7953		25.2	.9921	
5.1	.2008		10.1	.3976		15.2	.5984		20.241	.7969	51/64	25.3	.9961	
												25.400	1.0000	1



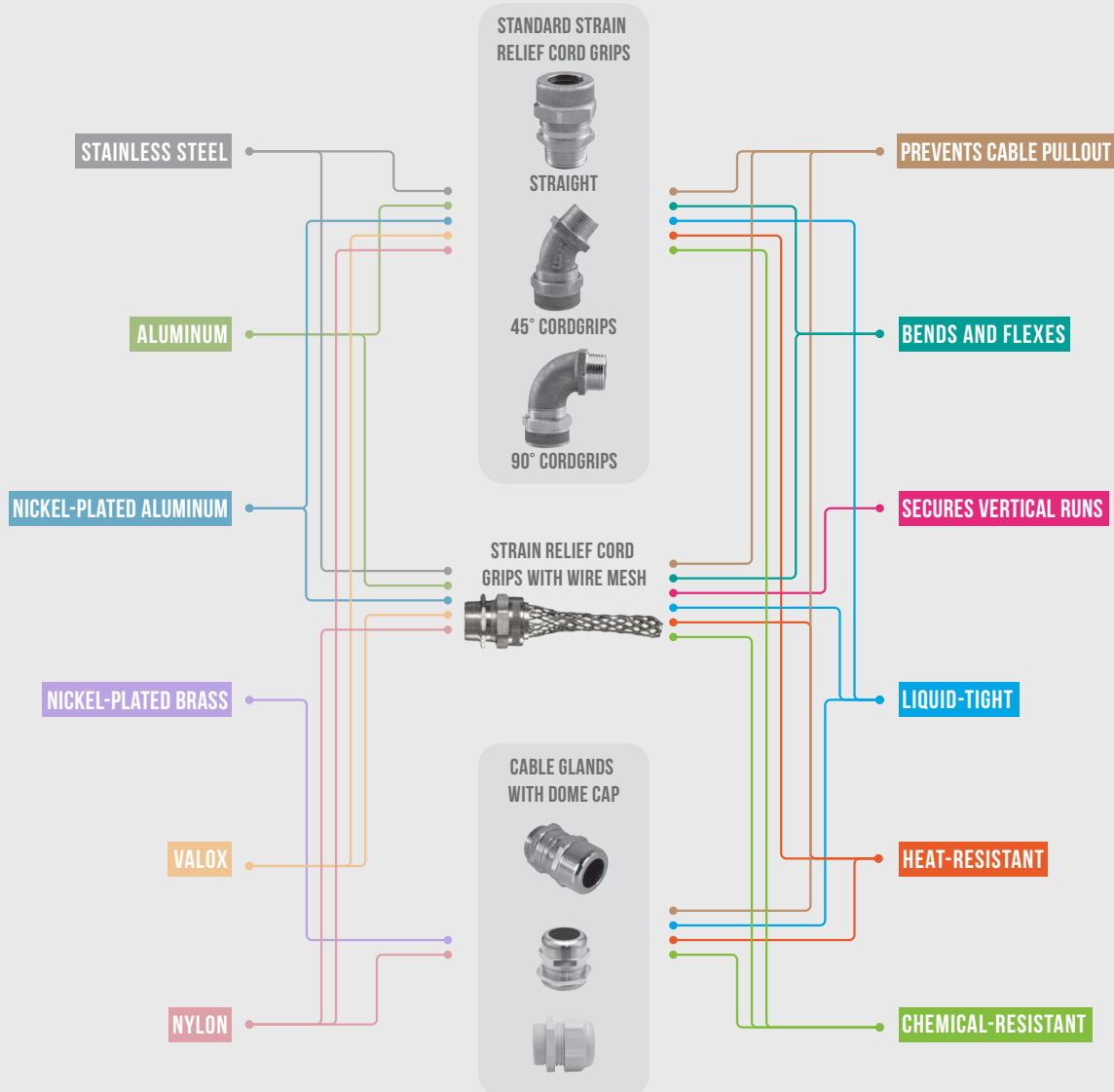
CATALOG NUMBER SUFFIX LEGEND

SUFFIX	DESCRIPTION	SUFFIX	DESCRIPTION
A	Aluminum Hardware	SF	Side Formed Tongue
B	Conical Pressure	S	Street Light Adapter (DBA Series)
BM	Base Mounting	S	Stud for UTS, UTSA
BF	Bagged & Filled (w/ Cual-Aid)	S	Slotted Hex Head FF
BP	Bulk Packed	S	Slotted Holes Braid
C	Cual-Aid	SC	Screw
CUF	Copper Flashed	SKH	Socket Head
CF	Center Formed Tongue	SP	Shakeproof
CS	Chatter Spring	SH	Shear Head
FL	Flared End	SH	Stud w/ Hdw for UTS, UTSA
FT	Full Thread U-Bolt	SVC	Silver Plate Complete
GF	Grind Finish	SLW	Split Lockwasher
GP	General Purpose - Tin (Hot Line Clamp)		
HDW	Hardware		
HH	Hex Head		
L	Extra Length	TERMINAL BLOCKS	
LH	Left Hand Thread	SV	White Vinyl Cover
LH	Less Hardware	SVC	White Vinyl Cover w/ Short Circuit Strip
LS	Less Shear	SVS	White Vinyl Cover w/ Marking Strip
LS	Less Spacer - AVT Cat. No.	SC	Short Circuit Strip
LMH	Less Mounting Hardware	SCS	Short Circuit Strip w/ Marking Strip
N	NEMA Hole Spacing in Pad	SCC	Short Circuit Strip w/ Cover
NI	Nickel Plated	ST	Marking Strip w/ Studs
NH	Less (No) Hardware	STC	Marking Strip w/ Studs and Cover
NT	Narrow Tongue	ST-SC	Short Circuit Strip w/ Studs
P	Plugged Center Stop	ST-SCS	Short Circuit Strip w/ Studs and Marking Strip
PT	Plug & Tapered		
Q	Tin Plated Braid Ferrules	T	Tapered Ends
RH	Right Hand	TNC	Tin Plated Complete
RW	Restricted Width	TN	Tin Plated
SSTL	Stainless Steel	TN3	Tin Plate .0003 Thick
SBH	Silicon Bronze Hardware	TMH	Tongue Mounting Hardware
SS	Set Screw	U	Undrilled
SV	Silver Plated	UP	Unplated
SV-5	Silver Plated .0005 Thick	WT	Water Tight
SMH	Stud Mounting Hardware	XF	Extra Fine Wire
		ZN	Zinc Plated



REMKE The Ultimate Guide to Cable Strain Relief

Simplify the options for cable strain relief. It's easy to figure out which strain relief connector is suited to any application, just follow the lines!



AVAILABILITY

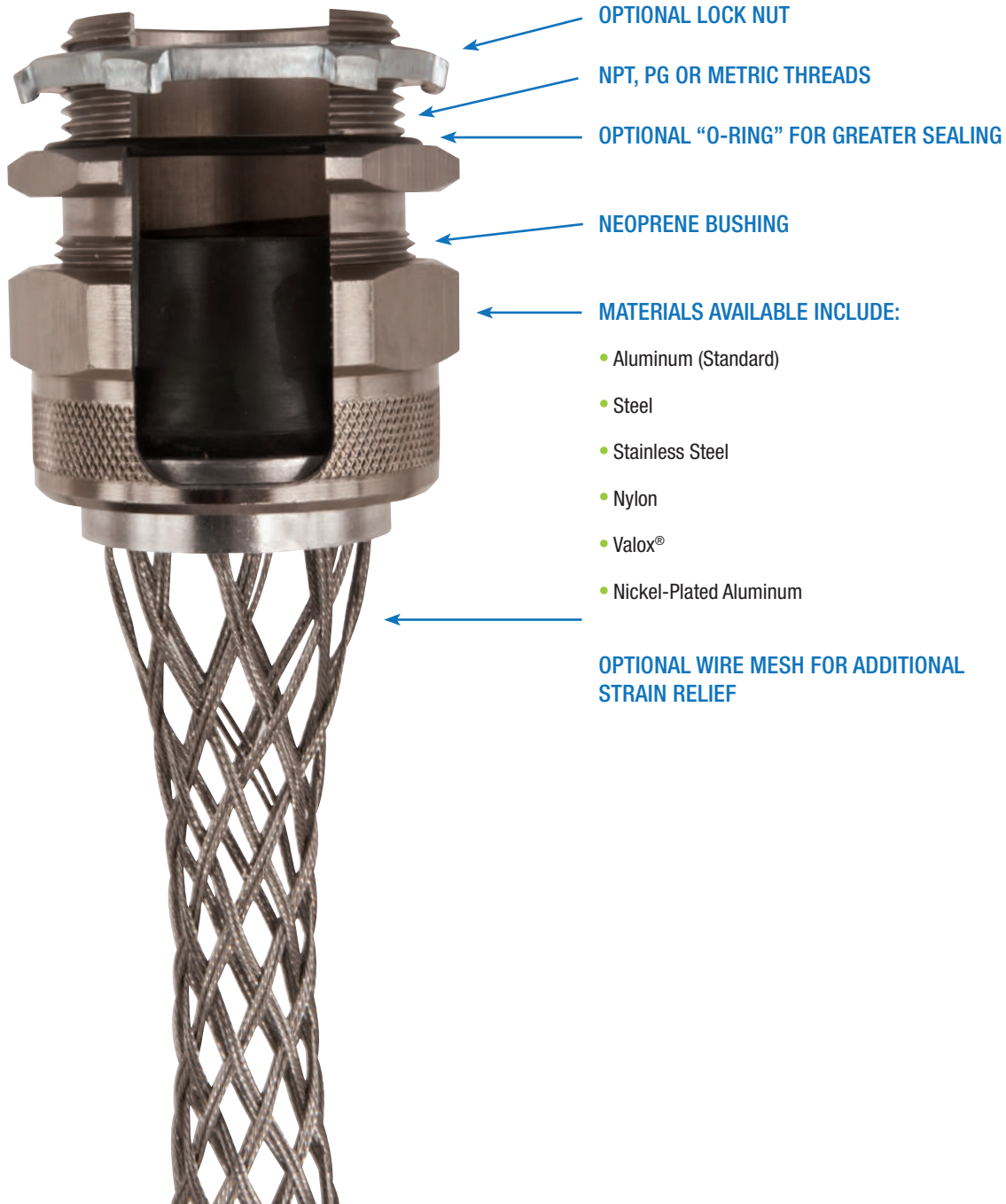
Remke's complete line of cable strain relief connectors are in stock and ready to ship. We can also engineer and manufacturer a strain relief connector to your exact specifications at no additional cost.

OPTIONAL ADD-ONS



G

INGREDIENTS OF A CORD GRIP



OPTIONAL LOCK NUT

NPT, PG OR METRIC THREADS

OPTIONAL "O-RING" FOR GREATER SEALING

NEOPRENE BUSHING

MATERIALS AVAILABLE INCLUDE:

- Aluminum (Standard)
- Steel
- Stainless Steel
- Nylon
- Valox®
- Nickel-Plated Aluminum

OPTIONAL WIRE MESH FOR ADDITIONAL STRAIN RELIEF

G

CABLE STRAIN RELIEF FOR HARSH ENVIRONMENTS

The right strain relief connectors deliver long-term reliability



WET

Environments where water and other liquids come in contact with electrical connectors.

Ideal materials for waterproof cable grips

Stainless Steel (304/316), Nylon, Valox, Nickel-Plated Brass, Nickel-Plated Aluminum

Common Applications
Food Processing, Paper Production and Water Treatment



HOT

Environments with high temperatures, direct heat or those that fluctuate greatly.

Ideal materials for high-temp cable connectors

Stainless Steel, Silicone, Valox, Nickel-Plated Aluminum

Common Applications
Welding, Food Processing and Paper Production



CHEMICAL

Environments where cable connectors come in contact with chemicals and other abrasive elements.

Ideal materials for chemical-resistant cable grips

Stainless Steel, PVC, Valox, Silicone, Viton

Common Applications
Manufacturing, Paper Production and Water Treatment



COLD

Environments with sustained freezing temperatures, indoors or outdoors.

Ideal materials for cable connectors in the cold

Silicone, Neoprene, Viton, Stainless Steel,

Common Applications
Refrigeration and Freezer Storage Facilities, Food Processing, Pharmaceutical, Outdoors



MECHANICAL

Environments with constant bending and flexing of electrical cables and connectors.

Ideal materials for industrial-strength cable grips

Stainless Steel, Aluminum, Steel, Nickel-Plated Brass, Nickel-Plated Aluminum

Common Applications
Manufacturing, Assembly Lines, Robotics, Material Handling, Industrial Automation



RSR SERIES ALUMINUM CORD GRIPS



RSR SERIES STRAIGHT ALUMINUM CORD GRIPS

Tuff-Seal™ RSR Series Aluminum Cord Grips are UL Listed and CSA Certified for use in both indoor and outdoor applications to prevent cable pullout, control arc of bend, and to provide a tight seal against environmental elements such as dirt, moisture and coolants.

The breadth of the line encompasses conduit sizes from 1/4" to 4" with fittings offered in machined aluminum, nickel-plated aluminum, steel, stainless steel, nylon and Valox®. Other features of the family of RSR Cord Grips include:

- A unique design with a combination tightening surface that includes both a hex area and a knurled surface
- Available with or without stainless steel wire mesh
- Available in NPT, PG, ISO or Metric threads
- Anti-friction washer that fits between the nut and bushing for easier compression.

NOTES

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

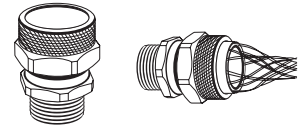
All wire mesh is stainless steel.

Dimension & certification information on pages G-52 to G-66 in Tuff-Seal Technical Reference.



Nickel-plated aluminum:
Cord grips available in nickel-plated aluminum. Add "N" to end of prefix.
(ex: RSR-0003 becomes RSRN-0003)

COMPLETE ASSEMBLY PART NUMBERS



RSR SERIES ALUMINUM CORD GRIPS				
Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh	
1/4"	.125 – .188	RSR-0003	—	
	.188 – .250	RSR-0004	RSR-0004-E	
	.250 – .312	RSR-0005	RSR-0005-E	
	.312 – .375	RSR-0006	RSR-0006-E	
	.375 – .438	RSR-0007*	RSR-0007-E	
3/8"	.125 – .188	RSR-003	—	
	.188 – .250	RSR-004	RSR-004-E	
	.250 – .312	RSR-005	RSR-005-E	
	.312 – .375	RSR-006	RSR-006-E	
	.375 – .438	RSR-007*	RSR-007-E	
1/2"	.125 – .188	RSR-1003	—	
	.188 – .250	RSR-1004	RSR-1004-E	
	.250 – .312	RSR-1005	RSR-1005-E	
	.312 – .375	RSR-1006	RSR-1006-E	
	.375 – .438	RSR-1007	RSR-1007-E	
	.438 – .500	RSR-108	RSR-108-E	
	.500 – .562	RSR-109	RSR-109-E	
	.562 – .625	RSR-110	RSR-110-E	
	.438 – .500	RSR-1208	RSR-1208-E	
	.500 – .562	RSR-1209	RSR-1209-E	
	.562 – .625	RSR-1210	RSR-1210-E	
	.562 – .688	RSR-1211*	RSR-1211-E	
	.625 – .750	RSR-1212*	RSR-1212-E	
	.688 – .812	RSR-1213*	RSR-1213-E	
	3/4"	.125 – .188	RSR-2103	RSR-2103-E
		.188 – .250	RSR-2104	RSR-2104-E
		.250 – .312	RSR-2105	RSR-2105-E
.312 – .375		RSR-2106	RSR-2106-E	
.375 – .438		RSR-2107	RSR-2107-E	
.438 – .500		RSR-2108	RSR-2108-E	
.500 – .562		RSR-2109	RSR-2109-E	
.562 – .625		RSR-2110	RSR-2110-E	
.438 – .500		RSR-208	RSR-208-E	
.500 – .562		RSR-209	RSR-209-E	
.562 – .625		RSR-210	RSR-210-E	
.562 – .688		RSR-211	RSR-211-E	
.625 – .750		RSR-212	RSR-212-E	
.688 – .812		RSR-213	RSR-213-E	
.500 – .562		RSR-2309	RSR-2309-E	
.562 – .625		RSR-2310	RSR-2310-E	
.562 – .688		RSR-2311	RSR-2311-E	
.625 – .750		RSR-2312	RSR-2312-E	
.688 – .812		RSR-2313	RSR-2313-E	
.750 – .875		RSR-2314*	RSR-2314-E	
.812 – .938	RSR-2315*	RSR-2315-E		
.875 – 1.000	RSR-2316*	RSR-2316-E		

*Cable may have to be stripped to pass through the bore of the body



RSR SERIES ALUMINUM CORD GRIPS

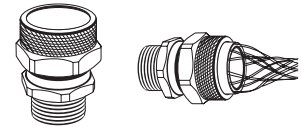


RSR SERIES STRAIGHT ALUMINUM CORD GRIPS

For applications known for their severe conditions – such as oil and gas, marine, food & chemical processing – RSR Cord Grips are available in nickel-plated aluminum. Providing exceptional corrosion resistance and high wear resistance, nickel plated connectors also feature an attractive finish similar to that of polished stainless steel.

Tuff-Seal™ RSR Cord Grips protect cable from damage and pull-out and are used in conduit hubs or knockouts at the point where the electrical cable is to be terminated.

COMPLETE ASSEMBLY PART NUMBERS



RSR SERIES ALUMINUM CORD GRIPS			
Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
1"	.438 – .562	RSR-309	RSR-309-E
	.562 – .625	RSR-310	RSR-310-E
	.562 – .688	RSR-311	RSR-311-E
	.625 – .750	RSR-312	RSR-312-E
	.688 – .812	RSR-313	RSR-313-E
	.750 – .875	RSR-314	RSR-314-E
	.812 – .938	RSR-315	RSR-315-E
	.875 – 1.000	RSR-316	RSR-316-E
	.875 – 1.000	RSR-3516	RSR-3516-E
	1.000 – 1.125	RSR-3518	RSR-3518-E
1 1/4"	1.125 – 1.250	RSR-3520*	RSR-3520-E
	1.250 – 1.375	RSR-3522*	RSR-3522-E
	.562 – .688	RSR-411	—
	.688 – .812	RSR-413	—
	.750 – .875	RSR-414	—
	.875 – 1.000	RSR-416	RSR-416-E
	1.000 – 1.125	RSR-418	RSR-418-E
1 1/2"	1.125 – 1.250	RSR-420*	RSR-420-E
	1.250 – 1.375	RSR-422*	RSR-422-E
	.562 – .688	RSR-511	—
	.688 – .812	RSR-513	—
	.750 – .875	RSR-514	—
	.875 – 1.000	RSR-516	RSR-516-E
	1.000 – 1.125	RSR-518	RSR-518-E
	1.125 – 1.250	RSR-520	RSR-520-E
	1.250 – 1.375	RSR-522	RSR-522-E
	1.250 – 1.375	RSR-5622	RSR-5622-E
2"	1.438 – 1.562	RSR-5625	RSR-5625-E
	1.562 – 1.688	RSR-5627*	RSR-5627-E
	1.688 – 1.812	RSR-5629*	RSR-5629-E
	1.250 – 1.375	RSR-622	RSR-622-E
	1.312 – 1.437	RSR-623	RSR-623-E
	1.438 – 1.562	RSR-625	RSR-625-E
	1.562 – 1.688	RSR-627	RSR-627-E
	1.688 – 1.812	RSR-629	RSR-629-E
	1.688 – 1.812	RSR-6729	RSR-6729-E
	1.812 – 1.938	RSR-6731	RSR-6731-E
	1.938 – 2.062	RSR-6733*	RSR-6733-E
2.062 – 2.188	RSR-6735*	RSR-6735-E	
2.188 – 2.312	RSR-6737*	RSR-6737-E	
2.312 – 2.438	RSR-6739*	RSR-6739-E	

NOTES

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

All wire mesh is stainless steel.

Dimension & certification information on pages G-52 to G-66 in Tuff-Seal Technical Reference.



Nickel-plated aluminum:
Cord grips available in nickel-plated aluminum. Add "N" to end of prefix. (ex: RSR-309 becomes RSRN-309)

*Cable may have to be stripped to pass through the bore of the body

G



RSR SERIES ALUMINUM CORD GRIPS



RSR SERIES STRAIGHT ALUMINUM CORD GRIPS

For applications known for their severe conditions – such as oil and gas, marine, food & chemical processing – RSR Cord Grips are available in nickel-plated aluminum. Providing exceptional corrosion resistance and high wear resistance, nickelplated connectors also feature an attractive finish similar to that of polished stainless steel.

Tuff-Seal™ RSR Cord Grips protect cable from damage and pull-out and are used in conduit hubs or knockouts at the point where the electrical cable is to be terminated.

G

NOTES

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

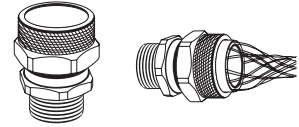
All wire mesh is stainless steel.

Dimension & certification information on pages G-52 to G-66 in Tuff-Seal Technical Reference.



Nickel-plated aluminum:
Cord grips available in nickel-plated aluminum. Add "N" to end of prefix. (ex: RSR-309 becomes RSRN-309)

COMPLETE ASSEMBLY PART NUMBERS



RSR SERIES ALUMINUM CORD GRIPS			
Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
2 1/2"	1.688 – 1.812	RSR-729	RSR-729-E
	1.812 – 1.938	RSR-731	RSR-731-E
	1.938 – 2.062	RSR-733	RSR-733-E
	2.062 – 2.188	RSR-735	RSR-735-E
	2.188 – 2.312	RSR-737	RSR-737-E
	2.312 – 2.438	RSR-739*	RSR-739-E
3"	1.688 – 1.812	RSR-8729	RSR-8729-E
	1.812 – 1.938	RSR-8731	RSR-8731-E
	1.938 – 2.062	RSR-8733	RSR-8733-E
	2.062 – 2.188	RSR-8735	RSR-8735-E
	2.188 – 2.312	RSR-8737	RSR-8737-E
	2.312 – 2.438	RSR-8739*	RSR-8739-E
	2.437 – 2.625	RSR-901	RSR-901-E
	2.625 – 2.812	RSR-902	RSR-902-E
	2.812 – 3.000	RSR-903	RSR-903-E
3.000 – 3.250	RSR-904	RSR-904-E	
3 1/2"	3.000 - 3.180	RSR-1151	RSR-1151-E
	3.180 - 3.335	RSR-1152	RSR-1152-E
	3.335 - 3.530	RSR-1153	RSR-1153-E
4"	3.500 - 3.690	RSR-1251	RSR-1251-E
	3.690 - 3.855	RSR-1252	RSR-1252-E
	3.855 - 4.025	RSR-1253	RSR-1253-E

*Cable may have to be stripped to pass through the bore of the body



RSR SERIES ALUMINUM CORD GRIPS



RSR SERIES 90° ALUMINUM CORD GRIPS

Tuff-Seal™ 90° RSR Cord Grips are UL Listed and CSA Certified for use in both indoor and outdoor applications to prevent cable pullout, control arc of bend, and to provide a tight seal against environmental elements such as dirt, moisture and coolants.

These cord grips with external threads offer the same features as the straight RSR grips described on page G-4. 90° grips can be ordered with or without wire mesh attachments, accommodate conduit sizes from 3/8" to 2" and are available in machined aluminum, nylon and Valox®.

For applications known for their severe conditions – such as oil and gas, marine, food & chemical processing – RSR 90° Cord Grips are available in nickel-plated aluminum. Providing exceptional corrosion resistance and high wear resistance, nickel-plated connectors also feature an attractive finish similar to that of polished stainless steel.

These Tuff-Seal grips protect cable from damage and pull-out and are used in conduit hubs or knock-outs at the point where the electrical cable is to be terminated.

NOTES

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

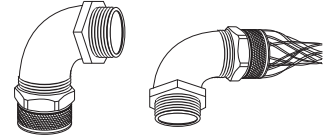
All wire mesh is stainless steel.

Dimension & certification information on pages G-52 to G-66 in Tuff-Seal Technical Reference.



Nickel-plated aluminum:
Cord grips available in nickel-plated aluminum. Add "N" to end of prefix.
(ex: RSR-9003 becomes RSRN-9003)

COMPLETE ASSEMBLY PART NUMBERS



RSR SERIES ALUMINUM CORD GRIPS			
Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
3/8"	.125 – .188	RSR-9003	—
	.188 – .250	RSR-9004	RSR-9004-E
	.250 – .312	RSR-9005	RSR-9005-E
	.312 – .375	RSR-9006	RSR-9006-E
	.375 – .438	RSR-9007	RSR-9007-E
1/2"	.125 – .188	RSR-9103	—
	.188 – .250	RSR-9104	RSR-9104-E
	.250 – .312	RSR-9105	RSR-9105-E
	.312 – .375	RSR-9106	RSR-9106-E
	.375 – .438	RSR-9107	RSR-9107-E
	.438 – .500	RSR-9108	RSR-9108-E
	.500 – .562	RSR-9109	RSR-9109-E
3/4"	.562 – .625	RSR-9110	RSR-9110-E
	.438 – .500	RSR-9208	RSR-9208-E
	.500 – .562	RSR-9209	RSR-9209-E
	.500 – .625	RSR-9210	RSR-9210-E
	.562 – .688	RSR-9211	RSR-9211-E
	.625 – .750	RSR-9212	RSR-9212-E
1"	.688 – .812	RSR-9213	RSR-9213-E
	.500 – .562	RSR-9309	RSR-9309-E
	.500 – .625	RSR-9310	RSR-9310-E
	.562 – .688	RSR-9311	RSR-9311-E
	.625 – .750	RSR-9312	RSR-9312-E
	.688 – .812	RSR-9313	RSR-9313-E
	.750 – .875	RSR-9314	RSR-9314-E
1 1/4"	.812 – .938	RSR-9315	RSR-9315-E
	.875 – 1.000	RSR-9316	RSR-9316-E
	.562 – .688	RSR-9411	—
	.688 – .812	RSR-9413	—
	.750 – .875	RSR-9414	—
	.875 – 1.000	RSR-9416	RSR-9416-E
	1.000 – 1.125	RSR-9418	RSR-9418-E
1 1/2"	1.125 – 1.250	RSR-9420	RSR-9420-E
	1.250 – 1.375	RSR-9422	RSR-9422-E
	.562 – .688	RSR-9511	—
	.688 – .812	RSR-9513	—
	.750 – .875	RSR-9514	—
	.875 – 1.000	RSR-9516	RSR-9516-E
	1.000 – 1.125	RSR-9518	RSR-9518-E
	1.125 – 1.250	RSR-9520	RSR-9520-E
	1.250 – 1.375	RSR-9522	RSR-9522-E
2"	1.438 – 1.562	RSR-9525	RSR-9525-E
	1.562 – 1.688	RSR-9527	RSR-9527-E
	1.688 – 1.812	RSR-9529	RSR-9529-E
	1.250 – 1.375	RSR-9622	RSR-9622-E
	1.438 – 1.562	RSR-9625	RSR-9625-E
	1.562 – 1.688	RSR-9627	RSR-9627-E
	1.688 – 1.812	RSR-9629	RSR-9629-E

*Cable may have to be stripped to pass through the bore of the body

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RSR SERIES ALUMINUM CORD GRIPS



RSR SERIES 45° ALUMINUM CORD GRIPS

Tuff-Seal™ 45° RSR Cord Grips are UL Listed and CSA Certified for use in both indoor and outdoor applications to prevent cable pullout, control arc of bend, and to provide a tight seal against environmental elements such as dirt, moisture and coolants.

These cord grips with external threads offer the same features as the straight RSR grips described on page G-4. Made from machined aluminum, these grips can be ordered with or without wire mesh attachments and accommodate conduit sizes from 1/2" to 1 1/2".

For applications known for their severe conditions – such as oil and gas, marine, food & chemical processing – RSR 45° Cord Grips are also available in nickel-plated aluminum. Providing exceptional corrosion resistance and high wear resistance, nickel-plated connectors also feature an attractive finish similar to that of polished stainless steel.

These Tuff-Seal grips protect cable from damage and pull-out and are used in conduit hubs or knock-outs at the point where the electrical cable is to be terminated.

NOTES

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

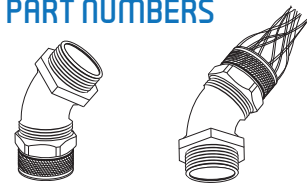
All wire mesh is stainless steel.

Dimension & certification information on pages G-52 to G-66 in Tuff-Seal Technical Reference.



Nickel-plated aluminum:
Cord grips available in nickel-plated aluminum. Add "N" to end of prefix.
(ex: RSR-45103 becomes RSRN-45103)

COMPLETE ASSEMBLY PART NUMBERS



RSR SERIES ALUMINUM CORD GRIPS			
Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
1/2"	.125 – .188	RSR-45103	—
	.188 – .250	RSR-45104	RSR-45104-E
	.250 – .312	RSR-45105	RSR-45105-E
	.312 – .375	RSR-45106	RSR-45106-E
	.375 – .438	RSR-45107	RSR-45107-E
	.438 – .500	RSR-45108	RSR-45108-E
	.500 – .562	RSR-45109	RSR-45109-E
	.562 – .625	RSR-45110	RSR-45110-E
3/4"	.438 – .500	RSR-45208	RSR-45208-E
	.500 – .562	RSR-45209	RSR-45209-E
	.500 – .625	RSR-45210	RSR-45210-E
	.562 – .688	RSR-45211	RSR-45211-E
	.625 – .750	RSR-45212	RSR-45212-E
	.688 – .812	RSR-45213	RSR-45213-E
1"	.500 – .562	RSR-45309	RSR-45309-E
	.500 – .625	RSR-45310	RSR-45310-E
	.562 – .688	RSR-45311	RSR-45311-E
	.625 – .750	RSR-45312	RSR-45312-E
	.688 – .812	RSR-45313	RSR-45313-E
	.750 – .875	RSR-45314	RSR-45314-E
	.812 – .938	RSR-45315	RSR-45315-E
	.875 – 1.000	RSR-45316	RSR-45316-E
1 1/4"	.562 – .688	RSR-45411	—
	.688 – .812	RSR-45413	—
	.750 – .875	RSR-45414	—
	.875 – 1.000	RSR-45416	RSR-45416-E
	1.000 – 1.125	RSR-45418	RSR-45418-E
	1.125 – 1.250	RSR-45420	RSR-45420-E
1 1/2"	1.250 – 1.375	RSR-45422	RSR-45422-E
	.562 – .688	RSR-45511	—
	.688 – .812	RSR-45513	—
	.750 – .875	RSR-45514	—
	.875 – 1.000	RSR-45516	RSR-45516-E
	1.000 – 1.125	RSR-45518	RSR-45518-E
	1.125 – 1.250	RSR-45520	RSR-45520-E
1.250 – 1.375	RSR-45522	RSR-45522-E	

*Cable may have to be stripped to pass through the bore of the body



RSRS SERIES STEEL CORD GRIPS



RSRS SERIES STEEL CORD CONNECTORS

The Tuff-Seal™ RSRS series of corrosion-resistant cord connectors features a body and compression nut made of zinc-chromium plated steel for added strength and durability, enhanced resistance to rust and a better physical appearance. These connectors are ideally suited for use in washdowns or high moisture environments in food processing plants, petrochemical facilities, wastewater treatment plants, pulp & paper mills and chemical manufacturing factories.

RSRS cord connectors have been designed to withstand the extremes of water, caustic materials, detergents or surfactants.

RSRS Corrosion-Resistant Connectors can be ordered with or without wire mesh and accommodate 3/8", 1/2", 3/4" and 1" conduit. The combination tightening surface on these connectors is a unique Remke design that provides a large wrenching area for easy installation. And the knurl section offers users an extra gripping surface for initial hand tightening.

NOTES

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

All wire mesh is stainless steel.

Dimension & certification information on pages G-52 to G-66 in Tuff-Seal Technical Reference. Dimensions are the same as those for RSR Straight Cord Grips.

COMPLETE ASSEMBLY PART NUMBERS

RSRS SERIES STEEL CORD GRIPS			
Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
3/8"	.125 – .188	RSRS-003	—
	.188 – .250	RSRS-004	RSRS-004-E
	.250 – .312	RSRS-005	RSRS-005-E
	.312 – .375	RSRS-006	RSRS-006-E
	.375 – .438	RSRS-007	RSRS-007-E
1/2"	.125 – .188	RSRS-103	—
	.188 – .250	RSRS-104	RSRS-104-E
	.250 – .312	RSRS-105	RSRS-105-E
	.312 – .375	RSRS-106	RSRS-106-E
	.375 – .438	RSRS-107	RSRS-107-E
	.438 – .500	RSRS-108	RSRS-108-E
	.500 – .562	RSRS-109	RSRS-109-E
3/4"	.562 – .625	RSRS-110	RSRS-110-E
	.438 – .500	RSRS-208	RSRS-208-E
	.500 – .562	RSRS-209	RSRS-209-E
	.500 – .625	RSRS-210	RSRS-210-E
	.562 – .688	RSRS-211	RSRS-211-E
	.625 – .750	RSRS-212	RSRS-212-E
1"	.688 – .812	RSRS-213*	RSRS-213-E
	.500 – .562	RSRS-309	RSRS-309-E
	.500 – .625	RSRS-310	RSRS-310-E
	.562 – .688	RSRS-311	RSRS-311-E
	.625 – .750	RSRS-312	RSRS-312-E
	.688 – .812	RSRS-313	RSRS-313-E
	.750 – .875	RSRS-314	RSRS-314-E
	.812 – .938	RSRS-315	RSRS-315-E
1 1/4"	.875 – 1.000	RSRS-316	RSRS-316-E
	.875 – 1.000	RSRS-416	—
	1.125 – 1.250	RSRS-418	—
	1.125 – 1.250	RSRS-420	—
1 1/2"	1.250 – 1.375	RSRS-422	—
	875 – 1.000	RSRS-516	—
	1.000 – 1.125	RSRS-518	—
	1.125 – 1.250	RSRS-520	—
1.250 – 1.375	RSRS-522	—	

*Cable may have to be stripped to pass through the bore of the body



G



RSSS SERIES STAINLESS STEEL CORD GRIPS



RSSS SERIES STAINLESS STEEL CORROSION-RESISTANT CORD CONNECTORS

The Tuff-Seal™ RSSS series of corrosion-resistant cord connectors feature a body and compression nut made of Type 304 stainless steel with exceptional tensile strength and the highest levels of durability in severely corrosive environments filled with saltwater, acids or chemicals. All RSSS connectors include an embedded Buna-N O-Ring. These connectors are recommended for use in washdowns or high moisture environments in food processing plants, petrochemical facilities, wastewater treatment plants, pulp & paper mills and chemical manufacturing factories. (Note: Type 316 stainless steel also available upon request and minimums may apply.)

All RSSS connectors can be ordered with or without wire mesh attachments and accommodate conduit sizes from 3/8" to 2 1/2".

The combination tightening surface on RSSS Corrosion-Resistant Connectors is a unique Remke design that provides a large wrenching area for easy installation.

NOTES

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

Dimension & certification information on pages G-52 to G-66 in Tuff-Seal Technical Reference.

All wire mesh is stainless steel.

For conduit sizes 1 1/4" through 2 1/2" minimum quantities may apply. Consult factory.



COMPLETE ASSEMBLY PART NUMBERS

RSSS SERIES STAINLESS STEEL CORD GRIPS			
Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
3/8"	.125 – .188	RSSS-003	—
	.188 – .250	RSSS-004	RSSS-004-E
	.250 – .312	RSSS-005	RSSS-005-E
	.312 – .375	RSSS-006	RSSS-006-E
	.375 – .438	RSSS-007	RSSS-007-E
1/2"	.125 – .188	RSSS-103	—
	.188 – .250	RSSS-104	RSSS-104-E
	.250 – .312	RSSS-105	RSSS-105-E
	.312 – .375	RSSS-106	RSSS-106-E
	.375 – .438	RSSS-107	RSSS-107-E
	.438 – .500	RSSS-108	RSSS-108-E
	.500 – .562	RSSS-109	RSSS-109-E
	.562 – .625	RSSS-110*	RSSS-110-E
3/4"	.438 – .500	RSSS-208	RSSS-208-E
	.500 – .562	RSSS-209	RSSS-209-E
	.500 – .625	RSSS-210	RSSS-210-E
	.562 – .688	RSSS-211	RSSS-211-E
	.625 – .750	RSSS-212	RSSS-212-E
1"	.688 – .812	RSSS-213*	RSSS-213-E
	.438 – .562	RSSS-309	RSSS-309-E
	.500 – .625	RSSS-310	RSSS-310-E
	.562 – .688	RSSS-311	RSSS-311-E
	.625 – .750	RSSS-312	RSSS-312-E
	.688 – .812	RSSS-313	RSSS-313-E
	.750 – .875	RSSS-314	RSSS-314-E
	.812 – .938	RSSS-315	RSSS-315-E
1 1/4"	.875 – 1.000	RSSS-316	RSSS-316-E
	.562 – .688	RSSS-411	—
	.688 – .812	RSSS-413	—
	.750 – .875	RSSS-414	RSSS-414-E
	.875 – 1.000	RSSS-416	RSSS-416-E
	1.000 – 1.125	RSSS-418	RSSS-418-E
1 1/2"	1.125 – 1.250	RSSS-420*	RSSS-420-E
	1.250 – 1.375	RSSS-422*	RSSS-422-E
	.562 – .688	RSSS-511	—
	.688 – .812	RSSS-513	—
	.750 – .875	RSSS-514	RSSS-514-E
	.875 – 1.000	RSSS-516	RSSS-516-E
	1.000 – 1.125	RSSS-518	RSSS-518-E
	1.125 – 1.250	RSSS-520	RSSS-520-E
2"	1.250 – 1.375	RSSS-522	RSSS-522-E
	1.250 – 1.375	RSSS-622	RSSS-622-E
	1.438 – 1.562	RSSS-625	RSSS-625-E
	1.562 – 1.688	RSSS-627	RSSS-627-E
	1.688 – 1.812	RSSS-629	RSSS-629-E
	1.688 – 1.812	RSSS-6729	RSSS-6729-E
	1.812 – 1.938	RSSS-6731	RSSS-6731-E
	1.938 – 2.062	RSSS-6733*	RSSS-6733-E
	2.062 – 2.188	RSSS-6735*	RSSS-6735-E
	2.188 – 2.312	RSSS-6737*	RSSS-6737-E
2 1/2"	2.312 – 2.438	RSSS-6739*	RSSS-6739-E
	1.688 – 1.812	RSSS-729	RSSS-729-E
	1.812 – 1.938	RSSS-731	RSSS-731-E
	1.938 – 2.062	RSSS-733	RSSS-733-E
	2.062 – 2.188	RSSS-735	RSSS-735-E
	2.188 – 2.312	RSSS-737	RSSS-737-E
3"	2.312 – 2.438	RSSS-739*	RSSS-739-E
	2.437 – 2.635	RSSS-901	RSSS-901-E
	2.625 – 2.812	RSSS-902	RSSS-902-E
	2.812 – 3.000	RSSS-903	RSSS-903-E
3.000 – 3.250	RSSS-904	RSSS-904-E	

*Cable may have to be stripped to pass through the bore of the body

Stainless Steel cord grips are available in 3 1/2 & 4 inch NPT. Contact factory for availability.



RSP SERIES NYLON CORD GRIPS

RSP SERIES NYLON CORROSION-RESISTANT CORD CONNECTORS

The Tuff-Seal™ RSP Series of Non-Metallic Cord Connectors are constructed of a durable, nylon material which offers excellent corrosion resistance, is lightweight, durable and ideal for use in damp environments. RSP Cord Connectors are ideally suited for use in applications with moisture or washdowns and they provide an environmental seal against dirt, coolants, fumes and the like.

RSP Corrosion-Resistant Connectors can be ordered with or without wire mesh attachments. The straight- body style accommodates 3/8", 1/2" and 3/4" conduit sizes while the 90° body fits 1/2" and 3/4" conduit. These connectors also feature a compression bushing made of high-quality, oil resistant Neoprene rubber with an anti-friction washer made of nylon.

RSP Connectors are suitable for use in both indoor and outdoor applications to prevent cable pullout and control arc of bend.

NOTES

Also available in yellow. Add "-Y" to part number.

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

All wire mesh is stainless steel.

Dimension & certification information on pages G-52 to G-66 in Tuff-Seal Technical Reference.



RSP SERIES-STRAIGHT

COMPLETE ASSEMBLY PART NUMBERS

Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
3/8"	.125 – .188	RSP-003	RSP-003-E
	.188 – .250	RSP-004	RSP-004-E
	.250 – .312	RSP-005	RSP-005-E
	.312 – .375	RSP-006	RSP-006-E
	.375 – .438	RSP-007	RSP-007-E
1/2"	.125 – .188	RSP-103	RSP-103-E
	.188 – .250	RSP-104	RSP-104-E
	.250 – .312	RSP-105	RSP-105-E
	.312 – .375	RSP-106	RSP-106-E
	.375 – .438	RSP-107	RSP-107-E
	.438 – .500	RSP-108	RSP-108-E
	.500 – .562	RSP-109	RSP-109-E
3/4"	.562 – .625	RSP-110	RSP-110-E
	.438 – .500	RSP-208	RSP-208-E
	.500 – .562	RSP-209	RSP-209-E
	.500 – .625	RSP-210	RSP-210-E
	.562 – .688	RSP-211	RSP-211-E
3/4"	.625 – .750	RSP-212	RSP-212-E
	.688 – .812	RSP-213	RSP-213-E

RSP SERIES-90°

COMPLETE ASSEMBLY PART NUMBERS

Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
1/2"	.125 – .188	RSP-9103	RSP-9103-E
	.188 – .250	RSP-9104	RSP-9104-E
	.250 – .312	RSP-9105	RSP-9105-E
	.312 – .375	RSP-9106	RSP-9106-E
	.375 – .438	RSP-9107	RSP-9107-E
	.438 – .500	RSP-9108	RSP-9108-E
	.500 – .562	RSP-9109	RSP-9109-E
3/4"	.562 – .625	RSP-9110	RSP-9110-E
	.500 – .562	RSP-9209	RSP-9209-E
	.500 – .625	RSP-9210	RSP-9210-E
	.562 – .688	RSP-9211	RSP-9211-E
	.625 – .750	RSP-9212	RSP-9212-E
3/4"	.688 – .812	RSP-9213	RSP-9213-E





RSPV SERIES VALOX CORD GRIPS

VALOX® CORROSION-RESISTANCE & FDA-WASHDOWN APPROVED CORD GRIPS

Tuff-Seal™ Cord Grips made of Valox are cutting-edge, non-metallic connectors with excellent heat, chemical and corrosion resistance. This material provides high mechanical, thermal and electrical properties for stability and reliability. Rated for IP and NEMA compliance, Remke Valox cord grips are ideal for applications that require an environmental seal against dirt, dust, moisture, fumes and chemicals - and are also approved for FDA-washdowns.

Remke Valox Cord Grips feature a compression bushing made of high-quality, oil-resistant Neoprene rubber with an anti-friction washer made of nylon. RSPV cord grips are suitable for use both indoors & outdoors to prevent cable pullout and control arc of bend. Available options include

- Wire mesh attachments
- Straight-body style for 3/8", 1/2" and 3/4" conduit sizes
- 90-degree body for 1/2" and 3/4" conduit.

Valox connectors are commonly used in Automation, OEMs Maintenance and repair operations, food processing, wastewater treatment, Petro chemical, marine and shipboard, pulp and paper processing.

NOTES

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

All wire mesh is stainless steel.

Dimension & certification information on pages G-52 to G-66 in Tuff-Seal Technical Reference.

Valox is registered trademark of GE Plastics

RSPV SERIES-STRAIGHT

COMPLETE ASSEMBLY PART NUMBERS

Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
3/8"	.125 - .188	RSPV-003	RSPV-003-E
	.188 - .250	RSPV-004	RSPV-004-E
	.250 - .312	RSPV-005	RSPV-005-E
	.312 - .375	RSPV-006	RSPV-006-E
	.375 - .438	RSPV-007	RSPV-007-E
1/2"	.125 - .188	RSPV-103	RSPV-103-E
	.188 - .250	RSPV-104	RSPV-104-E
	.250 - .312	RSPV-105	RSPV-105-E
	.312 - .375	RSPV-106	RSPV-106-E
	.375 - .438	RSPV-107	RSPV-107-E
	.438 - .500	RSPV-108	RSPV-108-E
	.500 - .562	RSPV-109	RSPV-109-E
	.562 - .625	RSPV-110	RSPV-110-E
3/4"	.438 - .500	RSPV-208	RSPV-208-E
	.500 - .562	RSPV-209	RSPV-209-E
	.500 - .625	RSPV-210	RSPV-210-E
	.562 - .688	RSPV-211	RSPV-211-E
	.625 - .750	RSPV-212	RSPV-212-E
	.688 - .812	RSPV-213	RSPV-213-E

RSPV SERIES-90°

COMPLETE ASSEMBLY PART NUMBERS

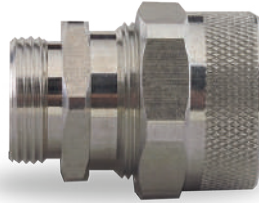
Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
1/2"	.125 - .188	RSPV-9103	RSPV-9103-E
	.188 - .250	RSPV-9104	RSPV-9104-E
	.250 - .312	RSPV-9105	RSPV-9105-E
	.312 - .375	RSPV-9106	RSPV-9106-E
	.375 - .438	RSPV-9107	RSPV-9107-E
	.438 - .500	RSPV-9108	RSPV-9108-E
	.500 - .562	RSPV-9109	RSPV-9109-E
	.562 - .625	RSPV-9110	RSPV-9110-E
3/4"	.500 - .562	RSPV-9209	RSPV-9209-E
	.500 - .625	RSPV-9210	RSPV-9210-E
	.562 - .688	RSPV-9211	RSPV-9211-E
	.625 - .750	RSPV-9212	RSPV-9212-E
	.688 - .812	RSPV-9213	RSPV-9213-E

*Cable may have to be stripped to pass through the bore of the body





RPG SERIES ALUMINUM CORD GRIPS



RPG CORD GRIPS WITH PG THREADS

The Tuff-Seal™ RPG Series Cord Grips features a Pg thread so that it can mate with an internal Pg thread of an enclosure, machine or other equipment being connected. Features of these grips are identical to those of our standard RSR Series Aluminum Cord Grips described on page G-4. These grips are offered in Pg 21-29-36 and 48 and can be ordered with or without mesh attachments.

NOTES

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

Larger sizes available upon request.

All wire mesh is stainless steel.

Thread specifications:

Detailed thread specifications are available upon request.

Taps are readily available.



RPG SERIES STEEL CORD GRIPS

COMPLETE ASSEMBLY PART NUMBERS

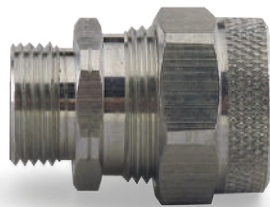
Pg Thread	Cable Range	Cord Grip	Cord Grip With Mesh
Pg 11	.125 – .187	RPG-11103	—
	.187 – .250	RPG-11104	RPG-11104-E
	.250 – .312	RPG-11105	RPG-11105-E
	.312 – .375	RPG-11106	RPG-11106-E
	.375 – .437	RPG-11107	RPG-11107-E
	.437 – .500	RPG-11108	RPG-11108-E
	.500 – .562	RPG-11109	RPG-11109-E
Pg 13.5	.562 – .625	RPG-11110	RPG-11110-E
	.125 – .187	RPG-13103	RPG-13103-E
	.187 – .250	RPG-13104	RPG-13104-E
	.250 – .312	RPG-13105	RPG-13105-E
	.312 – .375	RPG-13106	RPG-13106-E
	.375 – .437	RPG-13107	RPG-13107-E
	.437 – .500	RPG-13108	RPG-13108-E
Pg 16	.500 – .562	RPG-13109	RPG-13109-E
	.562 – .625	RPG-13110	RPG-13110-E
	.438 – .500	RPG-16208	RPG-16208-E
	.500 – .562	RPG-16209	RPG-16209-E
	.562 – .625	RPG-16210	RPG-16210-E
	.625 – .687	RPG-16211	RPG-16211-E
	.687 – .812	RPG-16213	RPG-16213-E
Pg 21	.500 – .562	RPG-21309	RPG-21309-E
	.562 – .625	RPG-21310	RPG-21310-E
	.625 – .687	RPG-21311	RPG-21311-E
	.687 – .812	RPG-21313	RPG-21313-E
	.812 – .937	RPG-21315	RPG-21315-E
	.937 – 1.000	RPG-21316	RPG-21316-E
	.500 – .562	RPG-21312	RPG-21312-E
	.562 – .625	RPG-21314	RPG-21314-E
Pg 29	.625 – .750	RPG-21316	RPG-21316-E
	.750 – .875	RPG-21314	RPG-21314-E
	.875 – 1.000	RPG-21316	RPG-21316-E
	.500 – .562	RPG-29309	RPG-29309-E
	.562 – .625	RPG-29310	RPG-29310-E
	.625 – .688	RPG-29311	RPG-29311-E
	.688 – .812	RPG-29313	RPG-29313-E
	.812 – .938	RPG-29315	RPG-29315-E
	.938 – 1.000	RPG-29316	RPG-29316-E
	1.000 – 1.125	RPG-29518	RPG-29518-E
	1.125 – 1.250	RPG-29520	RPG-29520-E
	1.250 – 1.375	RPG-29522	RPG-29522-E
Pg 36	.875 – 1.000	RPG-29316	RPG-29316-E
	1.000 – 1.125	RPG-29518	RPG-29518-E
	1.125 – 1.250	RPG-29520	RPG-29520-E
	1.250 – 1.375	RPG-29522	RPG-29522-E
Pg 42	1.250 – 1.375	RPG-36516	RPG-36516-E
	1.375 – 1.500	RPG-36518	RPG-36518-E
	1.500 – 1.625	RPG-36520	RPG-36520-E
	1.625 – 1.750	RPG-36522	RPG-36522-E
	1.750 – 1.875	RPG-36524	RPG-36524-E
Pg 48	1.250 – 1.375	RPG-42622	RPG-42622-E
	1.375 – 1.500	RPG-42623	RPG-42623-E
	1.500 – 1.625	RPG-42625	RPG-42625-E
	1.625 – 1.750	RPG-42627	RPG-42627-E
	1.750 – 1.875	RPG-42629	RPG-42629-E
Pg 48	1.688 – 1.812	RPG-48629	RPG-48629-E
	1.812 – 1.938	RPG-48731	RPG-48731-E
	1.938 – 2.062	RPG-48733	RPG-48733-E
	2.062 – 2.188	RPG-48735	RPG-48735-E
	2.188 – 2.312	RPG-48737	RPG-48737-E
2.312 – 2.438	RPG-48739	RPG-48739-E	

*Cable may have to be stripped to pass through the bore of the body





RSM SERIES ALUMINUM CORD GRIPS



RSM SERIES CORD GRIPS WITH ISO METRIC THREADS

The line of Tuff-Seal™ liquid-tight RSM Series Cord Grips are similar to our standard products except that the external conduit thread is replaced with an ISO thread for mating with an internal metric thread of an enclosure, machine or other equipment being connected. The metric threads on these grips meet DIN 40430 standards.

NOTES

CORD GRIP ACCESSORIES

Locknuts: add "-L" to any part number
O-Rings: add "-R" to any part number

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

All wire mesh is stainless steel.

Thread specifications in the Tuff-Seal Technical Reference Section

RSM SERIES CORD GRIPS WITH ISO THREADS

COMPLETE ASSEMBLY PART NUMBERS

ISO Metric Thread	Cable Range	Cord Grip	Cord Grip With Mesh
M16	.125 – .187	RSM-161003	—
	.187 – .250	RSM-161004	RSM-161004-E
	.250 – .312	RSM-161005	RSM-161005-E
	.312 – .375	RSM-161006	RSM-161006-E
	.375 – .437	RSM-161007	RSM-161007-E
	.125 – .187	RSM-16103	—
	.187 – .250	RSM-16104	RSM-16104-E
	.250 – .312	RSM-16105	RSM-16105-E
	.312 – .375	RSM-16106	RSM-16106-E
	.375 – .437	RSM-16107	RSM-16107-E
	.437 – .500	RSM-16108	RSM-16108-E
.500 – .562	RSM-16109	RSM-16109-E	
.562 – .625	RSM-16110	RSM-16110-E	
M20	.125 – .187	RSM-20103	—
	.187 – .250	RSM-20104	RSM-20104-E
	.250 – .312	RSM-20105	RSM-20105-E
	.312 – .375	RSM-20106	RSM-20106-E
	.375 – .437	RSM-20107	RSM-20107-E
	.437 – .500	RSM-20108	RSM-20108-E
	.500 – .562	RSM-20109	RSM-20109-E
.562 – .625	RSM-20110	RSM-20110-E	
M25	.250 – .312	RSM-25205	—
	.312 – .375	RSM-25206	—
	.375 – .437	RSM-25207	—
	.438 – .500	RSM-25208	RSM-25208-E
	.500 – .562	RSM-25209	RSM-25209-E
	.500 – .625	RSM-25210	RSM-25210-E
	.562 – .687	RSM-25211	RSM-25211-E
.625 – .750	RSM-25212	RSM-25212-E	
.687 – .812	RSM-25213	RSM-25213-E	
M30	.438 – .500	RSM-30308	RSM-30308-E
	.500 – .562	RSM-30309	RSM-30309-E
	.500 – .625	RSM-30310	RSM-30310-E
	.562 – .687	RSM-30311	RSM-30311-E
	.625 – .750	RSM-30312	RSM-30312-E
	.687 – .812	RSM-30313	RSM-30313-E
	.750 – .875	RSM-30314	RSM-30314-E
.812 – .937	RSM-30315	RSM-30315-E	
.875 – 1.000	RSM-30316	RSM-30316-E	
M32	.437 – .500	RSM-32308	RSM-32308-E
	.500 – .562	RSM-32309	RSM-32309-E
	.500 – .625	RSM-32310	RSM-32310-E
	.562 – .688	RSM-32311	RSM-32311-E
	.625 – .750	RSM-32312	RSM-32312-E
	.688 – .812	RSM-32313	RSM-32313-E
	.750 – .875	RSM-32314	RSM-32314-E
.812 – .938	RSM-32315	RSM-32315-E	
.875 – 1.000	RSM-32316	RSM-32316-E	
M40	.562 – .688	RSM-40411	—
	.688 – .812	RSM-40413	—
	.750 – .875	RSM-40414	RSM-40414-E
	.875 – 1.000	RSM-40416	RSM-40416-E
	1.000 – 1.125	RSM-40418	RSM-40418-E
1.125 – 1.250	RSM-40420	RSM-40420-E	
1.250 – 1.375	RSM-40422	RSM-40422-E	
M50	.562 – .688	RSM-50511	—
	.688 – .812	RSM-50513	—
	.750 – .875	RSM-50514	RSM-50514-E
	.875 – 1.000	RSM-50516	RSM-50516-E
	1.000 – 1.125	RSM-50518	RSM-50518-E
	1.125 – 1.250	RSM-50520	RSM-50520-E
1.250 – 1.375	RSM-50522	RSM-50522-E	

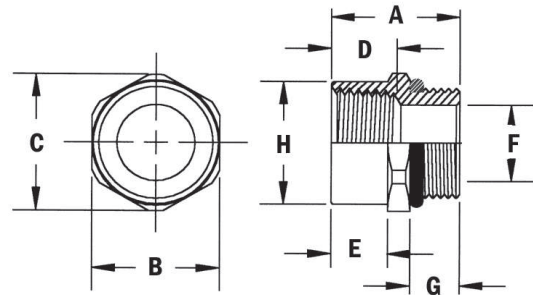
*Cable may have to be stripped to pass through the bore of the body



THREADED ADAPTERS



Tuff-Seal™ Threaded Adapters easily convert – or mate – one thread style with another. These adapters are offered with both internal and external threads that mate NPT with ISO Metric style fittings or NPT with Pg fittings. They are constructed of machined aluminum with electroless-nickel plating for enhanced protection against corrosion, friction and contamination. The threaded adapters also incorporate a BUNA-N O-Ring to provide a liquid-tight seal. This product family meets ASTM, MIL and AMS specifications.



"M" (ISO) METRIC THREADED ADAPTERS

PART NUMBERS										
Part Number	External Thread	Internal Thread	A	B Hex	C	D	E	F Dia.	G	H Dia.
M16-38	M16 X 1.5	3/8 NPT	1.000	.875	.970	.400	.435	.455	.390	.830
M16-50	M16 X 1.5	1/2 NPT	1.000	1.000	1.090	.510	.445	.455	.390	.980
M20-50	M20 X 1.5	1/2 NPT	1.000	1.000	1.090	.510	.445	.610	.390	.980
M25-50	M25 X 1.5	1/2 NPT	1.000	1.250	1.375	.520	.400	.625	.390	1.180
M25-75	M25 X 1.5	3/4 NPT	1.000	1.250	1.375	.520	.400	.800	.390	1.180
M32-75	M32 X 1.5	3/4 NPT	1.000	1.375	1.530	.520	.400	.800	.390	1.180
M32-100	M32 X 1.5	1 NPT	1.250	1.437	1.600	.680	.635	.990	.390	1.430
M32-125	M32 X 1.5	1-1/4 NPT	1.280	2.000	2.220	.700	.635	.937	.390	1.850
M40-100	M40 X 1.5	1 NPT	1.250	2.000	2.220	.680	.635	1.060	.390	1.430
M40-125	M40 X 1.5	1-1/4 NPT	1.280	2.000	2.220	.700	.635	1.320	.390	1.850
M50-150	M50 X 1.5	1-1/2 NPT	1.280	2.250	2.475	.700	.635	1.500	.390	2.190

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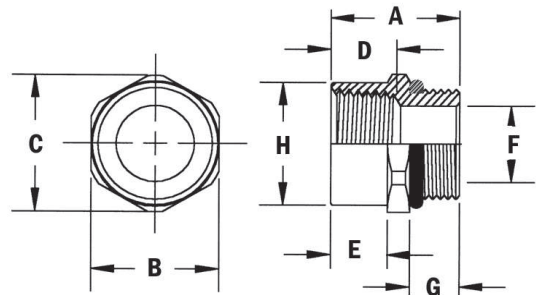
Pg Threaded Adapters (On next page)



THREADED ADAPTERS



Tuff-Seal™ Threaded Adapters easily convert – or mate – one thread style with another. These adapters are offered with both internal and external threads that mate NPT with ISO Metric style fittings or NPT with Pg fittings. They are constructed of machined aluminum with electroless-nickel plating for enhanced protection against corrosion, friction and contamination. The threaded adapters also incorporate a BUNA-N O-Ring to provide a liquid-tight seal. This product family meets ASTM, MIL and AMS specifications.



PG THREADED ADAPTERS

PART NUMBERS

Part Number	External Thread	Internal Thread	A	B Hex	C	D	E	F Dia.	G	H Dia.
PG11-38	PG 11	3/8 NPT	1.000	1.000	.970	.400	.435	.455	.390	.830
PG11-50	PG 11	1/2 NPT	1.000	1.000	1.090	.510	.445	.485	.390	.980
PG13-50	PG 13.5	1/2 NPT	1.000	1.000	1.090	.510	.445	.610	.390	.980
PG16-50	PG 16	1/2 NPT	1.000	1.000	1.090	.510	.445	.610	.390	.980
PG21-50	PG 21	1/2 NPT	1.000	1.250	1.375	.510	.445	.865	.390	.980
PG21-75	PG 21	3/4 NPT	1.000	1.250	1.375	.520	.400	.865	.390	1.180
PG29-100	PG 29	1 NPT	1.250	1.562	1.720	.680	.635	.990	.390	1.480
PG29-125	PG 29	1-1/4 NPT	1.280	2.000	2.220	.700	.635	1.140	.390	1.850
PG36-125	PG 36	1-1/4 NPT	1.280	2.000	2.220	.700	.635	1.290	.390	1.850
PG36-150	PG 36	1-1/2 NPT	1.280	2.000	2.220	.700	.635	1.500	.390	2.190
PG42-125	PG 42	1-1/4 NPT	1.280	2.250	2.220	.700	.635	1.500	.390	2.190
PG42-150	PG 42	1-1/2 NPT	1.280	2.250	2.475	.700	.635	1.500	.390	2.190

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"M" (ISO) Metric Threaded Adapters (On previous page)



DRAIN FITTINGS

DRAIN FITTINGS

Condensation within an electrical enclosure is a common and potentially dangerous occurrence. To fight this problem, Remke Drain Fittings are installed at the bottom of the enclosures or in a lower section of the conduit system to drain away moisture caused by condensation. These fittings provide continuous ventilation for the prevention and/or release of condensation when properly installed in the appropriate location.

Offered in 1/2 and 3/4 inch NPT sizes, Remke Drain Fittings are precision machined of high-quality stainless steel, steel or aluminum to assure a long service life. These drain fittings are also installed in hubs or drilled & tapped openings and are easy to remove and install for maintenance.

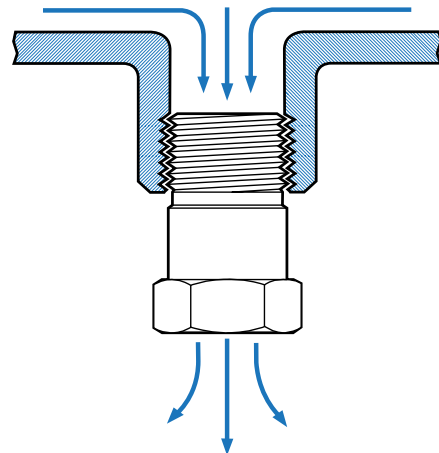


SPECIFICATIONS

Enclosure	NEMA 3R
UL Standard	514B
Standard Materials	Bodies & nuts - aluminum, steel or stainless steel Screen - stainless steel
Country of Origin	USA

ORDERING CHART

DRAIN FITTINGS		
Thread Size	Material	Part Number
1/2 NPT	Aluminum	RDC50A
1/2 NPT	Steel	RDC50S
1/2 NPT	Stainless Steel	RDC50SS
3/4 NPT	Aluminum	RDC75A
3/4 NPT	Steel	RDC75S
3/4 NPT	Stainless Steel	RDC75SS



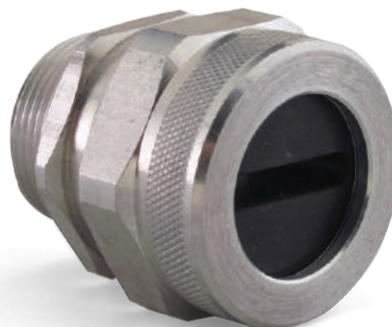
DRAIN FITTINGS

Drain Fittings are usually installed at the bottom of the cord grip/ enclosure to drain moisture caused by condensation.

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RSF SERIES ALUMINUM FESTOON CABLE CONNECTORS



RSF SERIES ALUMINUM FESTOON CABLE CONNECTORS

Tuff-Seal™ RSF Festoon Cable Connectors are specially designed for heavy-duty, flat cable or festoon system applications. Unique to the U.S. market, these cord grips are used in place of the traditional two-screw connector at the critical point of termination between the plant environment and the internal wiring of the festoon system.

Benefits of the Festoon Cable Connector include:

- Termination with both mechanical & environmental integrity which minimizes the incidence of disconnected power
- Available in machined aluminum, steel, stainless steel or nylon to meet specific application needs
- Placing multiple cables through one connector saving both labor time and cost – eliminates the need for multiple terminations & connectors.

Manufactured for use in both indoor and outdoor locations, Tuff Seal Festoon Cable Connectors provide a liquid-tight seal that keeps out dirt, moisture, coolants, lubricant and corrosives. Meeting NEMA standards, these grips are available with either M style (ISO), Pg or NPT threads. And they can be customized based on the number of conductors needed for a specific application.

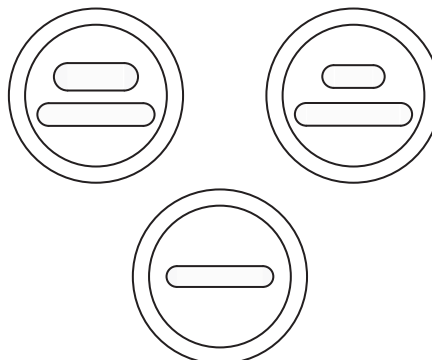
NOTES

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

Other thread and body configurations available. Consult factory.

Threads can be supplied as M style (ISO), Pg or NPT.



RSF SERIES ALUMINUM FESTOON CABLE CONNECTORS

COMPLETE ASSEMBLY PART NUMBERS

Conduit Size	Complete Assembly	Body, Nut, Washer Assembly	Bushing Only	Bushing Dimensions		Number of Holes
1"	RSF-3001	RSR-300-W	SBF-3001	.660 X .240	—	1
	RSF-3002	RSR-300-W	SBF-3002	.750 X .250	—	1
	RSF-3003	RSR-300-W	SBF-3003	.890 X .290	—	1
1 1/4"	RSF-4001	RSR-400-W	SBF-5001	1.190 X .350	—	1
	RSF-4002	RSR-400-W	SBF-5002	1.370 X .250	—	1
	RSF-4003	RSR-400-W	SBF-5003	1.240 X .240	—	1
	RSF-4004	RSR-400-W	SBF-5004	1.130 X .220	—	1
	RSF-4005	RSR-400-W	SBF-5005	1.240 X .240	1.240 X .240	2
	RSF-4006	RSR-400-W	SBF-5006	1.130 X .220	1.130 X .220	2
	RSF-4007	RSR-400-W	SBF-5007	.660 X .240	1.130 X .220	2
	RSF-4008	RSR-400-W	SBF-5008	.660 X .240	1.240 X .240	2
	RSF-4009	RSR-400-W	SBF-5009	.890 X .290	1.130 X .220	2
	RSF-4010	RSR-400-W	SBF-5010	.890 X .290	1.240 X .240	2
	RSF-4011	RSR-400-W	SBF-5011	.750 X .250	1.130 X .220	2
	RSF-4012	RSR-400-W	SBF-5012	.750 X .250	1.240 X .240	2
1 1/2"	RSF-5001	RSR-500-W	SBF-5001	1.190 X .350	—	1
	RSF-5002	RSR-500-W	SBF-5002	1.370 X .250	—	1
	RSF-5003	RSR-500-W	SBF-5003	1.240 X .240	—	1
	RSF-5004	RSR-500-W	SBF-5004	1.130 X .220	—	1
	RSF-5005	RSR-500-W	SBF-5005	1.240 X .240	1.240 X .240	2
	RSF-5006	RSR-500-W	SBF-5006	1.130 X .220	1.130 X .220	2
	RSF-5007	RSR-500-W	SBF-5007	.660 X .240	1.130 X .220	2
	RSF-5008	RSR-500-W	SBF-5008	.660 X .240	1.240 X .240	2
	RSF-5009	RSR-500-W	SBF-5009	.890 X .290	1.130 X .220	2
	RSF-5010	RSR-500-W	SBF-5010	.890 X .290	1.240 X .240	2
	RSF-5011	RSR-500-W	SBF-5011	.750 X .250	1.130 X .220	2
	RSF-5012	RSR-500-W	SBF-5012	.750 X .250	1.240 X .240	2
	RSF-5013	RSR-500-W	SBF-5013	1.500 X .469	—	1
	RSF-5014	RSR-500-W	SBF-5014	1.150 X .484	—	1
	RSF-5015	RSR-500-W	SBF-5015	1.415 X .265	—	1
	RSF-5016	RSR-500-W	SBF-5016	.705 X .250	.705 X .250	2
2"	RSF-6001	RSR-600-W	SBF-6001	1.710 X .500	—	1
	RSF-6002	RSR-600-W	SBF-6002	1.460 X .450	—	1
	RSF-6003	RSR-600-W	SBF-6003	1.770 X .240	—	1
	RSF-6004	RSR-600-W	SBF-6004	1.650 X .220	—	1
	RSF-6005	RSR-600-W	SBF-6005	1.770 X .240	1.770 X .240	2
	RSF-6006	RSR-600-W	SBF-6006	1.650 X .220	1.650 X .220	2
	RSF-6007	RSR-600-W	SBF-6007	1.370 X .250	1.370 X .250	2
	RSF-6009	RSR-600-W	SBF-6009	1.750 X .625	—	1
	RSF-6010	RSR-600-W	SBF-6010	1.500 X .469	1.125 X .265	2
	RSF-6011	RSR-600-W	SBF-6011	.900 X .300	1.750 X .250	2
	RSF-6013	RSR-600-W	SBF-6013	1.500 X .469	—	1
	RSF-6029	RSR-600-W	SBF-6029	.990 X 1.630	—	1
2 1/2"	RSF-7001	RSR-700-W	SBF-7001	2.500 X .750	—	1
	RSF-7002	RSR-700-W	SBF-7002	2.180 X .300	—	1

NOTE: Numerous other configurations are available as stock items. Consult factory.

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MULTIPLE HOLE BUSHINGS



The Remke family of Multiple Hole Bushings are the answer when multiple conductors need to be terminated into one fitting. With over 300 configurations available, when you use Remke multiple hole bushings you'll save both money and space by using a single bushing and cord connector instead of separate cord grips for each length of cable.

Remke Multiple Hole Bushings are also available in Silicone. Silicone rubber is used in a variety of industries for its extreme temperature properties and chemical resistance. Silicone is an excellent electrical insulator and its composition makes it highly resistant to ozone, UV and heat. Industries that benefit from silicone rubbers include automotive, medical devices, aviation and aerospace, electronics, construction and industrial.

Any of our Multiple Hole Bushings can fit into any standard Remke cord connector made from aluminum, nickel-plated aluminum, steel, stainless steel, nylon or Valox®. Standard bushings are made from Neoprene but optional materials include silicone for high-temperature applications.

Customized Multiple Hole Bushings are also available. The Remke Engineered Solutions team will work with you to develop the bushing that is best suited for your application.

MULTIPLE HOLE BUSHINGS

PART NUMBERS				
Bushing Only Part Number	Form Size	Number of Holes	Diameter Each Hole (IN)	Conduit Size
SRB-100-UF1	2	1	Oval - .425 x .225	1/2" or 3/4"
SRB-100-UF2	2	1	Oval - .610 x .225	1/2" or 3/4"
SRB-103-2	2	2	.187	1/2" or 3/4"
SRB-104-2	2	2	.250	1/2" or 3/4"
SRB-104-3	2	3	.250	1/2" or 3/4"
SRB-10532-2	2	2	.156	1/2" or 3/4"
SRB-10532-3	2	3	.156	1/2" or 3/4"
SRB-10532-4	2	4	.156	1/2" or 3/4"
SRB-10564-2	2	2	.078	1/2" or 3/4"
SRB-10732-2	2	2	.218	1/2" or 3/4"
SRB-10732-3	2	3	.218	1/2" or 3/4"
SRB-10932-2	2	2	.281	1/2" or 3/4"
SRB-201764-2	3	2	.265	1/2" or 3/4"
SRB-201764-3	3	3	.265	1/2" or 3/4"
SRB-201964-2	3	2	.296	1/2" or 3/4"
SRB-201964-3	3	3	.296	1/2" or 3/4"
SRB-201964-4	3	4	.296	1/2" or 3/4"
SRB-202164-2	3	2	.328	1/2" or 3/4"
SRB-203-4	3	4	.187	1/2" or 3/4"
SRB-204-2	3	2	.250	1/2" or 3/4"
SRB-204-3	3	3	.250	1/2" or 3/4"
SRB-204-4	3	4	.250	1/2" or 3/4"
SRB-205-2	3	2	.312	1/2" or 3/4"
SRB-20516-3	3	3	.312	1/2" or 3/4"
SRB-20732-2	3	2	.218	1/2" or 3/4"
SRB-20732-4	3	4	.218	1/2" or 3/4"
SRB-20932-3	3	3	.281	1/2" or 3/4"
SRB-300-3SP1	4	3	.300	3/4" or 1"
SRB-300-3SP2	4	3	.225	3/4" or 1"
SRB-300-4SP1	4	4	.220	3/4" or 1"
SRB-300-4SP2	4	4	.340	3/4" or 1"
SRB-301964-2	4	2	.296	3/4" or 1"
SRB-301964-4	4	4	.296	3/4" or 1"
SRB-301964-5	4	5	.296	3/4" or 1"
SRB-303-3	4	3	.187	3/4" or 1"
SRB-303-4	4	4	.187	3/4" or 1"
SRB-304-5	4	5	.250	3/4" or 1"
SRB-305-3	4	3	.312	3/4" or 1"
SRB-306-2	4	2	.375	3/4" or 1"
SRB-500-2	5	2	.500/.375	1 1/4" or 1 1/2"
SRB-506-3	5	3	.375	1 1/4" or 1 1/2"
SRB-508-2	5	2	.500	1 1/4" or 1 1/2"
SRB-509-3	5	3	.562	1 1/4" or 1 1/2"
SRB-510-2	5	2	.625	1 1/4" or 1 1/2"

NOTE: Numerous other configurations are available as stock items. Consult factory.



REMKE CUSTOM BUSHING DESIGN GUIDE

BUSHING SIZE – CONNECTOR MATERIAL MATRIX

Based on conduit size and material of construction, custom bushings can fit into all or some of the Remke cord connectors. This matrix will help you determine what is available.

Conduit Size	Bushing Series	Aluminum and Nickel-Plated Aluminum	Steel	Stainless Steel	Nylon and Valox
1/2"	100	X	X	X	X
3/4"	200	X	X	X	X
1"	300	X	X	X	—
1 1/4"	500	X	X	X	—
1 1/2"	500	X	X	X	—
2"	600	X	—	X	—
2 1/2" OR 3"	700	X	—	X	—

HOW TO ORDER A COMPLETE ASSEMBLY

Step 1: Determine the bushing series size you need by laying out multiple conductors in the circles below which represent each size. This process will also help you determine the conduit size.

Step 2: Determine what connector material best suits your application and use the matrix chart to confirm that the bushing fits with the desired connector size and material.

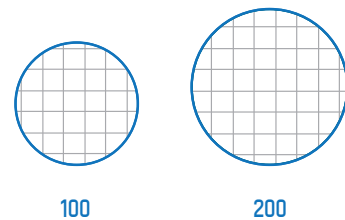
CREATING A FULL ASSEMBLY PART NUMBER FOR EXISTING BUSHINGS

Once you have identified the custom bushing needed, to create a full assembly part number you will need to substitute the prefix of the material of construction you want for the prefix in the bushing only part number.

Material Prefix:

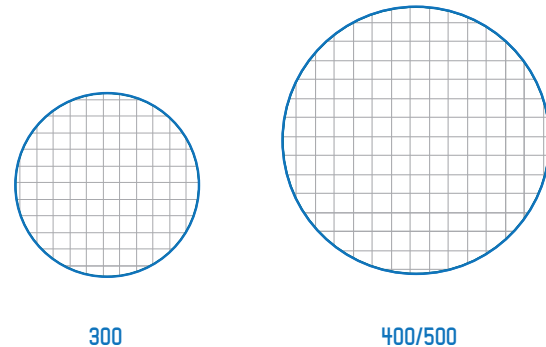
- RSR: Aluminum
- RSRN: Nickel-Plated Aluminum
- RSRS: Steel
- RSSS: Stainless Steel
- RSP: Nylon
- RSPV: Valox

Example: The part number for Bushing SRB-104-2 as a complete assembly to fit into an aluminum cord connector would be RSR-104-2. To fit into a nylon connector, the part number for Bushing SRB-104-2 would be RSP-104-2.



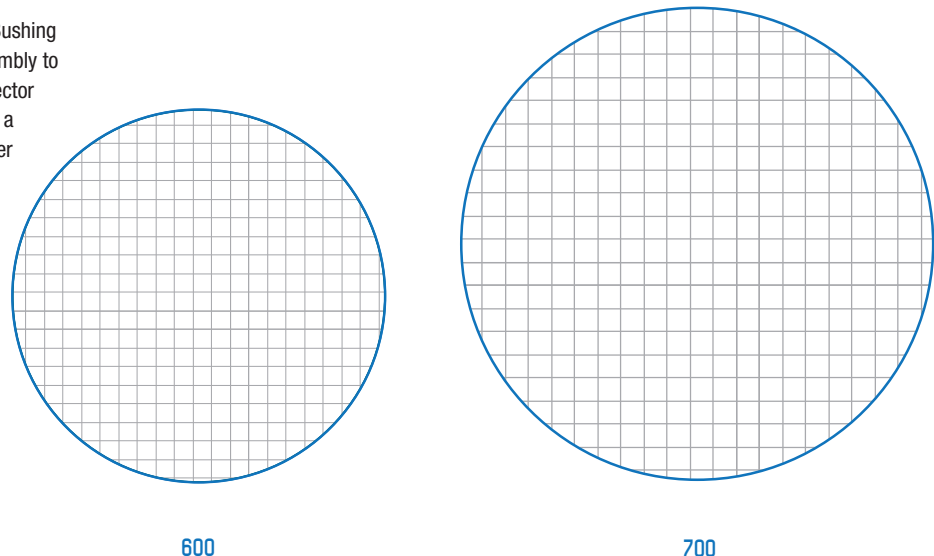
100

200



300

400/500



600

700



TECK CABLE CONNECTORS



POWR-TECK™ TECK CABLE CONNECTORS

Made in the USA, Remke PowR-Teck Teck Cable Connectors feature an exclusive one-piece design. Other manufacturers give you 4 or 5 pieces to assemble and if you lose one you're out of luck.....but not with Remke! When you choose the PowR-Teck connector you get the PowR-Lock™ one-piece design that's more compact in size. And no disassembly is required – just push the cable through, tighten the connector and you're done.

PowR-Teck connectors are designed to form a watertight seal around the jacketed metal cable and at the enclosure entry. Rated NEMA 4 and IP65, these connectors are in-stock in 1/2" to 4" hub sizes in aluminum, nickel-plated aluminum and stainless steel. Design features of PowR-Teck connectors include:

- One-Piece Compact Design
- Unique PowR-Lock Grounding Seal for superior conductivity
- No Disassembly Required for easy and fast installations
- Neoprene bushing provides superior pull-out and sealing protection
- Embedded Viton® O-Ring

The family of PowR-Teck Teck Cable Connectors are ideal for use in these applications:

- Water Treatment and Sewage Treatment Plants
- Mining
- Pulp and Paper Plants
- Oil and Gas Facilities
- Petrochemical Plants
- Automotive Manufacturing and Assembly
- Power Generation/Power Plants
- Plastics Production and Container Manufacturing
- Grain Silos
- Temporary Power



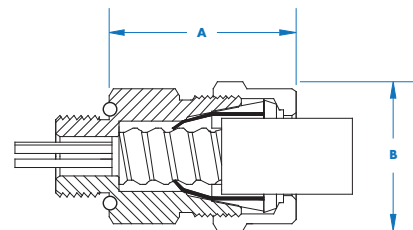
CSA STANDARD: C22.2 NO. 18-98
FILE NUMBER: 28985
RATINGS: NEMA 4, IP65
PATENT PENDING

COMPLETE ASSEMBLY PART NUMBERS

Hub Size	Aluminum	Nickel-Plated Aluminum	304 Stainless Steel*
1/2"	RTK-050-1	RTKN-050-1	RTKSS-050-1
1/2"	RTK-050-2	RTKN-050-2	RTKSS-050-2
1/2"	RTK-050-3	RTKN-050-3	RTKSS-050-3
1/2"	RTK-050-4	RTKN-050-4	RTKSS-050-4
3/4"	RTK-075-5	RTKN-075-5	RTKSS-075-5
3/4"	RTK-075-6	RTKN-075-6	RTKSS-075-6
1"	RTK-100-7	RTKN-100-7	RTKSS-100-7
1 1/4"	RTK-125-8	RTKN-125-8	RTKSS-125-8
1 1/4"	RTK-125-9	RTKN-125-9	RTKSS-125-9
1 1/4"	RTK-125-10	RTKN-125-10	RTKSS-125-10
1 1/2"	RTK-150-11	RTKN-150-11	RTKSS-150-11
1 1/2"	RTK-150-12	RTKN-150-12	RTKSS-150-12
1 1/2"	RTK-150-13	RTKN-150-13	RTKSS-150-13
2"	RTK-200-14	RTKN-200-14	RTKSS-200-14
2"	RTK-200-15	RTKN-200-15	RTKSS-200-15
2"	RTK-200-16	RTKN-200-16	RTKSS-200-16
2"	RTK-200-17	RTKN-200-17	RTKSS-200-17
2"	RTK-200-18	RTKN-200-18	RTKSS-200-18
2 1/2"	RTK-250-19	RTKN-250-19	RTKSS-250-19
2 1/2"	RTK-250-20	RTKN-250-20	RTKSS-250-20
3"	RTK-300-21	RTKN-300-21	RTKSS-300-21
3"	RTK-300-22	RTKN-300-22	RTKSS-300-22
3"	RTK-300-23	RTKN-300-23	RTKSS-300-23
3 1/2"	RTK-350-24	RTKN-350-24	RTKSS-350-24
3 1/2"	RTK-350-25	RTKN-350-25	RTKSS-350-25
3 1/2"	RTK-350-26	RTKN-350-26	RTKSS-350-26
4"	RTK-400-27	RTKN-400-27	RTKSS-400-27
4"	RTK-400-28	RTKN-400-28	RTKSS-400-28
4"	RTK-400-29	RTKN-400-29	RTKSS-400-29

*NEMA 4X rated

DIMENSIONAL INFORMATION



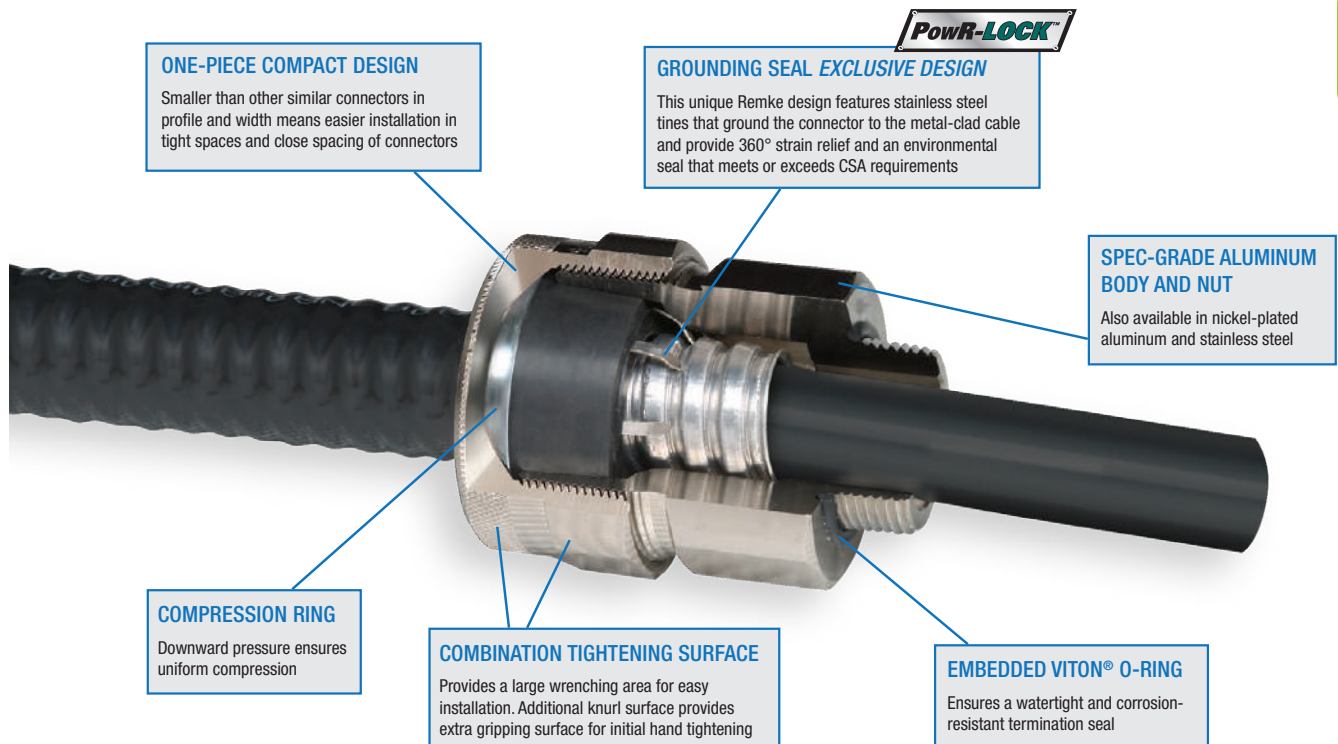
Hub Size	Dimension A (IN.)	Dimension B (IN.)
1/2"	2.10	1.38
1/2"	2.10	1.53
3/4"	2.45	2.20
1"	2.45	2.47
1 1/4"	3.35	2.97
1 1/2"	3.70	3.50
2"	4.05	4.15
2.5"	4.10	4.60
3"	4.50	5.68
3.5"	4.60	6.02
4"	4.75	6.52

OPTIONAL LOCKNUT PART NUMBERS

Hub Size	Steel	Stainless Steel
1/2"	LN-50	LNSS-50
3/4"	LN-75	LNSS-75
1"	LN-100	LNSS-100
1 1/4"	LN-125	LNSS-125
1 1/2"	LN-150	LNSS-150
2"	LN-200	LNSS-200
2 1/2"	LN-250	LNSS-250
3"	LN-300	LNSS-300
3 1/2"	LN-350	LNSS-350
4"	LN-400	LNSS-400

Exposed Armor Length	Cable Range Over Jacket		Cable Range Over Armor	
	Min	Max	Min	Max
7/8"	.525"	.650"	.415"	.570"
7/8"	.650"	.775"	.540"	.695"
7/8"	.750"	.875"	.640"	.795"
7/8"	.860"	.985"	.750"	.905"
1"	.955"	1.080"	.845"	1.000"
1"	1.080"	1.205"	.970"	1.125"
1"	1.205"	1.350"	1.095"	1.270"
1 1/4"	1.350"	1.475"	1.240"	1.395"
1 1/4"	1.475"	1.600"	1.365"	1.520"
1 1/4"	1.600"	1.725"	1.490"	1.645"
1 1/2"	1.725"	1.850"	1.615"	1.770"
1 1/2"	1.850"	1.975"	1.740"	1.895"
1 1/2"	1.975"	2.100"	1.865"	2.020"
1 3/4"	2.100"	2.225"	1.990"	2.145"
1 3/4"	2.225"	2.350"	2.115"	2.270"
1 3/4"	2.350"	2.475"	2.240"	2.395"
1 3/4"	2.475"	2.600"	2.365"	2.520"
1 3/4"	2.600"	2.725"	2.490"	2.645"
1 3/4"	2.700"	2.850"	2.560"	2.760"
1 3/4"	2.850"	3.000"	2.710"	2.910"
1 3/4"	3.000"	3.150"	2.860"	3.060"
1 3/4"	3.150"	3.300"	3.010"	3.210"
1 3/4"	3.300"	3.450"	3.160"	3.360"
1 3/4"	3.450"	3.600"	3.300"	3.500"
1 3/4"	3.600"	3.750"	3.450"	3.650"
1 3/4"	3.750"	3.900"	3.600"	3.800"
1 3/4"	3.900"	4.050"	3.750"	3.940"
1 3/4"	4.050"	4.200"	3.900"	4.090"
1 3/4"	4.200"	4.350"	4.050"	4.240"

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ONE-PIECE COMPACT DESIGN

Smaller than other similar connectors in profile and width means easier installation in tight spaces and close spacing of connectors

GROUNDING SEAL EXCLUSIVE DESIGN

This unique Remke design features stainless steel tines that ground the connector to the metal-clad cable and provide 360° strain relief and an environmental seal that meets or exceeds CSA requirements

SPEC-GRADE ALUMINUM BODY AND NUT

Also available in nickel-plated aluminum and stainless steel

COMPRESSION RING

Downward pressure ensures uniform compression

COMBINATION TIGHTENING SURFACE

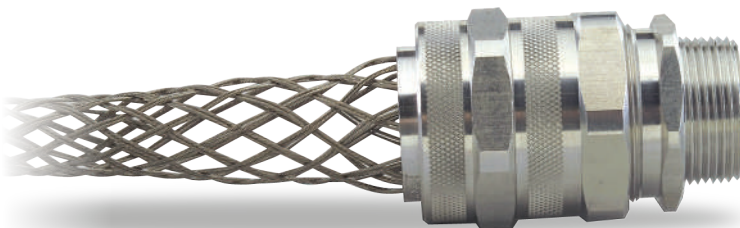
Provides a large wrenching area for easy installation. Additional knurl surface provides extra gripping surface for initial hand tightening

EMBEDDED VITON® O-RING

Ensures a watertight and corrosion-resistant termination seal



SWIVEL-FLEX ALUMINUM CORD GRIPS



The Tuff-Seal™ SWV Series, or Swivel-Flex Cord Grips feature a patented swivel design that provides superior cable protection. This patent-pending design virtually eliminates premature mesh fatigue while the mesh prevents cable pull-out. And this combination maximizes both cable and connection life so that downtime and costs are greatly reduced.

Machined flats and threads in the cord connector provide a more secure installation with a visually appealing appearance. A special inner gasket made from neoprene provides a seal against rust, filings and other foreign material. And these grips meet or exceed SAE performance requirements.

Swivel-Flex Grips are ideal for use in applications where repetitive movement of control & power cable occurs such as with robots and automated equipment used in material handling and welding. Grips in this series are available in straight, 45° and 90° body styles with knock-out sizes ranging from 1 1/4" diameter to 1 1/2" diameter.

COMPLETE ASSEMBLY PART NUMBERS

SWIVEL-FLEX ALUMINUM CORD GRIPS				
Conduit Size	Cable Range	Straight	45 Degree	90 Degree
1 1/4"	.562 – .688	SWV-411-E	SWV-45411-E	SWV-9411-E
	.688 – .812	SWV-413-E	SWV-45413-E	SWV-9413-E
	.750 – .875	SWV-414-E	SWV-45414-E	SWV-9414-E
	.875 – 1.000	SWV-416-E	SWV-45416-E	SWV-9416-E
	1.000 – 1.125	SWV-418-E	SWV-45418-E	SWV-9418-E
	1.125 – 1.250	SWV-420-E	SWV-45420-E	SWV-9420-E
	1.250 – 1.375	SWV-422-E	SWV-45422-E	SWV-9422-E
1 1/2"	.562 – .688	SWV-511-E	SWV-45511-E	SWV-9511-E
	.688 – .812	SWV-513-E	SWV-45513-E	SWV-9513-E
	.750 – .875	SWV-514-E	SWV-45514-E	SWV-9514-E
	.875 – 1.000	SWV-516-E	SWV-45516-E	SWV-9516-E
	1.000 – 1.125	SWV-518-E	SWV-45518-E	SWV-9518-E
	1.125 – 1.250	SWV-520-E	SWV-45520-E	SWV-9520-E
	1.250 – 1.375	SWV-522-E	SWV-45522-E	SWV-9522-E



TUFF-FLEX ALUMINUM CORD GRIPS



The redesigned Tuff-Flex Cord Grip Connector features a molded rubber cone that is tapered for improved cable stability. Another key feature of this redesigned connector is that it is more compact with a slimmer profile which provides easier installation in tight spaces. The unique design of this connector is ideally suited for applications where cable damage due to excessive flexing is a concern.

The rubber cone on this connector matches cable arc-of-bend specifications to eliminate damage. 100% rubber construction outlasts PVC designs as it resists hard knocks, splitting and cracking. The Tuff-Flex Cord Grip also features a rubber cone-to-connector seal that is moisture proof. And when the rubber cone is coupled with one of Remke's aluminum or steel strain relief cord grip there is even greater protection from abrasion and cable pull-out.

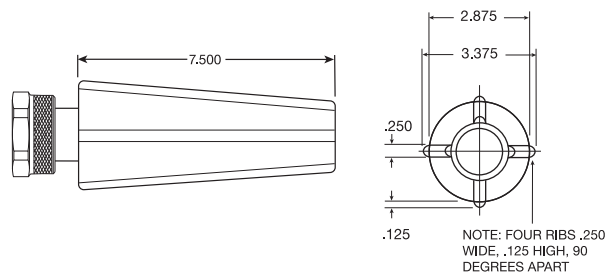
Tuff-Flex Connectors are ideal for use in applications where repetitive movement of control & power cable occurs such as with robots and automated equipment used in material handling and welding. Special 'swivel' versions are also available for those applications producing cable rotation as well as cable flex.

TUFF-FLEX SERIES CORD GRIP CONNECTORS

COMPLETE ASSEMBLY PART NUMBERS				
Conduit Size	Cable Range	Straight	45 Degree	90 Degree
1 1/4"	.562 – .688	TF-411	TF-45411	TF-9411
	.688 – .812	TF-413	TF-45413	TF-9413
	.750 – .875	TF-414	TF-45414	TF-9414
	.875 – 1.000	TF-416	TF-45416	TF-9416
	1.000 – 1.125	TF-418	TF-45418	TF-9418
	1.125 – 1.250	TF-420	TF-45420	TF-9420
	1.250 – 1.375	TF-422	TF-45422	TF-9422
1 1/2"	.562 – .688	TF-511	TF-45511	TF-9511
	.688 – .812	TF-513	TF-45513	TF-9513
	.750 – .875	TF-514	TF-45514	TF-9514
	.875 – 1.000	TF-516	TF-45516	TF-9516
	1.000 – 1.125	TF-518	TF-45518	TF-9518
	1.125 – 1.25	TF-520	TF-45520	TF-9520
	1.250 – 1.375	TF-522	TF-45522	TF-9522

TUFF-FLEX WITH SWIVEL CORD GRIP CONNECTOR

COMPLETE ASSEMBLY PART NUMBERS				
Conduit Size	Cable Range	Straight	45 Degree	90 Degree
1 1/4"	.562 – .688	TFSV-411	TFSV-45411	TFSV-9411
	.688 – .812	TFSV-413	TFSV-45413	TFSV-9413
	.750 – .875	TFSV-414	TFSV-45414	TFSV-9414
	.875 – 1.000	TFSV-416	TFSV-45416	TFSV-9416
	1.000 – 1.125	TFSV-418	TFSV-45418	TFSV-9418
	1.125 – 1.250	TFSV-420	TFSV-45420	TFSV-9420
	1.250 – 1.375	TFSV-422	TFSV-45422	TFSV-9422
1 1/2"	.562 – .688	TFSV-511	TFSV-45511	TFSV-9511
	.688 – .812	TFSV-513	TFSV-45513	TFSV-9513
	.750 – .875	TFSV-514	TFSV-45514	TFSV-9514
	.875 – 1.000	TFSV-516	TFSV-45516	TFSV-9516
	1.000 – 1.125	TFSV-518	TFSV-45518	TFSV-9518
	1.125 – 1.25	TFSV-520	TFSV-45520	TFSV-9520
	1.250 – 1.375	TFSV-522	TFSV-45522	TFSV-9522



MATERIAL	
Connector	Aluminum
Flex Cone	Type NBR Rubber

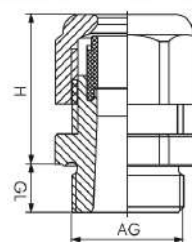
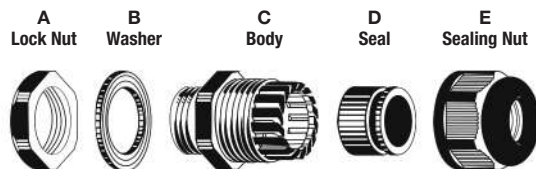


NPT TYPE NYLON CORD GRIPS

Material: PA (NYLON), UL 94
Hermetic seal: NBR
Protection degree: IP68, 5 Bar, IP69K
Working temperature: -40°C to 100°C in static state
 Instantaneous heat resistance up to 120°C
 -20°C to 80°C in dynamic state
 Instantaneous heat resistance up to 100°C
Colour: Grey, Black

IP68 PRODUCT SERVICE

LISTED E360400 **UL FILE NO.: E360400** **UL F1** In Black colour only



IP69K

Techspan Part No. Black	Techspan Part No. Grey	AG	Inch	H		GL		Wrench		Package Qty.
				mm	inch	mm	inch	mm	inch	
RDC09NA*	RDC09NA-GR*	3/8" NPT	.15 - .32	22	.866	15	.591	22/19	.866/.748	100
RDC09NR*	RDC09NR-GR*	3/8" NPT	.07 - .24	22	.866	15	.591	22/19	.866/.748	100
RDC13NA	RDC13NA-GR	1/2" NPT	.23 - .47	27	1.063	13	.512	24	.945	50
RDC13NR	RDC13NR-GR	1/2" NPT	.19 - .35	27	1.063	13	.512	24	.945	50
RDC16NA	RDC16NA-GR	1/2" NPT	.39 - .56	28	1.102	13	.512	27	1.063	50
RDC16NR	RDC16NR-GR	1/2" NPT	.27 - .47	28	1.102	13	.512	27	1.063	50
RDC21NA	RDC21NA-GR	3/4" NPT	.51 - .71	31	1.220	14	.551	33	1.299	50
RDC21NR	RDC21NR-GR	3/4" NPT	.35 - .63	31	1.220	14	.551	33	1.299	50
RDC29NA	RDC29NA-GR	1" NPT	.70 - .98	39	1.535	19	.748	42	1.654	20
RDC29NR	RDC29NR-GR	1" NPT	.47 - .79	39	1.535	19	.748	42	1.654	20
RDC36NA	RDC36NA-GR	1-1/4" NPT	.71 - .98	39	1.535	16	.630	46/42	1.811/1.654	10
RDC36NR	RDC36NR-GR	1-1/4" NPT	.51 - .79	39	1.535	16	.630	46/42	1.811/1.654	10

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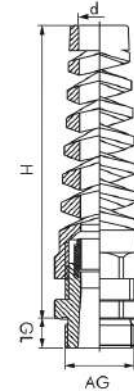
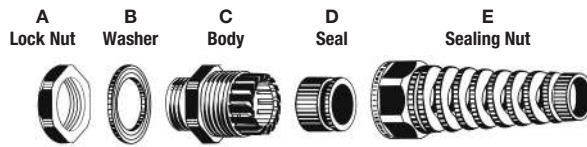


NPT TYPE NYLON CORD GRIPS WITH STRAIN RELIEF

Material: PA (NYLON), UL 94
Hermetic seal: NBR
Working temperature: -40°C to 100°C in static state
 Instantaneous heat resistance up to 120°C
 -20°C to 80°C in dynamic state
 Instantaneous heat resistance up to 100°C
Colour: Grey, Black

RoHS IP68 TÜV IP69K
PRODUCT SERVICE

LISTED E360400 UL FILE NO.: E360400 In Black colour only



Techspan Part No. Black	Techspan Part No. Grey††	AG	Inch	H		GL		d		Wrench		Package Qty.
				mm	inch	mm	inch	mm	inch	mm	inch	
RFC09NA*	RFC09NA-GR*	3/8" NPT	.15 - .32	63	2.480	15	.591	8,5	.334	22/19	.866/.748	100
RFC09NR*	RFC09NR-GR*	3/8" NPT	.07 - .24	63	2.480	15	.591	8,5	.334	22/19	.866/.748	100
RFC13NA	RFC13NA-GR	1/2" NPT	.23 - .47	90	3.543	13	.512	13	.512	24	.945	50
RFC13NR	RFC13NR-GR	1/2" NPT	.19 - .35	90	3.543	13	.512	13	.512	24	.945	50
RFC16NA	RFC16NA-GR	1/2" NPT	.39 - .56	100	3.937	13	.512	15,5	.610	27	1.063	50
RFC16NR	RFC16NR-GR	1/2" NPT	.27 - .47	100	3.937	13	.512	15,5	.610	27	1.063	50
RFC21NA	RFC21NA-GR	3/4" NPT	.50 - .71	114	4.488	14	.551	20	.787	33	1.299	20
RFC21NR	RFC21NR-GR	3/4" NPT	.35 - .63	114	4.488	14	.551	20	.787	33	1.299	20



†† Grey connectors with Strain Relief are Non-stock Items.

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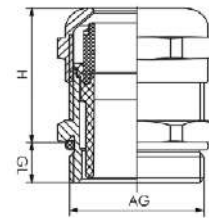
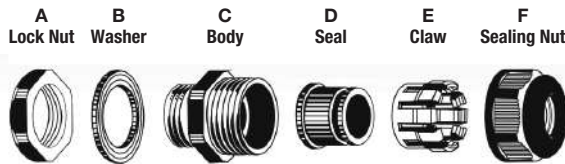
NPT TYPE METAL CORD GRIPS

Material: Nickel-plated brass
Fixture pack: PA (NYLON), UL 94
Hermetic seal: NBR
O-Seal ring: NBR
Protection degree: IP68-10 pressure (Rotate position)
Working temperature: -40°C to 100°C
 Instantaneous heat resistance up to 120°C

RoHS

LISTED
 E360400

UL FILE NO.: E360400



Techspan Part No.	AG	Inch	H		GL		mm		Package Qty.
			mm	inch	mm	inch	mm	inch	
BRC09NA*	3/8" NPT	.15 - .32	21	.827	15	.591	17/19	.669/.748	100
BRC09NR*	3/8" NPT	.07 - .24	21	.827	15	.591	17/19	.669/.748	100
BRC13NA	1/2" NPT	.23 - .47	24	.945	13	.512	22/24	.748/.945	50
BRC13NR	1/2" NPT	.19 - .35	24	.945	13	.512	22/24	.748/.945	50
BRC21NA	3/4" NPT	.51 - .71	25	.984	13	.512	30	1.181	20
BRC21NR	3/4" NPT	.35 - .63	25	.984	13	.512	30	1.181	20
BRC29NA	1" NPT	.70 - .98	29	1.142	19	.748	40	1.575	20
BRC29NR	1" NPT	.47 - .79	29	1.142	19	.748	40	1.575	20

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PG TYPE NYLON CORD GRIPS

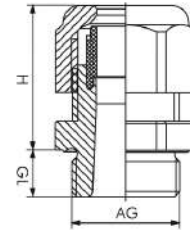
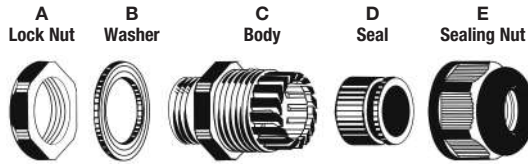
Material: PA (NYLON), UL 94
Hermetic seal: NBR
Protection degree: IP68, 5 Bar, IP69K
Working temperature: -40°C to 100°C in static state
 Instantaneous heat resistance up to 120°C
 -20°C to 80°C in dynamic state
 Instantaneous heat resistance up to 100°C
Colour: Grey, Black

RoHS **IP68** TÜV **IP69K**
PRODUCT SERVICE

US
LISTED
E360400

US *
UL FILE NO.: E360400

UL F1
 In Black colour only



Techspan Part No. Black	Techspan Part No. Grey	AG	Inch	H		GL				Package Qty.
				mm	inch	mm	inch	mm	inch	
RDC07AA*	RDC07AA-GR*	PG 7	.11 - .26	21	.827	15	.591	15	.591	200
RDC07AR*	RDC07AR-GR*	PG 7	.07 - .20	21	.827	15	.591	15	.591	200
RDC09AA*	RDC09AA-GR*	PG 9	.15 - .32	21	.827	15	.591	19	.748	125
RDC09AR*	RDC09AR-GR*	PG 9	.07 - .24	22	.866	15	.591	19	.748	125
RDC11AA*	RDC11AA-GR*	PG 11	.19 - .39	25	.984	15	.591	22	.866	100
RDC11AR*	RDC11AR-GR*	PG 11	.11 - .28	25	.984	15	.591	22	.866	100
RDC13AA	RDC13AA-GR	PG 13,5	.23 - .47	27	1.063	15	.591	24	.945	50
RDC13AR	RDC13AR-GR	PG 13,5	.19 - .35	27	1.063	15	.591	24	.945	50
RDC16AA	RDC16AA-GR	PG 16	.39 - .56	28	1.102	15	.591	27	1.063	50
RDC16AR	RDC16AR-GR	PG 16	.27 - .47	28	1.102	15	.591	27	1.063	50
RDC21AA	RDC21AA-GR	PG 21	.51 - .71	31	1.220	15	.591	33	1.299	50
RDC21AR	RDC21AR-GR	PG 21	.35 - .63	31	1.220	15	.591	33	1.299	50
RDC29AA	RDC29AA-GR	PG 29	.70 - .98	39	1.535	15	.591	42	1.654	20
RDC29AR	RDC29AR-GR	PG 29	.47 - .79	39	1.535	15	.591	42	1.654	20
RDC36AA	RDC36AA-GR	PG 36	.87 - 1.26	48	1.890	18	.710	53	2.087	8
RDC36AR	RDC36AR-GR	PG 36	.79 - 1.02	48	1.890	18	.710	53	2.087	8
RDC42AA	RDC42AA-GR	PG 42	1.26 - 1.50	49	1.929	18	.710	60	2.362	6
RDC42AR	RDC42AR-GR	PG 42	.98 - 1.22	49	1.929	18	.710	60	2.362	6
RDC48AA	RDC48AA-GR	PG 48	1.46 - 1.73	49	1.929	18	.710	65	2.560	5
RDC48AR	RDC48AR-GR	PG 48	1.14 - 1.38	49	1.929	18	.710	65	2.560	5



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PG NYLON CORD GRIPS WITH STRAIN RELIEF

Material: PA (NYLON), UL 94

RoHS



IP68

TÜV

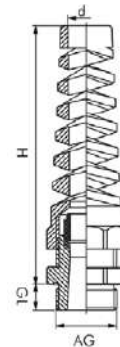
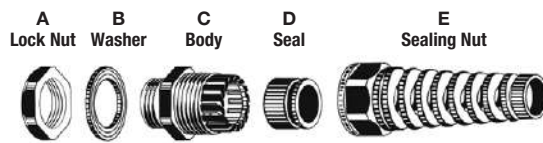
IP69K

Hermetic seal: NBR

Working temperature: -40°C to 100°C in static state
Instantaneous heat resistance up to 120°C
-20°C to 80°C in dynamic state
Instantaneous heat resistance up to 100°C



Colour: Grey, Black



Techspan Part No. Black	Techspan Part No. Grey††	AG	Ø	H		GL		d		Y		Package Qty.
				mm	inch	mm	inch	mm	inch	mm	inch	
RFC07AA*	RFC07AA-GR*	PG 7	.11 - .26	54	2.126	15	.591	7	.276	15	.591	100
RFC07AR*	RFC07AR-GR*	PG 7	.07 - .20	54	2.126	15	.591	7	.276	15	.591	100
RFC09AA*	RFC09AA-GR*	PG 9	.15 - .32	63	2.480	15	.591	8,5	.334	19	.748	100
RFC09AR*	RFC09AR-GR*	PG 9	.07 - .24	63	2.480	15	.591	8,5	.334	19	.748	100
RFC11AA*	RFC11AA-GR*	PG 11	.19 - .39	78	3.070	15	.591	10,5	.413	22	.866	100
RFC11AR*	RFC11AR-GR*	PG 11	.11 - .28	78	3.070	15	.591	10,5	.413	22	.866	100
RFC13AA	RFC13AA-GR	PG 13,5	.23 - .47	90	3.543	15	.591	13	.512	24	.945	50
RFC13AR	RFC13AR-GR	PG 13,5	.19 - .35	90	3.543	15	.591	13	.512	24	.945	50
RFC16AA	RFC16AA-GR	PG 16	.39 - .56	100	3.937	15	.591	15,5	.610	27	1.063	50
RFC16AR	RFC16AR-GR	PG 16	.27 - .47	100	3.937	15	.591	15,5	.610	27	1.063	50
RFC21AA	RFC21AA-GR	PG 21	.51 - .71	114	4.488	15	.591	20	.787	33	1.299	20
RFC21AR	RFC21AR-GR	PG 21	.35 - .63	114	4.488	15	.591	20	.787	33	1.299	20

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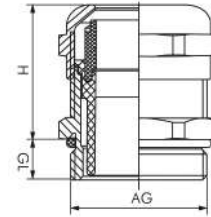
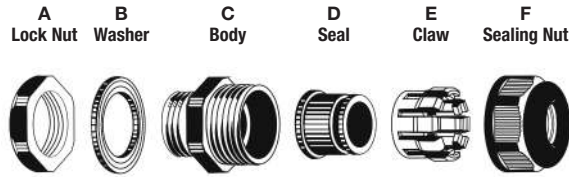
†† Grey connectors with Strain Relief are Non-stock Items.

PG TYPE METAL CORD GRIPS

Material: Nickel-plated brass
Fixture pack: PA (NYLON), UL 94
Hermetic seal: NBR
Protection degree: IP68-10 pressure (Rotate position)
Working temperature: -40°C to 100°C in static state
 Instantaneous heat resistance up to 120°C

RoHS
 CE IP68 TÜV IP69K
PRODUCT SERVICE

c UL US LISTED E360400
 C RA US UL FILE NO.: E360400



Techspan Part No.	AG	Inch	H		GL		Y		Package Qty.
			mm	inch	mm	inch	mm	inch	
BRC07AA*	PG 7	.11 - .26	19	.748	10	.394	14	.551	100
BRC07AR*	PG 7	.07 - .20	19	.748	10	.394	14	.551	100
BRC09AA*	PG 9	.15 - .32	21	.827	10	.394	17	.669	100
BRC09AR*	PG 9	.07 - .24	21	.827	10	.394	17	.669	100
BRC11AA*	PG 11	.19 - .39	22	.866	10	.394	20	.787	100
BRC11AR*	PG 11	.11 - .28	22	.866	10	.394	20	.787	100
BRC13AA	PG 13,5	.23 - .47	24	.945	10	.394	22	.866	50
BRC13AR	PG 13,5	.19 - .35	24	.945	10	.394	22	.866	50
BRC16AA	PG 16	.39 - .56	23	.906	10	.394	24	.945	50
BRC16AR	PG 16	.27 - .47	23	.906	10	.394	24	.945	50
BRC21AA	PG 21	.51 - .71	24	.945	12	.472	30	1.181	20
BRC21AR	PG 21	.35 - .63	24	.945	12	.472	30	1.181	20
BRC29AA	PG 29	.70 - .98	29	1.142	12	.472	40	1.575	20
BRC29AR	PG 29	.47 - .79	29	1.142	12	.472	40	1.575	20
BRC36AA	PG 36	.87 - 1.26	35	1.378	15	.591	50	1.969	10
BRC36AR	PG 36	.79 - 1.02	35	1.378	15	.591	50	1.969	10



M TYPE NYLON CORD GRIPS

Material: PA (NYLON), UL 94
Hermetic seal: NBR
Protection degree: IP68, 5 Bar, IP69K
Working temperature: -40°C to 100°C in static state
 Instantaneous heat resistance up to 120°C
 -20°C to 80°C in dynamic state
 Instantaneous heat resistance up to 100°C
Colour: Grey, Black

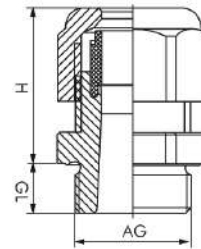
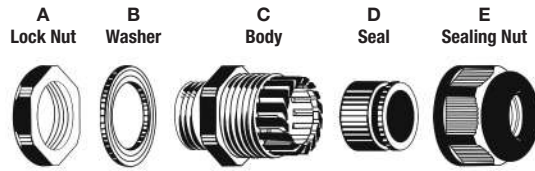
RoHS

CE IP68 TÜV IP69K
PRODUCT SERVICE

LISTED
 E360400

UL FILE NO.: E360400

UL F1
 In Black colour only



Techspan Part No. Black	Techspan Part No. Grey	AG	Ø Inch	H		GL		Y		Package Qty.
				mm	inch	mm	inch	mm	inch	
RDMC12AA*	RDMC12AA-GR*	M 12 x 1,5	.11 - .26	21	.827	15	.591	15	.591	200
RDMC12AR*	RDMC12AR-GR*	M 12 x 1,5	.07 - .20	21	.827	15	.591	15	.591	200
RDMC16AA*	RDMC16AA-GR*	M 16 x 1,5	.19 - .39	25	.984	15	.591	22	.866	100
RDMC16AR*	RDMC16AR-GR*	M 16 x 1,5	.11 - .28	25	.984	15	.591	22	.748	100
RDMC20AA	RDMC20AA-GR	M 20 x 1,5	.23 - .47	27	1.063	15	.591	24	.945	50
RDMC20AR	RDMC20AR-GR	M 20 x 1,5	.20 - .35	27	1.063	15	.591	24	.945	50
RDMC20AA1	RDMC20AA1-GR	M 20 x 1,5	.39 - .56	28	1.102	15	.591	27	1.063	50
RDMC25AA	RDMC25AA-GR	M 25 x 1,5	.51 - .71	31	1.220	15	.591	33	1.299	50
RDMC25AR	RDMC25AR-GR	M 25 x 1,5	.35 - .63	31	1.220	15	.591	33	1.299	50
RDMC32AA	RDMC32AA-GR	M 32 x 1,5	.70 - .98	39	1.535	15	.591	42	1.654	20
RDMC32AR	RDMC32AR-GR	M 32 x 1,5	.50 - .79	39	1.535	15	.591	42	1.654	20
RDMC40AA	RDMC40AA-GR	M 40 x 1,5	.87 - 1.26	48	1.890	18	.710	53	2.087	8
RDMC40AR	RDMC40AR-GR	M 40 x 1,5	.79 - 1.02	48	1.890	18	.710	53	2.087	8
RDMC50AA	RDMC50AA-GR	M 50 x 1,5	1.26 - 1.50	49	1.929	18	.710	60	2.362	6
RDMC50AR	RDMC50AR-GR	M 50 x 1,5	.98 - 1.22	49	1.929	18	.710	60	2.362	6

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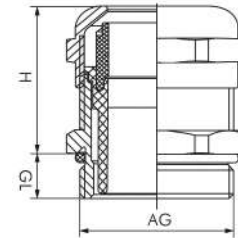
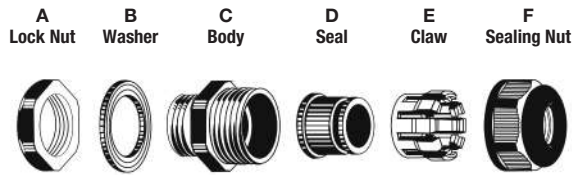
M TYPE METAL CORD GRIPS

Material: Nickel-plated brass
Fixture pack: PA (NYLON), UL 94
Hermetic seal: NBR
O-Seal ring: NBR
Protection degree: IP68-10 pressure (Rotate position)
Working temperature: -40°C to 100°C
 Instantaneous heat resistance up to 120°C

RoHS   TÜV 







Techspan Part No.	AG	Inch	H		GL		Y		Package Qty.
			mm	inch	mm	inch	mm	inch	
BRMC12AA*	M 12 x 1,5	.12 - .26	19	.748	10	.394	14	.551	100
BRMC12AR*	M 12 x 1,5	.08 - .20	19	.748	10	.394	14	.551	100
BRMC16AA*	M 16 x 1,5	.19 - .39	22	.866	10	.394	20	.787	50
BRMC16AR*	M 16 x 1,5	.07 - .24	21	.827	10	.394	17/19	.669/.748	50
BRMC20AA	M 20 x 1,5	.24 - .47	23	.906	10	.394	22	.866	50
BRMC20AR	M 20 x 1,5	.20 - .35	23	.906	10	.394	22	.866	50
BRMC25AA	M 25 x 1,5	.51 - .71	26	1.024	12	.472	30	1.181	50
BRMC25AR	M 25 x 1,5	.35 - .63	26	1.024	12	.472	30	1.181	50
BMRC32AA	M 32 x 1,5	.70 - .98	31	1.220	12	.472	40	1.575	20
BMRC32AR	M 32 x 1,5	.50 - .79	31	1.220	12	.472	40	1.575	20
BRMC40AA	M 40 x 1,5	.87 - 1.26	37	1.457	15	.591	50	1.969	10
BRMC40AR	M 40 x 1,5	.79 - 1.02	37	1.457	15	.591	50	1.969	10
BRMC50AA	M 50 x 1,5	1.26 - 1.50	37	1.457	15	.591	57	2.244	5
BRMC50AR	M 50 x 1,5	.98 - 1.22	37	1.457	15	.591	57	2.244	5



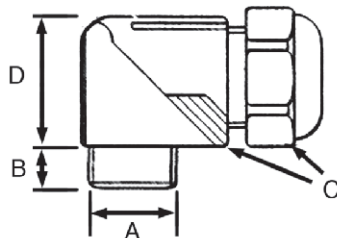
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DOME CAP™ CABLE GLANDS



DOME CAP 90° SNAP ELBOW NON-METALLIC CABLE GLANDS WITH NPT THREADS



Dome Cable Glands	Locking Nuts	Cable Range (in.)	Thread Type & Size	Clearance hole (in.) (A)	Thread Length (in.) (B)	Across Flats (in.) (C)	Height (in.) (D)
PG THREADS							
RE13NS	RLN13-BK	.11 - .27	1/2" NPT	0.82	0.75	0.94	1.20
RE13NR	RLN13-BK	.20 - .35	1/2" NPT	0.82	0.75	0.94	1.20

For fully assembled cable gland with O-Ring and Locknut add "-R" for O-Ring and "-N" for locknut after the last suffix

SPECIFICATIONS

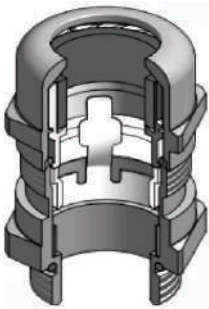
Materials	Polyamide 6
Sealing Ring	Neoprene
Protection Class	IP68
Clamping Insert	Polyamide 6
O Ring	NBR (Buna N, Nitrile)
Black is Standard Color	



SPECIFICATIONS

Materials	Brass, Nickel-Plated
Clamping Insert	Polyamide 6 V2
Contact Spring	Special Copper Alloy
Protection Class	IP68 - 5 Bar
Seal	Chloroprene
O-Ring	NBR
Attachment Thread	EN60423

DOME CAP STANDARD EMC CABLE GLANDS WITH METRIC OR NPT THREADS



Dome Cable Glands	Locknuts	Thread Type & Size	Clearance Hole (inches)	Thread Length (inches)	Across Flats (inches)	Cable Range Ø (inches/min-max)	Shield Diameter Ø (inches/min)
EMC/METRIC THREADS							
BRM4E12	RLEM12	M12X1.5	0.47	0.24	0.55	.118 - .256	.078 - .197
BRM4E16	RLEM16	M16X1.5	0.63	0.24	0.79	.197 - .394	.138 - .314
BRM4E20-2S	RLEM20	M20X1.5	0.79	0.24	0.87	.236 - .472	.177 - .394
BRM4E20	RLEM20	M20X1.5	0.79	0.31	1.00	.295 - .551	.216 - .453
BRM4E25	RLEM25	M25X1.5	1.00	0.31	1.18	.394 - .709	.275 - .551
BRM4E32	RLEM32	M32X1.5	1.26	0.35	1.57	.630 - .984	.472 - .787
BRM4E40	RLEM40	M40X1.5	1.57	0.35	1.97	.866 - 1.260	.709 - 1.063
BRM4E50	RLEM50	M50X1.5	1.97	0.35	1.97	1.181 - 1.496	1.024 - 1.339
BRM4E60	RLEM60	M63X1.5	2.48	0.55	2.52	1.339 - 1.732	1.181 - 1.575
BRM4E63	RLEM63	M63X1.5	2.48	0.39	2.95	1.457 - 2.087	1.300 - 1.929

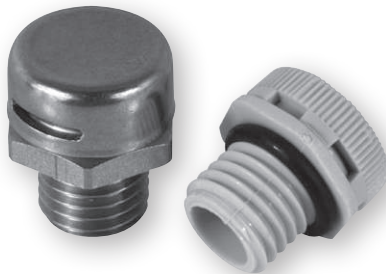
Part No.	Size	Cable Range Ømin-max mm	Shield Dia. Ømin-max mm	Thread Length	Across Flats
EMC/NPT THREADS					
BRN4E13	NPT 1/2"	.236 - .472	.177 - .394	0.314	0.866
BRN4E13S	NPT 1/2"	.295 - .551	.216 - .453	0.314	0.944
BRN4E21	NPT 3/4"	.394 - .709	.275 - .551	0.314	1.181
BRN4E29	NPT 1"	.630 - .984	.472 - .787	0.354	1.574
BRN4E36	NPT 1 1/4"	.866 - 1.260	.709 - 1.063	0.354	1.968
BRN4E42	NPT 1 1/2"	1.180 - 1.496	1.024 - 1.338	0.551	2.362
BRN4E48	NPT 2"	1.338 - 1.732	1.181 - 1.575	0.551	2.677

Hub Size	Steel	Brass
OPTIONAL LOCKNUT PART NUMBERS		
NPT 1/2"	LN-50	NN-13-BR
NPT 3/4"	LN-75	NN-21-BR
NPT 1"	LN-100	NN-29-BR
NPT 1 1/4"	LN-125	N/A
NPT 1 1/2"	LN-150	N/A
NPT 2"	LN-200	N/A

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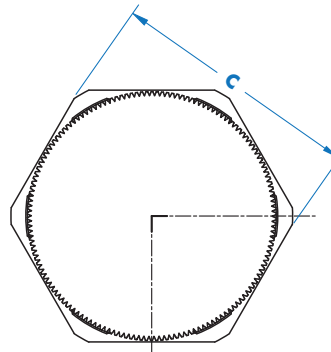
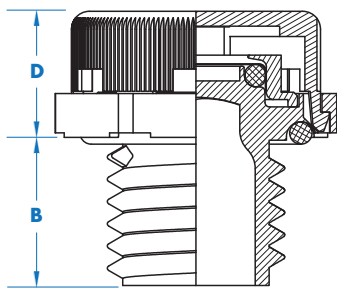
DOME CAP™ PE VENT PLUGS



SPECIFICATIONS

Housing Materials	PA6-V2 or Stainless Steel
Membrane Material	Acrylic co-polymer on nylon support
Membrane Feature	Hydrophobic - Oleophobic
Protection degree	IP68 (Refer to chart for pressure)
Protection Against Water Jet	IP69K
Air Flow Rates	Refer to the chart
Working Temperatures	40°C to +105°C
Available Membrane Permeability	S (standard) M (medium) H (high) UH (ultra high)
O-rings	Nitrile Rubber

POLYAMIDE DOME VENT PLUGS

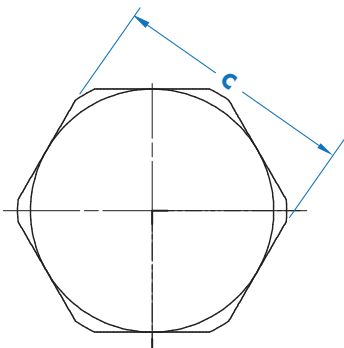
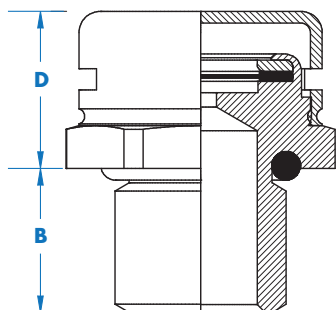


Polyamide 6 Gray	Locknuts	Thread Size	Clearance hole (inches)	Thread Length (B) (inches)	Across Flats (C) (inches)	Head Height D (inches)	$\Delta P = 1 \text{ Psi} = 70 \text{ m Bar}$. Average Air Permeability in liters per hour	Water Intrusion Pressure in Bar	Plug Type
RVP15-M12-NM	RLM12-GY	M12X1.5	0.492	0.236	0.669	0.295	16	0.9	A
RVP15-M12-NM-LT	RLM12-GY	M12X1.5	0.492	0.393	0.866	0.492	16	0.9	A

Option: Additional Thread Sizes and Permeability Levels, (Medium, High and Ultra High) are available upon request. Note: Locknuts are non-metallic

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STAINLESS STEEL DOME VENT PLUGS



Stainless Steel	Locknuts	Thread Size	Clearance hole (inches)	Thread Length (B) (inches)	Across Flats (C) (inches)	Head Height D (inches)	$\Delta P = 1 \text{ Psi} = 70 \text{ m Bar}$. Average Air Permeability in liters per hour	Water Intrusion Pressure in Bar	Plug Type
RVP10-M12-SS-LT	RLM12-BR	M12X1.0	0.492	0.394	0.669	0.433	16	0.9	C
RVP15-M12-SS	RLM12-BR	M12X1.5	0.492	0.236	0.669	0.295	16	0.9	C
RVP15-M12-SS-LT	RLM12-BR	M12X1.5	0.492	0.394	0.669	0.433	16	0.9	C

Option: Additional Thread Sizes and Permeability Levels, (Medium, High and Ultra High) are available upon request. Note: Locknuts are nickel-plated brass



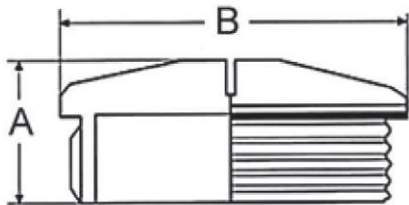
DOME CAP™ BLIND STOP PLUGS



SPECIFICATIONS

Materials Polyamide 6

DOME CAP BLIND STOP PLUGS WITH PG OR ISO/METRIC THREADS



PG THREADS

Dome Plugs	Color	Thread Type & Size	Height (A) (mm)	DIA. (B) (mm)
RBP09-GY	GRAY	PG 09	9.00	19.00
RBP11-GY	GRAY	PG 11	9.00	22.00
RBP13-GY	GRAY	PG 13.5	9.50	25.00
RBP16-GY	GRAY	PG 16	9.50	27.00
RBP21-GY	GRAY	PG 21	11.00	33.00
RBP29-GY	GRAY	PG 29	12.00	44.00

ISO/METRIC THREADS

RBMP16-GY	GRAY	M16 X 1.5	6.00	20.00
RBMP20-GY	GRAY	M20 X 1.5	6.00	24.00
RBMP25-GY	GRAY	M25 X 1.5	8.00	30.00
RBMP32-GY	GRAY	M32 X 1.5	8.00	37.00

Note: Other sizes and colors available upon request. Minimums may apply

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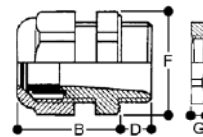
DOME & FLEX-PROTECTING LIQUID-TIGHT STRAIN RELIEF CONNECTORS

Applications & Specifications

These Polyamide strain relief connectors are resistant to salt water, weak acids, weak alkalis, alcohol, esters, ketones, ether, gasoline, mineral oil, animal and vegetable oil and meet IP68 specifications for liquid tight. They can be utilized underwater to 300 feet, underground for direct burial cables, fiber optics, computers, control cabinets, instruments, medical/dental equipment, car washes, hot tubs, and carpet cleaning machines.

No disassembly required, simply push cable or tubing through installed strain relief connector and tighten dome nut.

- Protection Class:** IP68, 5 bar
- Materials:** Polyamide 6 neoprene seal
- Operating Temperature:** Up to +150°C intermittent
- Temperature Range:** -30°C to 80°C permanent



Part No.	Dome Connector	Cable or Tubing Range	Thread Type Size	DIMENSIONS				
				Clearance Hole +.010	B Max O.A Length (Dome)	C Max O.A Length (Flex)	D Thread Length	F Wrenching Flats
RD07AA		.12-.26	PG 7	0.49	0.87	2.50	0.31	0.59
RD07AR		.08-.20						
RD09AA		.15-.32	PG 9	0.60	0.98	3.00	0.31	0.75
RD09AR		.08-.20						
*RD09NA		.20-.39	3/8" NPT	0.65	1.10	3.25	0.59	0.87
RD09NR		.12-.28						
RD11AA		.19-.39	PG 11	0.73	1.10	3.50	0.31	0.88
RD11AR		.11-.28						
RD13AA		.23-.47	PG 13.5	0.83	1.14	4.00	0.34	0.94
RD13AR		.19-.35						
*RD13NA		.24-.47	1/2" NPT	0.81	1.14	4.22	0.59	0.94
*RD13NR		.20-.35						
*RD16NA		.39-.55	1/2" NPT	0.81	1.22	4.61	0.59	1.06
RD16NR		.27-.47						
RD16AA		.39-.55	PG 16	0.90	1.22	4.44	0.39	1.06
RD16AR		.27-.47						
RD21AA		.51-.71	PG 21	1.13	1.38	5.00	0.44	1.30
RD21AR		.35-.63						
*RD21NA		.51-.71	3/4" NPT	1.02	1.38	5.12	0.59	1.30
*RD21NR		.35-.63						
RD29AA		.70-.98	PG 29	1.47	1.57	—	0.44	1.65
RD29AR		.47-.79						
RD29NA		.71-.98	1" NPT	1.275	1.57	—	0.71	1.65
RD29NR		.47-.79						
†RD36AA		.87-1.26	PG 36	1.87	1.93	—	0.51	2.09
†RD36AR		.79-1.02						

LOCKING NUTS (Polyamide)			
Part No.	Locking Nut (Black)	THREAD TYPE & SIZE	DIMENSIONS (INCHES)
			G Thickness
NP-07-BK		PG 7	0.20 0.75
NP-09-BK		PG 9	0.20 0.87
NN-09-BK		3/8" NPT	0.27 0.94
NP-11-BK		PG 11	0.20 0.94
NP-13-BK		PG 13.5	0.24 1.06
NN-13-BK		1/2" NPT	0.27 1.06
NN-13-BK		1/2" NPT	0.27 1.06
NP-16-BK		PG 16	0.24 1.18
NP-21-BK		PG 21	0.27 1.41
NN-21-BK		3/4" NPT	0.27 1.26
NP-29-BK		PG29	0.26 1.81
NN-29-BK		1" NPT	0.27 1.57
NP-36-BK		PG 36	0.31 2.36

(only part numbers with * are available in grey, add suffix -GR to part number)

† cUL E184471

3/8", 1/2" & 3/4" thread size come with anti-vibration gland nut.



ECONOMY CONNECTORS

Steel Cord Grip Connectors



- Screw Machined Steel Fittings
- CSA and UL Approved
- Neoprene Grommet
- Compact Size
- Label Shows Cable Diameter
- Zinc Plated

Part No.	COLOUR CODE	GROMMET HUB SIZE	FOR CABLE DIAMETER
CG50A250	Red	1/2" CORD GRIP	.15-.25"
CG50A350	WHITE	1/2" CORD GRIP	.26-.35"
CG50A450	BLUE	1/2" CORD GRIP	.36-.45"
CG50A560	GREEN	1/2" CORD GRIP	.46-.56"
CG50A650	BROWN	1/2" CORD GRIP	.57-.65"
CG75A250	RED	3/4" CORD GRIP	.15-.25"
CG75A350	WHITE	3/4" CORD GRIP	.26-.35"
CG75A450	BLUE	3/4" CORD GRIP	.36-.45"
CG75A560	GREEN	3/4" CORD GRIP	.46-.56"
CG75A650	BROWN	3/4" CORD GRIP	.57-.65"
CG75B750	YELLOW	3/4" CORD GRIP	.66-.75"
CG75B850	PURPLE	3/4" CORD GRIP	.76-.85"
CG100B560	GREEN	1" CORD GRIP	.46-.56"
CG100B650	BROWN	1" CORD GRIP	.57-.65"
CG100B750	YELLOW	1" CORD GRIP	.66-.75"
CG100B850	PURPLE	1" CORD GRIP	.76-.85"
CG100C950	GREY	1" CORD GRIP	.86-.95"
CG100C1050	BLACK	1" CORD GRIP	.96-1.05"

For 90° add suffix "90" to part number

Spiro-Grip Connectors



- Complete with lock-nut and sealing ring

Part No.	HUB SIZE	FOR CABLE DIAMETER
SPG50-1030	1/2" CORD GRIP BLACK	.10-.30"
SPG50-2047	1/2" CORD GRIP BLACK	.20-.47"
SPG50-3875	1/2" CORD GRIP BLACK	.38-.75"
SPG75-2047	3/4" CORD GRIP BLACK	.20-.47"
SPG75-3875	3/4" CORD GRIP BLACK	.38-.75"

* Non-metallic



LIQUIDTIGHT CONNECTORS



LIQUA-SEAL® LIQUIDTIGHT CONNECTORS

The family of Remke Liqua-Seal Connectors are available in three different styles: L-Series in zinc-plated steel or zinc-plated malleable iron or die cast zinc; ALM-Series of aluminum liquidtight connectors; and the LL-Series of stainless steel liquidtight connectors.

With multiple sizes and material options including steel, stainless steel, aluminum and zinc-plated malleable iron, the Tuff-Seal family of Liqua-Seal® Liquidtight Connectors feature IP65, IP68 and NEMA 4X ratings and are suitable for use in Class I, Div II locations. They are ideally suited for OEM applications that require flexibility & protection against entry of vapors, liquids or solids including

- Food Processing Plants
- Petroleum Machinery
- Chemical Processing
- Offshore Rights
- Machine Shop Equipment
- Pulp & Paper Factories
- Automation Equipment
- Heavy-Duty Electrical Motor Housings
- Machine Tool Building
- Robotics Assembly
- Motor & Transformer Terminations

LIQUIDTIGHT CONNECTORS



L SERIES LIQUA-SEAL® CONNECTORS

L-Series Liqua-Seal Connectors are made of steel with a chromium zinc plating on the body, ferrule, locknut and clamp nut to prevent corrosion under the most adverse of conditions. Rated IP65, these connectors are UL Listed & CSA Certified with a watertight and oiltight design that provides strain relief and reduces stress on components and termination points. L-Series connectors are available in straight, 90° and 45° body styles and are also available with insulated throats and wire mesh grips. Die-cast zinc versions are also available.

L-Series Liqua-Seal Connectors are ideally suited for use in applications such as food processing plants, chemical processing facilities, offshore rigs, pulp and paper factories, automation equipment, heavy-duty electrical motor housings and medical equipment

Notes

Dimensional information on page G-52 in Tuff-Seal Technical Reference

ZINC-PLATED STEEL, STRAIGHT, EXTERNAL CONDUIT THREAD

PART NUMBERS					
Conduit Size	Standard	Insulated Throat	With Mesh Grip	Insulated With Mesh Grip	Mesh Length
3/8"	LMM-01	LMM-02	LMM-01-E	LMM-02-E	2 5/8"
1/2"	LMM-11	LMM-12	LMM-11-E	LMM-12-E	3 7/8"
3/4"	LMM-21	LMM-22	LMM-21-E	LMM-22-E	4 3/8"
1"	LMM-31	LMM-32	LMM-31-E	LMM-32-E	5 1/4"
1 1/4"	LMM-41	LMM-42	LMM-41-E	LMM-42-E	5 5/8"
1 1/2"	LMM-51	LMM-52	LMM-51-E	LMM-52-E	5 3/4"
2"	LMM-61	LMM-62	LMM-61-E	LMM-62-E	7 1/2"
2 1/2"	LMM-71	LMM-72	—	—	—
3"	LMM-81	LMM-82	—	—	—
3 1/2"	LMM-91	LMM-92	—	—	—
4"	LMM-101	LMM-102	—	—	—

ZINC-PLATED MALLEABLE IRON, 45°, EXTERNAL CONDUIT THREAD

PART NUMBERS					
Conduit Size	Standard	Insulated Throat	With Mesh Grip	Insulated With Mesh Grip	Mesh Length
3/8"	LMA-01	LMA-02	LMA-01-E	LMA-02-E	2 5/8"
1/2"	LMA-11	LMA-12	LMA-11-E	LMA-12-E	3 7/8"
3/4"	LMA-21	LMA-22	LMA-21-E	LMA-22-E	4 3/8"
1"	LMA-31	LMA-32	LMA-31-E	LMA-32-E	5 1/4"
1 1/4"	LMA-41	LMA-42	LMA-41-E	LMA-42-E	5 5/8"
1 1/2"	LMA-51	LMA-52	LMA-51-E	LMA-52-E	5 3/4"
2"	LMA-61	LMA-62	LMA-61-E	LMA-62-E	7 1/2"

ZINC-PLATED MALLEABLE IRON, 90°, EXTERNAL CONDUIT THREAD

PART NUMBERS					
Conduit Size	Standard	Insulated Throat	With Mesh Grip	Insulated With Mesh Grip	Mesh Length
3/8"	LML-01	LML-02	LML-01-E	LML-02-E	2 5/8"
1/2"	LML-11	LML-12	LML-11-E	LML-12-E	3 7/8"
3/4"	LML-21	LML-22	LML-21-E	LML-22-E	4 3/8"
1"	LML-31	LML-32	LML-31-E	LML-32-E	5 1/4"
1 1/4"	LML-41	LML-42	LML-41-E	LML-42-E	5 5/8"
1 1/2"	LML-51	LML-52	LML-51-E	LML-52-E	5 3/4"
2"	LML-61	LML-62	LML-61-E	LML-62-E	7 1/2"
2 1/2"	LML-71	LML-72	—	—	—
3"	LML-81	LML-82	—	—	—
3 1/2"	LML-91	LML-92	—	—	—
4"	LML-101	LML-102	—	—	—

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DIE-CAST ZINC

PART NUMBERS		
Conduit Size	Straight Connector	90° Connector
3/8"	LTM-38	LTM-9038
1/2"	LTM-50	LTM-9050
3/4"	LTM-75	LTM-9075
1"	LTM-100	LTM-90100
1-1/4"	LTM-125	LTM-90125
1-1/2"	LTM-150	LTM-90150
2"	LTM-200	LTM-90200



ALUMINUM LIQUIDTIGHT CONNECTORS

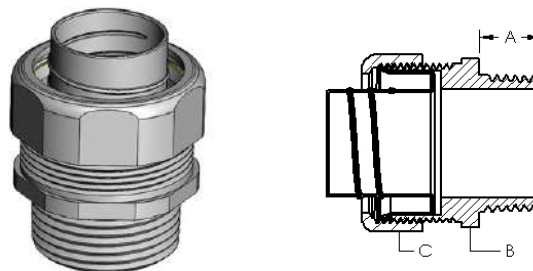
LIQUA-SEAL® ALUMINUM LIQUIDTIGHT CONNECTORS

The Remke ALM-Series Aluminum Liquidtight Connectors are designed to provide a dependable connection to stand up against wet & corrosive environments indoors, outdoors and in Class I/Div II hazardous locations. Made of high-quality forged aluminum with a natural finish, these connectors provide superior strength & durability that seals out oil, water, dust, dirt and fumes.

The design of these connectors features a reusable ferrule with maximum surface contact for better sealing and a permanent metal-to-metal ground, insulated throat to protect against wire damage, machined tapered NPT threads, a compact design and pending environmental certifications include NEMA 4, UL & CSA. Remke Aluminum Liquidtight Connectors are in stock in both straight and 90 degree styles in conduit sizes from 3/8" to 2".

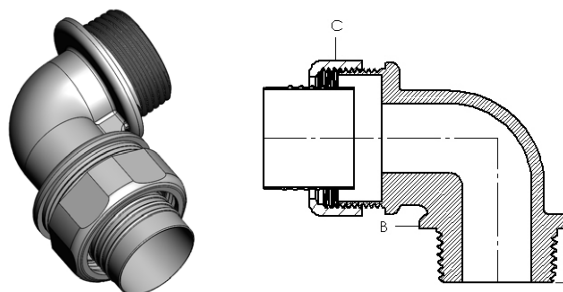
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STRAIGHT ALUMINUM LIQUIDTIGHT CONNECTORS



PART NUMBERS				
Conduit Size	Standard Catalog Number	Thread Length (A)	Body Diameter (B)	Dia. Across Flats (C)
3/8"	ALMM-01	.47	1.10	1.06
1/2"	ALMM-11	.47	1.18	1.20
3/4"	ALMM-21	.47	1.34	1.32
1"	ALMM-31	.59	1.61	1.61
1 1/4"	ALMM-41	.59	1.97	1.95
1 1/2"	ALMM-51	.63	2.24	2.20
2"	ALMM-61	.63	2.72	2.68

90° ALUMINUM LIQUIDTIGHT CONNECTORS



PART NUMBERS				
Conduit Size	Standard Catalog Number	Thread Length (A)	Body Diameter (B)	Dia. Across Flats (C)
3/8"	ALML-01	.47	1.10	1.06
1/2"	ALML-11	.47	1.18	1.20
3/4"	ALML-21	.47	1.38	1.32
1"	ALML-31	.59	1.69	1.61
1 1/4"	ALML-41	.59	2.06	1.95
1 1/2"	ALML-51	.63	2.37	2.20
2"	ALML-61	.63	2.78	2.68



STAINLESS STEEL LIQUIDTIGHT CONNECTORS

Rated IP68 and NEMA 4X, Remke Stainless Steel Liquidtight Connectors offer all the corrosion resistance you need AND the strength of stainless steel for the highest levels of endurance. Additional features of these connectors include:

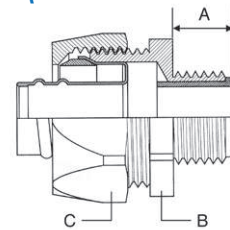
- Used to connect liquidtight conduit into a knockout or threaded NPT opening
- For use in wet or dry locations to seal electrical connections against dust, dirt, oil, water, chemicals and other corrosive elements
- Type 304 stainless steel body and ferrule
- Available in straight and 90 degree, 3/8" to 2" in stock
- Nylon insulated throat
- Viton® O-Ring standard (optional from other manufacturers)

Remke Stainless Steel Liquidtight Connectors are ideally suited for OEM and MRO applications known for their corrosive and abusive environments including:

- Food & Beverage Processing
- Petrochemical
- Pulp & Paper Mills
- Wastewater Treatment
- Heavy-duty electrical motors, generators and transformers
- Offshore Oil Rigs & Platforms
- Chemical Processing
- Portable equipment
- Machine Tool Building



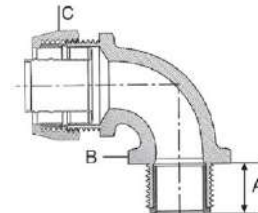
STRAIGHT STAINLESS STEEL LIQUIDTIGHT CONNECTORS



PART NUMBERS

Conduit Size	Catalog Number	Thread Length (A)	Body Hex (B)	Dia. Across Flats (C)
3/8"	LMSS-01	0.45	0.94	1.02
1/2"	LMSS-11	0.51	1.06	1.14
3/4"	LMSS-21	0.59	1.30	1.38
1"	LMSS-31	0.59	1.69	1.77
1 1/4"	LMSS-41	0.63	2.04	2.12
1 1/2"	LMSS-51	0.71	2.36	2.44
2"	LMSS-61	0.79	2.93	3.03

90 DEGREE STAINLESS STEEL LIQUIDTIGHT CONNECTORS



PART NUMBERS

Conduit Size	Catalog Number	Thread Length (A)	Body Hex (B)	Dia. Across Flats (C)
3/8"	LMSS-01-90	0.45	0.94	1.02
1/2"	LMSS-11-90	0.51	1.06	1.14
3/4"	LMSS-21-90	0.59	1.30	1.38
1"	LMSS-31-90	0.59	1.69	1.77
1 1/4"	LMSS-41-90	0.63	2.04	2.12
1 1/2"	LMSS-51-90	0.71	2.36	2.44
2"	LMSS-61-90	0.79	2.93	3.03

SPECIFICATIONS

MATERIALS

Body and Cap	304 Stainless Steel
Ferrule	304 Stainless Steel
O-Ring	Viton®
Protection	IP68, NEMA 4X
Listings	UL Listed, CSA Certified RoHS Compliant

LIQUID TIGHT CONDUIT AND TUBING

LIQUID TIGHT CONDUIT



FTPV

- Intended for use as a raceway for the installation of approved conductors with a nominal rating of 600 volts or less for non-hazardous locations
- Sizes from 3/8" to 2"
- Integral Rigid and Flexible PVC Construction resists Pull and Crushing. Suitable for Indoor or Outdoor use.
- Sunlight resistant
- Temperature Ratings:
 Dry 0° to 176°F (-18 to 80°C)
 In Oil. Up to 160°F (70°C)
 Wet Locations . . . Up to 140°F (60°C)
- Use Straight-Thru and Right-Angle Conduit Connectors
- Cut to Length with WT-1 Cutting Tool
- Cannot run mix of wire voltages in conduit



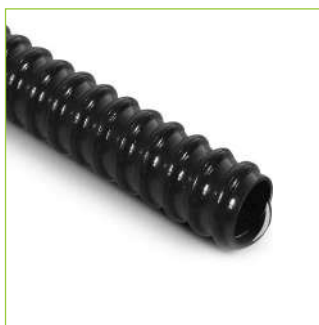
WT-1 Cutting Tool

Grey Part #	Trade Size	UL/CSA Desc.	A Outside Diameter (Inch)	B Inside Diameter (Inch)	Quantity
FTPV3758C	3/8	HF1 3/8	0.7	0.494	Stocked in 100 Foot Rolls
FTPV5008C	1/2	HF1 1/2	0.83	0.632	
FTPV7508C	3/4	HF1 3/4	1.04	0.830	
FTPV10008C	1	HF1 1	1.303	1.054	
FTPV12508C	1-1/4	EC125	1.66	1.410	50 Ft
FTPV15008L	1-1/2	EC150	1.9	1.600	
FTPV20008L	2	EC200	2.375	2.045	

Use CCNY-XXX-8 or NMSC-XXX-8 connectors on page G-45.

NON-METALLIC ELECTRICAL TUBING*

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TUPV

- Intended for use as a support and protection of insulated conductors with a nominal rating of 600 volts or less in equipment for non-hazardous locations
- TUPV -18°C to 70°C temperature rating
- Maximum flexibility tubing can be used in extremely tight quarters
- Smooth inside for easier wire pulling
- Suitable for high vibration or flexing applications
- Black
- CSA approved as liquid-tight tubing only
- Not CSA approved for mechanical protection – not considered conduit
- Cannot run mix of wire voltages in tubing



Grey Part #	Trade Size	UL/CSA Desc.	A Outside Diameter (Inch)	B Inside Diameter (Inch)	Quantity
*TUPV2500C	1/4	ET025	0.575	0.405	100
TUPV3750C	3/8	ET038	0.71	0.504	100
TUPV5000C	1/2	ET050	0.84	0.642	100
TUPV7500C	3/4	ET075	1.05	0.84	100
TUPV10000C	1	ET100	1.315	1.066	100
TUPV12500C	1-1/4	ET125	1.66	1.41	100
TUPV15000L	1-1/2	ET150	1.9	1.6	50
TUPV20000L	2	ET200	2.375	2.045	50

Use CCNY-XXX-0 connector on page G-45.

*Not Approved by CSA or

LIQUID TIGHT CONNECTORS - NYLON/PVC

Straight and Right Angle Non-Metallic Connectors



- UV rated
- Four Sizes for 3/8" to 2" Conduit
- No Disassembly Required to Install. Simply push Conduit or Tubing over Ferrule and tighten Sealing Nut
- No Threading of Conduit is Necessary. Lower your Installed Cost
- Connector may be reused. Turn Sealing Nut in Clockwise direction to Release Conduit
- Molded 6/6 Nylon. Non-Conductive, Non-Corrosive; Resistant to Fuels, Lubricants and most Chemicals

Straight Connector

Black Connector with 'O' Ring & Steel Locknut Part #	Grey Connector with 'O' Ring & Steel Locknut Part #	For Conduit	Thread Size	K.O. Size Inch	CTN/PKG	STD PK
CCNY2500		1/4	1/4 NPT	1/4	25	100
CCNY3750	CCNY3758	3/8	1/2 NPT	1/2	25	100
CCNY5000	CCNY5008	1/2	1/2 NPT	1/2	25	100
CCNY7500	CCNY7508	3/4	3/4 NPT	3/4	10	100
CCNY10000	CCNY10008	1	1 NPT	1	5	50
CCNY12500	CCNY12508	1-1/4	1-1/4 NPT	1-1/4	5	25
CCNY15000	CCNY15008	1-1/2	1-1/2 NPT	1-1/2	2	10
CCNY20000	CCNY20008	2	2 NPT	2	2	10

90° Connector

Black Part #	Grey Part #	For Conduit	Thread Size	K.O. Size Inch	CTN/PKG	STD PK
CCNY37900	CCNY37908	3/8	1/2 NPT	1/2	10	100
CCNY50900	CCNY50908	1/2	1/2 NPT	1/2	10	100
CCNY75900	CCNY75908	3/4	3/4 NPT	3/4	10	100
CCNY10900	CCNY10908	1	1 NPT	1	5	50
CCNY125900	CCNY125908	1-1/4	1-1/4 NPT	1-1/4	5	25
CCNY150900	CCNY150908	1-1/2	1-1/2 NPT	1-1/2	2	10
CCNY200900	CCNY200908	2	2 NPT	2	2	10

Combination Straight – 90° Swivel Connector

**One connector does every angle !!

Grey Part #	For Conduit	Thread Size	K.O. Size Inch	QTY/BOX
CCSW5008	N.M. Swivel L.T. Con. 1/2" GREY	1/2 NPT	1/2	10
CCSW7508	N.M. Swivel L.T. Con. 3/4" GREY	3/4 NPT	3/4	10
	SCREW-ON PVC RUBBER O-RING			

also available in black on request



Screw-On Straight and 90° Non-Metallic Connectors

For use with non-metallic liquid-tight conduit, type B. Produced from UV rated plastic for long outdoor life.

Straight Grey Connector with 'O' Ring & Steel Locknut Part #	90° Grey Connector with 'O' Ring & Steel Locknut Part #	For Conduit	Thread Size	K.O. Size Inch	STD PK
NMSC50	NMSC9050	1/2	1/2 NPT	1/2	100
NMSC75	NMSC9075	3/4	3/4 NPT	3/4	100

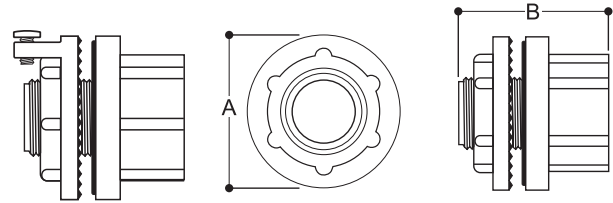




WH SERIES CONDUIT HUBS



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DIE CAST ZINC

PART NUMBERS					
Hub Size	Zinc Die Cast	Grounded	A	B	Mtg. Hole (minimum)
1/2"	WH-1	WH-1-G	1.54	1.31	0.84
3/4"	WH-2	WH-2-G	1.73	1.37	1.05
1"	WH-3	WH-3-G	2.04	1.59	1.31
1 1/4"	WH-4	WH-4-G	2.42	1.59	1.66
1 1/2"	WH-5	WH-5-G	2.79	1.59	1.90
2"	WH-6	WH-6-G	3.30	1.59	2.37
2 1/2"	WH-7	WH-7-G	3.70	2.47	2.88
3"	WH-8	WH-8-G	4.39	2.47	3.50
3 1/2"	WH-9	-	4.81	2.69	4.11
4"	WH-10	-	5.38	2.69	4.63

WH SERIES WATERTIGHT CONDUIT HUBS

The Tuff-Seal™ WH Series of Watertight Conduit Hubs feature a design with unique angled serrations that provide a larger & tighter surface plus a reliable watertight seal even with rough or oversized knock-out. Used to connect rigid metal conduit (or IMC) to a threadless opening in electrical enclosures, Remke Conduit Hubs are rated NEMA 4 and may be used in either wet or dry applications.

Remke Watertight Conduit Hubs are available in 1/2" to 4" hub sizes in these materials:

- Die Cast Zinc – high strength & hardness with outstanding corrosion resistance

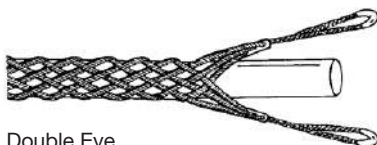
Designed with simple 2-piece construction, Remke WH Series Hubs offer positive grounding, protective insulated throats that prevent wire abrasion and an embedded O-Ring to ensure a watertight seal. A grounded style is also available.



STANDARD SUPPORT GRIPS



Standard Support Grips are designed to sustain and shore up the weight of cable in vertical or sloping applications. Constructed of non-magnetic tin-bronze wire, they assist in absorbing strain and flexure; and resist pullout, flexure and vibration. Standard Support Grips are available in a wide selection of eye styles and cable ranges. They will support cable rods and tubing with loads up to 600 lbs. Not recommended for runs over 100 feet.



Double Eye



Single Eye



Offset Eye



Universal Bail

Cable Range	Part #	Description	Approx.* Breaking Strength	Length	
				Eye	Mesh
Closed Mesh – Double Eye – Single Weave					
.50- .62	2201-001	R050-DE	770	4	11
.63- .74	2201-002	R062-DE	1150	4	11
.75- .99	2201-003	R075-DE	1320	4	14
1.00-1.24	2201-004	R100-DE	1920	5	15
1.25-1.49	2201-005	R125-DE	1920	5	16
1.50-1.74	2201-006	R150-DE	1920	5	18
1.75-1.99	2201-007	R175-DE	3150	6	20
2.00-2.49	2201-008	R200-DE	3360	6	22
2.50-2.99	2201-009	R250-DE	3360	6	24
3.00-3.49	2201-010	R300-DE	5280	8	26
3.50-3.99	2201-011	R350-DE	5280	8	28
Closed Mesh – Single Eye – Single Weave					
.50- .62	2201-013	R050-SE	770	7	11
.63- .74	2201-014	R062-SE	1150	8	11
.75- .99	2201-015	R075-SE	1320	8	14
1.00-1.24	2201-016	R100-SE	1920	9	15
1.25-1.49	2201-017	R125-SE	1920	10	16
1.50-1.74	2201-018	R150-SE	1920	12	18
1.75-1.99	2201-019	R175-SE	3150	14	20
2.00-2.49	2201-020	R200-SE	3360	16	22
2.50-2.99	2201-021	R250-SE	3360	18	24
3.00-3.49	2201-022	R300-SE	5280	21	26
3.50-3.99	2201-023	R350-SE	5280	24	28
Closed Mesh – Offset Eye – Single Weave					
.50- .62	2201-025	R050-OFS	770	4	11
.63- .74	2201-026	R062-OFS	960	4	11
.75- .99	2201-027	R075-OFS	960	4	14
1.00-1.24	2201-028	R100-OFS	1680	5	15
1.25-1.49	2201-029	R125-OFS	1680	5	16
1.50-1.74	2201-030	R150-OFS	1680	5	18
1.75-1.99	2201-031	R175-OFS	2640	6	20
2.00-2.49	2201-032	R200-OFS	3760	6	22
2.50-2.99	2201-033	R250-OFS	3760	6	24
3.00-3.49	2201-034	R300-OFS	5040	9	26
3.50-3.99	2201-035	R350-OFS	5040	9	28
Closed Mesh – Universal Bail – Single Weave					
.50- .62	2201-037	R050UB-18"	770	18	11
.63- .74	2201-038	R062UB-18"	1150	18	11
.75- .99	2201-039	R075UB-18"	1320	18	14
1.00-1.24	2201-040	R100UB-18"	1920	18	15
1.25-1.49	2201-041	R125UB-18"	1920	18	16
1.50-1.74	2201-042	R150UB-18"	1920	18	18
1.75-1.99	2201-043	R175UB-18"	3150	18	20
2.00-2.49	2201-044	R200UB-18"	3360	18	22
2.50-2.99	2201-045	R250UB-18"	3360	18	24
3.00-3.49	2201-046	R300UB-18"	5280	18	26
3.50-3.99	2201-047	R350UB-18"	5280	18	28

All mesh is available as double weave or stainless steel. Consult factory for availability.



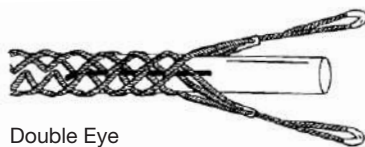
STANDARD SUPPORT GRIPS



Rod Closing Support Grips are suitable for permanent installations. The rod may become bent from high loads but grips are often reusable, after the rod is straightened. Rod closing has the lowest gripping ability of split closure methods but is the fastest and easiest to install. Installation may be difficult at high angles of weave (maximum cable diameter within listed range). Rod does not touch the cable at any point, preventing cuts. Rod is provided.



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Double Eye



Single Eye



Offset Eye



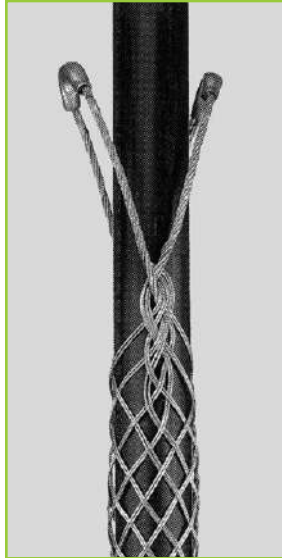
Universal Bail

Cable Range	Part #	Description	Approx.* Breaking Strength	Length	
				Eye	Mesh
Rod closing – Double Eye – Single Weave					
.50-.62	2203-001	RR050-DE	770	4	11
.63-.74	2203-002	RR062-DE	1150	4	11
.75-.99	2203-003	RR075-DE	1320	4	14
1.00-1.24	2203-004	RR100-DE	1920	5	15
1.25-1.49	2203-005	RR125-DE	1920	5	16
1.50-1.74	2203-006	RR150-DE	1920	5	18
1.75-1.99	2203-007	RR175-DE	3150	6	20
2.00-2.49	2203-008	RR200-DE	3360	6	22
2.50-2.99	2203-009	RR250-DE	3360	6	24
3.00-3.49	2203-010	RR300-DE	7520	8	26
3.50-3.99	2203-011	RR350-DE	7520	8	28
Rod closing – Single Eye – Single Weave					
.50-.62	2203-013	RR050-SE	770	7	11
.63-.74	2203-014	RR062-SE	960	8	11
.75-.99	2203-015	RR075-SE	1320	8	14
1.00-1.24	2203-016	RR100-SE	1680	9	15
1.25-1.49	2203-017	RR125-SE	1680	10	16
1.50-1.74	2203-018	RR150-SE	1680	12	18
1.75-1.99	2203-019	RR175-SE	2640	14	20
2.00-2.49	2203-020	RR200-SE	3760	16	22
2.50-2.99	2203-021	RR250-SE	3760	18	24
3.00-3.49	2203-022	RR300-SE	6560	21	26
3.50-3.99	2203-023	RR350-SE	6560	24	28
Rod closing – Offset Eye – Single Weave					
.50-.62	2203-025	RR050-OFS	770	4	11
.63-.74	2203-026	RR062-OFS	960	4	11
.75-.99	2203-027	RR075-OFS	960	4	14
1.00-1.24	2203-028	RR100-OFS	1680	5	15
1.25-1.49	2203-029	RR125-OFS	1680	5	16
1.50-1.74	2203-030	RR150-OFS	1680	5	18
1.75-1.99	2203-031	RR175-OFS	2640	6	20
2.00-2.49	2203-032	RR200-OFS	3760	6	22
2.50-2.99	2203-033	RR250-OFS	3760	6	24
3.00-3.49	2203-034	RR300-OFS	5040	9	26
3.50-3.99	2203-035	RR350-OFS	5040	9	28
Rod closing – Universal Bail – Single Weave					
.50-.62	2203-037	RR050UB-18"	770	18	11
.63-.74	2203-038	RR062UB-18"	1150	18	11
.75-.99	2203-039	RR075UB-18"	1320	18	14
1.00-1.24	2203-040	RR100UB-18"	1920	18	15
1.25-1.49	2203-041	RR125UB-18"	1920	18	16
1.50-1.74	2203-042	RR150UB-18"	1920	18	18
1.75-1.99	2203-043	RR175UB-18"	3150	18	20
2.00-2.49	2203-044	RR200UB-18"	3360	18	22
2.50-2.99	2203-045	RR250UB-18"	3360	18	24
3.00-3.49	2203-046	RR300UB-18"	5280	18	26
3.50-3.99	2203-047	RR350UB-18"	5280	18	28

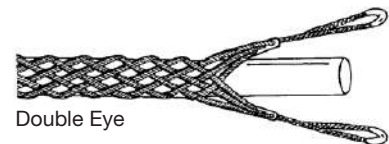
All mesh is available as double weave or stainless steel. Consult factory for availability.

HEAVY DUTY SUPPORT GRIPS

Heavy Duty Support Grips are designed to withstand greater loads and increased stress. The mesh is also available in stainless steel or as single weave.



Cable Range	Part #	Description	Approx.* Breaking Strength	Length	
				Eye	Mesh
Single Eye - Closed Mesh - Double Weave					
.75- .99	2206-001	P075-SE	2700	10	26
1.00-1.24	2206-002	P100-SE	4720	10	29
1.25-1.49	2206-003	P125-SE	4720	10	31
1.50-1.99	2206-004	P150-SE	4720	10	35
Double Eye - Closed Mesh - Double Weave					
.75- .99	2206-006	P075-DE	2700	10	26
1.00-1.24	2206-007	P100-DE	4720	10	29
1.25-1.49	2206-008	P125-DE	4720	10	31
1.50-1.99	2206-009	P150-DE	4720	10	35
2.00-2.49	2206-010	P200-DE	10080	10	37
2.50-2.99	2206-011	P250-DE	10080	10	39
3.00-3.49	2206-012	P300-DE	10080	10	41
3.50-3.99	2206-013	P350-DE	13120	10	45
4.00-4.49	2206-014	P400-DE	13120	10	47



WIDE RANGE STRAIN RELIEF GRIPS

Strain Relief Grips are used on cable to prevent pull-out, damage resulting from flexing and to control arc of bend. Grips are made with a single weave, galvanized steel mesh and aluminum fittings. A gasket is used to provide a seal from dust, filings and other foreign material.



Cable Range	Part #	Description	Fitting Thread Size	Mesh Length
Insulated - NPT Thread				
.22- .32	7303-001	SR-022	1/2"	3-1/4"
.30- .43	7303-002	SR-030	1/2"	3-1/4"
.40- .54	7303-003	SR-040	1/2"	4-3/4"
.52- .73	7303-004	SR-052	3/4"	5-3/4"
.70- .97	7303-005	SR-070	1"	7"
.94-1.25	7303-006	SR-094	1-1/4"	9"
1.20-1.50	7303-014	SRP-120	1-1/2"	11-3/4"
1.50-1.70	7303-015	SRP-140	2"	13-1/4"
1.70-2.00	7303-016	SRP-162	2-1/2"	13-1/2"
2.00-2.45	7303-017	SRP-200	2-1/2"	13-3/4"



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BUS DROP GRIPS

Bus Drop Grips support flexible cord or cable when supplying power from an overhead source. They relieve tension and absorb vibration, protecting the cable.



* Made of galvanized steel

Cable Range	Part #	Description	Approx.* Breaking Strength	Length	
				Eye	Mesh
Single Eye – Wide Range					
.22- .32	7304-001	BD022	1100	3	3-1/2
.30- .43	7304-002	BD030	1100	4	4-1/2
.41- .56	7304-003	BD041	1100	6	5
.53- .73	7304-004	BD053	1100	7	6-1/2
.70- .85	7304-005	BD070	1900	7	8-1/2
.82-1.00	7304-006	BD082	1900	8	8-1/2
.96-1.25	7304-007	BD096	1900	9	11
Universal Bail – Wide Range					
.22- .32	7304-009	BD022-UB	1100	12	3-1/2
.30- .43	7304-010	BD030-UB	1100	12	4-1/2
.41- .56	7304-011	BD041-UB	1100	12	5
.53- .73	7304-012	BD053-UB	1100	15	6-1/2
.70- .85	7304-013	BD070-UB	1900	16	8-1/2
.82-1.00	7304-014	BD082-UB	1900	16	8-1/2
.96-1.25	7304-015	BD096-UB	1900	17	11



Single Eye



Universal Bail

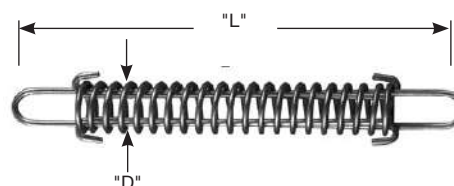
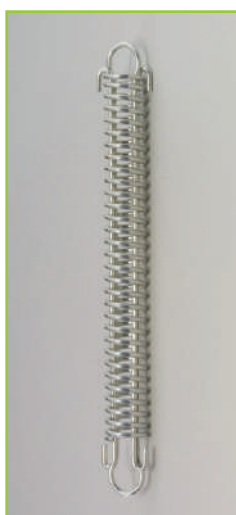


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BUS DROP SAFETY SPRINGS

Safety Springs relieve sudden stress on cord or cable overhead systems when used with Bus Drop Grips. Springs can be used with Single Eye type grips by disassembling drawbar from coil, placing through eye and replacing drawbar.

Description	Part #	Maxium Deflection	Approx.* Breaking Strength	Length No Load	Diameter
40 lb. Spring	203-02-001	2-5/8" at 40 lbs.	500	8-1/4"	3/4"
80 lb. Spring	203-02-002	3-1/8" at 80 lbs.	850	8-1/4"	1"



JUNIOR PULLING GRIPS

Junior Pulling Grips are reusable tools designed for pulling cables, wire and rope. Constructed of galvanized steel mesh, these grips are designed for use in pulling single cable or bundled

cables in overhead, underground, electrical construction and industrial applications. Customized sizes and designs available.



Cable Range	Part #	Description	Approx.* Breaking Strength	Length Mesh
.25- .36	3305-002	JP-25	1700	5"
.37- .49	3305-003	JP-37	1700	7"
.50- .61	3305-004	JP-50	1700	8"
.62- .74	3305-005	JP-62	2800	10"
.75- .99	3305-006	JP-75	4100	10"
1.00-1.25	3305-007	JP-100	4100	12"
.25-1.25	3305-008	JPK-1 Kit includes: JP-25, JP-37 JP-50, JP-62, JP-75, JP-100	—	—

LIGHT DUTY PULLING GRIPS

Light Duty Pulling Grips are single weave construction made of a high grade galvanized steel strand. They feature a flexible eye for easy attachment to a pulling line.

Application

Light duty Pulling Grips are used in general underground electrical construction where pulling tensions are low. They are also used for wiring industrial plants and commercial buildings.



Cable Range	Part #	Description	Approx.* Breaking Strength	Length	
				Eye	Mesh
Short					
.50- .61	3303-001	LD-050S	2800	5	11
.62- .74	3303-002	LD-062S	2800	5	11
.75- .99	3303-003	LD-075S	4000	6	12
1.00-1.24	3303-004	LD-100S	5300	7	13
1.25-1.49	3303-005	LD-125S	5300	7	14
1.50-1.74	3303-006	LD-150S	6800	8	15
1.75-1.99	3303-007	LD-175S	8500	8	17
2.00-2.49	3303-008	LD-200S	8500	9	18
2.50-2.99	3303-009	LD-250S	10600	9	18
3.00-3.49	3303-010	LD-300S	14700	10	20
Standard					
.50- .61	3303-011	LD-050	2800	5	16
.62- .74	3303-012	LD-062	2800	5	16
.75- .99	3303-013	LD-075	4000	6	20
1.00-1.24	3303-014	LD-100	6800	7	20
1.25-1.49	3303-015	LD-125	6800	7	21
1.50-1.99	3303-016	LD-150	6800	8	23
2.00-2.49	3303-017	LD-200	8500	9	25
2.50-2.99	3303-018	LD-250	8500	9	27
3.00-3.49	3303-019	LD-300	10600	10	30
3.50-3.99	3303-020	LD-350	14700	10	32





TUFF-SEAL™ TECHNICAL REFERENCE SECTION

RoHS STATEMENT

Remke Industries supports the European Union's efforts to remove harmful chemicals from electrical products. In compliance with Directive 2011/65/EU of the European Parliament and the Council of the European Union regarding the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), Remke Industries certifies either:

1. The maximum concentration values of weight in homogenous materials for the substances referred to in Article 4(1) of directive 2002/95/EC that are contained in the Products do not exceed the maximum concentration values of 0.1% in respect of lead, mercury, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers, and 0.01% in respect of cadmium. OR
2. The product supplied is exempt from this directive.

Remke Industries certifies that all products of our manufacture are fully compliant to the current RoHS Directive.

ISO CERTIFICATION



On July 1st, 2003 Remke Industries received ISO 9001 : 2000 certification which certifies that Remke is compliant with current ISO standards.

KNOCKOUT DIMENSIONS

N.P.T. Hub Size	Knockout Hole Recommended (Min to Max/ Inches)
1/4"	.540 to .570
3/8"	.671 to .701
1/2"	.859 to .906
3/4"	1.094 to 1.141
1"	1.359 to 1.406
1 1/4"	1.719 to 1.766
1 1/2"	1.969 to 2.016
2"	2.453 to 2.500
2 1/2"	2.953 to 3.000
3"	3.578 to 3.625
3 1/2"	3.570 TO 4.040
4"	4.550 TO 4.630

OPERATING TEMPERATURES

Material	Temperature range
Aluminum	-40°F to +300°F (-40°C to +149°C)
Buna-N	-40°F to +250°F (-40°C to +121°C)
Nylon	-40°F to +225°F (-40°C to +107°C)
Steel	-60°F to +1000°F (-51°C to +537°C)
Stainless Steel	-60°F to +1000°F (-51°C to +537°C)
Neoprene (bushings)	-40°F to +250°F (-40°C to +121°C)
Silicone (bushings)	-150°F to + 390°F (-101°C to +199°C)
Valox	-40°F to +250°F (-40°C to +121°C)
Dome-Cap Connectors:	
Non-Metallic	-22°F to +176°F (-30°C to +80°C)
Metallic	-40°F to +212°F (-40°C to +100°C)

FLAMMABILITY

Component	Rating
Mesh Grip	UL 94HB
Fitting	UL 94V-2

Note: Non-metallic cord connectors will not support combustion.

APPROVALS, CERTIFICATION & COMPLIANCES

AGENCY	FILE NUMBER	PRODUCT OR COMPONENT
Underwriters Laboratories Inc. (UL)	E53599	RSR Series (Straight, 90°, 45°) RSP Series (Straight, 90°) RSM Cord Grips RSRS Cord Grips RSRF Series
	E52002	Liqua-Seal Connectors
	E52002(N)	WH Series Watertight Conduit Hubs
	E157356(N)	WH Series Watertight Conduit Hubs
Canadian Standards Association (CSA)	28985	RSR Series (Straight, 90°, 45°) RSP Series (Straight, 90°) RSRS Cord Grips RSRF Series RSSS Series RSPV Series RTK Series MC Cable Connectors Watertight Conduit Hubs
National Electrical Code (NEC)	Articles 400-10	RSR Series (Straight, 90°, 45°)
	Articles 400-14	RSP Series (Straight, 90°) RSM Cord Grips RSRS Cord Grips RSRF Series
	Articles 501-4(B)	WH Series Watertight Conduit Hubs
	Articles 502-4(A)	WH Series Watertight Conduit Hubs
	Articles 503-3(A)	WH Series Watertight Conduit Hubs
ROHS & WEE	All Tuff-Seal and Tuff-Link Products are Compliant	

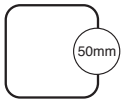

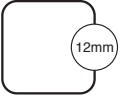

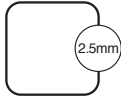
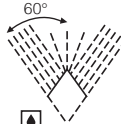
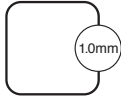


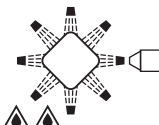


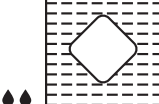
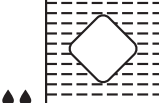
HAZARDOUS LOCATIONS

Definition	Remke Products
The Remke products listed are suitable for use in hazardous locations per Class I, Div. 2, Class II, Div 1 & 2, and Class III, Div. 1 & 2	RSR Series (Straight, 90°, 45°) WH Series Watertight Conduit Hubs RSP Series (Straight, 90°) RSM Cord Grips, RSRS Cord Grips RSRF Series

RATINGS/MATERIAL OF CONSTRUCTION

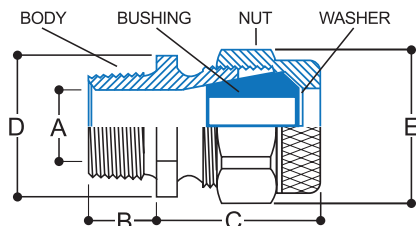
MATERIAL	IP 54 AND NEMA 3	IP 54 AND NEMA 3R	IP65 AND NEMA 4	IP 56 AND NEMA 4X	IP67 AND NEMA 6	IP 52 AND NEMA 12
Aluminum	X	X	X	—	X	X
Nickel-Plated Aluminum	X	X	X	X	X	X
Steel	X	X	X	—	X	X
Stainless Steel	X	X	X	X	X	X
Nylon	X	X	X	—	X	X
Valox	X	X	X	X	X	X

IP RATINGS DEFINITION

First Digit	Protection From Solid Objects	Second Digit	Protection From Moisture
0	Non-Protected	0	Non-Protected
1	 Protected against solid objects over 50mm e.g hands, large tools	1	 Protection against vertically falling drops of water
2	 Protected against solid objects over 12mm e.g hands, large tools	2	 Protection against direct sprays of water up to a 15° angle
3	 Protection from entry by solid objects over 2.5mm e.g. wire or small tools	3	 Protection against direct sprays of water up to a 60° angle
4	 Protection from entry by solid objects over 1.0mm e.g. wires or tools	4	 Protection against water sprayed from any direction. Limited ingress permitted.
5	 Protection against deposits of dust e.g. against equipment damage due to deposits	5	 Protection against low pressure water jets from any direction. Limited ingress permitted
6	 Total protection against dust ingress e.g. Dust-Tight	6	 Protection against high pressure water jets from any direction. Limited ingress permitted.
IP CODE EXAMPLE		7	 Protection against immersion between 15cm and 1M
IP54 = IP (IP LETTER CODE), 5 (1st Digit), 4 (2nd Digit)		8	 Protection against complete and continuous immersion in water under pressure e.g Water-Tight

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RSR STRAIGHT CORD GRIP DIMENSIONS



ALUMINUM AND NICKEL-PLATED ALUMINUM

Conduit Size	RSR Series	Form Size	A Inside Body Dia.	B	C	D Body Hex	E Nut
1/4"	0000	1	0.34	0.44	0.96	0.88	0.96
3/8"	000	1	0.47	0.44	0.96	0.88	0.96
1/2"	1000	1	0.47	0.44	0.95	0.88	0.96
1/2"	100	2	0.61	0.56	1.12	1.00	1.25
1/2"	1200	3	0.62	0.54	1.40	1.25	1.53
3/4"	2100	2	0.61	0.56	1.20	1.12	1.25
3/4"	200	3	0.80	0.57	1.42	1.25	1.53
3/4"	2300	4	0.81	0.57	1.49	1.37	1.72
1"	300	4	0.99	0.62	1.46	1.44	1.72
1"	3500	5	1.06	0.69	1.91	2.00	2.47
1 1/4"	400	5	1.32	0.69	1.80	2.00	2.00
1 1/2"	500	5	1.43	0.69	1.84	2.25	2.47
1 1/2"	5600	6	1.50	0.80	2.39	2.62	2.97
2"	600	6	2.00	0.80	2.39	2.83	2.97
2"	6700	7	1.90	0.80	3.32	4.00	4.20
2 1/2"	700	7	2.36	1.28	3.19	4.00	4.20
3"	8700	7	2.35	1.31	3.07	4.00	4.20
3"	900	9	3.05	1.39	3.14	4.75	4.00
3 1/2"	1150	8	3.25	1.47	4.65	5.36	6.22
4"	1250	9	3.60	1.47	4.86	5.82	6.66

Dimension A is the minimum Inside Body Diameter. Other dimensions are nominal.

Dimension E is cross corners of the nut.

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NYLON AND VALOX

Conduit Size	Form Size	A Inside Body Dia.	B	C	D Body Hex	E Nut
3/8"	1	0.44	0.49	0.70	0.94	0.94
1/2"	2	0.50	0.88	1.12	1.25	1.25
3/4"	3	0.56	0.88	1.38	1.50	1.50

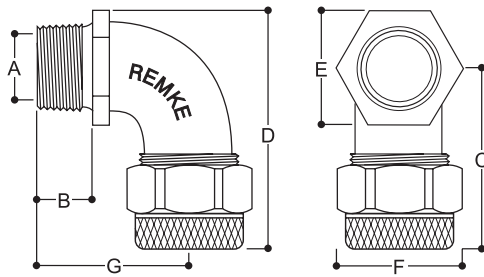
STEEL

Conduit Size	Form Size	A Inside Body Dia.	B	C	D Body Hex	E Nut
3/8"	1	0.47	0.44	0.56	0.88	0.88
1/2"	2	0.62	0.56	0.69	1.00	1.26
3/4"	3	0.81	0.56	0.85	1.25	1.37
1"	4	0.99	0.63	0.94	1.43	1.56

STAINLESS STEEL

Conduit Size	RSSS SERIES	Form Size	A Inside Body Dia.	B	C	D Body Hex	E Nut
3/8"	000	1	0.47	0.44	0.88	0.94	0.96
1/2"	100	2	0.61	0.56	1.18	1.12	1.25
3/4"	200	3	0.81	0.57	1.44	1.37	1.50
1"	300	4	0.99	0.62	1.49	1.56	1.72
1 1/4"	400	5	1.32	0.69	2.04	2.00	2.48
1 1/2"	500	5	1.44	0.69	1.93	2.25	2.48
2"	600	6	2.00	0.80	2.43	2.83	2.97
2 1/2"	700	7	2.36	1.25	2.96	3.75	3.95
3"	900	9	3.05	1.39	3.01	4.75	5.00
3 1/2"	1150	11	3.00	1.47	4.41	5.36	6.22
4"	1250	12	3.60	1.47	4.53	5.82	6.66

RSR SERIES 90° CORD GRIP DIMENSIONS



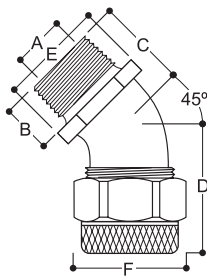
Note: Dimension "E" is across flats
Dimension "F" is across corners

ALUMINUM AND NICKEL-PLATED ALUMINUM

Conduit Size	A Body Bore	B	C	D	E Body Hex	F Nut	G
3/8"	0.45	0.44	1.51	2.00	0.98	0.96	1.31
1/2"	0.58	0.56	1.88	2.39	1.03	1.26	1.50
3/4"	0.76	0.63	2.25	2.88	1.25	1.55	1.99
1"	0.99	0.63	2.41	3.13	1.44	1.74	2.00
1 1/4"	1.28	0.69	3.19	4.41	2.13	2.47	2.69
1 1/2"	1.40	0.69	3.19	4.41	2.13	2.47	2.69
2"	1.90	0.81	4.03	5.56	2.81	2.97	3.19

NOTE: 1 1/4" and 1 1/2" size grips have hex positioned per right view above. All other sizes have hex positioned per left view below.

RSR SERIES 45° CORD GRIP DIMENSIONS



Note: Dimension "E" is across flats
Dimension "F" is across corners

ALUMINUM AND NICKEL-PLATED ALUMINUM

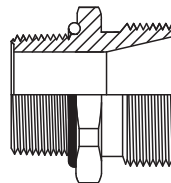
Conduit Size	A Body Bore	B	C	D	E Body Hex	F Nut
3/8"	0.45	0.44	1.51	2.00	0.98	0.96
1/2"	0.58	0.56	1.88	2.39	1.03	1.26
3/4"	0.76	0.63	2.25	2.88	1.25	1.55
1"	0.99	0.63	2.41	3.13	1.44	1.74
1 1/4"	1.28	0.69	3.19	4.41	2.13	2.47
1 1/2"	1.40	0.69	3.19	4.41	2.13	2.47
2"	1.90	0.81	4.03	5.56	2.81	2.97

NOTE: 1 1/4" and 1 1/2" size grips have hex positioned per right view above. All other sizes have hex positioned per left view below.

CONDUIT SEALS AND LOCKNUTS

Conduit Sestd	Size	Locknuts
SOR-38	3/8"	LN-38
SOR-1-VNT	1/2"	LN-50
SOR-2	3/4"	LN-75
SOR-3	1"	LN-100
SOR-4	1 1/4"	LN-125
SOR-51	1 1/2"	LN-150
SOR-16	2"	LN-200
—	2 1/2"	LN-250
—	3"	LN-300

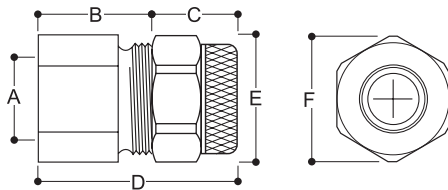
RSR SERIES CORD GRIPS WITH O-RINGS



These Tuff-Seal RSR grips feature an O-ring that creates a watertight seal when they are used in a taper tapped conduit hub. In these applications gaskets must be used in either the knockouts or clearance drilled holes. To ensure a more reliable seal an embedded O-ring should be utilized. Many of the standard Tuff-Seal cord grips listed in this catalog feature a body hex large enough to permit machining a groove for the embedded O-ring.

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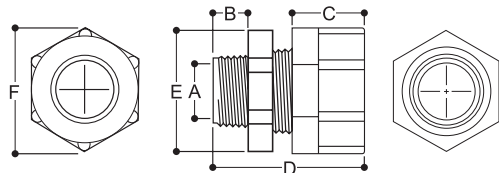
RSRF SERIES CORD GRIP DIMENSIONS



SPECIFICATIONS						
Conduit Size	A Body Bore	B	C	D	E Body Hex	F Nut
3/8"	0.44	0.62	0.75	1.38	0.88	0.99
1/2"	0.62	0.69	1.06	1.75	1.12	1.33
3/4"	0.63	0.81	1.00	1.81	1.31	1.33
1"	0.94	0.94	1.31	2.25	1.63	1.70
1 1/4"	1.44	1.06	1.69	2.75	2.25	2.55
1 1/2"	1.44	1.06	1.69	2.75	2.25	2.55
2"	1.88	1.25	2.38	3.63	2.75	3.25

NOTE: Dimensions for the RSRH Hub Style Cord Grips are the same as above except for the addition of the nipple.

RSP AND RSPV STRAIGHT CORD GRIPS DIMENSIONS



SPECIFICATIONS						
Conduit Size	A Body Bore	B	C	D	E Body Hex	F Nut
3/8"	0.44	0.49	0.70	1.63	0.94	0.94
1/2"	0.57	0.50	0.88	2.01	1.12	1.25
3/4"	0.76	0.56	0.88	2.10	1.38	1.50

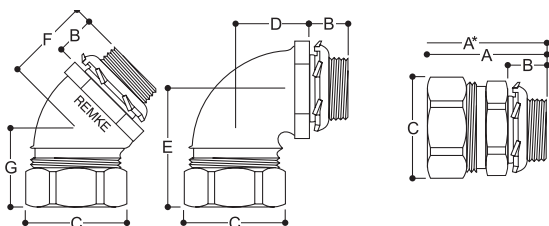
Dimension A is the minimum Body Bore. Other dimensions are nominal.

Dimension D is with the Nut snug but bushing uncompressed.

Dimension E is across the Straight Body hex. flats. Dimension F is across Nut hex. flats.

Dimensions are approximate.

LIQUA-SEAL CONNECTOR DIMENSIONS



SPECIFICATIONS										
Conduit Size	Hub Size	A	A*	B	C Flats	C Corners	D	E	F	G
3/8"	1/2"	1.47	4.47	0.50	1.00	1.10	1.37	1.58	0.84	1.26
1/2"	1/2"	1.47	4.97	0.50	1.13	1.23	1.37	1.75	0.87	1.47
3/4"	3/4"	1.54	5.54	0.56	1.38	1.52	1.53	1.91	0.95	1.55
1"	1"	1.96	6.96	0.64	1.63	1.80	1.81	2.23	1.10	1.81
1 1/4"	1 1/4"	2.09	8.09	0.72	2.25	2.41	2.05	2.33	1.35	1.84
1 1/2"	1 1/2"	2.09	8.84	0.72	2.50	2.68	2.18	2.46	1.43	1.90
2"	2"	2.16	10.16	0.78	3.00	3.21	2.51	2.73	1.53	2.00

NOTE: Nominal Dimensions in Inches. A* Dimension is overall length of connector with wire mesh grip. Larger sizes are available. Contact factory.

THREAD SPECIFICATIONS

PG THREAD SPECIFICATIONS

Thread Size	Major Diameter (mm)	Pitch (mm)
Pg 7	12.5	1.27
Pg 9	15.2	1.41
Pg 11	18.6	1.41
Pg 13.5	20.4	1.41
Pg 16	22.5	1.41
Pg 21	28.3	1.56
Pg 29	37.0	1.56
Pg 36	47.0	1.56
Pg 42	54.0	1.56
Pg 48	59.3	1.56

NPT THREAD SPECIFICATIONS

Thread Size	Major Diameter (mm)	Pitch (mm)
NPT 1/4"	13.7	1.41
NPT 3/8"	17.1	1.41
NPT 1/2"	21.3	1.81
NPT 3/4"	26.7	1.81
NPT 1"	33.4	2.21
NPT 1-1/4"	48.3	2.21
NPT 1-1/2"	47.0	2.21
NPT 2"	60.3	2.21

METRIC THREAD SPECIFICATIONS

Thread Size	Major Diameter (mm)	Pitch (mm)
M12 X 1.5	12	1.50
M16 X 1.5	16	1.50
M20 X 1.5	20	1.50
M25 X 1.5	25	1.50
M32 X 1.5	32	1.50
M40 X 1.5	40	1.50
M50 X 1.5	50	1.50
M63 X 1.5	63	1.50

SELECTED CORD & CABLE DIAMETERS

Type of Cord	AWG Size of Conductors	Number of Conductors-Approximate O.D. in Inches		
		2 Conductor	3 Conductor	4 Conductor
SVO, SVTO	18	.235	.255	—
	18	.290	.320	.335
SJ, SJO, SJT, SJTO	16	.320	.340	.385
	14	.350	.375	.415
	12	.430	.445	.500
	10	.560	.600	.680
	18	.345	.365	.390
S, SO, ST, STO	16	.370	.390	.415
	14	.500	.530	.570
	12	.575	.600	.650
	10	.625	.660	.710
	8	.675	.725	.780
	6	.795	.865	.900
	4	.900	.975	1.100
	2	1.105	1.170	1.290
W	6	.930	1.010	1.100
	4	1.080	1.170	1.270
	3	1.170	1.240	1.340
	2	1.270	1.340	1.480
	1	1.440	1.510	1.680
	1/0	1.520	1.650	1.790
	2/0	1.650	1.750	1.930
	3/0	1.770	1.890	2.070
	4/0	1.920	2.040	2.260
	250	—	2.390	—
	14	—	.400	—
BUS DROP CABLE	12	—	.440	—
	10	—	.500	—
	8	—	.665	—
	6	—	.815	—
	4	—	.955	—
	2	—	1.175	—

FRACTION/DECIMAL/METRIC CONVERSION

Fraction	Decimal	MM	Fraction	Decimal	MM
1/64	0.0156	0.397	33/64	0.5156	13.097
1/32	0.0312	0.794	17/32	0.5312	13.494
3/64	0.0469	1.191	35/64	0.5469	13.891
1/16	0.0625	1.588	9/16	0.5625	14.288
5/64	0.0781	1.984	37/64	0.5781	14.684
3/32	0.0938	2.381	19/32	0.5938	15.081
7/64	0.1094	2.778	39/64	0.6094	15.478
1/8	0.1250	3.175	5/8	0.6250	15.875
9/64	0.1406	3.572	41/64	0.6406	16.272
5/32	0.1562	3.969	21/32	0.6562	16.669
11/64	0.1719	4.366	43/64	0.6719	17.066
3/16	0.1875	4.762	11/16	0.6875	17.462
13/64	0.2031	5.159	45/64	0.7031	17.859
7/32	0.2188	5.556	23/32	0.7188	18.256
15/64	0.2344	5.953	47/64	0.7344	18.653
1/4	0.2500	6.350	3/4	0.7500	19.050
17/64	0.2656	6.747	49/64	0.7656	19.447
7/32	0.2812	7.144	25/32	0.7812	19.844
19/64	0.2969	7.541	51/64	0.7969	20.241
5/16	0.3125	7.938	53/64	0.8281	21.034
21/64	0.3281	8.334	27/32	0.8438	21.431
11/32	0.3438	8.731	55/64	0.8594	21.828
23/64	0.3594	9.128	7/8	0.8750	22.225
3/8	0.3750	9.525	57/64	0.8906	22.622
25/64	0.3906	9.922	29/32	0.9062	23.019
13/32	0.4062	10.319	59/64	0.9219	23.416
27/64	0.4219	10.716	15/16	0.9375	23.812
7/16	0.4375	11.112	61/64	0.9531	24.209
29/64	0.4531	11.509	31/32	0.9688	24.606
15/32	0.4688	11.906	63/64	0.9844	25.003
31/64	0.4844	12.303			
1/2	0.5000	12.700			

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FLEXIBLE ELECTRICAL CORD OR CABLE TO CORD GRIP SELECTION TABLE

Cord Type SJ-SJTO SJO	Cord OD	Hub Size	Straight Cord Grip	Alternate Straight	90 Degree Cord Grip	45 Degree Cord Grip
—	.125-.188	1/2"	RSR-1003	RSR-103	RSR-9103	RSR-45103
—	.125-.188	3/4"	RSR-2103	—	—	—
—	.188-.250	1/2"	RSR-1004	RSR-104	RSR-9104	RSR-45104
—	.188-.250	3/4"	RSR-2104	—	—	—
18/2	.290	1/2"	RSR-1005	RSR-105	RSR-9105	RSR-45105
18/2	.290	3/4"	RSR-2105	—	—	—
18/3	.320	1/2"	RSR-1006	RSR-106	RSR-9106	RSR-45106
18/3	.320	3/4"	RSR-2106	—	—	—
18/4	.335	1/2"	RSR-1006	RSR-106	RSR-9106	RSR-45106
18/4	.335	3/4"	RSR-2106	—	—	—
16/2	.320	1/2"	RSR-1006	RSR-106	RSR-9106	RSR-45106
16/2	.320	3/4"	RSR-2106	—	—	—
16/3	.340	1/2"	RSR-1006	RSR-106	RSR-9106	RSR-45106
16/3	.340	3/4"	RSR-2106	—	—	—
16/4	.385	1/2"	RSR-1007	RSR-107	RSR-9107	RSR-45107
16/4	.385	3/4"	RSR-2107	—	—	—
14/2	.350	1/2"	RSR-1006	RSR-106	RSR-9106	RSR-45106
14/2	.350	3/4"	RSR-2106	—	—	—
14/3	.375	1/2"	RSR-1007	RSR-107	RSR-9107	RSR-45107
14/3	.375	3/4"	RSR-2107	—	—	—
14/4	.415	1/2"	RSR-1007	RSR-107	RSR-9107	RSR-45107
14/4	.415	3/4"	RSR-2107	—	—	—

Cord Type S-STO-SO	Cord OD	Hub Size	Straight Cord Grip	Alternate Straight	90 Degree Cord Grip	45 Degree Cord Grip
18/2	.345	1/2"	RSR-1006	RSR-106	RSR-9106	RSR-45106
18/2	.345	3/4"	RSR-2106	—	—	—
18/3	.365	1/2"	RSR-1006	RSR-106	RSR-9106	RSR-45106
18/3	.365	3/4"	RSR-2106	—	—	—
18/4	.390	1/2"	RSR-1007	RSR-107	RSR-9107	RSR-45107
18/4	.390	3/4"	RSR-2107	—	—	—
16/2	.370	1/2"	RSR-1006	RSR-106	RSR-9106	RSR-45106
16/2	.370	3/4"	RSR-2106	—	—	—
16/3	.390	1/2"	RSR-1007	RSR-107	RSR-9107	RSR-45107
16/3	.390	3/4"	RSR-2107	—	—	—
16/4	.415	1/2"	RSR-107	RSR-1207	RSR-9107	RSR-45107
16/4	.415	3/4"	RSR-2107	—	—	—
14/2	.500	1/2"	RSR-109	RSR-1209	RSR-9109	RSR-45109
14/2	.500	3/4"	RSR-2109	RSR-209	RSR-9209	RSR-45209
14/2	.500	1"	RSR-309	—	RSR-9309	RSR-45309
14/3	.530	1/2"	RSR-109	RSR-1209	RSR-9109	RSR-45109
14/3	.530	3/4"	RSR-2109	RSR-209	RSR-9209	RSR-45209
14/3	.530	3/4"	RSR-209	—	RSR-9210	RSR-45210
14/3	.530	1"	RSR-309	RSR-310	RSR-9309	RSR-45309
14/4	.570	1/2"	RSR-110	RSR-1211	RSR-9110	RSR-45110
14/4	.570	3/4"	RSR-2110	RSR-211	RSR-9210	RSR-45210
14/4	.570	1"	RSR-310	RSR-311	RSR-9310	RSR-45310
12/2	.575	1/2"	RSR-110	RSR-1210	RSR-9110	RSR-45110
12/2	.575	3/4"	RSR-2110	RSR-210	RSR-9210	RSR-45210
12/2	.575	1"	RSR-310	—	RSR-9310	RSR-45310
12/3	.600	1/2"	RSR-110	RSR-1210	RSR-9110	RSR-45110

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FLEXIBLE ELECTRICAL CORD OR CABLE TO CORD GRIP SELECTION TABLE

Cord Type S-STO-SO	Cord OD	Hub Size	Straight Cord Grip	Alternate Straight	90 Degree Cord Grip	45 Degree Cord Grip
12/3	.600	3/4"	RSR-2110	RSR-210	RSR-9210	RSR-45210
12/3	.600	1"	RSR-310	RSR-310	RSR-9310	RSR-45310
12/4	.650	1/2"	RSR-1211	—	—	—
12/4	.650	3/4"	RSR-211	RSR-2311	RSR-9211	RSR-45211
12/4	.650	1"	RSR-311	—	RSR-9311	RSR-45311
10/2	.625	1/2"	RSR-1211	—	—	—
10/2	.625	3/4"	RSR-211	RSR-2311	RSR-9211	RSR-45211
10/2	.625	1"	RSR-311	—	RSR-9311	RSR-45311
10/3	.660	1/2"	RSR-1211	—	—	—
10/3	.660	3/4"	RSR-211	RSR-2311	RSR-9211	RSR-45211
10/3	.660	1"	RSR-311	—	RSR-9311	RSR-45311
10/4	.710	1/2"	RSR-1212	—	—	—
10/4	.710	3/4"	RSR-212	RSR-2312	RSR-9212	RSR-45212
10/4	.710	1"	RSR-312	—	RSR-9312	RSR-45312
8/2	.675	1/2"	RSR-1211	—	—	—
8/2	.675	3/4"	RSR-211	RSR-2311	RSR-9211	RSR-45211
8/2	.675	1"	RSR-311	—	RSR-9311	RSR-45311
8/3	.725	1/2"	RSR-1212	—	—	—
8/3	.725	3/4"	RSR-212	RSR-2312	RSR-9212	RSR-45212
8/3	.725	1"	RSR-312	—	RSR-9312	RSR-45312
8/4	.780	1/2"	RSR-1213	—	—	—
8/4	.780	3/4"	RSR-213	RSR-2313	RSR-9213	RSR-45213
8/4	.780	1"	RSR-313	RSR-3514	RSR-9313	RSR-45313
8/4	.780	1 1/4"	RSR-414	—	RSR-9414	RSR-45414
8/4	.780	1 1/2"	RSR-514	—	RSR-9514	RSR-45514
6/2	.795	1"	RSR-313	RSR-3514	RSR-9313	RSR-45313
6/2	.795	1 1/4"	RSR-414	—	RSR-9414	RSR-45414
6/2	.795	1 1/2"	RSR-514	—	RSR-9514	RSR-45514
6/3	.865	1"	RSR-314	RSR-3514	RSR-9314	RSR-45314
6/3	.865	1 1/4"	RSR-414	—	RSR-9414	RSR-45414
6/3	.865	1 1/2"	RSR-514	—	RSR-9514	RSR-45514
6/4	.900	1"	RSR-315	RSR-3516	RSR-9315	RSR-45315
6/4	.900	1 1/4"	RSR-416	—	RSR-9416	RSR-45416
6/4	.900	1 1/2"	RSR-516	—	RSR-9516	RSR-45516
4/3	.975	1"	RSR-3516	—	—	—
4/3	.975	1 1/4"	RSR-416	—	RSR-9416	RSR-45416
4/3	.975	1 1/2"	RSR-516	—	RSR-9516	RSR-45516
4/4	1.100	1"	RSR-3518	—	—	—
4/4	1.100	1 1/4"	RSR-418	—	RSR-9418	RSR-45418
4/4	1.100	1 1/2"	RSR-518	—	RSR-9518	RSR-45518
2/3	1.170	1"	RSR-3520	—	—	—
2/3	1.170	1 1/4"	RSR-420	—	RSR-9420	RSR-45420
2/3	1.170	1 1/2"	RSR-520	—	RSR-9520	RSR-45520
2/4	1.290	1"	RSR-3522	—	—	—
2/4	1.290	1 1/4"	RSR-422	—	RSR-9422	RSR-45422
2/4	1.290	1 1/2"	RSR-522	—	RSR-9522	RSR-45522

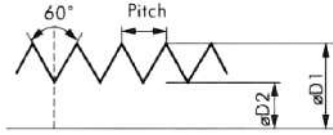
NOTE: If a Mesh Grip is required, add letter 'E' to end of Remke part number. This chart is based on the cable diameters shown. The actual diameter of the cable being used may require the next larger or smaller cord grip bushing.

Cable diameters vary between manufacturers and because cable manufacturers must allow tolerance, their published data should be checked.

The bushing I.D. should be larger than, but as close as possible to, the cable O.D.

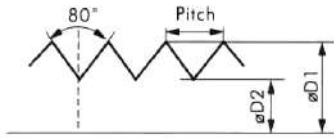
TECHNICAL INFORMATION

Metric ISO Thread Specifications



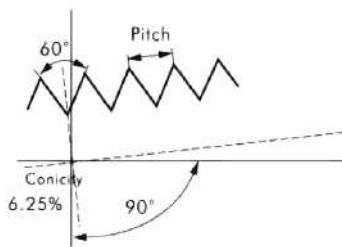
Size	Pitch mm	Outside-Ø D1		Inside-Ø D2		Thru-hole	
		mm	inch	mm	inch	mm	inch
M 12 x 1,5	1,5	12	.472	10,13	.399	12,2	.480
M 16 x 1,5	1,5	16	.630	14,13	.556	16,2	.638
M 20 x 1,5	1,5	20	.787	18,13	.714	20,2	.795
M 25 x 1,5	1,5	25	.984	23,13	.911	25,2	.992
M 32 x 1,5	1,5	32	1.260	30,13	1.186	32,2	1.268
M 40 x 1,5	1,5	40	1.575	38,13	1.501	40,2	1.583
M 50 x 1,5	1,5	50	1.969	48,13	1.895	50,2	1.976
M 63 x 1,5	1,5	63	2.480	61,13	2.407	63,2	2.488

PG Thread Specifications



Size	Pitch		Outside-Ø D1		Inside-Ø D2		Thru-hole	
	mm	inch	mm	inch	mm	inch	mm	inch
PG 7	1,270	.050	12,5	.492	11,28	.444	12,7	.500
PG 9	1,410	.056	15,2	.598	13,86	.546	15,4	.606
PG 11	1,410	.056	18,6	.732	17,26	.680	18,8	.740
PG 13,5	1,410	.056	20,4	.803	19,06	.750	20,7	.815
PG 16	1,410	.056	22,5	.886	21,16	.833	22,8	.898
PG 21	1,588	.062	28,3	1.114	26,78	1.054	28,6	1.126
PG 29	1,588	.062	37,0	1.457	35,48	1.400	37,4	1.472
PG 36	1,588	.062	47,0	1.850	45,48	1.791	47,5	1.870
PG 42	1,588	.062	54,0	2.126	52,48	2.066	54,5	2.146
PG 48	1,588	.062	59,3	2.334	57,78	2.275	59,8	2.354

NPT Thread Specifications



Size	Pitch Inch	Outside-Ø Inch	Number of pitches n
1/4" NPT	0.056	0.54	18
3/8" NPT	0.056	0.675	18
1/2" NPT	0.071	0.84	14
3/4" NPT	0.071	1.05	14
1" NPT	0.087	1.315	11 1/2
1 1/4" NPT	0.087	1.66	11 1/2
1 1/2" NPT	0.087	1.9	11 1/2
2" NPT	0.087	2.375	11 1/2
2 1/2" NPT	0.125	2.875	8
3" NPT	0.125	3.5	8
3 1/2" NPT	0.125	4	8

CHART I International Protection (IP) Ratings to IEC 529

Protection Modes to EN 60529 DIN VDE 0470 Part 1		Second Digit – Degree of Water Protection									
First Digit	Protection against penetration of foreign bodies	IP 0X	IP X1	IP X2	IP X3	IP X4	IP X5	IP X6	IP X7	IP X8	
		No Protection	Protection against dripping water falling vertically	Protection against dripping water even when tilted 15° vertically	Protection against dripping water even when tilted 60°	Protection against splashing water from any direction	Protection against water jets from any direction	Protection against heavy seas from any direction	Protection against effects of immersion	Protection against submersion	
IP X0	No protection	No protection	IP 00								
IP 1X	Protection against touching with the hand	Protection against large solid bodies >50 mm Ø	IP 10	IP 11	IP 12						
IP 2X	Protection against touching with the finger	Protection against med., solid bodies >12.5 mm Ø	IP 20	IP 21	IP 22	IP 23					
IP 3X	Protection against touching with tools, wires, etc., >2.5 mm Ø	Protection against small, solid bodies >2.5 mm Ø	IP 30	IP 31	IP 32	IP 33	IP 34				
IP 4X	Protection against touching with tools, wires, etc., >1 mm Ø	Protection against small, solid bodies >1 mm Ø	IP 40	IP 41	IP 42	IP 43	IP 44				
IP 5X	Protection against touching with tools, wires, etc., >1mm Ø	Protection against internal dust accumulation	IP 50				IP 54	IP 55			
IP 6X	Protection against touching with tools, wires, etc., >1mm Ø	Protection against all dust accumulation	IP 60					IP 65	IP 66	IP 67	IP 68

In some countries a third digit is added. It gives information about the mechanical properties of the equipment. This designation has not yet been standardized according to current DIN and IEC regulations. Devices in this catalogue correspond to digit IP .7.

CHART II NEMA / IP Cross Reference

The chart below provides a cross-reference from NEMA to International Protection (IP) Ratings. This cross-reference is an approximation based on the most current information available. It is not sanctioned by NEMA, IEC, or any other regulatory body. This chart should be used only as a guideline.

IEC 529 Protection Ratings	NEMA Ratings									
	1	2	3	3R	4	4X	5	6	12	13
IP 00	↓									
IP 10	↓									
IP 11		↓								
IP 20			↓							
IP 21			↓							
IP 22			↓							
IP 23			↓							
IP 30			↓							
IP 31			↓							
IP 32			↓							
IP 33			↓							
IP 40			↓							
IP 41			↓							
IP 42			↓							
IP 43			↓							
IP 50			↓							
IP 51			↓							
IP 52			↓							
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IP 54			↓							
IP 55			↓							
IP 56			↓							
IP 60			↓							
IP 61			↓							
IP 62			↓							
IP 63			↓							
IP 64			↓							
IP 65			↓							
IP 66			↓							
IP 67			↓							
IP 68			↓							

WIRE MESH CABLE GRIPS WORKING LOAD AND SAFETY FACTOR CONSIDERATIONS

The grips in the catalog have listed Approximate Breaking Strength. The approximate breaking strength of a Remke grip represents an average calculation based on test factors which have been determined from data established from actual testing performed in our engineering laboratories. The actual testing is performed with new grips on metal rods, subject to straight longitudinal tensile loads applied at a uniform rate. Normal manufacturing and test factors can produce a variation of + or - 20% in the approximate breaking strength values listed.

The broad application of Remke Grips on a wide variety of objects requires that adequate safety factors be used to establish a safe working load. The ratio of the listed approximate breaking strength to the normal working load is the safety factor. As an example, a safety factor of ten (10) would then mean the working load is established by dividing the catalog listed approximate breaking strength by ten (10), or it can be stated that the working load is 1/10 of the catalog listed approximate breaking strength.

It is impossible to set a safety factor suitable for all cases as operating conditions are never the same. The load, the speed, the acceleration, the diameter, number of objects gripped, surface of object being gripped, and the attachments used—all of these should be considered, together with the effects of abrasions, corrosion, prior use, or abuse, etc. The user-engineer must consider all the variables of his specific application, as well as possible accident consequences, before selecting the safety factor to be applied. Where the conditions of the application are not well defined or where risk of personnel or property damage is high, a greater safety factor should be utilized.

Any warranty as to quality, performance or fitness for use of grips is always premised on the condition that the published approximate breaking strengths apply only to new, unused grips and that such products are properly stored, handled, used, maintained, and properly inspected from time to time during the period of use.

The factory should be consulted for specific application recommendations where approximate breaking strength and holding are considered critical.

SUPPORT AND PULLING GRIPS ATTACHMENTS

DOUBLE EYE SUPPORT GRIP

Use when cable is vertical and extends past the grip without bending. May be fastened to open hooks within 15° from vertical axis. Double eye allows fully balanced load as long as eyes are equally supported.

SINGLE EYE SUPPORT GRIP

Use when cable is vertical, when the cable bends, or where a single attachment eases application.

OFFSET EYE SUPPORT GRIP

Use when offset positioning is necessary.

UNIVERSAL BALE SUPPORT GRIP

Use on continuous structural objects such as pipes or beams. The adjustable bale wraps around the object and self-locks into the bar.

APPLICATION GUIDE FOR WIRE MESH PRODUCTS

SUPPORT GRIPS

General Purpose Standard Supports Grips are used indoors or outdoors to support the weight of cable, metal rods, hose, or tubing in vertical or sloping applications. Specific applications include buildings, poles, excavations, mine shafts, towers, elevators, potheads, terminators or other structures. They assist in absorbing strain and flexure, and resist pullout, flexure, and vibration. They will support cable, rods and tubing with loads up to 600 lbs. for runs up to 100 feet. All support grips will hold more than one cable.

MATERIALS

Support grip mesh is made of high grade wire formed into a flexible strand. Standard construction is single weave, double weave is available as custom item. The standard material is tin coated bronze which is non magnetic. Stainless Steel 302 or 304 may be used where high tensile strength of the grip is required or for severe atmospheric conditions. Both of these materials generate only minor heat when exposed to the magnetic field produced by high amperage AC cables. This prevents possible damage to the cable insulation or injury to the user.

FEATURES/BENEFITS

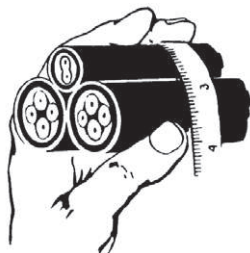
- Security-grip supports cable and removes strain from individual conductors
- Makes connection safe by preventing strain on terminals, eliminating electrical accidents and power failures.
- Eliminates costly downtime and maintenance.
- Easily installed and removed, not requiring any special skill or tool.
- Permits cable to "breathe" (expand or contract) without loss of holding action.
- Instantly relocated or repositioned which saves time and labor.
- Conforms to shape of cable.

WORKING LOAD/SAFETY FACTOR

The approximate breaking strength of a Remke grip represents an average calculation based on test factors which have been determined in our engineering labs using NEW grips and metal rods. The broad application of Remke grips request adequate safety factors to be used to establish a SAFE working load. As a rule of thumb the working load may be considered 1/10 of the approximate breaking strength listed in the catalog. Refer to specific catalog pages for more information.

GRIP SIZE—MULTIPLE CABLES

To determine grip size when more than one cable is held in a single grip, measure envelope of cables to be held using a diameter-circumference tape. For oval configuration (or where envelope of cables cannot be measured) please contact factory.



CLOSED MESH

Used where end of cable is available. Grips may be slid along considerable length of cable faster—easier than using split groups.

CLOSED MESH—DOUBLE EYE—SINGLE WEAVE

Use when cable is vertical and extends past the grip without bending. May be fastened to open hooks within 15° from vertical axis. Allows fully balanced load as long as eyes are equally supported.

CLOSED MESH—SINGLE EYE—SINGLE WEAVE

Use when cable is vertical, when the cable bends, or where a single attachment eases application.

DOUBLE EYE GRIPS

- Breaking strength listed is for straight uniform load with balanced eye loading. If this condition is not true, rating reduction by at least 50% may be required.
- Maximum angle of eye (from longitudinal centerline of grip) is 15°, actual dimension from cable varies with bail length.
- Do not increase diameter of formed eye.
- Decreasing radius of formed eye is usually not harmful.

SINGLE EYE GRIPS

- Single eye is strongest attachment.
- Use when cable bends or where single attachment is desired.
- No unequal loading probe as with double eye type.

BUS DROP GRIPS

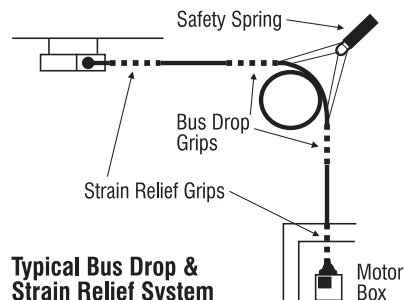
Bus Drop Grips are for indoor use only.

- Support flexible cord or cable when supplying power from an overhead source.
- Designed to support weight of cable, relieve tension and absorb vibration, or flexure.
- Supports the load without damage to the cable.
- Prevent pullouts which can cause accidents, downtime, and loss of production.
- Easy installation.

Bus Drop Grips with Safety Springs can be used to absorb sudden strains caused by accidental hitting, pulling or bending of the cable. They are used primarily where flexible cable connects electrical equipment to bus duct. They are also used to support or restrain air hose and water hose.

Double Bus Drop Grips store excess cable neatly.

Bus Drop Grips with Safety Springs and Strain Relief Grips can provide a complete flexible cord system which adapts to any layout. The Strain Relief Grips relieve the strain on the terminals. The Bus Drop Grips provide positive permanent support which, unlike rigid conduit systems, can be adjusted instantly if equipment is repositioned. Almost any system can be installed quickly even in cases where equipment and bus duct are distantly located or awkwardly positioned.



Typical Bus Drop & Strain Relief System

MATERIAL

The standard mesh material is galvanized steel which has high tensile strength and corrosion resistance (more than adequate for most indoor applications).

Optional stainless steel grips are available.

All Bus Drop Grips are "Wide Range" (to accept more cable per size) with strand equalizers which uniformly distribute compressive force over a large area of the cable for maximum gripping strength with minimum concentration of force without pinching the cable.

BUS DROP GRIPS

FEATURES/BENEFITS

- Few Grips are needed to fit many cable sizes.
- Readily installed, adjusted, repositioned, removed or re-used which saves time and money when relocating plant wiring or machines.
- Easily attached to both open and closed end structures.
- Automatically adjust their gripping to hold the required load.
- No special installer skill or special tools required.
- Increases safety to personnel working in the application area.

WORKING LOAD/SAFETY FACTOR

The approximate breaking strength of the Remke grip represents an average calculation based on test factors which have been determined in our engineering labs using NEW grips and metal rods. As a rule of thumb the working load may be considered 1/10 of the approximate breaking strength listed in the catalog.

CAUTION: The broad application of Remke grips requires adequate safety factors be used to establish a SAFE working load. Refer to specific catalog pages for more information.

Single Eye Grips employ a single eye for each attachment to open hooks or other open end structural members. The formed eye tube assures long, trouble-free resistance to wear. Can be used with SAFETY SPRINGS.

Universal Bale Grips employ a flexible "universal" bail eye for each attachment around closed-end structures such as pipe, columns or through closed eyes. The universal bail is a secure, self-locking attachment and is reusable. Removal is simple and quick. Can be used with SAFETY SPRINGS.

Safety Springs can be used with either SINGLE EYE or UNIVERSAL BALE GRIPS to relieve sudden tensions exerted on cable system. When used with single eye grip, disassemble drawbar from coil, placing drawbar through eye of grip, then replace drawbar.

LIQUA-SEAL® (MESH) CONNECTORS

Liqua-Seal (Mesh) Connectors prevent pullout and provide strain relief when connecting liquid-tight flexible metal conduit to electrical enclosures.

MATERIAL

The standard mesh design is single weave, corrosion free stainless steel. These mesh grips are available with fittings made of steel (3/8"-1" straight connectors) or ductile iron (1 - 1/4"-2" straight connectors and all 45° and 90° connectors), with or without insulated throat.

FEATURES/BENEFITS

- The mesh exerts a uniformly distributed compressive force over a large area of the conduit for maximum gripping without pinching the conduit.
- An endless weave conforms to the conduit, eliminating wedging or crushing of the conduit at that point.
- Mesh material has high tensile strength and corrosion resistance.
- Readily installed, adjusted, repositioned, removed or reused.
- Automatically adjust their gripping to hold the required load.
- No special installer skills or special tools required.

WORKING LOAD/SAFETY FACTOR

(See Wide Range Strain Relief Grips)

STANDARD STRAIN RELIEF CONNECTOR GRIPS

Standard Strain Relief Connector Grips are used in conduit hubs or knock-outs at the point where the portable electrical cable is to be terminated. They provide an environmental seal against dirt, moisture, coolants, corrosive fumes, etc. and provide strain relief where undue strain on the cable would otherwise cause loosening or pull-out at the individual wire terminals. Primary applications are in the wiring of portable power tools, power centers and bus drop cable systems.

MATERIAL

The Standard mesh design is multi-weave corrosion free stainless steel. These mesh grips are available with fittings made of aluminum in straight, 45° or 90° body design; also with fittings made of steel, stainless steel or nylon in straight body design. All these fittings come with neoprene bushings.

FEATURES/BENEFITS

- The mesh exerts a uniformly distributed compressive force over a large area of the cable for maximum gripping without pinching the cable.
- An endless weave conforms to the cable jacket, eliminating wedging or crushing of the cable at that point.
- Mesh material has high tensile strength and corrosion resistance.
- Readily installed, adjusted, repositioned, removed or reused.
- Automatically adjust their gripping to hold the required load.
- No special installer skills or special tools required.

WORKING LOAD/SAFETY FACTOR

(see Wide Range Strain Relief Grips)

WIDE RANGE STRAIN RELIEF GRIPS

Wide Range Strain Relief Grips connect flexible cord or bus drop cable to electrical enclosures and equipment. Designed primarily to prevent pull tension on cable to be transmitted to the joints or terminals. The National Electrical Code requires terminal tension protection. Easily installed. Primary applications are indoors in the wiring of electrical enclosures, such as power boxes, cabinets, panel boards, machine tools, portable power tools, power centers and bus drop cable systems.

They can be used with Bus Drop Grips and Safety Springs to provide a complete flexible cord system that adapts to any layout.

MATERIAL

The standard mesh design is wide range mesh single weave, made of galvanized steel. Gasket seals are made of P.V.C. Available with insulated or non-insulated fittings made of aluminum.

FEATURES/BENEFITS

- The mesh exerts a uniformly distributed compressive force over a large area of the cable for maximum gripping without pinching the cable.
- An endless weave conforms to the cable jacket, eliminating wedging or crushing of the cable at that point.
- Mesh material has high tensile strength and corrosion resistance (more than adequate for most indoor applications).
- P.V.C. gasket seals out large dust particles, lint or metal filings and other contaminants from the electrical connections.
- SR series has a male N.P.T. tapered thread and locknut for the 1/2"–2-1/2" thread size. This allows easy attachment to enclosures up to 3/8" thick. An insulated bushing is provided to prevent metal to conductor contact.
- Adjusts to wide range of cable or cord diameters, so fewer grips are needed to fit many cable sizes.
- Readily installed, adjusted, repositioned, removed or reused.
- Makes relocating plant wiring and machines easy.
- Automatically adjust their gripping to hold the required load.
- No special installer skills or special tools required.

WORKING LOAD/SAFETY FACTOR

The approximate breaking strength of a Remke grip (as shown in the catalog) represents an average calculation based on test factors which have been determined in our engineering labs using NEW grips and metal rods. As a rule of thumb the working load may be considered 1/10 of the approximate breaking strength listed in the catalog. CAUTION: The broad application of Remke grips requires adequate safety factors be used to establish a SAFE working load.

Refer to specific catalog pages for more information.

FACTORY ASSISTANCE

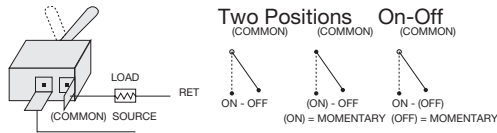
When factory assistance is required for specific applications, etc., please be prepared to provide all pertinent information:

1. Object to be gripped
2. Material of object to be gripped
3. Environment (temperature, abrasion corrosion)
4. Diameter range
5. Eye length
6. Mesh length
7. Mesh material
8. Length of support
9. Other special conditions

SWITCHES INFORMATION

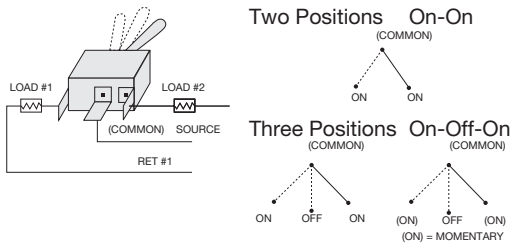
S.P.S.T. (Single Pole/ Single Throw)

A two terminal switch which opens or closes one circuit.



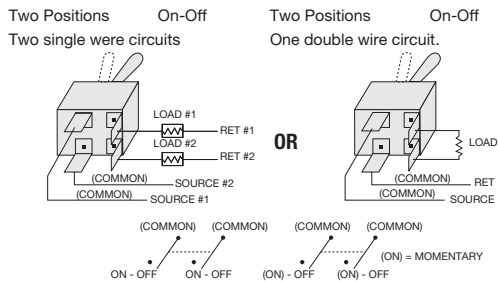
S.P.D.T. (Single Pole /Double Throw)

A three terminal switch that controls two single-wire circuits. Permits only one circuit to be energized at a time.



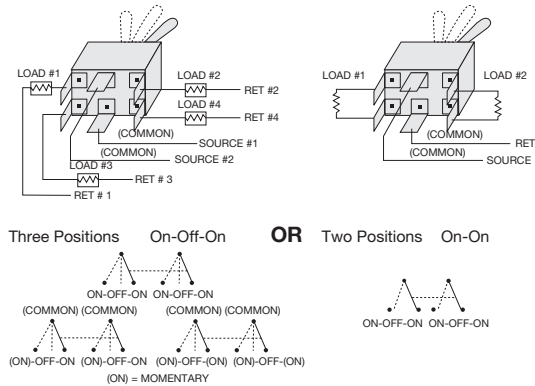
D.P.S.T.(Double Pole/Single Throw)

A four terminal switch that controls one double wire circuit or two single wire circuits.



D.P.D.T. (Double Pole/Double Throw)

A six terminal switch that controls two double wire circuits permitting only one circuit to be energized at a time, or four single wire circuits permitting only two circuits to be energized at a time.



ELECTRICAL TERMS

Ampere – Electrical unit indicating rate of flow of electricity through a circuit.

Circuit – Path taken by electrical current flowing through conductor from one terminal source of supply to another.

Current – The movement of electrons through a conductor measured in amperes.

Double Pole – A switch that operates simultaneously in two separate electric circuits.

Double Throw – A switch that alternately completes a circuit at either end of its extreme positions.

Double Pole/Single Throw – D.P.S.T. – A switch that has four terminals and is used to connect or disconnect two pairs of terminals simultaneously.

Double Pole/Double Throw – D.P.S.T. – A switch that has six terminals and is used to connect one pair of terminals to either of the other two pairs.

Inductive Load – Initial amps needed to engage a circuit and/or load which allows a momentary flow of current when a circuit is open. (Devices that create inductive loads are typically motor coils and solenoids.)

Lamp Load – Light bulb current expressed in amps at a rated voltage.

Momentary – Momentary action is obtained by holding switch in position with pressure. Upon release the switch returns to the previous position.

Reversing – Reversing action is obtained by reversing the polarity of a switch with jumper wires or blades to change the rotation of a motor. Typical applications are winches, plows, radio antennas and fuel selector valves.

Single Pole – A switch that opens, closes, or changes connection in a single conductor of an electrical circuit to a common contact.

Single Throw – A switch that opens, closes, or completes a circuit at only one of the extreme positions of its actuator.

Single Pole/Single Throw – S.P.S.T. – A two terminal switch which opens or closes one circuit.

Single Pole/Double Throw – S.P.D.T. – A three terminal switch for connecting one terminal to either of two other terminal.

Volt – The unit that measures the potential difference in electrical force or "pressure" between two points on a circuit.

Watt – The unit of power that indicates the rate at which a device converts electric current to another form of energy, either heat or motion.

Service Tip

- Replacement switch must have same or higher rating as original switch.
- Unplug circuit or turn off power at electrical panel.
- Remove wires from old switch one-at-a-time and attach to new switch in same manner, or follow wiring diagram.
- For Screw Terminals – Twist stranded wire together. Loop wire clockwise around screw. Tighten securely.
- For Blade Terminals – Use Female push-on terminals. Crimp tightly on stranded wire. Make sure you have a snug fit.
- Turn on power.



SUB-MINI & MINIATURE TOGGLES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12

Sub-Miniature Toggles

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function		Poles/Throws	125VAC/28VDC	AMPS 250VAC	Actuator Style	Actuator Material	Bushing Length	Mounting Hole	Terminal Type	Hardware	Spec. Drawing Page No.
35-000	35-000-BU	1	On	Off	SPST	3A	1.5	Bat	BCP	0.220"	0.195"	Solder	2 N, LR, LW	H-3 A
35-001	35-001-BU	2	On	On	SPDT	3A	1.5	Bat	BCP	0.220"	0.195"	Solder	2 N, LR, LW	H-3 A
35-002	35-002-BU	3	On	On	DPDT	3A	1.5	Bat	BCP	0.220"	0.195"	Solder	2 N, LR, LW	H-3 A

Miniature Toggles

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function		Poles/Throws	125VAC/28VDC	AMPS 250VAC	Actuator Style	Actuator Material	Bushing Length	Mounting Hole	Terminal Type	Hardware	Spec. Drawing Page No.
35-003	35-003-BU	2	On	(On)	SPDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 B
35-004	35-004-BU	2	On	On	SPDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 B
35-005	35-005-BU	2	On	Off	SPDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 B
35-006	35-006-BU	4	On	Off	SPST	5	2	Bat with Boot	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 B
35-007	35-007-BU	2	On	Off	SPDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 B
35-008	35-008-BU	2	(On)	Off	SPDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 B
35-009	35-009-BU	5	On	On	DPDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 C
35-010	35-010-BU	6	On	On	DPDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 E
35-012	35-012-BU	6	On	Off	DPDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 E
35-014	35-014-BU	6	On	(On)	DPDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 E
35-016	35-016-BU	6	On	Off	DPDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 E
35-018	35-018-BU	6	(On)	Off	DPDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 E
35-024	35-024-BU	7	On	On	3PDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 D
35-026	35-026-BU	7	On	Off	3PDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 D
35-036	35-036-BU	8	On	On	4PDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 E
35-038	35-038-BU	8	On	Off	4PDT	5	2	Bat	BCP	0.350"	0.250"	Solder	2 N, LR, LW	H-3 A

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function		Poles/Throws	125VAC/28VDC	AMPS 250VAC	Actuator Style	Actuator Material	Bushing Length	Mounting Hole	Terminal Type	Hardware	Spec. Drawing Page No.
35-053	35-053-BU	9	On	On	SPDT	5	2	Flat Lever	Metal	0.364"	0.250"	PCB	2 N, LR, LW	H-3 F
35-055	35-055-BU	9	On	Off	SPDT	5	2	Flat Lever	Metal	0.364"	0.250"	PCB	2 N, LR, LW	H-3 F
35-057	35-057-BU	10	On	On	DPDT	5	2	Flat Lever	Metal	0.364"	0.250"	PCB	2 N, LR, LW	H-3 F
35-059	35-059-BU	10	On	Off	DPDT	5	2	Flat Lever	Metal	0.364"	0.250"	PCB	2 N, LR, LW	H-3 F
35-070	35-070-BU	11	On	On	SPDT	6	3	Paddle	Polyamide	0.452"	0.500"	Solder/QC	N, KN	H-3 G
35-071	35-071-BU	11	On	Off	SPDT	6	3	Paddle	Polyamide	0.452"	0.500"	Solder/QC	N, KN	H-3 G
35-072	35-072-BU	12	On	On	DPDT	6	3	Paddle	Polyamide	0.452"	0.500"	Solder/QC	N, KN	H-3 G
35-073	35-073-BU	12	On	Off	DPDT	6	3	Paddle	Polyamide	0.452"	0.500"	Solder/QC	N, KN	H-3 G

Notes: (On) = Momentary On KN = Knurled Nut LW = Lock Washer PCB = Printed Circuit Board
 BCP = Brass Chrome Plate LR = Lock Ring N = Nut(s) QC = Quick Connect

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

MINIATURE TOGGLES



Fig. 1



Fig. 2

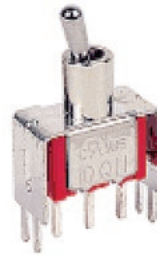


Fig. 3

Miniature Toggles with Printed Circuit Board Terminals

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function			Poles/Throws	125VAC/28VDC	AMPS 250VAC	Actuator Style	Actuator Material	Bushing Length	Mounting Hole	Terminal Type	Hardware	Spec. Drawing Page No.
35-087	35-087-BU	1	On		On	SPDT	5	2	Bat	BCP	0.350"	0.250"	PCB	2 N, LR, LW	H-5 A
35-079	35-079-BU	2	On		On	DPDT	5	2	Bat	BCP	0.350"	0.250"	PCB	2 N, LR, LW	H-5 B
35-083	35-083-BU	2	On	Off	(On)	DPDT	5	2	Bat	BCP	0.350"	0.250"	PCB	2 N, LR, LW	H-5 B
35-085		2	(On)	Off	(On)	DPDT	5	2	Bat	BCP	0.350"	0.250"	PCB	2 N, LR, LW	H-5 B

Miniature Toggles with Printed Circuit Board with Integral Bracket Terminals

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function			Poles/Throws	125VAC/28VDC	AMPS 250VAC	Actuator Style	Actuator Material	Bushing Length	Mounting Hole	Terminal Type	Spec. Drawing Page No.
35-093	35-093-BU	3	On	Off	(On)	SPDT	5	2	Bat	BCP	0.350"	0.250"	PCB†	H-5 C

Notes: (On) = Momentary On
BCP = Brass Chrome Plate

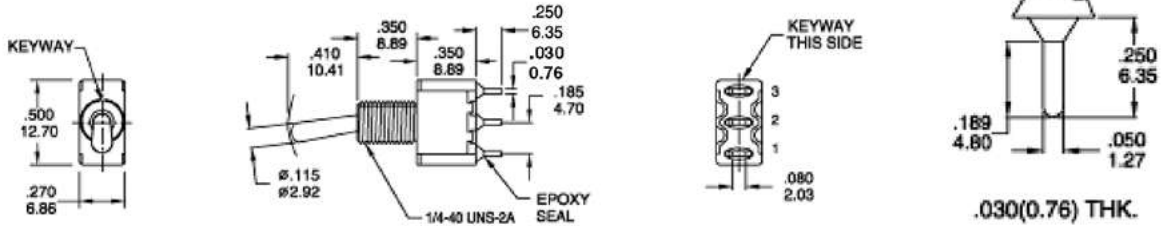
LW = Lock Washer
N = Nut(s)

LR = Lock Ring
PCB = Printed Circuit Board
PCB† = Printed Circuit Board with Integral Bracket

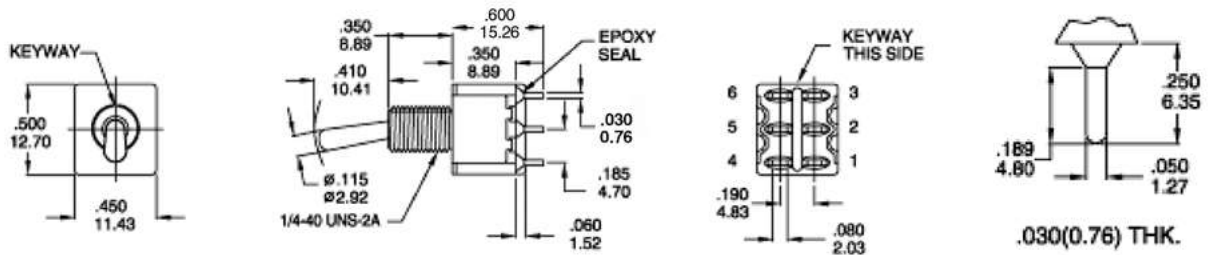
All quantities are single; BU's are packages of 25 Unless otherwise noted.

MINIATURE TOGGLES (Cont.)

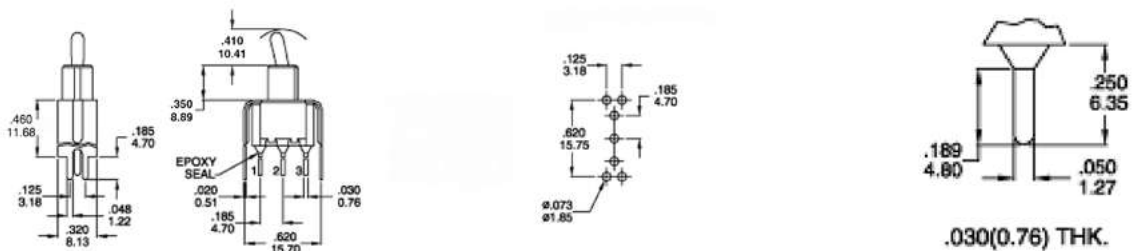
A



B



C



H

MINIATURE TOGGLES

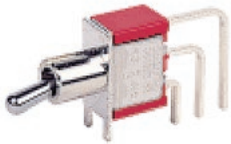


Fig. 1



Fig. 2



Fig. 3



Fig. 4

Miniature Toggles with Printed Circuit Board Right Angle Vertical Mount Terminals

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function			Poles/Throws	125VAC/28VDC	AMPS 250VAC	Actuator Style	Actuator Material	Bushing Length	Mounting Hole	Terminal Type	Spec. Drawing Page No.
35-104	35-104-BU	1	On	Off	On	SPDT	5	2	Bat	BCP	0.350"	0.250"	PCB††	H-7 A
35-107	35-107-BU	2	On		On	DPDT	5	2	Bat	BCP	0.350"	0.250"	PCB††	H-7 B
35-108	35-108-BU	2	On		(On)	DPDT	5	2	Bat	BCP	0.350"	0.250"	PCB††	H-7 B

Miniature Toggles with Printed Circuit Board Right Angle Horizontal Mount Terminals

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function			Poles/Throws	125VAC/28VDC	AMPS 250VAC	Actuator Style	Actuator Material	Bushing Length	Mounting Hole	Terminal Type	Spec. Drawing Page No.
35-115	35-115-BU	3	On		On	SPDT	5	2	Bat	BCP	0.350"	0.250"	PCB†††	H-7 C
35-125	35-125-BU	3	(On)	Off	(On)	SPDT	5	2	Bat	BCP	0.350"	0.250"	PCB†††	H-7 C
35-127	35-127-BU	4	On		On	DPDT	5	2	Bat	BCP	0.350"	0.250"	PCB†††	H-7 D
	35-135-BU	4	(On)	Off	(On)	DPDT	5	2	Bat	BCP	0.350"	0.250"	PCB†††	H-7 D

Notes: (On) = Momentary On
BCP = Brass Chrome Plate

KN = Knurled Nut
LR = Lock Ring

LW = Lock Washer
N = Nut(s)

PCB = Printed Circuit Board
PCB† = Printed Circuit Board with Integral Bracket
QC = Quick Connect
PCB†† = Printed Circuit Board Right Angle Vertical Mount
PCB††† = Printed Circuit Board Right Angle Horizontal Mount

MEDIUM DUTY TOGGLES

H



Fig. 5



Fig. 6



Fig. 7



Fig. 8

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function			Poles/Throws	AMPS 125VAC	AMPS 250VAC	AMPS 12VDC	HP 125-250VAC	Actuator Style	Color	Bushing Length	Mounting Hole	Terminal Type	Hardware	Spec. Drawing Page No.
35-090	35-090-BU	5	On	Off	SPST				16	Paddle*	Red	0.342"	0.500"	QC .250"	N, LN	H-7 E	
35-092	35-092-BU	5	On	Off	SPST				16	Paddle*	Green	0.342"	0.500"	QC .250"	N, LN	H-7 E	
35-094	35-094-BU	5	On	Off	SPST				16	Paddle*	Amber	0.342"	0.500"	QC .250"	N, LN	H-7 E	
35-3008	35-3008-BU	6	On	Off	SPST	15	10		3/4	Paddle	Black		0.550" x 1.125"	QC .250"	N, LN	H-7 F	
35-3091	35-3091-BU	7	On	Off	SPST	15	10		3/4	Paddle**	Amber		0.550" x 1.125"	QC .250"	N, LN	H-7 F	
35-3140	35-3140-BU	8	On	Off	SPST	15	10		3/4	Paddle*	Red/Green	0.379"	0.500"	QC .250"	N, LN	H-7 G	

Notes: *Lighted Paddles (12V Incandescent)
**Lighted Base (125 V Neon)

FN = Face Nut
HP = Horse Power

LN = Locking Nut
N = Nut

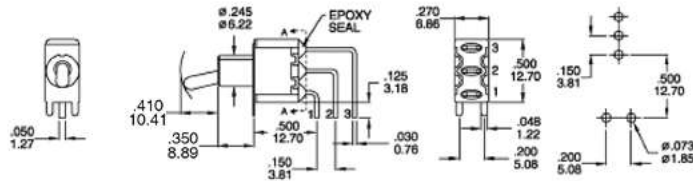
QC = Quick Connect

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

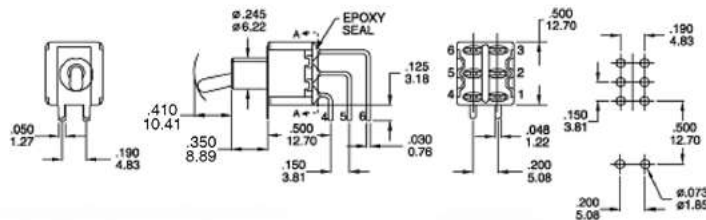
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MINIATURE TOGGLES (Cont.)

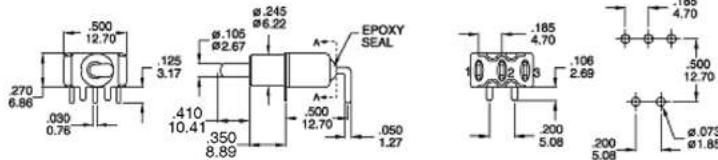
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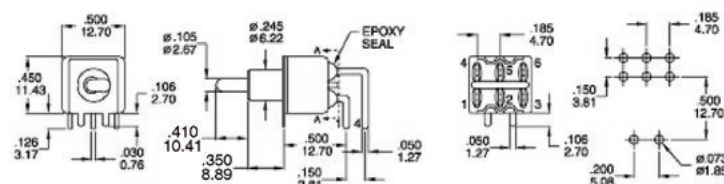
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C

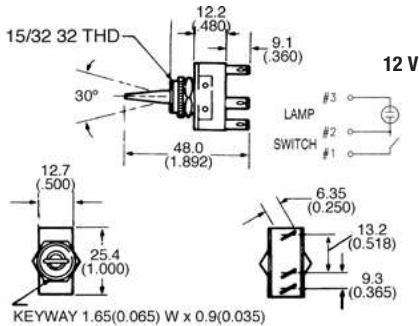


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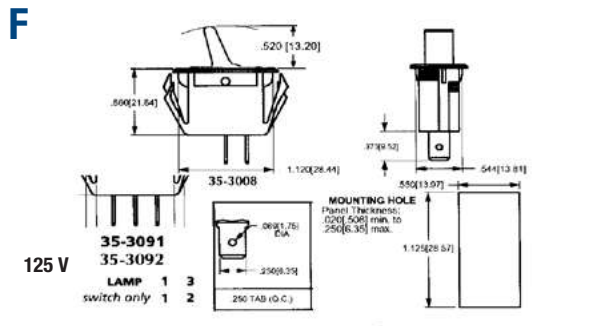


MEDIUM DUTY TOGGLES

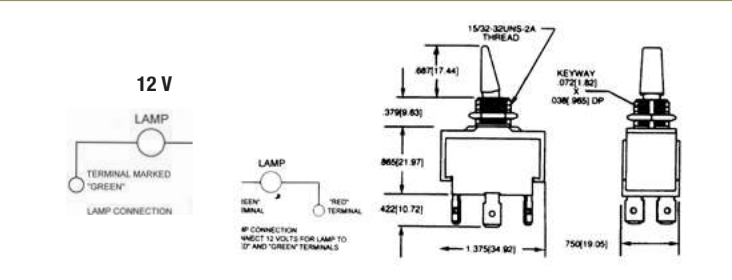
E



F



G



H

MEDIUM DUTY TOGGLES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function		Poles/Throws	AMPS 125VAC	AMPS 250VAC	HP 125-250VAC	Actuator Style	Actuator Material	Bushing Length	Mounting Hole	Terminal Type	Hardware	Spec. Drawing Page No.	
35-132	35-132-BU	1	On	On	DPDT	3			Bat	Metal	0.418"	0.500"	Solder	2 N, ID	H-9 A	
35-064	35-064-BU	2	On	Off	SPST	4	2		Bat	Metal	0.418"	0.500"	Solder	2 N, ID	H-9 A	
35-076	35-076-BU	3	Off	(On)	SPST	6	3	1/4	Bat	Metal	0.465"	0.500"	Solder	N, KN	H-9 B	
35-086	35-086-BU	3	On	Off	(On) SPDT	6	3	1/4	Bat	Metal	0.465"	0.500"	Solder	N, KN	H-9 B	
35-114	35-114-BU	3	On	On	SPDT	6	3	1/4	Bat	Metal	0.465"	0.500"	Solder	N, KN	H-9 B	
35-116	35-116-BU	3	On	(On)	SPDT	6	3	1/4	Bat	Metal	0.465"	0.500"	Solder	N, KN	H-9 B	
35-117	35-117-BU	4	On	On	DPDT	6	3	1/4	Bat	Metal	0.468"	0.500"	QC .250"	N, KN	H-9 C	
35-118	35-118-BU	4	On	Off	DPST	6	3		Bat	Metal	0.468"	0.500"	QC .250"	N, KN	H-9 C	
35-154	35-154-BU	5	On	(On)	DPDT	6	3	1/4	Bat	Metal	0.465"	0.500"	Solder	N, KN	H-9 D	
35-160	35-160-BU	6	On	Off	SPST	6	3		Bat	Metal	0.465"	0.500"	Solder	N, KN	H-9 E	
35-167	35-167-BU	7	On	Off	SPST	6	3		Bat	Metal	0.470"	0.500"	Srew	N, KN, Sc	H-9 F	
35-171	35-171-BU	8	On	Off	SPST	6	3		Ball	Metal	0.276"	0.500"	Srew	N, KN, Sc, ID	H-9 G	
35-186	35-186-BU	9	On	On	DPDT	6	3	3/4	Paddle	Black Plastic	0.379"	0.500"	Solder	N, KN	H-9 H	
35-188	35-188-BU	9	On	Off	On	DPDT	6	3	3/4	Paddle	Black Plastic	0.379"	0.500"	Solder	N, KN	H-9 H

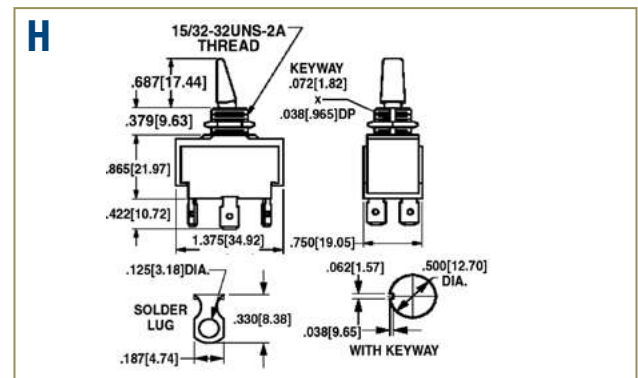
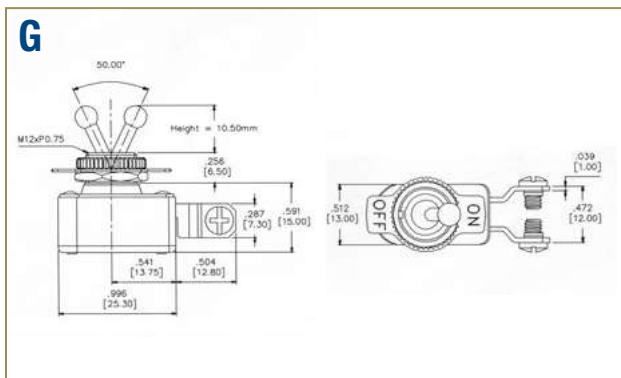
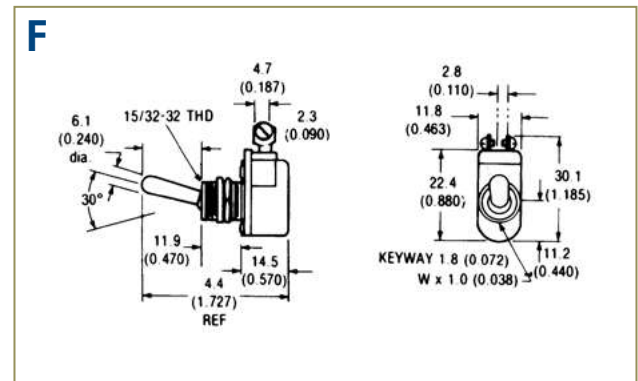
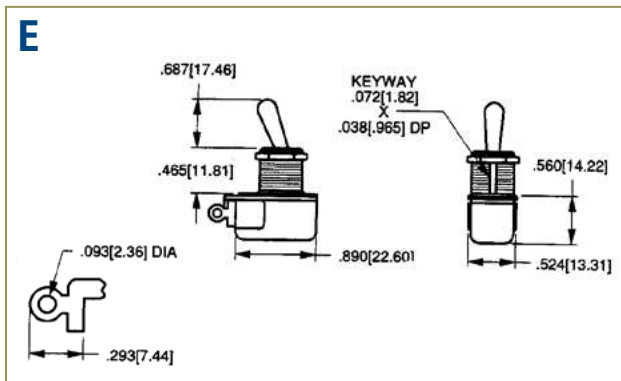
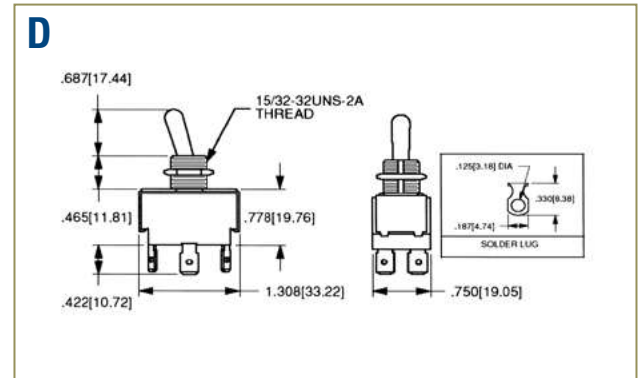
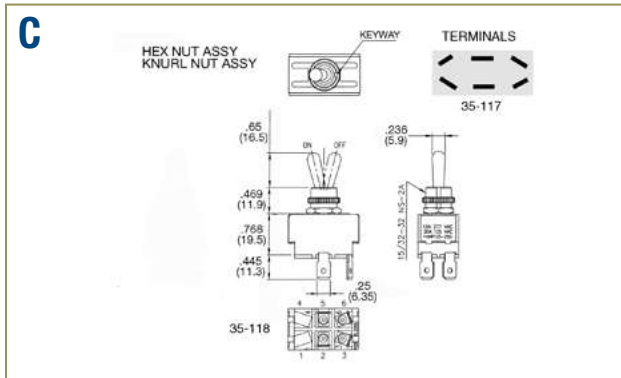
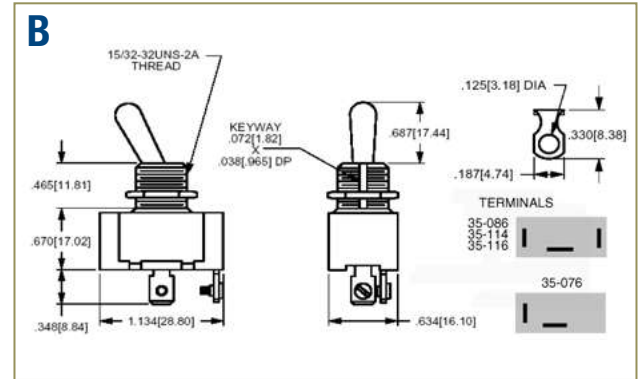
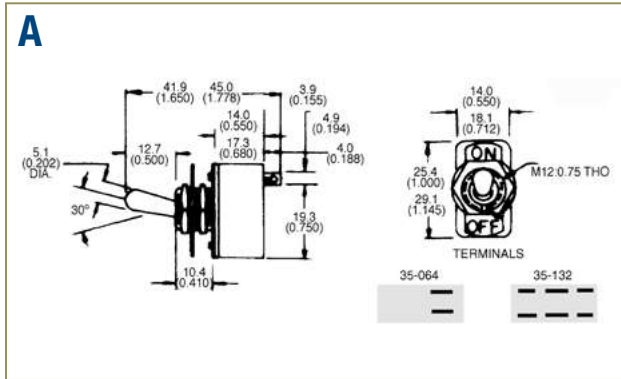
Notes: (On) = Momentary On
 *Rated 20A @ 125-277VAC
 HP = Horse Power
 ID = ID Plate
 KN = Knurled Nut

NN = Nickel Nut
 N = Nut(s)
 QC = Quick Connect
 WL = Wire Lead
 Sc = Screw

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

MEDIUM DUTY TOGGLES (Cont.)



MEDIUM DUTY TOGGLES (Cont.)



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function		Poles/Throws	AMPS 125VAC	AMPS 250VAC	HP 125-250VAC	Actuator Style	Actuator Material	Bushing Length	Mounting Hole	Terminal Type	Hardware	Spec. Drawing Page No.	
35-854	35-854-BU	1	On	Off	SPST	6	3		Bat	Black Plastic	0.342"	0.500"	WL	KN, ID	H-11 A	
35-1076	35-1076-BU	2	Off	(On)	SPST	6	3	1/4	Bat	Metal	0.465"	0.500"	Screw	N, KN, FN, Sc	H-11 B	
35-1114	35-1114-BU	2	On	On	SPDT	6	3	1/4	Bat	Metal	0.465"	0.500"	Screw	N, KN, FN, Sc	H-11 B	
35-1116	35-1116-BU	2	On	(On)	SPDT	6	3	1/4	Bat	Brass	0.465"	0.500"	Screw	N, KN, FN, Sc	H-11 B	
35-3035	35-3035-BU	3	On	Off	SPST	6	3		Bat	Brass	0.325"	0.500"	Screw	2 N	H-11 C	
35-119	35-119-BU	4	On	Off	SPST	10	5	1/2	Bat	Metal	0.500"	0.500"	QC .250"	N, KN	H-11 D	
35-120	35-120-BU	4	On	On	SPDT	10	5	1/2	Bat	Metal	0.500"	0.500"	QC .250"	N, KN	H-11 D	
35-180	35-180-BU	5	On	Off	SPST	10	5	1/2	Paddle	Black Plastic	0.280"	0.500"	QC .250"/Sd	FN, NN	H-11 E	
35-182	35-182-BU	5	On	On	SPDT	10	5	1/2	Paddle	Black Plastic	0.280"	0.500"	QC .250"/Sd	FN, NN	H-11 E	
35-184	35-184-BU	5	On	Off	On	SPDT	10	5	1/2	Paddle	Black Plastic	0.280"	0.500"	QC .250"/Sd	FN, NN	H-11 E
35-3050	35-3050-BU	6	On	Off	SPST	10	4	1/3	Bat	Brass	0.325"	0.500"	WL	2 N	H-11 F	
35-112	35-112-BU	7	On	Off	DPST	15	10		Bat	Metal	0.468"	0.500"	Solder	N, KN	H-11 G	
35-152	35-152-BU	7	On	On	DPDT	15	10		Bat	Metal	0.468"	0.500"	Solder	N, KN	H-11 G	
35-3127	35-3127-BU	11	(On)	Off	(On)†	DPDT	15	10	1/2	Bat	Metal	0.465"	0.500"	QC .250"	FN, N	H-11 H
35-3153	35-3153-BU	8	(On)	Off	(On)	SPDT	15	10	3/4	Paddle	Black Nylon	0.379"	0.500"	QC .250"	FN, NN	H-11 I
35-3169	35-3169-BU	9	(On)	Off	(On)	SPDT	15	10	3/4	Paddle	Black Nylon	0.379"	0.500"	Screw	FN, NN, Sc	H-11 J
35-178	35-178-BU	10	On	Off	SPST	20	20	**	Paddle	Black Plastic	0.342"	0.500"	QC .250"/Sd	N, BFN	H-11 K	
35-3009	35-3009-BU	5	On	Off	SPST	20	10	1-1/2	Paddle	Black Nylon	0.280"	0.500"	QC .250"/Sd	KN	H-11 E	
35-3150	35-3150-BU	8	On	Off	On	SPDT	20*	1-1/2	Paddle	Black Nylon	0.379"	0.500"	QC .250"	FN, NN	H-11 I	
35-3154	35-3154-BU	8	On	Off	DPST	20*		1-1/2	Paddle	Black Nylon	0.379"	0.500"	QC .250"	FN, NN	H-11 I	
35-3156	35-3156-BU	8	On	On	DPDT	20*		1-1/2	Paddle	Black Nylon	0.379"	0.500"	QC .250"	FN, NN	H-11 I	
35-3158	35-3158-BU	8	On	Off	On	DPDT	20*	1-1/2	Paddle	Black Nylon	0.379"	0.500"	QC .250"	FN, NN	H-11 I	
35-3160	35-3160-BU	9	On	Off	SPST	20*		1-1/2	Paddle	Black Nylon	0.379"	0.500"	Screw	FN, NN, Sc	H-11 J	
35-3162	35-3162-BU	9	On	On	SPDT	20*		1-1/2	Paddle	Black Nylon	0.379"	0.500"	Screw	FN, NN, Sc	H-11 J	
35-3164	35-3164-BU	9	On	Off	DPST	20*		1-1/2	Paddle	Black Nylon	0.379"	0.500"	Screw	FN, NN, Sc	H-11 J	
35-3166	35-3166-BU	9	On	On	DPDT	20*		1-1/2	Paddle	Black Nylon	0.379"	0.500"	Screw	FN, NN, Sc	H-11 J	
35-3168	35-3168-BU	9	On	Off	On	DPDT	20*	1-1/2	Paddle	Black Nylon	0.379"	0.500"	Screw	FN, NN, Sc	H-11 J	

Notes: (On) = Momentary On
 *Rated 20A @ 125-277VAC

BFN = Brass Face Nut
 FN = Face Nut
 HP = Horse Power
 ID = ID Plate
 KN = Knurled Nut

NN = Nickel Nut
 N = Nut(s)
 QC = Quick Connect
 Sc = Screw
 Sd = Solder
 WL = Wire Lead
 † = Reversing Toggle
 ** = 1/2 HP@125V, 1 HP@250V

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

HEAVY DUTY TOGGLES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function		Poles/Throws	AMPS 125VAC	AMPS 250VAC	HP 125-250VAC	Actuator Style	Actuator Material	Bushing Length	Mounting Hole	Terminal Type	Hardware	Spec. Drawing Page No.	
35-078	35-078-BU	1	On	Off	SPST	15	10	3/4	Bat	Metal					H-13 A	
35-143	35-143-BU	2	On	Off	On	4PDT	15	10	3/4	Bat	Metal	0.465"	0.500"	Screw	N, FN, Sc	H-13 B
35-145	35-145-BU	2	On		Off	4PST	15	10	3/4	Bat	Metal	0.465"	0.500"	Screw	N, FN, Sc	H-13 B
35-3080	35-3080-BU	2	On		On	4PDT	15	10	3/4	Bat	Metal	0.465"	0.500"	Screw	N, FN, Sc	H-13 B
35-3135	35-3135-BU	3	**	10n	On	†	15	10	1/2	Bat	Brass	0.468"	0.500"	Screw	N, FN, Sc	H-13 C
35-126	35-126-BU	4	On		Off	DPST	16	8	1	Bat	Metal	0.465"	0.500"	Screw	N, FN	H-13 D
35-3070	35-3070-BU	4	On		Off	SPST	16	8	1-1/2	Bat	Metal	0.465"	0.500"	Screw	N, Sc	H-13 E
35-140	35-140-BU	5	On	Off	On	3PDT	17	12	1-1/2	Bat	Metal	0.465"	0.500"	Screw	N, FN, Sc	H-13 F
35-141	35-141-BU	5	On		On	3PDT	17	12	1-1/2	Bat	Metal	0.465"	0.500"	Screw	N, FN, Sc	H-13 F
35-080	35-080-BU	6	On		Off	SPST	20	10*	3/4	Bat	Metal	0.470"	0.500"	Screw	N, KN, Sc, ID	H-13 G
35-144	35-144-BU	7	On		On	DPDT	20	10*	1-1/2	Bat	Metal	0.465"	0.500"	Solder	N, KN	H-13 I
35-146	35-146-BU	6	On		On	DPDT	20	10*	1-1/2	Bat	Metal	0.470"	0.500"	Screw	N, KN, Sc	H-13 I
35-149	35-149-BU	7	On	Off	On	DPDT	20	10	3/4	Bat	Metal	0.465"	0.500"	Solder	N, KN	H-13 I
35-150	35-150-BU	6	(On)	Off	(On)	DPDT	20	10*	1-1/2	Bat	Metal	0.470"	0.500"	Screw	N, KN, Sc	H-13 I
35-151	35-151-BU	6	On	Off	(On)	DPDT	20	10*	1-1/2	Bat	Metal	0.470"	0.500"	Screw	N, KN, Sc	H-13 I
35-153	35-153-BU	8	On	Off	(On)	SPDT	20	10*	3/4	Bat	Metal	0.470"	0.500"	Screw	N, KN, Sc	H-13 H
35-3015	35-3015-BU	9	On	Off	On	SPDT	20	10	3/4	Bat	Brass	0.325"	0.500"	QC .250"	N, KN	H-13 J
35-3025	35-3025-BU	7	On	Off	On	DPDT	20	10*	1-1/2	Bat	Brass	0.468"	0.500"	QC .250"	N, KN	H-13 K
35-3045	35-3045-BU	10	On		Off	DPST	20	10	3/4	Bat	Brass	0.468"	0.500"	QC .250"	N, KN	H-13 L
35-3055	35-3055-BU	9	Off		(On)	SPST	20	10	3/4	Bat	Brass	0.468"	0.500"	QC .250"	N, KN	H-13 J
35-3056	35-3056-BU	9	On		Off	SPST	20	10	3/4	Bat	Brass	0.325"	0.500"	Solder	N, KN	H-13 J
35-3075	35-3075-BU	11	On		Off	DPST	20	10	1-1/2	Bat	Brass	0.465"	0.500"	Screw	N, Sc	H-13 E
35-3170	35-3170-BU	12	On		Off	SPST	***	***	1/2	Bat	Brass	0.500"	0.438"	Screw	KN, Sc	H-13 M

Notes: (On)/(Off) = Momentary On/Off

*Rated @ 277VAC

**1&2 On

***Rated 35A @ 6VDC/20A @ 12VDC

FN = Face Nut

† = Progressive Two Circuit

ID = ID Plate

KN = Knurled Nut

N = Nut

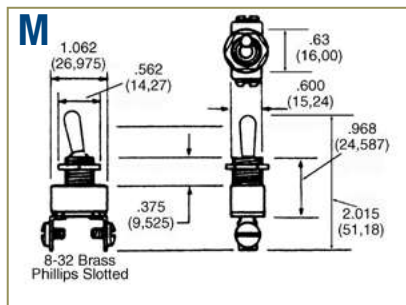
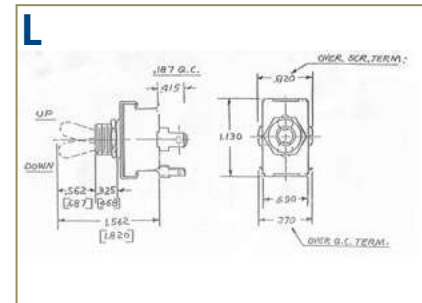
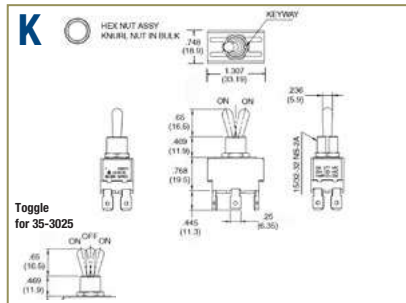
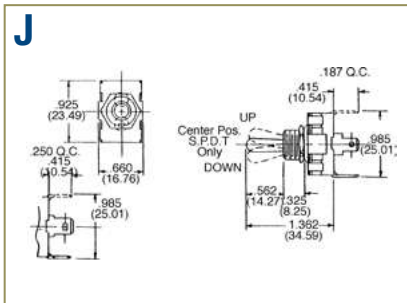
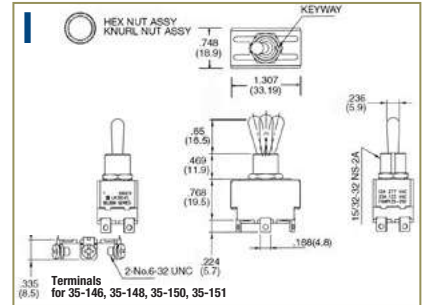
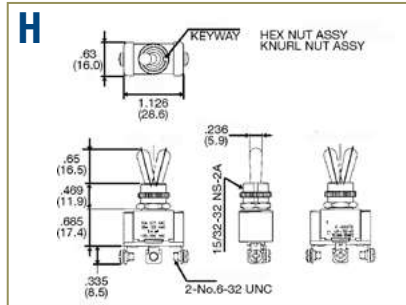
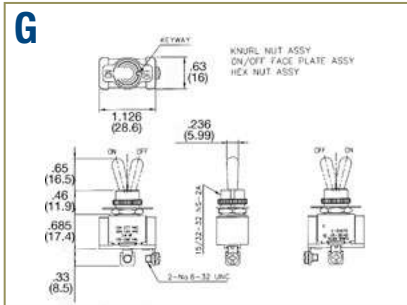
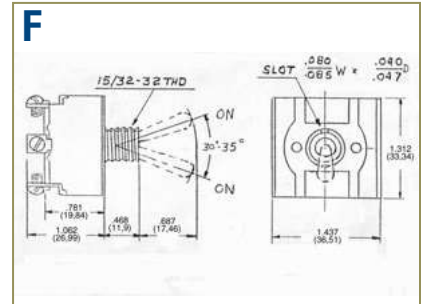
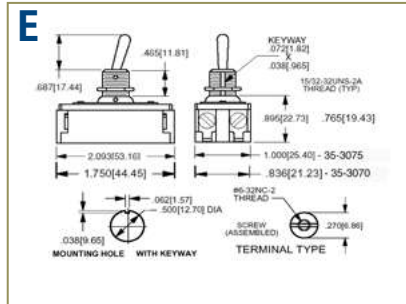
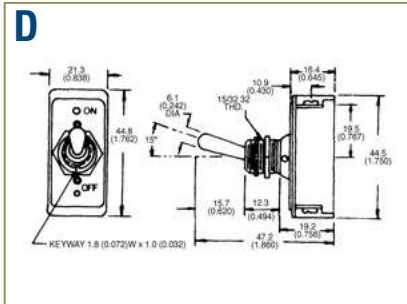
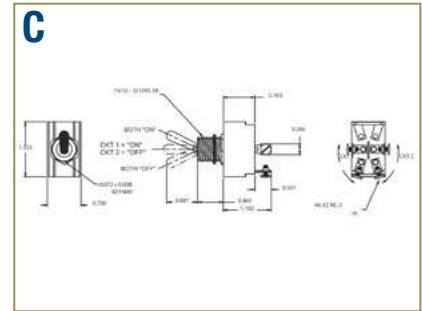
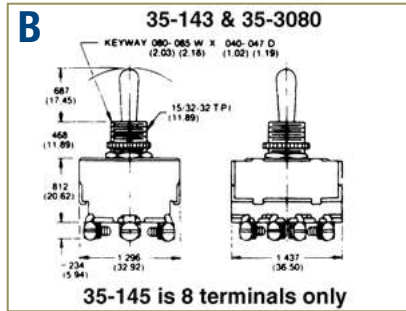
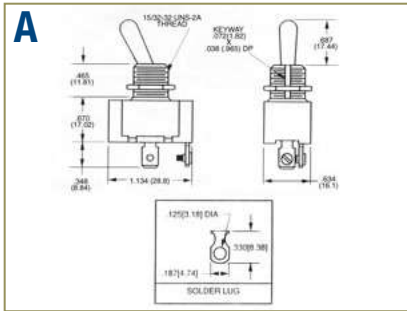
QC = Quick Connect

Sc = Screw

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

HEAVY DUTY TOGGLES (Cont.)



H

HEAVY DUTY TOGGLES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function			Poles/Throws	AMPS 125VAC	AMPS 250VAC	HP 125-250VAC	Actuator Style	Actuator Material	Bushing Length	Mounting Hole	Terminal Type	Hardware	Spec. Drawing Page No.
35-110	35-110-BU	3	On	Off	On	SPDT	20	10*	3/4	Bat	Metal	0.470"	0.500"	Screw	N, KN, Sc	H-15 A
35-130	35-130-BU	3	On		On	SPDT	20	10*	3/4	Bat	Metal	0.470"	0.500"	Screw	N, KN, Sc	H-15 A
35-148	35-148-BU	3	On	Off	On	DPDT	20	10*	1-1/2	Bat	Metal	0.470"	0.500"	Screw	N, KN, Sc	H-15 B
35-155	35-155-BU	5	(On)	Off	(On)	SPDT	20	10*	3/4	Bat	Brass	0.325"	0.500"	Screw	N, KN, Sc	H-15 A
35-156	35-156-BU	4	On		(On)	DPDT	20	10	1-1/2	Bat	Brass	0.468"	0.500"	QC .250"	N, KN	H-15 D
35-185	35-185-BU	2	On		Off	DPST	20	10*	1-1/2	Bat	Metal	0.465"	0.500"	QC .250"	N, KN	H-15 C
35-3005	35-3005-BU	6	On		Off	SPST	20	10	3/4	Bat	Brass	0.325"	0.500"	QC .250"	N, KN	H-15 E
35-3010	35-3010-BU	6	On		On	SPDT	20	10	3/4	Bat	Brass	0.325"	0.500"	QC .250"	N, KN	H-15 E
35-3020	35-3020-BU	4	On		On	DPDT	20	10*	1-1/2	Bat	Brass	0.468"	0.500"	QC .250"	N, KN	H-15 D
35-3060	35-3060-BU	2	On		Off	DPST	20	10*	1-1/2	Bat	Brass	0.468"	0.500"	Screw	N, KN, Sc	H-15 F

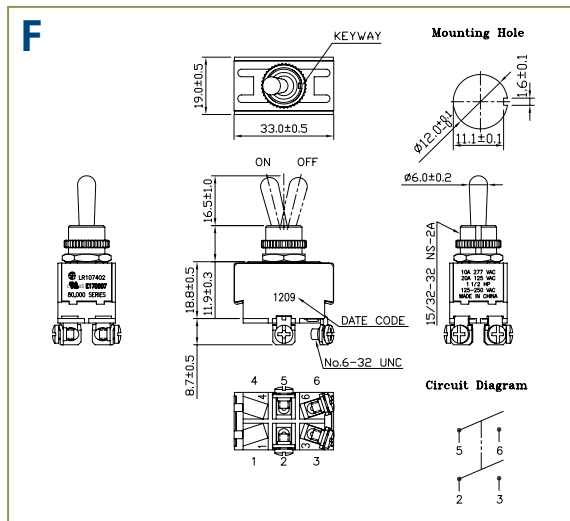
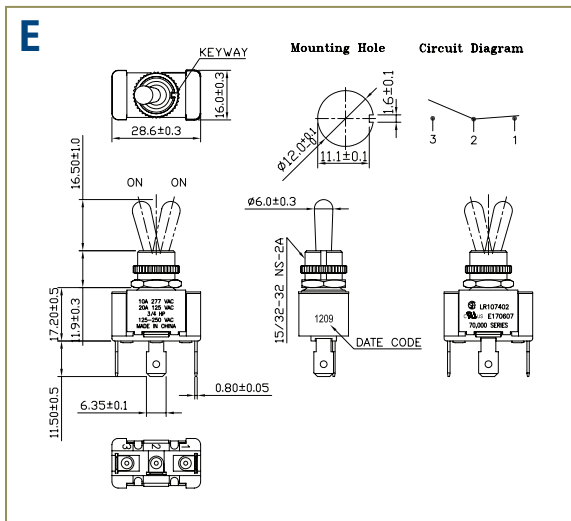
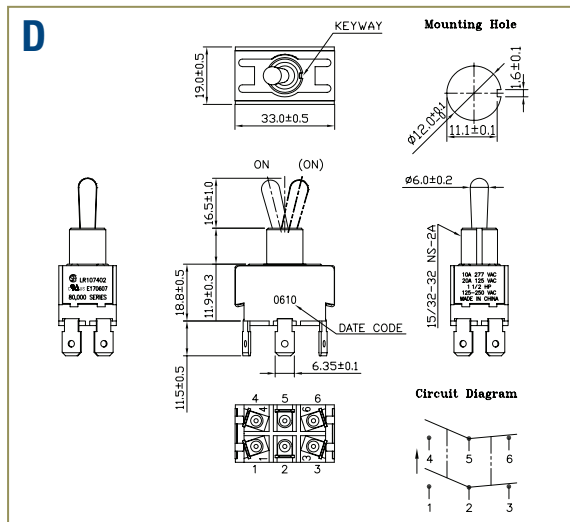
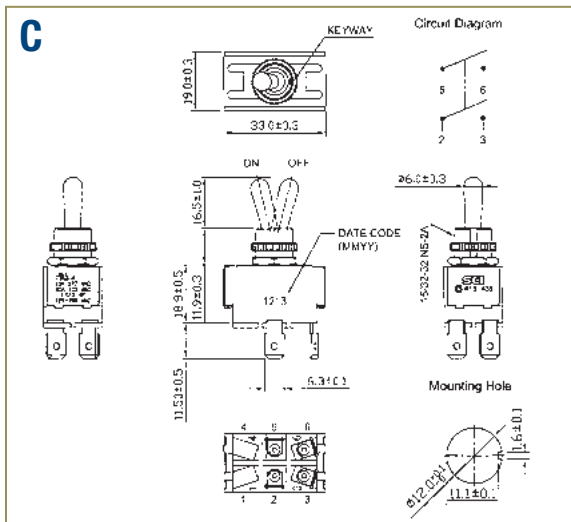
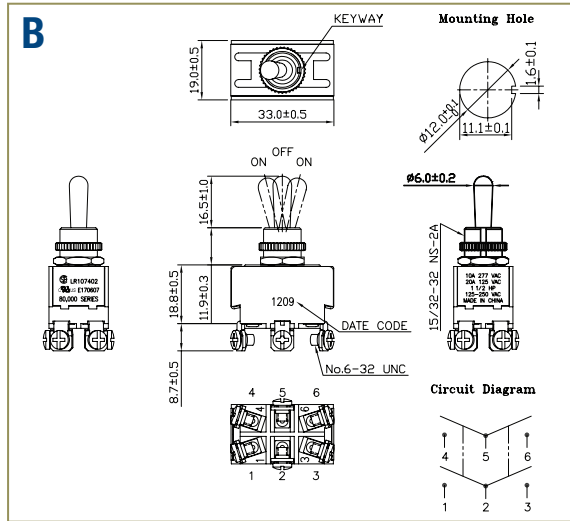
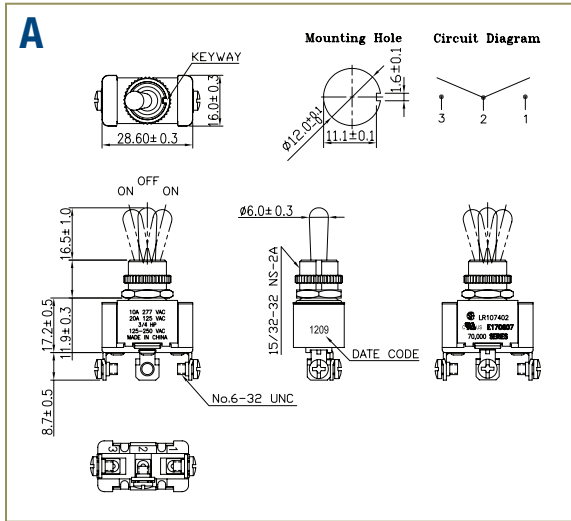
Notes: (On)/(Off) = Momentary On/Off
 *Rated @ 277VAC
 **1&2 On
 ***Rated 35A @ 6VDC/20A @ 12VDC
 FN = Face Nut
 † = Progressive Two Circuit

ID = ID Plate
 KN = Knurled Nut
 N = Nut
 QC = Quick Connect
 Sc = Screw

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

HEAVY DUTY TOGGLES (Cont.)



LIGHTED TOGGLES



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles/Throws	AMPS 12 VDC	Actuator Style	Lamp Color	Terminal Type	Bushing Length	Mounting Hole	Hardware	Spec. Drawing Page No.
35-3301	35-3301-BU	1	On Off	SPST	20	LED Tip	Lighted Green LED	QC .250"	0.400"	0.500"	KN	H-17 A
35-3302	35-3302-BU	1	On Off	SPST	20	LED Tip	Lighted Amber LED	QC .250"	0.400"	0.500"	KN	H-17 A
35-3303	35-3303-BU	1	On Off	SPST	20	LED Tip	Lighted Blue LED	QC .250"	0.400"	0.500"	KN	H-17 A
35-3310	35-3310-BU	2	On Off	SPST	20	LED Duckbill	Lighted Red LED	QC .250"	0.400"	0.500"	KN	H-17 B
35-3311	35-3311-BU	2	On Off	SPST	20	LED Duckbill	Lighted Green LED	QC .250"	0.400"	0.500"	KN	H-17 B
35-3312	35-3312-BU	2	On Off	SPST	20	LED Duckbill	Lighted Amber LED	QC .250"	0.400"	0.500"	KN	H-17 B
35-3313	35-3313-BU	2	On Off	SPST	20	LED Duckbill	Lighted Blue LED	QC .250"	0.400"	0.500"	KN	H-17 B
35-3320	35-3320-BU	3	On Off	SPST	20	LED Paddle	Lighted Red LED	QC .250"	N/A	0.944"	N/A	H-17 C
35-3321	35-3321-BU	3	On Off	SPST	20	LED Paddle	Lighted Green LED	QC .250"	N/A	0.944"	N/A	H-17 C
35-3322	35-3322-BU	3	On Off	SPST	20	LED Paddle	Lighted Amber LED	QC .250"	N/A	0.944"	N/A	H-17 C
35-3323	35-3323-BU	3	On Off	SPST	20	LED Paddle	Lighted Blue LED	QC .250"	N/A	0.944"	N/A	H-17 C
35-3330	35-3330-BU	4	On Off	SPST	20	LED Tip	Lighted Red LED	QC.187"/Solder	N/A	0.866"	N/A	H-17 D
35-3331	35-3331-BU	4	On Off	SPST	20	LED Tip	Lighted Green LED	QC.187"/Solder	N/A	0.866"	N/A	H-17 D
35-3332	35-3332-BU	4	On Off	SPST	20	LED Tip	Lighted Amber LED	QC.187"/Solder	N/A	0.866"	N/A	H-17 D
35-3333	35-3333-BU	4	On Off	SPST	20	LED Tip	Lighted Blue LED	QC.187"/Solder	N/A	0.866"	N/A	H-17 D

Note: All figures are for illustration purpose only, and the number/type of terminals may vary

QC = Quick Connect

KN = Knurled Nut

LIGHTED ROCKER



Fig. 5

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles/Throws	AMPS 12 VDC	Actuator Style	Lamp Color	Terminal Type	Bushing Length	Mounting Hole	Hardware	Spec. Drawing Page No.
35-3370	35-3370-BU	5	On Off	SPST	30	LED Oval Rocker	Lighted Red LED	QC .250"	0.350"	0.500"	KN	H-17 E
35-3371	35-3371-BU	5	On Off	SPST	30	LED Oval Rocker	Lighted Green LED	QC .250"	0.350"	0.500"	KN	H-17 E
35-3372	35-3372-BU	5	On Off	SPST	30	LED Oval Rocker	Lighted Amber LED	QC .250"	0.350"	0.500"	KN	H-17 E
35-3373	35-3373-BU	5	On Off	SPST	30	LED Oval Rocker	Lighted Blue LED	QC .250"	0.350"	0.500"	KN	H-17 E

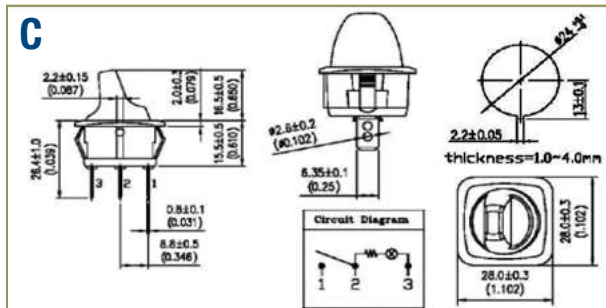
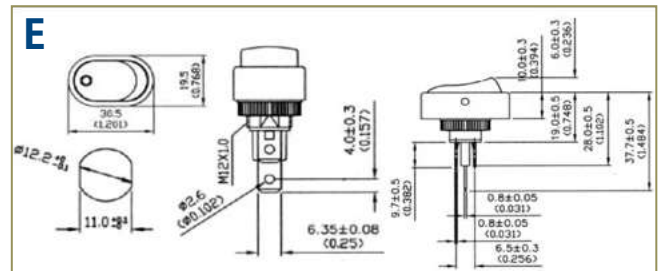
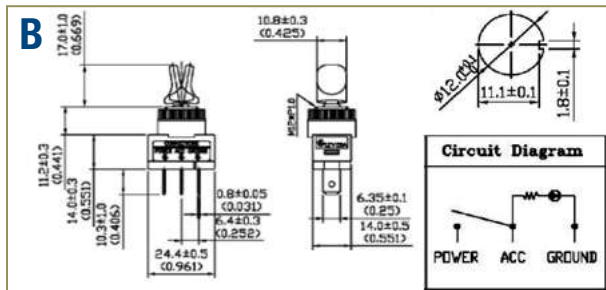
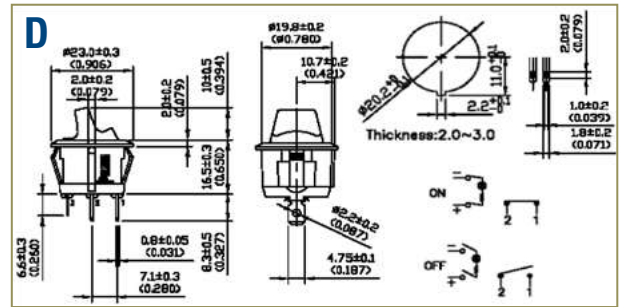
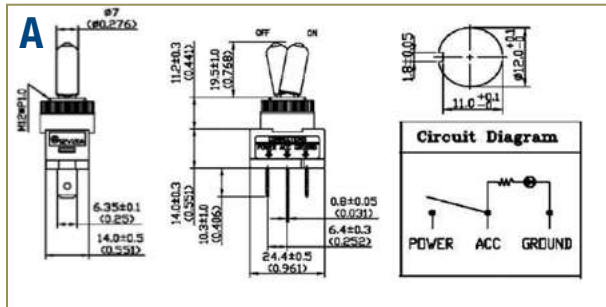
Note: All figures are for illustration purpose only, and the number/type of terminals may vary

QC = Quick Connect

KN = Knurled Nut

All quantities are single; BU's are packages of 25 Unless otherwise noted.

LIGHTED TOGGLES (Cont.)



H

LIGHTED MINIATURE ROCKERS



Fig. 1



Fig. 2

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles/Throws	AMPS 125VAC	AMPS 250VAC	Actuator Color	Terminal Type	Mounting Hole	Spec. Drawing Page No.
35-680	35-680-BU	1	On Off	SPST	5	3	Lighted Orange LED	QC .187"/Solder	0.512" x 0.750"	H-19 A
35-681	35-681-BU	1	On Off	SPST	5	3	Lighted Green LED	QC .187"/Solder	0.512" x 0.750"	H-19 A
35-682	35-682-BU	1	On Off	SPST	5	3	Lighted Red LED	QC .187"/Solder	0.512" x 0.750"	H-19 A
35-645	35-645-BU	2	On Off	SPST	10	5	Lighted Red LED	Solder Eyelet	0.755" x 0.508"	H-19 B
35-646	35-646-BU	2	On Off	DPST	10	5	Lighted Red LED	Solder Eyelet	0.755" x 0.508"	H-19 B

Notes: (On)/(Off) = Momentary On/Off
QC = Quick Connect

(In Series) Resistor Chart for 35-680, 35-681 and 35-682 for DC usage (pilot lamp). Diode for AC usage.

Forward	Current	Reverse	Intensity	Recommended Resistor @ Voltage		
V _{FD}	I _{LED}	V _R	M _{CD}	5V	12V	24V
2.1	10	4V	1.6 typ.	270	1K	2.2K

MINIATURE ROCKERS



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles/Throws	AMPS 125VAC	AMPS 250VAC	Actuator Color	Terminal Type	Imprinting Color and Marking	Mounting Hole	Spec. Drawing Page No.
35-602	35-602-BU	3	On On	SPDT	4	2	Black Plastic	Solder Lug		0.350 x 0.734	H-19 C
35-603	35-603-BU	3	On (On)	SPDT	4	2	Black Plastic	Solder Lug		0.350 x 0.734	H-19 C
35-604	35-604-BU	3	On Off	SPDT	4	2	Black Plastic	Solder Lug		0.350 x 0.734	H-19 C
35-615	35-615-BU	4	On On	SPDT	4	2	Black	QC .187"		0.508 x 0.756	H-19 D
35-605	35-605-BU	5	On Off	SPST	8	4	Black/Red Indicating	QC .187"	Red 0-	0.508 x 0.756	H-19 E
35-606	35-606-BU	6	On On	DPDT	8	4	Black	QC .187"		0.508 x 0.756	H-19 E
35-608	35-608-BU	6	On Off	DPST	8	4	Black	QC .187"		0.508 x 0.756	H-19 E
35-609	35-609-BU	6	On On	SPDT	8	4	Black	QC .187"		0.508 x 0.756	H-19 E
35-674	35-674-BU	7	On On	DPDT	8	4	Red Plastic	Solder Lug		0.625 x 0.523	H-19 F
35-676	35-676-BU	7	On Off	DPDT	8	4	Red Plastic	Solder Lug		0.625 x 0.523	H-19 F
35-642	35-642-BU	8	On Off	SPST	10	6	Black Plastic	QC .250"	White 0-	0.508 x 0.755	H-19 G
35-644	35-644-BU	4	On On	SPDT	10	5	Black	QC .187"		0.508 x 0.756	H-19 D
35-648	35-648-BU	9	On On	DPDT	10	5	Black	QC .187"		0.887 x 0.756	H-19 D
35-607	35-607-BU	6	On Off	SPST	11	N/R	Black	QC .187"		0.508 x 0.756	H-19 E
35-643	35-643-BU	10	On Off	DPST	16*	16	Black Plastic	QC .250"	White 0-	0.483 x 1.021	H-19 H
35-3705		10	On Off	DPST	16	16	White Plastic	QC .250"	Black 0-	0.483 x 1.021	H-19 H

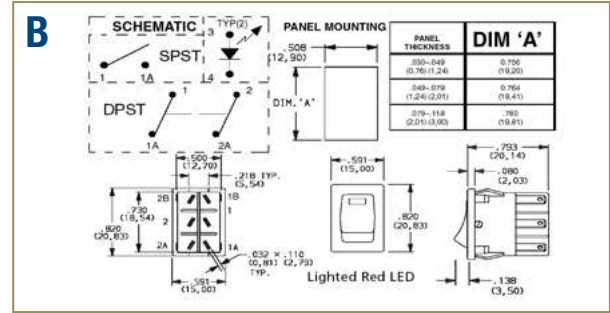
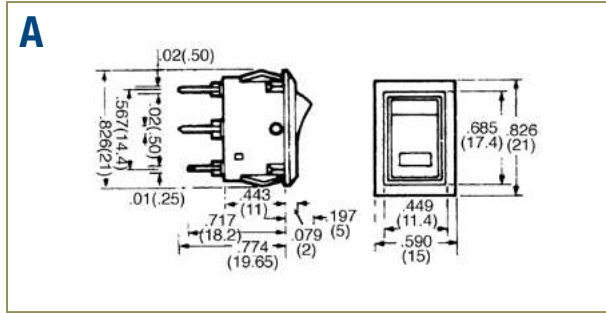
Notes: (On) = Momentary On
*1/4 HP @ 125VAC, 1/2 HP @250VAC
N/R = Not Rated

QC = Quick Connect

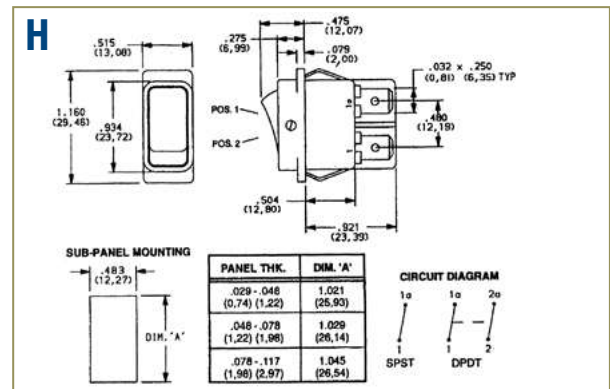
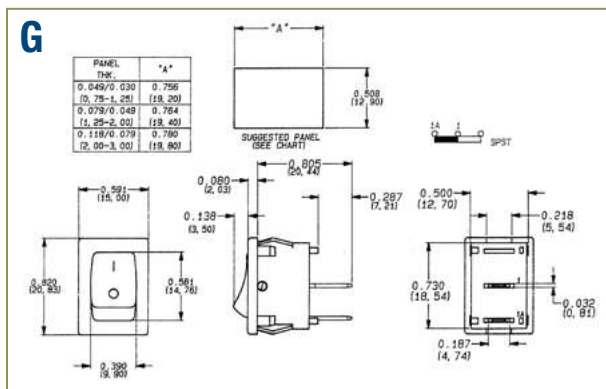
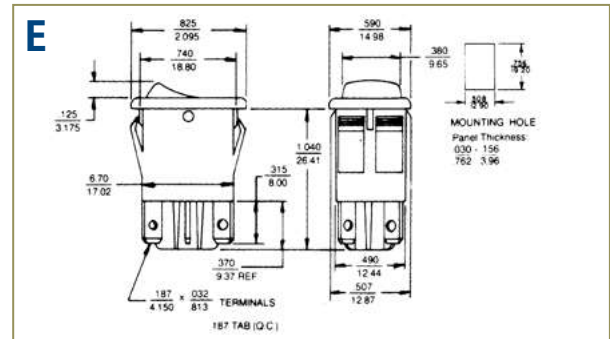
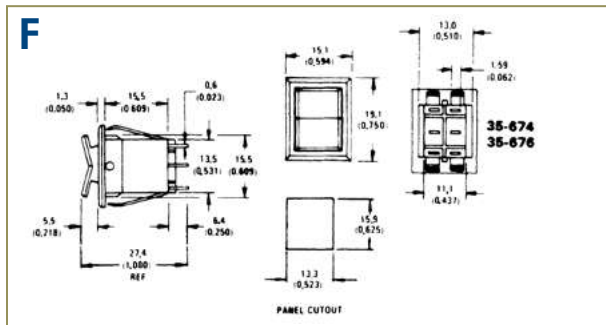
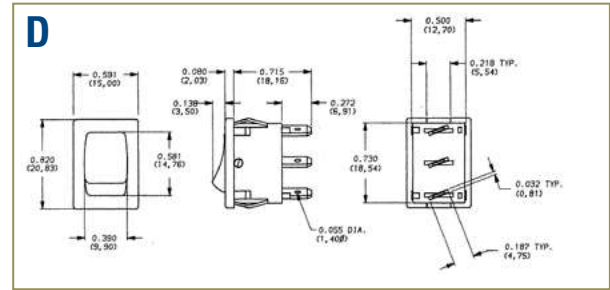
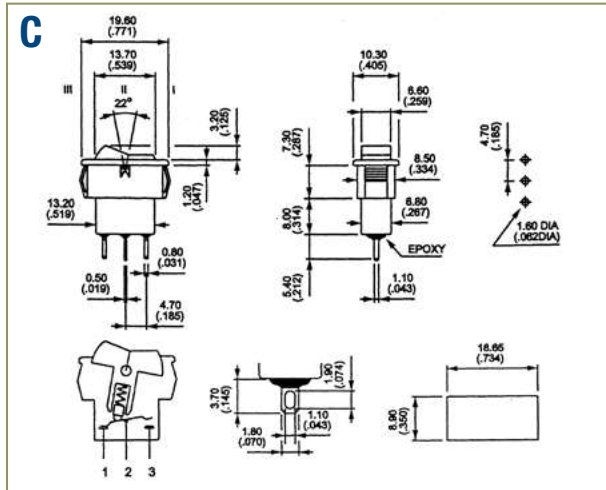
Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

LIGHTED MINIATURE ROCKERS (Cont.)



MINIATURE ROCKERS (Cont.)



STANDARD APPLIANCE ROCKERS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function			Poles/Throws	AMPS 125VAC	AMPS 250VAC	Actuator Color	Actuator Material	Imprinting Color and Marking	Mounting Hole	Spec. Drawing Page No.
35-3760	35-3760-BU	1	(On)		Off	SPST	15*	10	White	Nylon		0.550" x 1.125"	H-21 A
35-691	35-691-BU	2	On		Off	SPST	16	10	Black	Nylon		0.550" x 1.125"	H-21 B
35-693	35-693-BU	3	On		Off	SPST	16	10	Black	Nylon	Red On/Off	0.550" x 1.125"	H-21 B
35-694	35-694-BU	2	On	Off	On	SPDT	16	10	Black	Nylon		0.550" x 1.125"	H-21 B
35-3030	35-3030-BU	3	On		Off	SPST	16*	10	Black	Nylon	Red On/Off	0.550" x 1.125"	H-21 B

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function			Poles/Throws	AMPS 125VAC	AMPS 250VAC	HP 125/250VAC	Actuator Material	Imprinting Color and Marking	Mounting Hole	Spec. Drawing Page No.
35-3600	35-3600-BU	4	On		Off	SPST	15	10	3/4	Black Nylon		0.830" x 1.450"	H-21 D
35-3610	35-3610-BU	4	On		On	SPDT	15	10	3/4	Black Nylon		0.830" x 1.450"	H-21 D
35-3620	35-3620-BU	4	On	Off	On	SPDT	15	10	3/4	Black Nylon		0.830" x 1.450"	H-21 D
35-3630	35-3630-BU	4	On		Off	DPST	15	10	3/4	Black Nylon		0.830" x 1.450"	H-21 D
35-3636	35-3636-BU	4	On		Off	SPST	20	†	1-1/2	Black Nylon		0.830" x 1.450"	H-21 D
35-3640	35-3640-BU	4	On		On	DPDT	15	10	3/4	Black Nylon		0.830" x 1.450"	H-21 D
35-3650	35-3650-BU	4	On	Off	On	DPDT	15	10	3/4	Black Nylon		0.830" x 1.450"	H-21 D
35-3660	35-3660-BU	4	(On)		Off	DPST	15	10	3/4	Black Nylon		0.830" x 1.450"	H-21 D
35-3670	35-3670-BU	4	(Off)		On	DPST	15	10	3/4	Black Nylon		0.830" x 1.450"	H-21 D
35-3680	35-3680-BU	4	(On)		On	DPDT	15	10	3/4	Black Nylon		0.830" x 1.450"	H-21 D
35-3690	35-3690-BU	4	(On)	Off	On	DPDT	15	10	3/4	Black Nylon		0.830" x 1.450"	H-21 D
35-3695	35-3695-BU	4	(On)	Off	(On)	DPDT	15	10	3/4	Black Nylon		0.830" x 1.450"	H-21 D
35-3710	35-3710-BU	4	On		Off	SPST	16	10	3/4	Black Nylon		0.550" x 1.125"	H-21 C
35-3720	35-3720-BU	4	On		On	SPDT	16	10	3/4	Black Nylon		0.550" x 1.125"	H-21 C

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function			Poles/Throws	AMPS 125VAC	AMPS 250VAC	HP 250 VAC	Actuator Material	Imprinting Color and Marking	Mounting Hole	Spec. Drawing Page No.
35-620	35-620-BU	5	On		Off	DPST	15	10	1/4	Red Poly	White On/Off	0.866" x 1.102"	H-21 E
35-640	35-640-BU	6	On		On	SPDT	16	16	1	Black Nylon		1.100" x 0.453"	H-21 F
35-695	35-695-BU	7	(On)	Off	(On)	SPDT	16	16	1	Black Plastic		0.550" x 1.180"	H-21 F
35-654	35-654-BU	8	On		Off	DPST	20	15	N/R	Black Plastic		1.000" x 1.125"	H-21 G

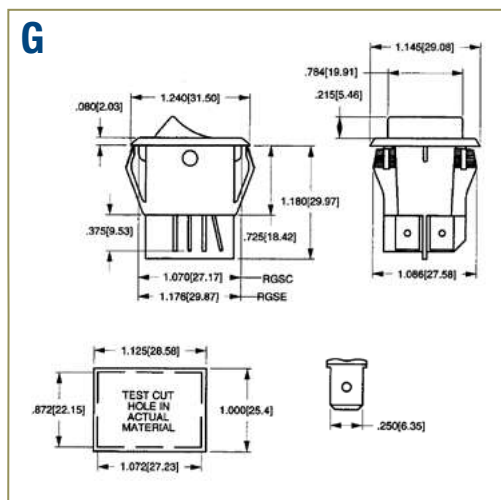
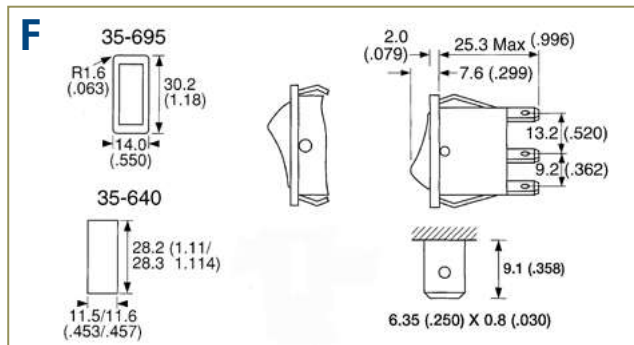
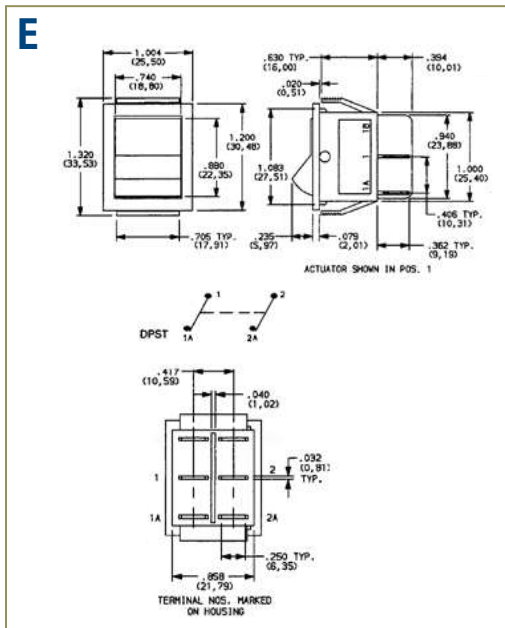
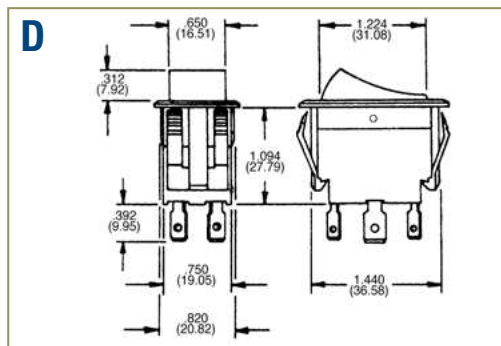
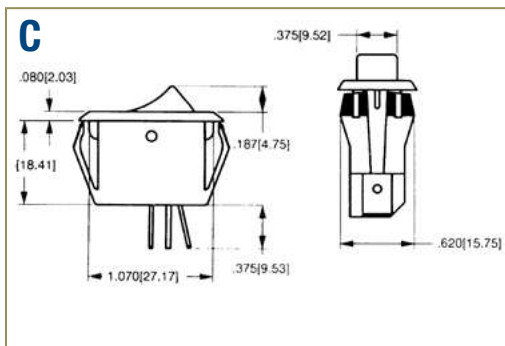
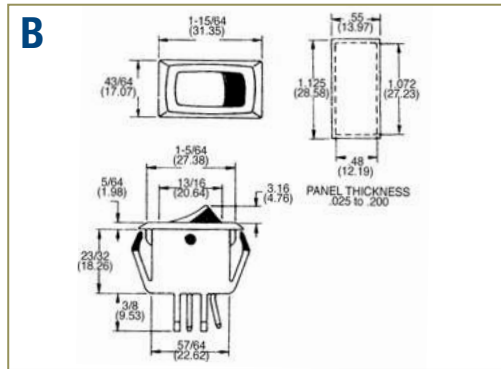
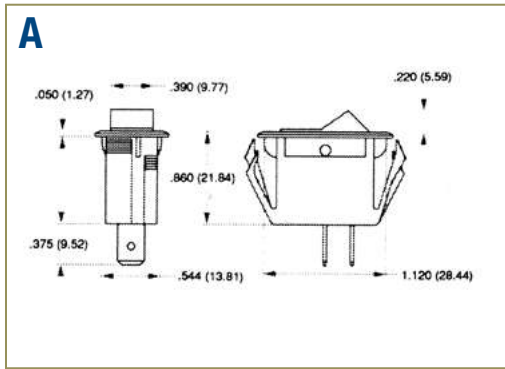
Notes: (On) = Momentary On N/R = Not Rated † = 20A @ 277VAC and 2 H.P. @ 250VAC
 *3/4 H.P. @ 125/250VAC All of the Above have Quick Connect .250" Terminals

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

H

STANDARD APPLIANCE ROCKERS (Cont.)



STANDARD APPLIANCE ROCKERS



Fig. 1



Fig. 2



Fig. 3

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function			Poles/Throws	AMPS 125VAC	AMPS 250VAC	Actuator Color	Actuator Material	Imprinting Color and Marking	Mounting Hole	Spec. Drawing Page No.
35-691	35-691-BU	1	On		Off	SPST	16	10	Black	Nylon		0.550" x 1.125"	H-23 A
35-694	35-694-BU	1	On	Off	On	SPDT	16	10	Black	Nylon		0.550" x 1.125"	H-23 B

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function			Poles/Throws	AMPS 125VAC	AMPS 250VAC	HP 125/250VAC	Actuator Material	Imprinting Color and Marking	Mounting Hole	Spec. Drawing Page No.
35-3600	35-3600-BU	2	On		Off	SPST	15	10	3/4	Black Nylon		0.830" x 1.450"	H-23 C
35-3630	35-3630-BU	2	On		Off	DPST	15	10	3/4	Black Nylon		0.830" x 1.450"	H-23 D
35-3640	35-3640-BU	2	On		On	DPDT	15	10	3/4	Black Nylon		0.830" x 1.450"	H-23 E
35-3695	35-3695-BU	2	(On)	Off	(On)	DPDT	15	10	3/4	Black Nylon		0.830" x 1.450"	H-23 F
35-695	35-695-BU	3	(On)	Off	(On)	SPDT	16	16	1	Black Plastic		0.550" x 1.180"	H-23 G

Notes: (On) = Momentary On N/R = Not Rated † = 20A @ 277VAC and 2 H.P. @ 250VAC
 *3/4 H.P. @ 125/250VAC All of the Above have Quick Connect .250" Terminals

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

LIGHTED APPLIANCE ROCKERS



Fig. 4

On-Off Circuit Function

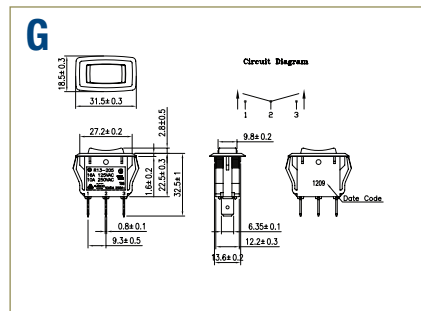
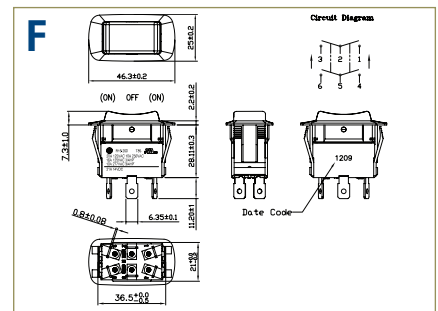
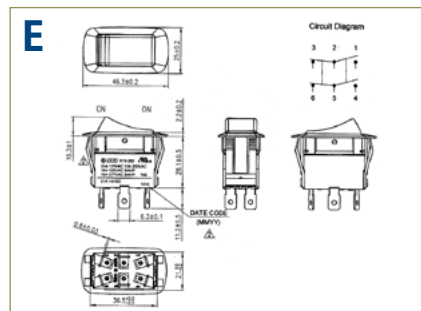
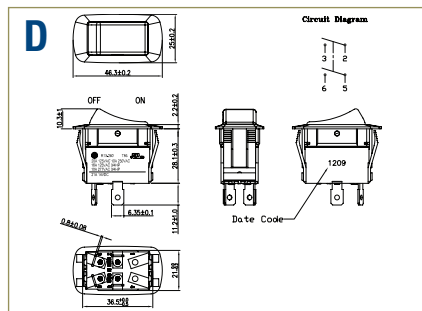
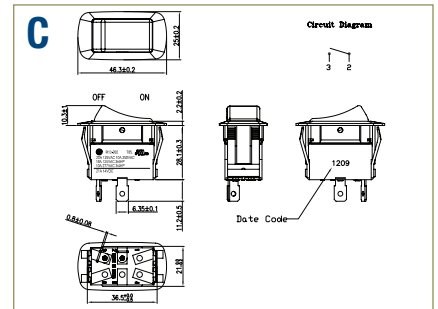
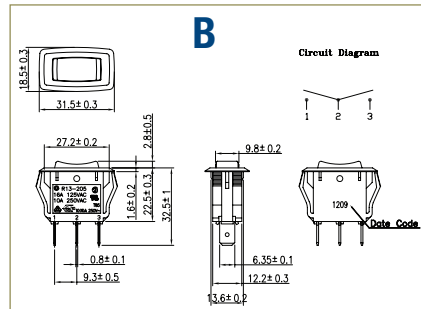
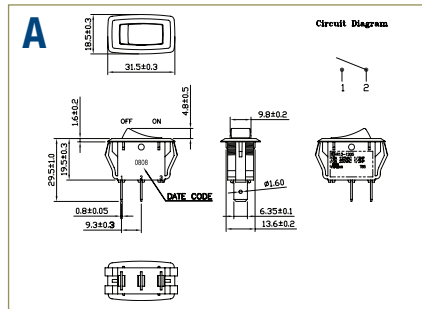
Retail Part No.	Bulk Part No.	Figure No.	Poles/Throws	AMPS 125VAC	AMPS 250VAC	HP 125 VAC	HP 250 VAC	HP 125-250 VAC	Actuator Color	Actuator Material	Lamp Voltage	Mounting Hole	Spec. Drawing Page No.
35-688	35-688-BU	5	SPST	15*	15	1/2	1		Lighted Red	Nylon	125V Ne	0.453" x 1.110"	H-23 H

Notes: *Built-in Resistor
 **Rated 10 Amps @ 30VDC
 ***Requires external resistor and diode for AC applications (not included)
 Incdt = Incandescent
 Ne = Neon
 N/R = Not Rated
 QC = Quick Connect

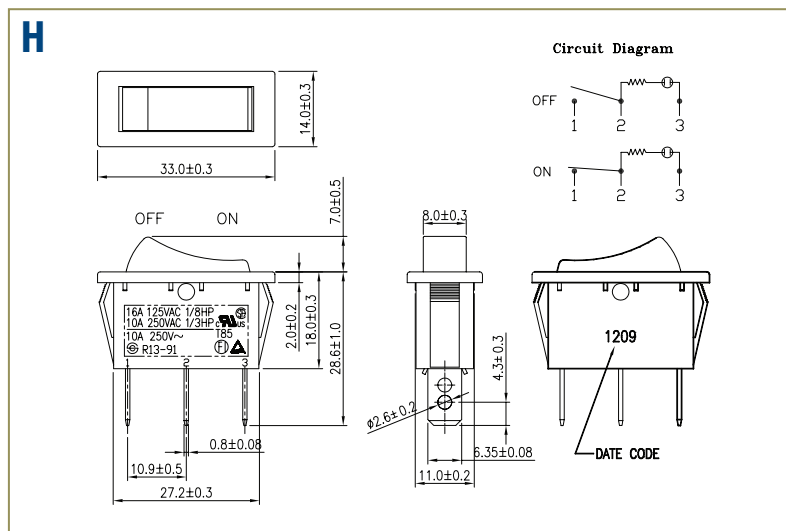
Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

STANDARD APPLIANCE ROCKERS (Cont.)



LIGHTED APPLIANCE ROCKERS (Cont.)



H

LIGHTED APPLIANCE ROCKERS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10

On-Off Circuit Function

Retail Part No.	Bulk Part No.	Figure No.	Poles/Throws	AMPS 125VAC	AMPS 250VAC	HP 125 VAC	HP 250 VAC	HP 125-250 VAC	Actuator Color	Actuator Material	Lamp Voltage	Mounting Hole	Spec. Drawing Page No.
35-660	35-660-BU	1	SPST	** 10	N/R				Lighted Red		12V Incdt	0.550" x 1.125"	H-25 A
35-684	35-684-BU	2	SPST	12	N/R	N/R	N/R	N/R	White w/ Red LED	Plastic	***	0.430" x 1.189"	H-25 B
35-696	35-696-BU	3	SPST	15	8			1/2	Lighted Red	Nylon	125V Ne	0.508" x 0.756"	H-25 C
35-656	35-656-BU	4	SPST	15	10			1/2	Black w/Lighted Amber	Nylon	125V Ne	1.450" x 0.830"	H-25 D
35-662	35-662-BU	5	SPST	15	15	1/2	1		Lighted Amber	Nylon	12V Incdt	0.453" x 1.110"	H-25 E
35-664	35-664-BU	5	SPST	15	15	1/2	1		Lighted Green	Nylon	12V Incdt	0.453" x 1.110"	H-25 E
35-688	35-688-BU	5	SPST	15*	15	1/2	1		Lighted Red	Nylon	125V Ne	0.453" x 1.110"	H-25 E
35-689	35-689-BU	6	SPST	15	10			3/4	Lighted Red	Nylon	125V Ne	0.550" x 1.125"	H-25 F
35-3790	35-3790-BU	6	SPST	15	10			3/4	Lighted Amber	Nylon	125V Ne	0.550" x 1.125"	H-25 F
35-621	35-621-BU	7	SPST	16	16				Black w/Red Lens	Plastic	125V Ne	0.870" x 1.070"	H-25 G
35-3730	35-3730-BU	8	SPST	16	10				Lighted Amber		125V Ne	0.550" x 1.125"	H-25 H
35-3740	35-3740-BU	8	SPST	16	10				Lighted Red		125V Ne	0.550" x 1.125"	H-25 H
35-655	35-655-BU	9	DPST	20	15	N/R	N/R		Lighted Red	Plastic	125V Ne	1.000" x 1.125"	H-25 I
35-686	35-686-BU	10	DPST	20	20	1/2	1		Black w/Red Indicator	Plastic	125V Ne	1.180" x 0.870"	H-25 J

Notes: *Built-in Resistor

**Rated 10 Amps @ 30VDC

***Requires external resistor and diode for AC applications (not included)

Incdt = Incandescent

Ne = Neon

N/R = Not Rated

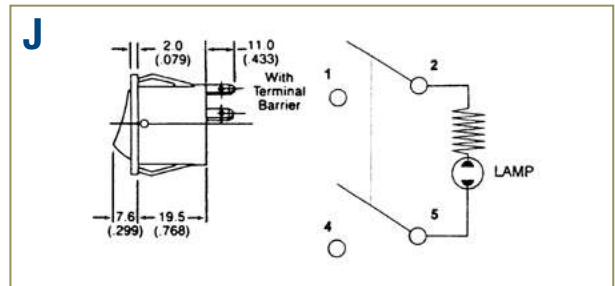
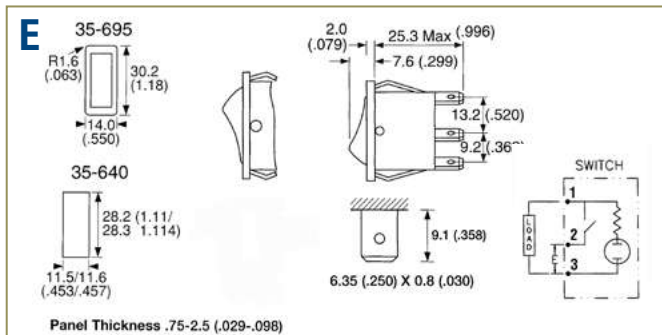
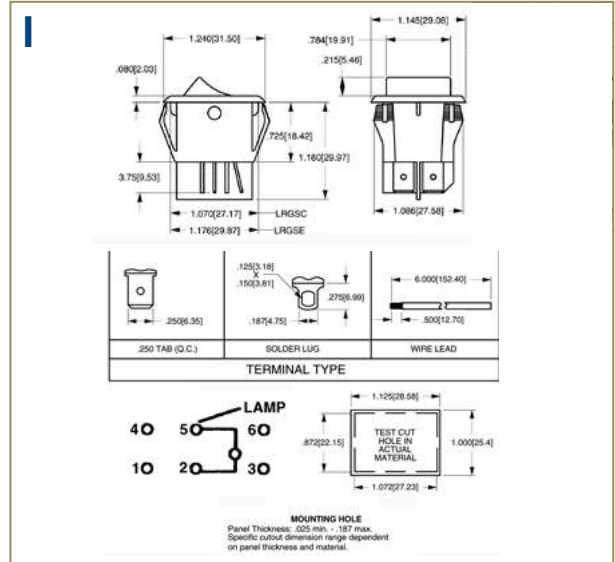
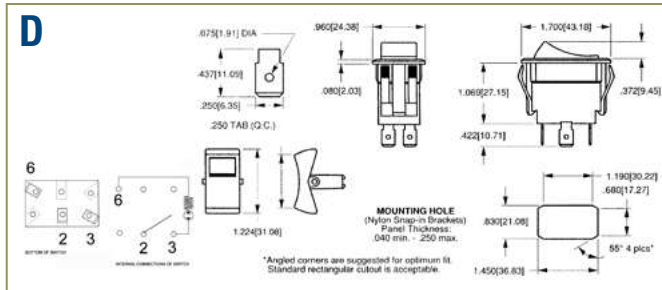
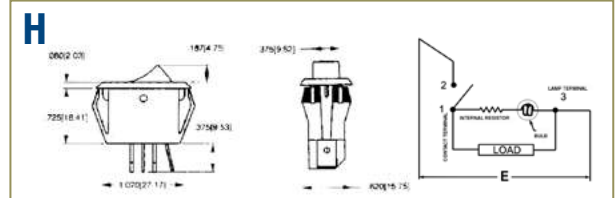
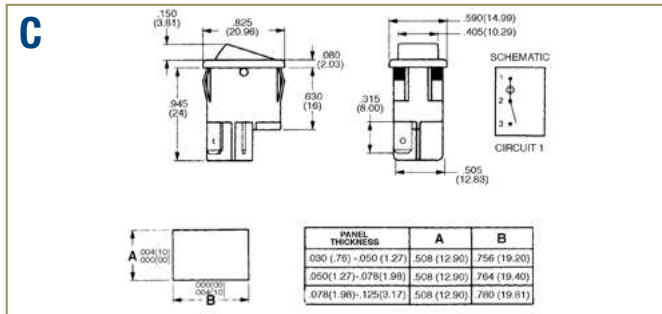
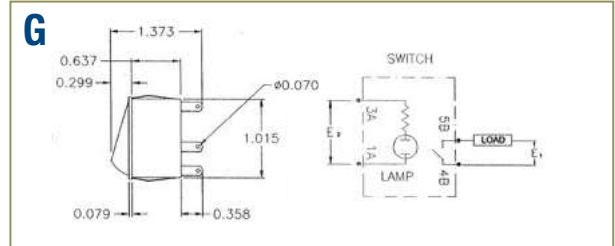
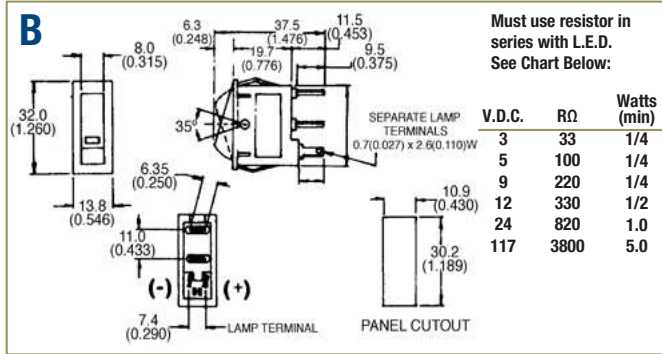
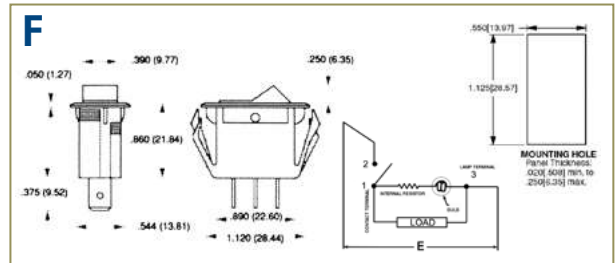
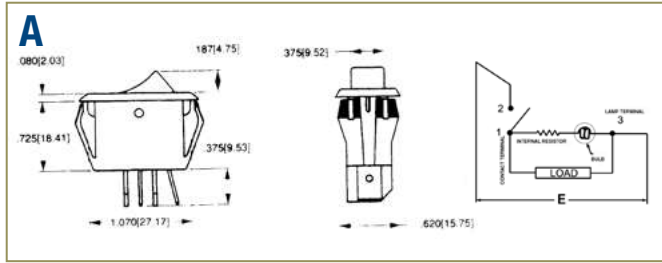
QC = Quick Connect

The Terminal Types for the above parts are QC .250" except for 35-684 is Solder and 35-696 is QC .187".

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

LIGHTED APPLIANCE ROCKERS (Cont.)



AUTOMOTIVE/MARINE ROCKERS



Fig. 1



Fig. 2

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function		Poles/Throws	AMPS 125VAC	AMPS 250VAC	Amps 12 VDC	HP 125-250 VAC	Lamp Color	Lamp Voltage	Terminal Type	Mounting Hole	Spec. Drawing Page No.
35-3580	35-3580-BU	1	On	Off	SPST	15	10	N/R	1/2			QC .250"	0.830" x 1.450"	H-27 A
35-3585	35-3585-BU	1	On	On	DPDT			20				QC .250"	0.830" x 1.450"	H-27 A
35-3590	35-3590-BU	1	On	Off	DPDT			20				QC .250"	0.830" x 1.450"	H-27 A
35-3500	35-3500-BU	2	On	Off	SPST			20		Amber	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3505	35-3505-BU	2	On	Off	SPST			20		Green	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3510	35-3510-BU	2	On	Off	SPST			20		Red	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3515	35-3515-BU	2	On	Off	SPST			20		Blue	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3520	35-3520-BU	2	On	Off	DPDT			20		Amber	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3525	35-3525-BU	2	On	Off	DPDT			20		Green	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3530	35-3530-BU	2	On	Off	DPDT			20		Red	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3535	35-3535-BU	2	On	Off	DPDT			20		Blue	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3540	35-3540-BU	2	(On)	Off	SPST			20		Amber	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3545	35-3545-BU	2	(On)	Off	SPST			20		Green	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3550	35-3550-BU	2	(On)	Off	SPST			20		Red	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3555	35-3555-BU	2	(On)	Off	SPST			20		Blue	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3560	35-3560-BU	2	(On)	Off (On)	DPDT			20		Amber	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3565	35-3565-BU	2	(On)	Off (On)	DPDT			20		Green	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3570	35-3570-BU	2	(On)	Off (On)	DPDT			20		Red	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B
35-3575	35-3575-BU	2	(On)	Off (On)	DPDT			20		Blue	12V Incandescent	QC .250"	0.830" x 1.450"	H-27 B

Notes: For replacement gasket use part number 999-16543-001

(On) = Momentary On

QC = Quick Connect

All above parts have nylon actuators

ROUND ROCKERS



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function		Poles/Throws	AMPS 125VAC	AMPS 250VAC	HP 250 VAC	Actuator Color	Imprinting Color and Marking	Terminal Type	Mounting Hole	Spec. Drawing Page No.
35-1300	35-1300-BU	3	On	Off	SPST	10	6		Red (Lighted)*	White 0- (See Fig.)	QC .187"	0.7952"	H-27 C
35-1301	35-1301-BU	3	On	Off	SPST	10	6		Green (Lighted)*	White 0- (See Fig.)	QC .187"	0.7952"	H-27 C
35-1302	35-1302-BU	4	On	Off	SPST	10	6		Black	White 0- (See Fig.)	QC .187"	0.7952"	H-27 D
35-1304	35-1304-BU	5	On	Off	DPST	10	6		Black	White 0- (See Fig.)	QC .187"	0.7952"	H-27 E
35-1305	35-1305-BU	6	On	Off	SPDT	10	6		Black	White 0- (See Fig.)	QC .187"	0.7952"	H-27 F
35-1307	35-1307-BU	3	On	Off	SPST	10	6		Amber (Lighted)*	White 0- (See Fig.)	QC .187"	0.7952"	H-27 C
35-1311	35-1311-BU	7	On	Off	SPST	10	6		Blk w/Red Indicator*	None	QC .187"	0.7952"	H-27 G

Notes:

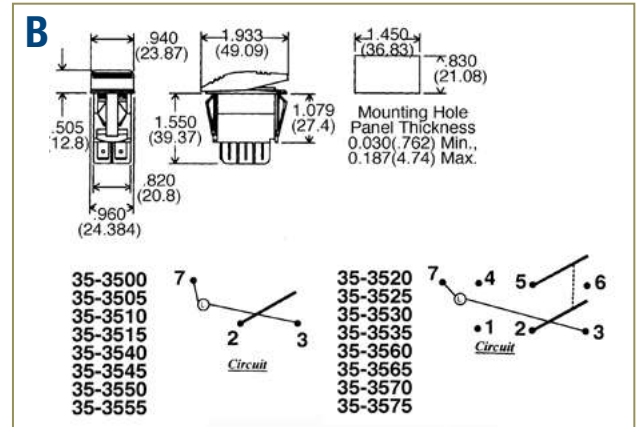
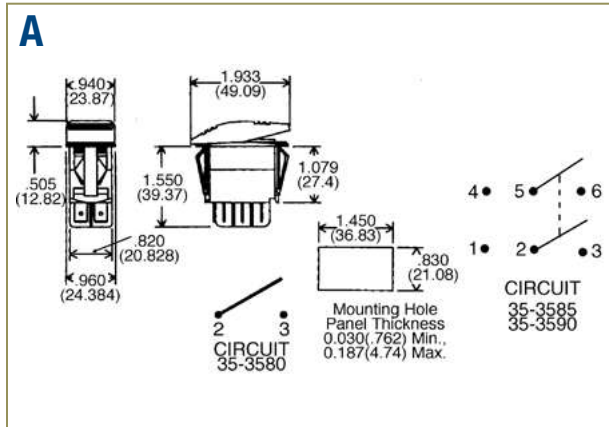
(On) = Momentary On * = 125V Lamp

QC = Quick Connect

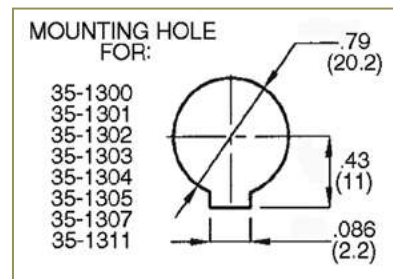
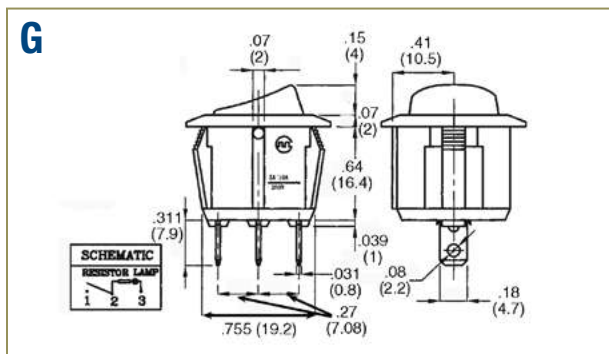
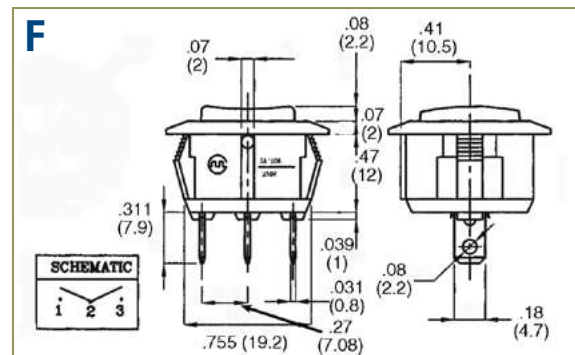
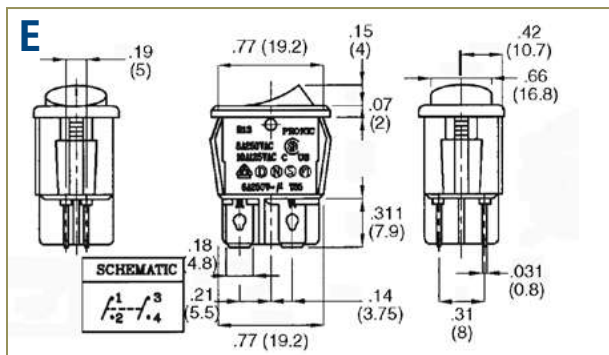
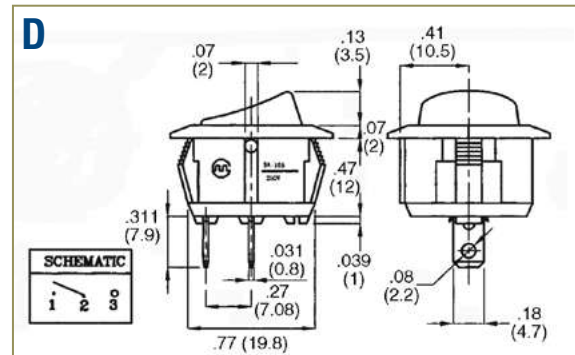
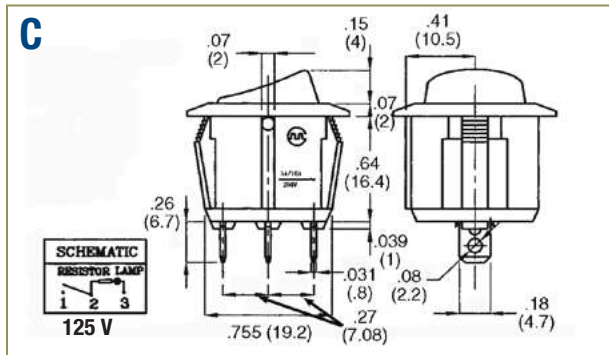
Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

AUTOMOTIVE/MARINE ROCKERS (Cont.)



ROUND ROCKERS (Cont.)



SUB-MINI & MINIATURE PUSHBUTTONS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12



Fig. 13

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles/Throws	AMPS 125VAC	AMPS 250VAC	Bushing Length	Actuator Length	Actuator Color	Actuator Style	Terminal Type	Mounting Hole	Hardware	Spec. Drawing Page No.
35-402	35-402-BU	1	On (Off)	NC SPST	1/4*		0.125"	0.175"	Black	Pl	Sd Lug	0.172"	N	H-29 A
35-3459	35-3459-BU	2	Off (On)	NO SPST	1/4†		0.225"	0.240"	White	Pin	Sd Eyelet	0.250"	N	H-29 B
35-400	35-400-BU	3	Off (On)	NO SPST	1/2	1/4	0.125"	0.175"	Black	Pl	Sd Lug	0.172"	N	H-29 C
35-401	35-401-BU	4	Off (On)	NO SPST	1		0.276"	0.091"	Black	RC	Sd Eyelet	0.281"	N, KN	H-29 D
35-407	35-407-BU	5	Off (On)	NO SPST	1	1/2		0.100"	White	SqB	QC .187"/Sd	****		H-29 E
35-410	35-410-BU	4	Off (On)	NO SPST	1		0.276"	0.091"	Red	RC	Sd Eyelet	0.281"	N, KN	H-29 K
35-415	35-415-BU	5	Off (On)	NO SPST	1	1/2		0.100"	Red	SqB	QC .187"/Sd	****		H-29 E
35-450	35-450-BU	6	On (On)	SPDT	1*		0.250"	0.218"	White	Pin	Sd Eyelet	0.250"	2 N, LW, LR	H-29 F
35-451	35-451-BU	7	On (On)	DPDT	1*		0.250"	0.218"	White	Pin	Sd Eyelet	0.250"	2 N, LW, LR	H-29 F
35-404	35-404-BU	8	On (On)	SPDT	3		0.335"	0.315"	Black	RC	Sd Eyelet	0.250"	N, KN, W	H-29 G
35-405	35-405-BU	9	On (On)	DPDT	3		0.335"	0.315"	Black	RC	Sd Eyelet	0.250"	N, KN, W	H-29 J
35-406	35-406-BU	10	On (Off)	SPST	3		0.315"	0.315"	Black	RC	Sd Eyelet	0.315"	N, W	H-29 H
35-408	35-408-BU	10	On (On)	SPDT	3		0.315"	0.315"	Black	RC	Sd Eyelet	0.315"	N, W	H-29 H
35-409	35-409-BU	10	Off (On)	NO SPST	3		0.315"	0.315"	Black	RC	Sd Eyelet	0.315"	N, W	H-29 H
35-411	35-411-BU	11	Off (On)	NO SPST	3	1	0.295"	0.157"	Black	RB	Sd Eyelet	0.400"	N, W	H-29 I
35-412	35-412-BU	12	Off (On)	NO SPST	3	1	0.295"	0.157"	Black	SqB	Sd Eyelet	0.400"	N, W	H-29 I
35-413	35-413-BU	13	Off (On)	NO SPST	3	1	0.295"	0.157"	Black	RqB	Sd Eyelet	0.400"	N, W	H-29 I
35-417	35-417-BU	13	Off (On)	NO SPST	3	1	0.295"	0.157"	Red	RqB	Sd Eyelet	0.400"	N, W	H-29 I
35-425	35-425-BU	9	On (On)	DPDT	3		0.335"	0.315"	Blue	RC	Sd Eyelet	0.250"	N, KN, W	H-29 J

Notes: (On)/(Off) = Momentary On/Off
 *Rated@120VAC/28VDC
 ****0.500 x 0.437
 † = Rated @125VAC/DC

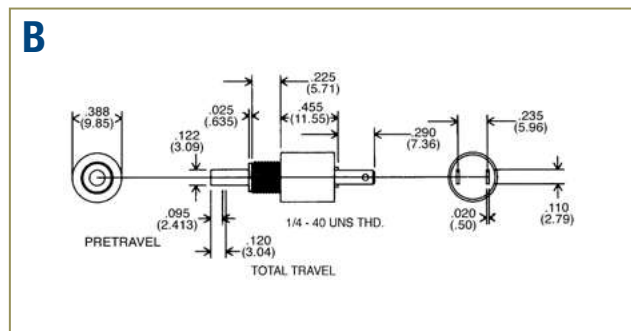
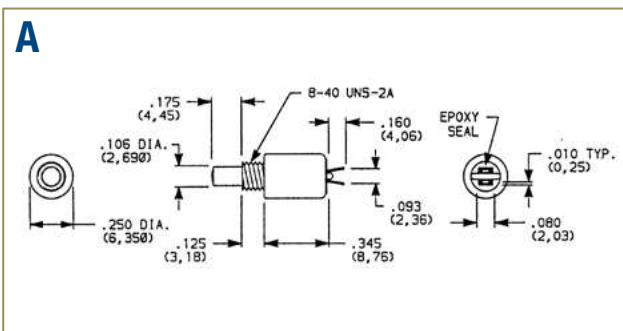
KN = Knurled Nut
 LR = Lock Ring
 LW = Lock Washer
 N = Nut(s)
 NC = Normally Closed
 NO = Normally Open
 N/R = Not Rated

QC = Quick Connect
 RC = Round Cap
 RqB = Rectangle Button

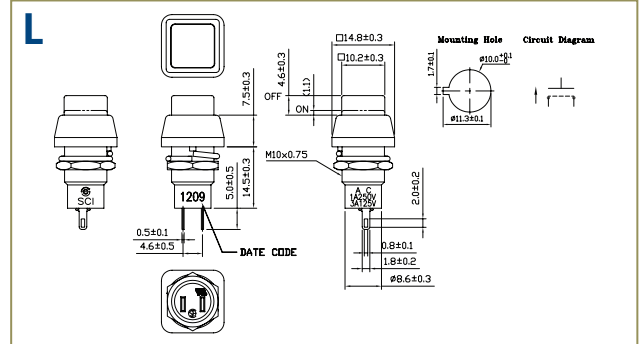
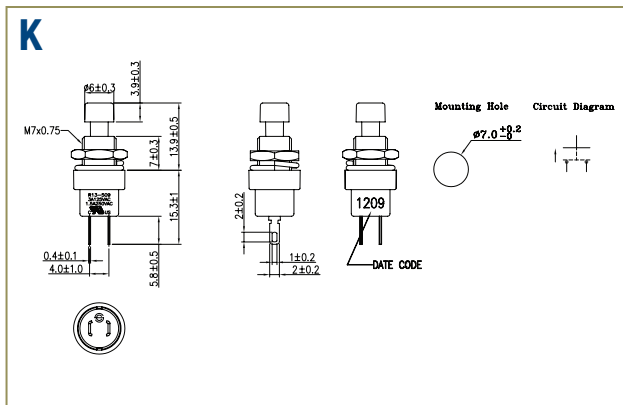
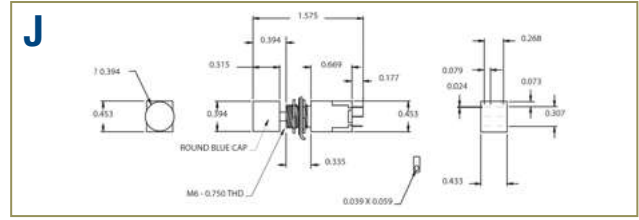
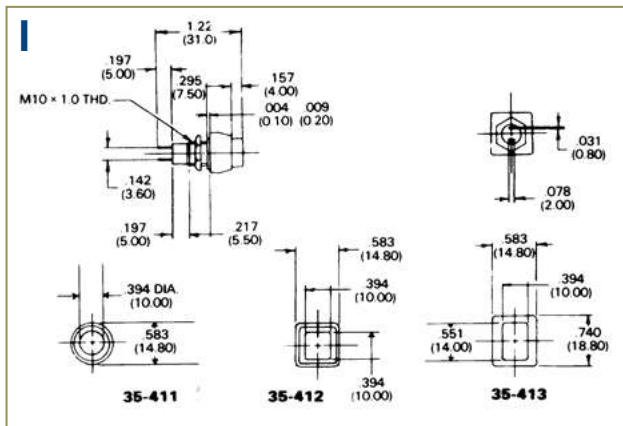
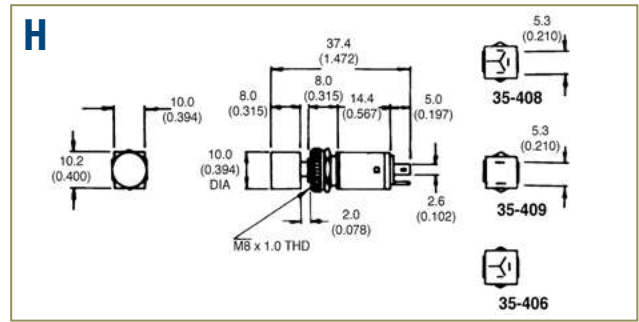
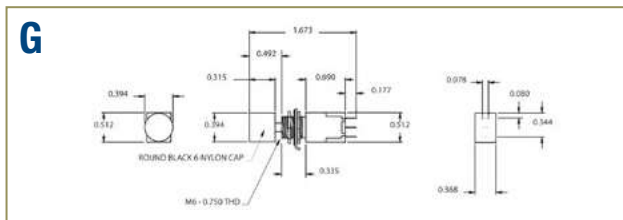
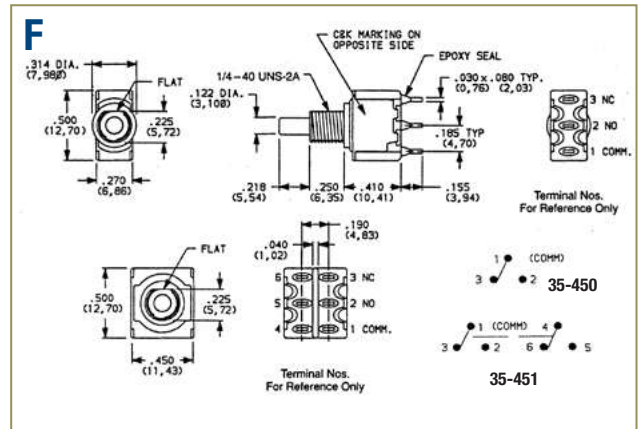
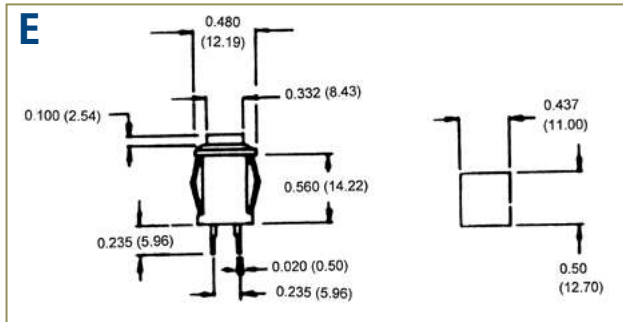
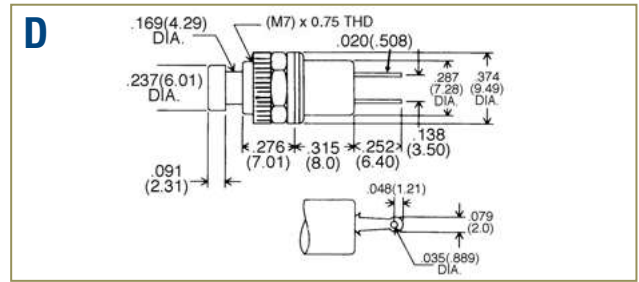
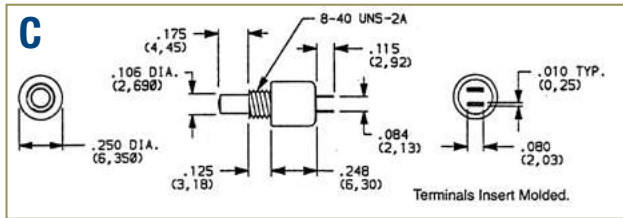
Pl = Plunger
 Sd = Solder
 SqB = Square Button
 W = Washer

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

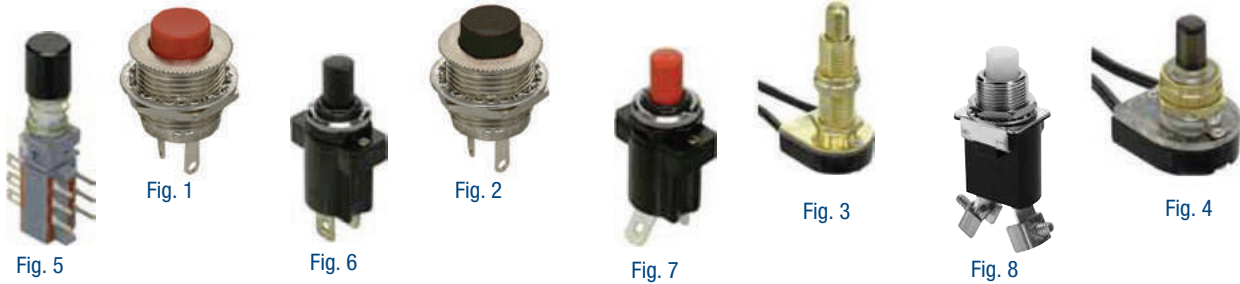
All quantities are single; BU's are packages of 25 Unless otherwise noted.



SUB-MINI & MINIATURE PUSHBUTTONS (Cont.)



MINIATURE PUSHBUTTONS



Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles/Throws	AMPS 125VAC	30 Watts	Bushing Length	Actuator Length	Actuator Color	Actuator Style	Terminal Type	Mounting Hole	Hardware	Spec. Drawing Page No.
35-416	35-416-BU	1	On Off	SPDT	N/R	250mA	0.391"	0.110"	Red	RB	Sd Eyelet	0.469"	LN, LW	H-31 A
35-418	35-418-BU	2	On (Off)	SPDT	N/R	250mA	0.391"	0.110"	Black	RB	Sd Eyelet	0.469"	LN, LW	H-31 A
35-3460	35-3460-BU	3	On Off	SPST	6††		1.100"	0.360"	Brass	CB	6" WL	0.375"	N, KN	H-31 B
35-852	35-852-BU	4	On Off	SPST	6††		0.375"	0.344"	Black	CB	6" WL	0.375"	N, KN	H-31 C
Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles/Throws	AMPS 125VAC	Amps 250 VAC	Bushing Length	Actuator Length	Actuator Color	Actuator Style	Terminal Type	Mounting Hole	Hardware	Spec. Drawing Page No.
35-491	35-491-BU	5	On On	DPDT	0.50**	0.20		0.406"	Black	RmB	PCB/Sd Eye		N, LN	H-31 D
Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles/Throws	AMPS 125VAC	Amps 250 VAC	Bushing Length	Actuator Length	Actuator Color	Actuator Style	Terminal Type	Mounting Hole	Hardware	Spec. Drawing Page No.
35-475	35-475-BU	6	(On) Off	NO SPST	0.50	0.50	0.260"	0.500"	Red	RB	†††	0.500"	N, LN	H-31 E
35-476	35-476-BU	7	Off (On)	NO SPST	0.50		0.260"	0.500"	Black	RB	†††	0.500"	N, LN	H-31 E
35-3471	35-3471-BU	8	On (Off)	NO SPST	***		0.374"	0.244"	White	RB	Sc	0.500"	N, LW	H-31 F

Notes: (On)/(Off) = Momentary On/Off
 **Rated@100VAC
 ***Rated 2Amps @120VAC, 1A 277 VAC

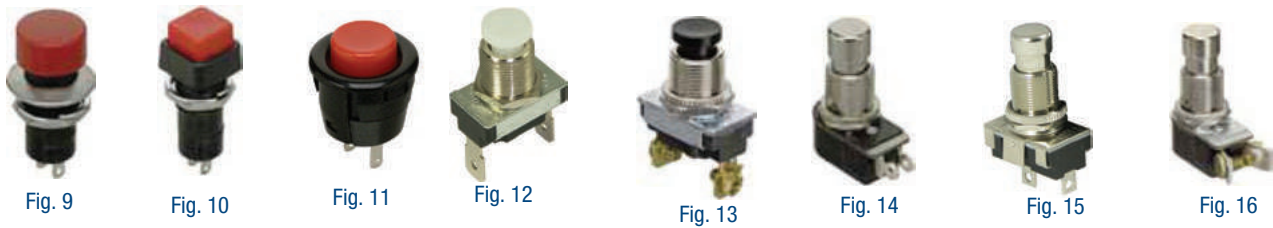
†† = 3@250V AC
 ††† = 6.3mm Tab w/Eyelet
 35-491 is momentary on if the pin is removed
 CB = Canopy Button
 KN = Knurled Nut
 LN = Lock Nut

LW = Lock Washer
 N = Nut(s)
 NC = Normally Closed
 NO = Normally Open
 N/R = Not Rated

PCB = Printed Circuit Board
 RB = Round Button
 RmB = Removable Button

Sc = Screw
 Sd = Solder

STANDARD PUSHBUTTONS



Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles/Throws	AMPS 125VAC	Amps 250 VAC	Bushing Length	Actuator Length	Actuator Color/Material	Frame/Bezel	Terminal Type	Mount Hole	Hardware	Spec. Drawing Page No.
35-420	35-420-BU	9	Off (On)	NO SPST		3	0.276"	0.354"	Red Plastic	Chrm. Ring	Sd Eyelet	0.500"	N, W	H-31 G
35-421	35-421-BU	10	Off (On)	NO SPST		3	0.390"	0.244"	Red Plastic	Black Square	Sd Eyelet	0.500"	N, W	H-31 H
35-422	35-422-BU	9	On Off	SPST		3	0.276"	0.354"	White Plastic	Chrm. Ring	Sd Eyelet	0.500"	N, W	H-31 G
35-423	35-423-BU	11	Off (On)	NO SPST	3	N/R	Snap-in	0.125"	Red Plastic	Black	Sd Eyelet	0.687"		H-31 I
35-3456	35-3456-BU	12	(On) Off	SPST	6	3	0.500"	0.212"	White		Q.C.	0.500"	N, KN	H-31 J
35-3457	35-3457-BU	13	Off (On)	NO SPST	6**	3**	0.500"	0.212"	Black Plastic		Sc	0.500"	N, KN, Sc	H-31 J
35-3458	35-3458-BU	13	(Off) On	NC SPST	***	***	0.490"	0.200"	Red Plastic		Sc	0.500"	N, KN, Sc	H-31 K
35-430	35-430-BU	14	Off (On)	NO SPST	6	3	0.562"	0.437"	Chrm. Metal		Sd Eyelet	0.500"	N, KN	H-31 L
35-432	35-432-BU	14	On (Off)	NC SPST	6	3	0.562"	0.437"	Chrm. Metal		Sd Eyelet	0.500"	N, KN	H-31 L
35-448	35-448-BU	15	On Off	SPST	6	3	0.561"	0.415"	Chrm. Metal		Sd Eyelet	0.500"	N, KN	H-31 L
35-449	35-449-BU	16	On Off	SPST	6	3	0.561"	0.437"	Chrm. Metal		Sc	0.500"	N, KN	H-31 M

Notes: (On)/(Off)/(SPDT) = Momentary Action
 *Rated 8Amps @125V DC, 4Amps @250V DC, 1/3 HP @125VAC;
 **Rated 6Amps @120VAC/3Amps @240VAC
 ***Rated 3Amps @120VAC/1.5Amps @277VAC
 ****Rated 25/15Amps @6/12VDC

† = Rated 1/2 HP @250VDC
 Chrm. = Chrome
 HP = Horse Power
 KN = Knurled Nut
 N = Nut(s)

NC = Normally Closed
 NO = Normally Open
 N/R = Not Rated
 QC = Quick Connect
 Sc = Screw

Sd = Solder
 W = Washer
 WL = Wire Lead

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

STANDARD PUSHBUTTONS (Cont.)



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles/Throws	AMPS 125VAC	Amps 250 VAC	Bushing Length	Actuator Length	Actuator Color/Material	Frame/Bezel	Terminal Type	Mount Hole	Hardware	Spec. Drawing Page No.
35-3454	35-3454-BU	1	On or Off	SPST††	10*	N/R	0.561"	0.410"	Chrm. Metal		6" WL	0.500"	N, KN	H-33 A
35-473	35-473-BU	2	NO NC	SPDT	16†	16†	0.380"	0.125"	Red Plastic	Black Shroud	QC .250"	0.500"	N	H-33 B
35-458	35-458-BU	3	On Off	SPST	15	10	0.562"	0.238"	Chrm. Metal		Sc	0.500"	N, KN, Sc	H-33 C
35-3425	35-3425-BU	4	On Off	SPST	15	10	0.561"	0.415"	Chrm. Metal		Sc	0.500"	N, KN, Sc	H-33 D
35-3427	35-3427-BU	4	Off (On)	NO SPST	15	10	0.561"	0.415"	Chrm. Metal		Sc	0.500"	N, KN, Sc	H-33 D
35-3429	35-3429-BU	4	On (Off)	NC SPST	15	10	0.561"	0.415"	Chrm. Metal		Sc	0.500"	N, KN, Sc	H-33 D
35-3490	35-3490-BU	4	On On	SPDT	15	10	0.561"	0.415"	Chrm. Metal		Sc	0.500"	2 N, Sc	H-33 D
35-455	35-455-BU	5	Off On	SPST	16^	16	Snap-in	0.157"	Red Plastic	Black	QC .250"/Sd	0.992"		H-33 E
35-457	35-457-BU	5	Off (On)	NO SPST	16^	16	Snap-in	0.157"	Red Plastic	Black	QC .250"/Sd	0.992"		H-33 H
35-459	35-459-BU	5	Off (On)	NO SPST	16^	16	Snap-in	0.157"	Black Plastic	Black	QC .250"/Sd	0.992"		H-33 E
35-490	35-490-BU	6	On Off	DPDT††	8	6	0.730"	0.312"	OrangeΔ	Black	PCB/Sd Lug	0.530"	N, W	H-33 F

Notes: (On)/(Off)/(SPDT) = Momentary Action

*Rated 8Amps @125V DC, 4Amps @250V DC, 1/3 HP @125VAC;

**Rated 6Amps @120VAC/3Amps @240VAC

***Rated 3Amps @120VAC/1.5Amps @277VAC

****Rated (25, 15) Amps @ (6, 12) VDC

^ = 1/2 HP @ 125VAC, 1 HP @ 250 VAC

† = Rated 1/2 HP @125 VAC, 0.2A @250 VDC

†† = Alternate Action

Chrm. = Chrome

HP = Horse Power

35-490 comes with Nut and Washer Hardware

35-490 pin can be removed to make momentary

Δ = Mechanical Indicator, non-illuminated

NC = Normally Closed

NO = Normally Open

N/R = Not Rated

QC = Quick Connect

Sc = Screw

Sd = Solder

N = Washer

WL = Wire Lead

KN = Knurled Nut

N = Nut(s)

LIGHTED PUSHBUTTONS



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12

Switches

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles/Throws	Amps 125 VAC	Amps 250 VAC	Amps 14 VDC	HP 125 VAC	Bushing Length	Actuator Length	Actuator Color	Actuator Style	Terminal Type	Mounting Hole	Spec. Drawing Page No.
35-480	35-480-BU	8^	On Off	SPST	10	10	10	1/4	Snap-in	0.360"	Red Lens	Square	QC .25"/Sd	1.10" x 0.88"	H-33 K
35-481††		8									Red Lens	Square			H-33 K
35-482	35-482-BU	8^	On Off	SPST	10	10	10	1/4	Snap-in	0.360"	Amber Lens	Square	QC .25"/Sd	1.10" x 0.88"	H-33 K
35-484	35-484-BU	8^	On Off	SPST	10	10	10	1/4	Snap-in	0.360"	Green Lens	Square	QC .25"/Sd	1.10" x 0.88"	H-33 K
35-3412	35-3412-BU	9	(1NC) (1NO)	SPDT					0.295"	0.196"		Square	Sd Eyelet	0.638"	H-33 I
35-3414	35-3414-BU	9	1NC 1NO	SPDT					0.295"	0.196"		Square	Sd Eyelet	0.638"	H-33 I
35-3430	35-3430-BU	9	2NC 2NO	DPDT					0.295"	0.196"		Square	Sd Eyelet	0.638"	H-33 I
35-3431	35-3431-BU	10	2NC 2NO	DPDT					0.295"	0.196"		Rq	Sd Eyelet	0.638"	H-33 J
35-3432	35-3432-BU	10	(1NC) (1NO)	SPDT					0.295"	0.196"		Rq	Sd Eyelet	0.638"	H-33 J

Lens and Diffuser Kits

Choose a Lens and Diffuser Kit below to go with Fig. 9 and Fig. 10 above part numbers (Sold Separately)

Retail Part No.	Bulk Part No.	Figure No.	Style	Color	Spec. Drawing Page No.
35-3438	35-3438-BU	11	Square	Clear	H-33 L
	35-3400-BU		12V Replacement Bulb		

Retail Part No.	Bulk Part No.	Figure No.	Style	Color	Spec. Drawing Page No.
35-3442	35-3442-BU	12	Rectangle	Red	H-33 M
35-3443	35-3443-BU	12	Rectangle	Clear	H-33 M
	35-3400-BU		12V Replacement Bulb		

Notes: () = Momentary Function

*NC = Normally Closed and NO = Normally Open

^ = 12V Incandescent

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

N/R = Not Rated

PCB = Printed Circuit Board

† = 0.2A @ 220VDC, 5mA @ 12VAC/DC

†† = Lens Only

QC = Quick Connect

Rq = Rectangle

Sd = Solder

TACTILE PUSHBUTTONS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles/Throws	Amps 12 VDC	50VAC/DC	Operating Force	Actuator Height	Actuator Color	Mounting Style	Body Size	Spec. Drawing Page No.	Protection
35-1451		1	(On) Off	SPST	50mA		160g	0.169"	Gray	PCB, Low Profile	0.472"	H-35 A	IP57 Protected Against Dust Temporary Immersion
35-1452		2	(On) Off	SPST	50mA		130g	0.169"	Black	PCB, Low Profile	0.236"	H-35 A	
35-1453		3	(On) Off	SPST	50mA		200g	0.151"	Gray	PCB, Low Profile	0.280"	H-35 A	
35-1411		4	(On) Off	SPST		1.0VA		0.093"		PCB	0.283" (7mm)	H-35 B	
35-1414		4	(On) Off	SPST		1.0VA		0.156"		PCB	0.283" (7mm)	H-35 B	
35-1412		5	(On) Off	SPST		1.0VA		0.093"		Surface	0.283" (7mm)	H-35 B	

Notes: (On) = Momentary On PCB = Printed Circuit Board 35-1453 is a Right Angle Style Pushbutton

SUB-MINIATURE SNAP ACTION



Fig. 6



Fig. 7



Fig. 8



Fig. 9

Retail Part No.	Bulk Part No.	Figure No.	Poles/Throws	Amps 250 VAC	Operating Point (In)	Over Travel Min. (In)	Differential Travel Max. (In)	Operating Force Max. Oz. (grams)	Actuator	Terminal Type	Spec. Drawing Page No.
35-822	35-822-BU	6	SPDT	5	0.488			1.0 (28)	Lever	Solder	H-35 C
35-834	35-834-BU	7	SPDT	5	0.449	0.016	0.008	5.2 (146)	Plunger	Solder	H-35 D
35-836	35-836-BU	8	SPDT	5	0.476			1.4 (39)	Lever	Solder	H-35 D
35-838	35-838-BU	9	SPDT	5	0.701			1.6 (45)	Roller	Solder	H-35 D

Notes: All of the above part numbers have momentary action.

MINIATURE SNAP ACTION



Fig. 10



Fig. 11



Fig. 12



Fig. 13



Fig. 14



Fig. 15



Fig. 16



Fig. 17



Fig. 18



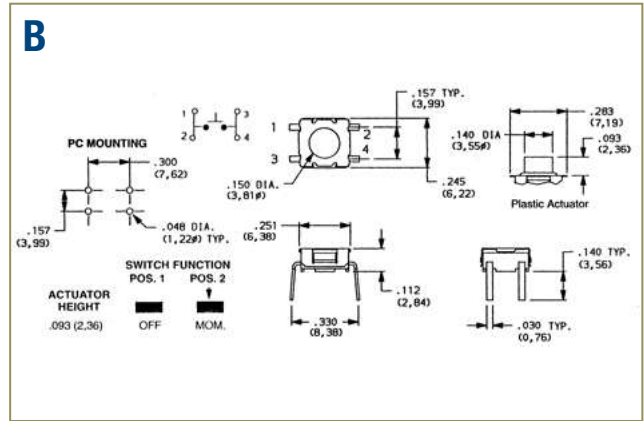
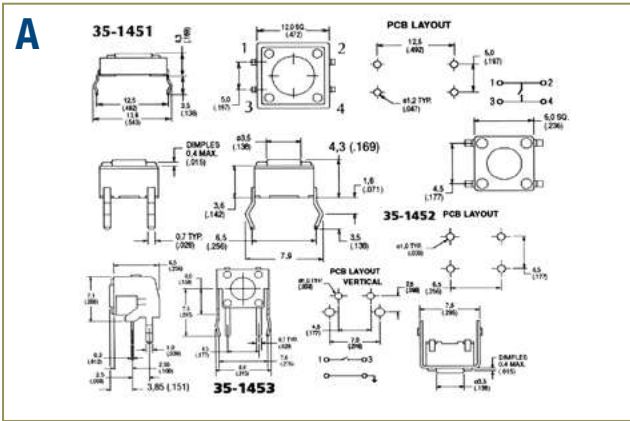
Fig. 19

Retail Part No.	Bulk Part No.	Figure No.	Poles/Throws	Amps 250 VAC	Amps 125 VDC	Amps 250 VDC	HP125/250 VAC	PT Max. (In)	OT Min. (In)	DT Max. (In)	OF Max. Oz. (grams)	Actuator	Actuator Length (In)	Spec. Drawing Page No.
35-823	35-823-BU	10	SPDT	10	1/2	1/4	1/3	0.056	0.035	0.013	2.7 (75)	PP		H-35 E
35-824	35-824-BU	11	SPDT	10	1/2	1/4	1/3	0.500	0.200	0.125	0.60 (17)	Lever	2.22	H-35 F
35-827	35-827-BU	12	SPDT	10	1/2	1/4	1/3	0.160	0.065	0.030	1.59-2.65 (45-75)	LvR	1.343	H-35 G
35-846	35-846-BU	13	SPDT	10	1/2	1/4	1/3	0.070	0.035	0.013	2.65-3.18 (75-90)	LvR	0.810	H-35 H
35-870	35-870-BU	14	NC SPST	10	1/2	1/4	1/3	0.056	0.035	0.013	2.7 (75)	PP		H-35 E
35-872	35-872-BU	14	NO SPST	10	1/2	1/4	1/3	0.056	0.035	0.013	2.7 (75)	PP		H-35 E
35-876	35-876-BU	13	SPDT	10	1/2	1/4	1/3	0.700	0.035	0.013	5.3-6.36 (150-180)	LvR	0.810	H-35 H
35-878	35-878-BU	15	SPDT	10	1/2	1/4	1/2	0.140	0.062	0.050	3.18-5.3 (90-150)	SR	1.29	H-35 I
35-880	35-880-BU	16	SPDT	10	1/2	1/4	1/3	0.160	0.075	0.032	1.59-2.65 (45-75)	Lever	1.40	H-35 J
35-882	35-882-BU	12	SPDT	10	1/2	1/4	1/3	0.160	0.065	0.030	5.29 (150)	LvR	1.343	H-35 G
35-3934	35-3934-BU	17	SPDT	10	1/2	1/4	1/3	0.080	0.035	0.013	2.65-3.18 (75-90)	Lever	0.840	H-35 K
35-3938	35-3938-BU	11	SPDT	11*	1/2	1/4	1/3	0.250	0.125	0.045	2.5-8.0 (70-225)	Lever	2.34	H-35 F
35-3940	35-3940-BU	13	SPDT	11*	1/2	1/4	1/3	0.060	0.030	0.015	7.94 (225)	LvR	0.810	H-35 H
35-3942	35-3942-BU	16	SPDT	10	1/2	1/4	1/3	0.160	0.075	0.032	1.06-1.76 (30-50)	Lever	1.40	H-35 J
35-840	35-840-BU	10	SPDT	15	1/2	1/4	1/2	0.056	0.035	0.013	5.29 (150)	PP		H-35 E
35-842	35-842-BU	15	SPDT	15	1/2	1/4	1/2	0.140	0.062	0.050	3.18-5.3 (90-150)	SR	1.29	H-35 I
35-844	35-844-BU	16	SPDT	15	1/2	1/4	1/2	0.160	0.075	0.032	2.28-5.3 (80-150)	Lever	1.40	H-35 J
35-848	35-848-BU	12	SPDT	15	1/2	1/4	1/2	0.160	0.065	0.030	2.8-5.3 (80-150)	LvR	1.343	H-35 G
35-874	35-874-BU	13	SPDT	15	1/2	1/4	1/2	0.070	0.035	0.013	5.3-6.36 (150-180)	LvR	0.810	H-35 H
35-3945	35-3945-BU	18	SPDT	15*	1/2	1/4	1/2	0.250	0.125	0.045	4.2-14.1 (120-400)	Lever	2.340	H-35 L
35-3932	35-3932-BU	19	SPDT	21*			1†	0.047	0.050	0.010	7.94 (225)	PP		H-35 M

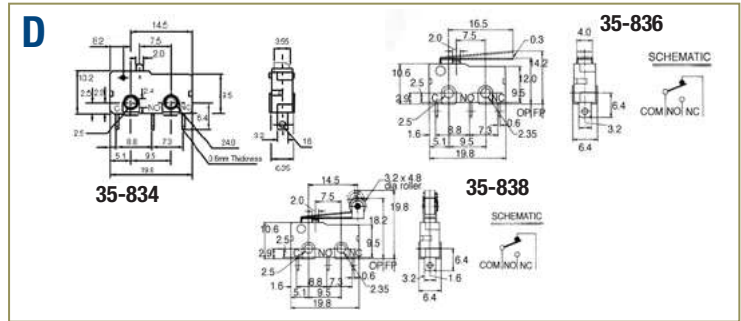
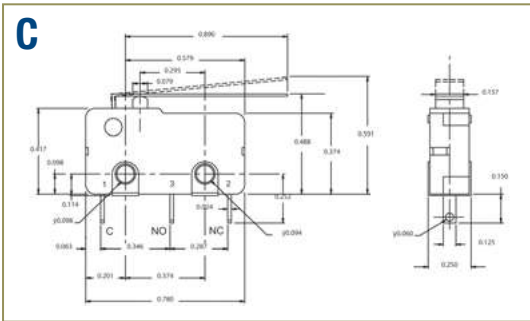
Notes: *Rated @ 277VAC DT = Differential Travel NC = Normally Closed OT = Over Travel SR = Simulated Roller
 † = Rated @ 125VAC, 2 HP @ 250VAC HP = Horse Power NO = Normally Open PP = Pin Plunger QC = Quick Connect
 All of the above have momentary action LvR = Lever Roller OF = Operating Force PT = Pre Travel

Note: All figures are for illustration purpose only, and the number/type of terminals may vary. All quantities are single; BU's are packages of 25 Unless otherwise noted.

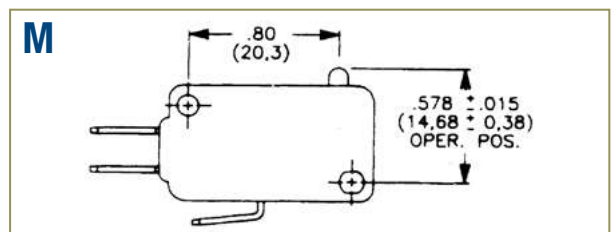
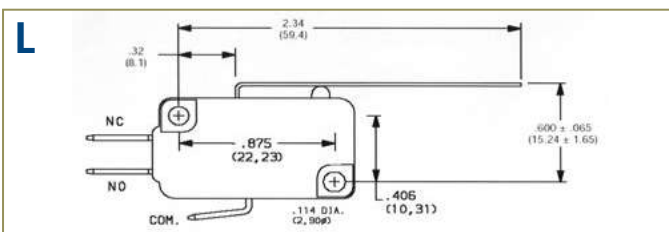
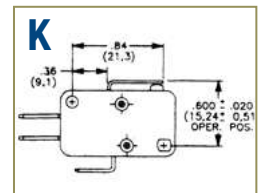
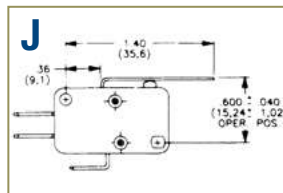
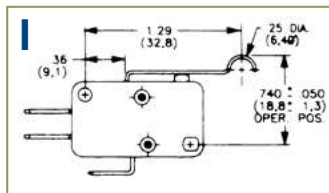
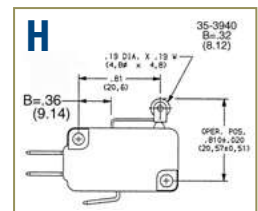
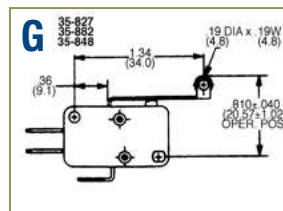
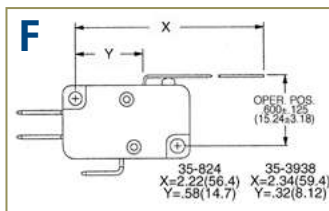
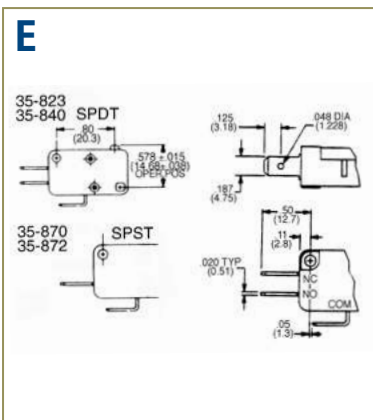
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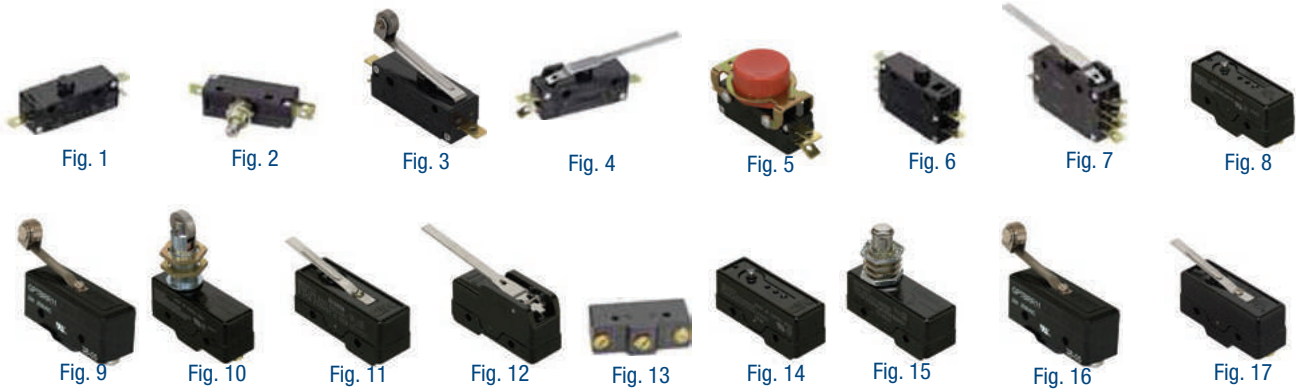
SUB-MINIATURE SNAP ACTION (Cont.)



MINIATURE SNAP ACTION (Cont.)



GENERAL PURPOSE SNAP ACTION



Retail Part No.	Bulk Part No.	Figure No.	Amps **VAC	Amps 125 VDC	Amps 250 VDC	HP 125 VAC	HP 250 VAC	PT Max. (In)	OT Min. (In)	DT Max. (In)	OF Max. Oz. (grams)	Actuator	Actuator Length (In)	Terminal Type	Spec. Drawing Page No.
35-461	35-461-BU	1	15			3/4	1-1/2	0.050	0.050	0.010	20 (567)	PI		QC .250"	H-37 A
35-462	35-462-BU	2	15			3/4	1-1/2	0.050	0.187	0.010	20 (567)	PI w/OT		QC .250"	H-37 B
35-463	35-463-BU	3	15			3/4	1-1/2	0.281	0.062	0.094	20 (567)	Ro	1.50	QC .250"	H-37 C
35-464	35-464-BU	4	15			3/4	1-1/2	0.312	0.187	0.062	20 (567)	Lever	2.50	QC .250"	H-37 D
35-830	35-830-BU	5	15			3/4	1-1/2	0.050	0.050	0.010	20 (567)	Red Pb		QC .250"	H-37 E
35-831	35-831-BU	5	15			3/4	1-1/2	0.050	0.050	0.010	20 (567)	Black Pb		QC .250"	H-37 E
35-990	35-990-BU	*6	15			3/4	1-1/2	0.050	0.050	0.010	30 (850)	PI		QC .250"	H-37 F
35-992	35-992-BU	*7	15			3/4	1-1/2	0.312	0.187	0.062	30 (850)	Lever	2.50	QC .250"	H-37 F
35-3900	35-3900-BU	8	15			1/8	1/4	0.016	0.005	0.002	12.3 (350)	PP		Sc	H-37 G
35-3901	35-3901-BU	8	15	1/2	1/4			0.016	0.005	0.002	12.3 (350)	PP		Sc	H-37 G
35-3907	35-3907-BU	9	15					0.158	0.063	0.002	5.3 (151)	LRo	1.783	Sc	H-37 O
35-3910	35-3910-BU	10	20	1/2	1/4	1	2	0.028	0.140	0.008	22.9 (650)	RP		Sc	H-37 I
35-3911	35-3911-BU	10	15					0.016	0.140	0.002	12.3 (349)	RP		Sc	H-37 I
35-828	35-828-BU	11	20	1/2	1/4	1	2	0.156	0.062	0.050	5-13 (142-370)	LL	1.95	Sc	H-37 H
35-890	35-890-BU	12	20	1/2	1/4			0.380	0.190	0.156	3.5-26 (100-740)	Lever	2.50	Sc	H-37 J
35-892	35-892-BU	13	20	1/2	1/4	1	2	0.020	0.055	0.002	12.3 (350)	SP		Sd/Sc	H-37 K&L
35-894	35-894-BU	14	20	1/2	1/4	1	2	0.020	0.005	0.002	12.3 (350)	PP		Sd/Sc	H-37 L
35-896	35-896-BU	15	20	1/2	1/4	1	2	0.020	0.063	0.002	12.3 (350)	PI w/OT		Sd/Sc	H-37 M
35-980	35-980-BU	14	20	1/2	1/4			0.030	0.005	0.005	26 (740)	PP		Sd/Sc	H-37 L
35-982	35-982-BU	15	20	1/2	1/4			0.030	0.220	0.005	26 (740)	PI		Sd/Sc	H-37 M
35-984	35-984-BU	12	20	1/2	1/4			0.380	0.190	0.047	2.5-9 (60-255)	Lever	2.50	Sd/Sc	H-37 J
35-987	35-987-BU	16	20	1/2	1/4	1/2	1	0.468	0.062	0.085	3.5 (100)	Ro	1.91	Sc	H-37 N
35-3903	35-3903-BU	13	20	1/2	1/4	3/4	1 1/2	0.020	0.055	0.002	12.3 (350)	SP		Sc	H-37 K
35-3904	35-3904-BU	17	20	1/2	1/4	1/2	1	0.158	0.062	0.050	5.3 (150)	LL	1.95	Sc	H-37 H

Notes: All of the above have momentary action

*DPDT

**125/250VAC

All have SPDT, but 35-990 & 35-992

DT = Differential Travel

HP = Horse Power

HRo = Hinged Roller

LRo = Leaf Rollers

LL = Leaf Lever

OF = Operating Force

OT = Over Travel

Pb = Pushbuttons

PI = Plunger

PT = Pre-Travel

QC = Quick Connect

RP = Roller Plunger

Sc = Screw

Sd = Solder

ShRo = Short Roller

SP = Stub Plunger

PP = Pin Plunger

Ro = Roller

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

GENERAL PURPOSE SNAP ACTION (Cont.)



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Retail Part No.	Bulk Part No.	Figure No.	Amps **VAC	Amps 125 VDC	Amps 250 VDC	HP 125 VAC	HP 250 VAC	PT Max. (In)	OT Min. (In)	DT Max. (In)	OF Max. Oz. (grams)	Actuator	Actuator Length (In)	Terminal Type	Spec. Drawing Page No.
35-3908	35-3908-BU	1	20	1/2	1/4	3/4	1-1/2	0.025	0.22	0.002	20 (567)	High OT Pl		Sc	H-39 A
35-3914	35-3914-BU	2	20	1/2	1/4	3/4	1-1/2	0.020	0.062	0.002	13 (368)	Small OT Pl		Sc	H-39 A
35-3916	35-3916-BU	3	20	1/2	1/4	3/4	1-1/2	0.380	0.190	0.078	2.5-18 (71-510)	Lever	2.34	Sc	H-39 B
35-3921	35-3921-BU	4	20	1/2	1/4	N/R	N/R	0.080	0.090	0.008	10-13 (284-370)	RARO	0.65	Sd/Sc	H-39 C
35-3922	35-3922-BU	5	20	1/2	1/4	1/2	1		0.094	0.020	18 (510)	HRo	0.91	Sc	H-39 D

Notes: All of the above have momentary action
 **125/250/480VAC
 All have SPDT

DT = Differential Travel
 HP = Horse Power
 HRo = Hinged Roller
 LRo = Leaf Rollers
 LL = Leaf Lever

OF = Operating Force
 OT = Over Travel
 Pb = Pushbuttons
 Pl. = Plunger

PT = Pre-Travel
 QC = Quick Connect
 RP = Roller Plunger
 Sc = Screw
 RARO = Reverse Action Roller

Sd = Solder
 SP = Stub Plunger
 PP = Pin Plunger
 Ro = Roller

KEYLOCK SWITCHES



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11

Retail Part No.	Bulk Part No.	Figure No.	Poles/Throws	Amps 125 VAC	Action	Index	Lock Type	Key Removal	Actuator	Terminal Type	Mounting Hole (In)	Hardware	Spec. Drawing Page No.
35-3190	35-3190-BU	7	SPDT	4	On/On	90°	4 tumbler w/detent	2 Pos.	Metal Key†	Sd Lug	0.760 x 0.640	N, 2Keys	H-39 G
35-3192	35-3192-BU	7	DPDT	4	On/On	90°	4 tumbler w/detent	2 Pos.	Metal Key†	Sd Lug	0.760	N, 2Keys	H-39 G
35-3193	35-3193-BU	8	SPDT	4	On/On	90°	6 tumbler w/tube lock	2 Pos.	Metal Barrel Key†	6" WL	0.760 x 0.640	N, 2Keys	H-39 H
35-3194	35-3194-BU	8	SPDT	4	On/On	90°	6 tumbler w/tube lock	1 Pos.	Metal Barrel Key†	6" WL	0.760 x 0.640	N, 2Keys	H-39 H
35-3195	35-3195-BU	9	SPDT	4	On(On)	45°	4 tumbler	1 Pos.	Metal Key†	6" WL	0.760 x 0.640	N, 2Keys	H-39 F
35-3197	35-3197-BU	10	SP3T	4	**	45°	4 tumbler	1 Pos.	Metal Key†	Sd Lug	0.760 x 0.640	N, 2Keys	H-39 G
35-3482		11	SPDT	****	Off/On/(On)	90°	5 tumbler	1 Pos.	Metal Key†	Sc	0.844	N, 2Keys	H-39 I

Notes: *Rated @ 2.5Amps 120VAC (480V.A.)

**SP-3 pos. On1 - Off - On2

***Nut, 2 Screws, Ring, and 2 Keys

2.1amps @46VDC (96V.A.), all of the rest are rated

@ 2A @250VAC/4A @ 28VDC, except 35-3482

****35-3482 is rated @ 15A 6-12VDC-2 Position SPDT

Keys(2) included in Hardware

N = Nut

Pos. = Positions

Sc = Screw

Sd = Solder

WL = Wire Leads

† = All keyed alike per figure

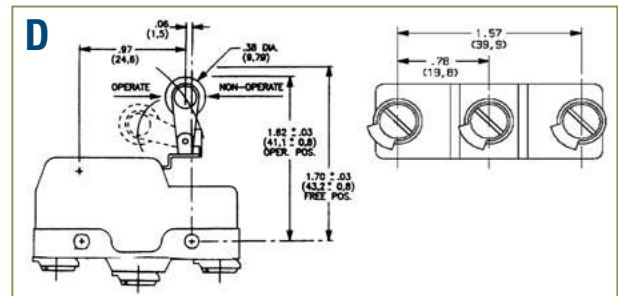
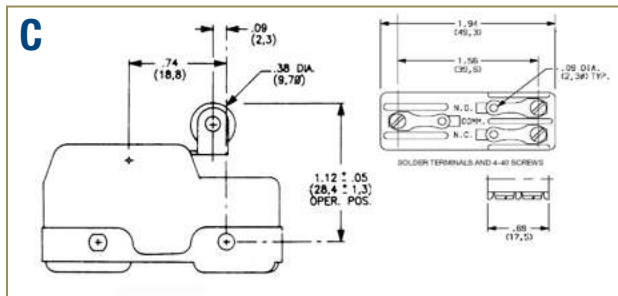
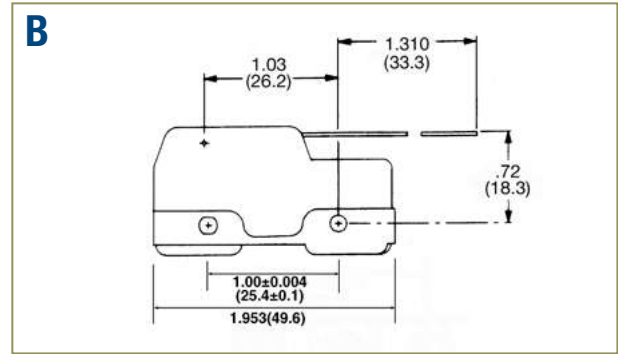
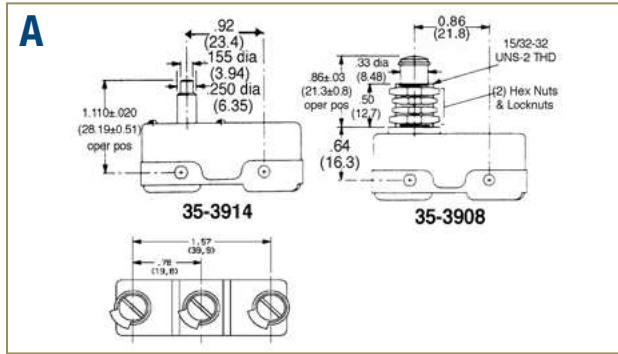
#1110801 Keys for 35-3193 & 35-3194

#115140126 Keys for 35-3190, 35-3192, 35-3195 & 35-3197

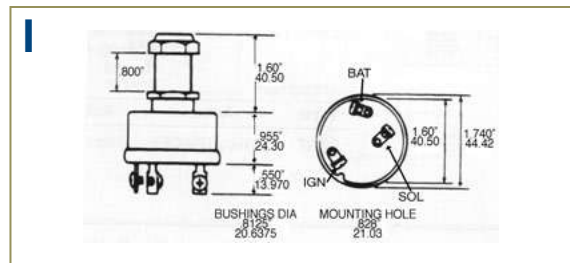
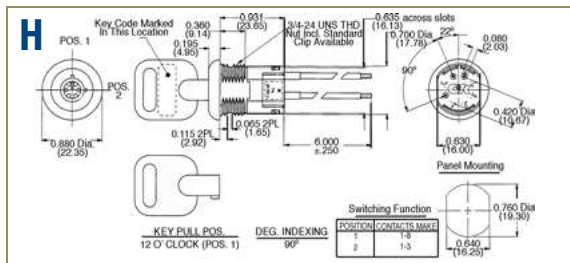
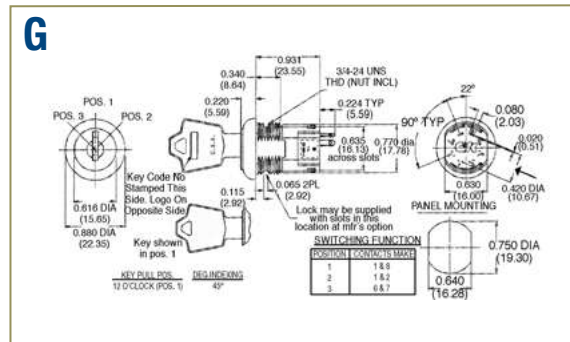
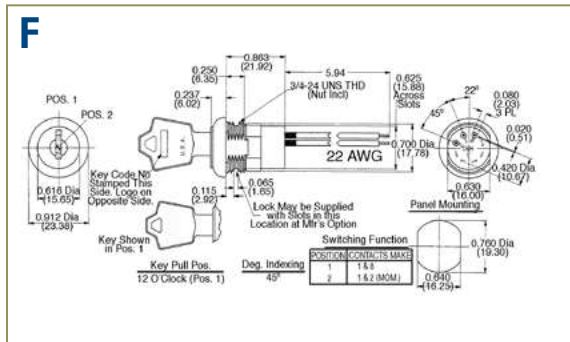
Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

GENERAL PURPOSE SNAP ACTION (Cont.)



KEYLOCK SWITCHES (Cont.)



H

ROTARY SWITCHES



Retail Part No.	Bulk Part No.	Figure No.	Poles/Throws	Amps 125 VAC	Amps 250 VAC	Action	Actuator	Terminal Type	Mounting Style	Mounting Hole (In)	Hardware	Spec. Drawing Page No.
35-859	35-859-BU	1	SPST	3	1.5	On/Off	White Plastic	6" Wire Leads	Snap-In	0.500		H-41 A
35-855	35-855-BU	2	SPST	6	3	On/Off	Brass Knob	6" Wire Leads	Threaded Bushing	0.375	KN, FN	H-41 B
35-856	35-856-BU	3	SPST	6	3	On/Off	Black Plastic	6" Wire Leads	Threaded Bushing	0.375	N, FN	H-41 C
35-1857	35-1857-BU	4	SP3T	6	3	Off/On/On/On	Brass Knob	6" Wire Leads	Threaded Bushing	0.375	N, FN	H-41 D

Retail Part No.	Bulk Part No.	Figure No.	Amps (Cont.)	Amps 125 VAC	Amps 125 VDC	Positions	Poles	Index	Actuator	Terminal Type	Mounting Style	Mounting Hole (In)	Hardware	Spec. Drawing Page No.
35-375	35-375-BU	5		0.3†		6	2	30°	1/4" Metal	Sd Eyelet	Shorting	0.375	N, LR	H-41 E
35-376	35-376-BU	5		0.3†		12	1	30°	1/4" Metal	Sd Eyelet	Shorting	0.375	N, LR	H-41 E
35-378	35-378-BU	5		0.3†		3	3	30°	1/4" Metal	Sd Eyelet	Non-Shorting	0.375	N, LR	H-41 E
35-379	35-379-BU	5		0.3†		4	3	30°	1/4" Metal	Sd Eyelet	Shorting	0.375	N, LR	H-41 E
35-1212		6	6	250mA*		12 No Stop	1	30°	1/2" Metal	Sd Eyelet	Non-Shorting	0.250	N, LR, W	H-41 F
35-1226		6	6	250mA*		6 No Stop	2	30°	1/2" Metal	Sd Eyelet	Non-Shorting	0.250	N, LR, W	H-41 F
35-1306		7	5	2.5	350mA	6	1	30°	1/4" Plastic	Sd Lug	Non-Shorting	0.386	N, LR	H-41 G
35-1312		7	5	2.5	350mA	12 No Stop	1	30°	1/4" Plastic	Sd Lug	Non-Shorting	0.386	N, LR	H-41 G
35-1314		7	5	2.5	350mA	12	1	30°	1/4" Plastic	Sd Lug	Non-Shorting	0.386	N, LR, StR	H-41 G
35-1324		7	5	2.5	350mA	4	2	30°	1/4" Plastic	Sd Lug	Non-Shorting	0.386	N, LR	H-41 G
35-1334		7	5	2.5	350mA	4	3	30°	1/4" Plastic	Sd Lug	Non-Shorting	0.386	N, LR	H-41 G
35-1343		7	5	2.5	350mA	3	4	30°	1/4" Plastic	Sd Lug	Non-Shorting	0.386	N, LR	H-41 G
35-1323		7	5	2.5	350mA	8	1	45°	1/4" Plastic	Sd Lug	Non-Shorting	0.386	N, LR, StR	H-41 G

Notes: *Or 28VDC
Adj. = Adjustable Stop
† = Or 30V DC
Non-Shorting = break before make

FN = Face Nut
KN = Knurled Nut
LR = Locking Ring
N = Nut

Sd = Solder
StR = Stop Ring
W = Washer

SLIDE SWITCHES

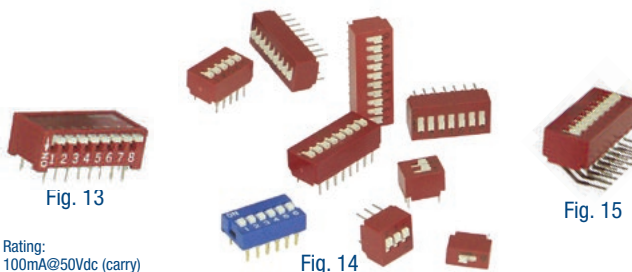


Retail Part No.	Bulk Part No.	Figure No.	Circuit Funct.	Poles & Throws	Amps 125 VAC	Amps 250 VAC	Amps 30 VAC	Amps 125 VDC	Actuator Style	Terminal Type	Mounting Style	Spec. Drawing Page No.
35-202	35-202-BU	8	On/On	PDT			0.303	1/2	Black Plastic	Solder Lug	Surface	H-41 H
35-210	35-210-BU	10	On/On	SPDT	6				Black Plastic	Printed Circuit Board Lug	Surface	H-41 J
35-222	35-222-BU	11	On/On	DPDT	6	3			Black Plastic	Printed Circuit Board Lug	Surface	H-41 K
35-242	35-242-BU	12	On/On	DPDT	11				Black Plastic	Solder Lug	Surface	H-41 L

H

DIP SWITCHES

Retail Part No.	Bulk Part No.	Figure No.	Number of Positions	Profile	Spec. Drawing Page No.
35-953		13	4	Side Actuated	H-41 M
35-957		13	8	Side Actuated	H-41 M
35-961	35-961-BU	14	1	Standard	H-41 N
35-962		14	2	Standard	H-41 N
35-963		14	3	Standard	H-41 N
35-964	35-964-BU	14	4	Standard	H-41 N
35-965		14	5	Standard	H-41 N
35-966	35-966-BU	14	6	Standard	H-41 N
35-967		14	7	Standard	H-41 N
35-968	35-968-BU	14	8	Standard	H-41 N
35-969		14	9	Standard	H-41 N
35-970	35-970-BU	14	10	Standard	H-41 N
35-974		14	12	Standard	H-41 N
35-971		15	8	Right Angle	H-41 N



Rating:
100mA@50Vdc (carry)
100mA@5Vdc
25mA@25Vdc

Note: All figures are for illustration purpose only, and the number/type of terminals may vary.

All quantities are single; BU's are packages of 25 Unless otherwise noted.

CIRCUIT BREAKERS

Retail Part No.	Bulk Part No.	Figure No.	Amps 125/250 VAC/32VDC	Actuator	Mounting Hole	Hardware	Spec. Drawing Page No.
35-2103	35-2103-BU	1	3	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2104	35-2104-BU	1	4	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2105	35-2105-BU	1	5	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2106	35-2106-BU	1	6	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2107	35-2107-BU	1	7	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2108	35-2108-BU	1	8	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2110	35-2110-BU	1	10	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2112	35-2112-BU	1	12	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2115	35-2115-BU	1	15	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2120	35-2120-BU	1	20	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2125	35-2125-BU	1	25	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2130	35-2130-BU	1	30	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2135	35-2135-BU	1	35	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A
35-2140	35-2140-BU	1	40	Black Plastic Button	0.450"	Nut, Knurling Nut; ID Plate	H-43 A



Fig. 1

SPECIALTY SWITCHES



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11

Retail Part No.	Bulk Part No.	Figure No.	Circuit Function	Poles & Throws	Amps 125 VAC	Amps 250 VAC	Actuator	Terminal Style	Body Color	Spec. Drawing Page No.
35-864	35-864-BU	2	On Off	SPST	6	3	3-1/2" Pull Chain	6" Wire Leads		H-43 B
35-865	35-865-BU	3	Off 1-On 2-On	SPDT^	6	3	3-15/16" Pull Chain	Push-in	Purple	H-43 C
35-867	35-867-BU	3	Off 1-On 2-On 3-On	SP3T	6	3	3-3/4" Pull Chain	Push-in	White	H-43 D
35-849	35-849-BU	4	On Off	SPST	6	3	Thumbwheel	Insulation Piercing	White Plastic	H-43 E
35-853	35-853-BU	4	On Off	SPST	6	3	Thumbwheel	Insulation Piercing	Black Plastic	H-43 E
35-1851	35-1851-BU	5	On Off	SPST	6*		Rocker	Solder	Black Plastic	H-43 F

Retail Part No.	Bulk Part No.	Figure No.	Action	Poles & Throws	Amps 20 VAC/DC	Amps 120 VAC	Amps 80 VDC	Actuator	Terminal Type	Mounting Type	Gap	Spec. Drawing Page No.
35-750	35-750-BU	7	NO w/o Magnet	SPST	0.5**	0.08	0.10	Magnet Incl.	Screw	Surface	0.250"	H-43 H
35-756	35-756-BU	7	NO or NC	SPDT	0.015	0.025	0.0375	Magnet Incl.	Screw	Surface	0.250"	H-43 H

Retail Part No.	Bulk Part No.	Figure No.	Action	Poles & Throws	Amps 30 VAC	Amps 120 VAC	Watts 30 VDC	Actuator	Terminal Type	Mounting Type	Gap	Spec. Drawing Page No.
35-754		8	NO w/o magnet	SPST	0.3		3	Magnet Incl.	Side WL	Submin. Surface	1.000"	H-43 I
35-762		9	NO w/o magnet	SPST	0.3		3	Magnet Incl.	WL	Recessed, 3/8" dia.	1.250"	H-43 J

Retail Part No.	Bulk Part No.	Figure No.	Action	Poles & Throws	Amps 6 VDC	Amps 125 VAC	Tilt Angle	Actuator	Terminal Type	Mounting Type	Mounting Holes	Spec. Drawing Page No.
35-730	35-730-BU	10	On Off On	DPDT	1/2			Plastic Handle	Screw		3.40 mm	H-43 K
35-764	35-764-BU	11	NO or NC	SPST		1/2	15°	Int. Metal Ball	Leads			H-43 L

Notes: *Rated 6Amps@120VAC
 **10 Watts Max.
 Sd = Solder

^ = 3 Position
 Incl. = Included
 † = 0.2 Amps@120VDC Max., 4 Watts max.

***Rated 0.01A 120VAC, 450mA 1.5VDC, 20mA 50VDC
 NO/NC = Normally Open or Normally Closed
 †† = Ampere turns = 15-90

All quantities are single; BU's are packages of 25 Unless otherwise noted.

SWITCH ACCESSORIES



Fig. 16



Fig. 17



Fig. 18



Fig. 19



Fig. 20



Fig. 21

Retail Part No.	Bulk Part No.	Figure No.	Description
35-060	35-060-BU	16	Bat Handle Toggle Switch Boot – Thread size: 15/32-32.
35-063	35-063-BU	17	Bat Handle Mini Toggle Switch Boot (Rubber Head) 1/4" Bushing
	35-061-BU	18	Standard On/Off Switch ID Plate Fits 15/32 bushings – 10 pack only
	35-2100-BU	19	Circuit Breaker Plate – 10 pack only
35-436		20	Pushbutton Caps – 1 ea Red 35-430 & Black 35-432
35-430	35-437-BU	20	Pushbutton Caps – 10 pack Red
35-432	35-438-BU	20	Pushbutton Caps – 10 pack Black
	35-758-BU	21	Magnet Only

ROCKER & TOGGLE SWITCH ACCESSORIES

Switch Guard

35-1710B, Flip Cover Switch Guard

Provides the maximum protection, and can be easily added to an already installed switch by unscrewing and replacing the facenut. Spring-loaded snap action cover returns the switch to the 'safe' position when closed, and secures it there. Rugged red melamine cover is colorfast at temperature extremes and is resistant to most contaminants, like fuel oil. Recommended for use with standard 11/16" toggle handle Off-On or On-On switches with a keyway in the bushing. Steel faceplate with black glossy finish. Height closed 1.08"; height open 1.71". 1.80" long x .67" wide. Mounting hole diameter .47". Accepts switches with standard 15/32" diameter mounting stems.



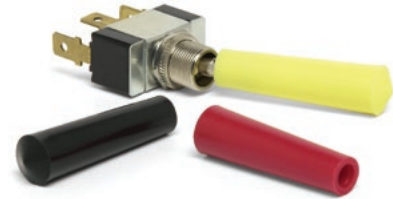
With cover up.

With cover closed.

Handle Extensions

Rigid plastic extension snaps over standard or ball handled toggle switches, extending a standard handle to 1-7/8" long. Enables switches to be easily color-coded. Packed 10 of each color per package.

- 81271, Red
- 81272, Yellow
- 81273, Black



H

TOGGLE SWITCH PACKAGING



Retail Card Packaging



Bulk Packaging



Techspan Toggle Switches are available in single retail card and bulk packaging.

TOP 40 BEST SELLING INDUSTRIAL BLISTER PACKED SWITCHES

Retail Part No.	Description	Program Qty.
1050C1-BP	Red – Raised – Neon 125V Panel Mount Indicator Light	4
1051A1-BP	Red – Round – Neon 250V Panel Mount Indicator Light	4
1050C3-BP	Amber – Raised – Neon 125V Panel Mount Indicator Light	4
35-1710B	Flip Cover Switch Guard	4
765003	Bat Handle Toggle Switch Half boot	4
35-060	Bat Handle Toggle Switch Boot	4
35-080	20A-SPST On-Off Heavy Duty Bat Tog	4
35-110	SPDT On-Off On Heavy Duty Tog	4
35-126	DPST On-Off Heavy Duty Bat Tog	4
35-130	SPDT On-On Bat Toggle Switch 20A	4
35-146	SPST N.O.(Mom) Lg.Rd Red Pb-3A	4
35-148	DPDT On-Off-On Heavy Bat Toggle Switch	4
35-150	DPDT (On(Off (On) Bat Handle Toggle Switch	4
35-155	SPDT (On)Off(On) Bat Handle Toggle Switch	4
35-180	SPST On-Off Blk. Paddle Tog-10A	4
35-3005	SPST On-Off Utility Bat Toggle 20A W/Bras	4
35-3010	SPDT Bat Handle Toggle On-On	4
35-3020	DPDT Bat Handle Toggle On-On	4
35-3060	DPST Bat Handle Toggle On-Off 1 1/2 HP	4
35-3457	SPST Off-On Blk Pushbutton-6amp	4
35-3600	SPST On-Off Rocker-15A	4
35-3630	DPST On-Off Rocker-15A	4
35-3695	DPDT(On)-Off-(On)-Rocker-15A	4
35-410	SPST N.O.(Mom) Red Mini Pb-1A	4
35-412	SPST N.O.(Mom) Squa Blk Mini Pb	4
35-457	SPST N.O. 16Amp Large Rnd. Pushbutton	4
35-462	SPDT Snap Action W/PushButton Actuator 1	4
35-464	Snap Action W/Lever Act-15A	4
35-491	DPDT Push-on Push-off Switch 5A (Moment	4
35-688	SPST On-Off Snapin W/Red Lens	4
35-691	SPST On-Off Black Rocker Switch	4
35-694	SPDT On-Off On Blk Rocker -16A	4
35-695	SPDT (On)-Off-(On) Blk Rocker-16A	4
35-840	Mini Snapaction W/Pin Act-15A	4
35-842	Mini Snapaction W/Simulated Roller Act	4
35-844	Mini Snapaction W/Lever-15A	4
35-846	Mini Snapaction W/Short Roller Actuator 1	4
81271P	Handle Extensions – Red (2/pack)	2
81272P	Handle Extensions – Yellow (2/pack)	2
81273P	Handle Extensions – Black (2/pack)	2



Free Counter Top Spinner Display with order of Program Display may be purchased separately under part # 768192

SWITCH CROSS-REFERENCE

Competitor #	Competitor	Techspan
110-73	Carling	35-160
110-BP	Carling	35-448
110-PM-OFF	Carling	35-430
110-PM-ON	Carling	35-432
110-S-73	Carling	35-167
110-SP	Carling	35-449
2CF53-73 TABS	Carling	35-3015
2CF54-73	Carling	35-110
2FA53-73TABS	Carling	35-3005
2FA54-73	Carling	35-080
2FB64-73	Carling	35-1114
2GA55-73	Carling	35-3065
2GA724-73	Carling	35-080
2GA724-D-2B-B	Carling	35-3160
2GB724-D-2B-B	Carling	35-3162
2GC724-73	Carling	35-130
2GK51-73	Carling	35-118
2GK721-D-2B-B	Carling	35-3154
2GK724-D-2B-B	Carling	35-3164
2GL51-73	Carling	35-1173
2GL60-D-2B-B	Carling	35-186
2GL6A-73	Carling	35-154
2GL721-D-2B-B	Carling	35-3156
2GL724-73	Carling	35-146
2GL724-D-2B-B	Carling	35-3166
2GM60	Carling	35-188
2GM60-D-2B-B	Carling	35-188
2GM721-D-2B-B	Carling	35-3158
2GM724-73	Carling	35-148
62112421000N	Carling	35-606
62115919000N	Carling	35-608
62116919000N	Carling	35-605
62116929000N	Carling	35-609
632122-2BJN	Carling	35-696
6FA64-73	Carling	35-1076
6FB64-73	Carling	35-1116
6FC-54-73	Carling	35-155
6GA72B-73	Carling	35-3055
6GK72S-73	Carling	35-3065
6GL6A-73	Carling	35-154
CA201-73	Carling	35-3040
CB101-73	Carling	35-120
DA221-P-B-B	Carling	35-178
DA284-73	Carling	35-3070
DB221-P-B-B	Carling	35-182
DK284-73	Carling	35-126
EK204-73	Carling	35-3075
HL254-73	Carling	35-141
HM254-73	Carling	35-140
IK254-73	Carling	35-145
IL254-73	Carling	35-3080
IM254-73	Carling	35-143
LRA211-PAB/125N	Carling	35-3091
LRA211RAB125N	Carling	35-694
LRA211RSB125N	Carling	35-3795
LRA511RSB/012V	Carling	35-660
LRGSK611RSB0/125N	Carling	35-655
LTA201TRBR125N	Carling	35-689
LTLA516SBLAMNBL125N	Carling	35-656
PPA525-AC	Carling	35-458
RA901-MW-B-0-N	Carling	35-3760

Competitor #	Competitor	Techspan
RA901-RB-B-0-N	Carling	35-3710
RA901-RB-B-1-N	Carling	35-3030
RA901-VB-B-0-V	Carling	35-693
RA911-PB-B-0-N	Carling	35-3008
RB901-RB-B-0-N	Carling	35-3720
RGSCC201RBB0	Carling	35-654
TIGA516SBLNBL	Carling	35-3600
TIGB516SBLNBL	Carling	35-3610
TIGC516SBLNBL	Carling	35-3620
TIGK516SBLNBL	Carling	35-3630
TIGK5B-6S-BL-NBL	Carling	35-3660
TIGK5M-6S-BL-NBL	Carling	35-3670
TIGL516SBLNBL	Carling	35-3640
TIGL5B-6S-BL-NBL	Carling	35-3680
TIGM516SBLNBL	Carling	35-3650
TIGM5B-6S-BL-NBL	Carling	35-3690
TIGM5M-6S-BL-NBL	Carling	35-3695
V1DAB60C-CBC00-000	Carling	35-3500
V1DAB60C-CGC00-000	Carling	35-3505
V1DAB60C-CMC00-000	Carling	35-3510
V1DAB60C-CTC00-000	Carling	35-3515
V1DAS00C-CZC00	Carling	35-3580
V2DAB60C-CBC00-000	Carling	35-3540
V2DAB60C-CGC00-000	Carling	35-3535
V2DAB60C-CMC00-000	Carling	35-3550
V2DAB60C-CTC00-000	Carling	35-3555
VDDAS00C-CZC00	Carling	35-3585
VJDAB60C-CBC00-000	Carling	35-3520
VJDAB60C-CGC00-000	Carling	35-3525
VJDAB60C-CMC00-000	Carling	35-3530
VJDAB60C-CTC00-000	Carling	35-3535
VJDAS00C-CZC00	Carling	35-3590
VLDAB60C-CBC00-000	Carling	35-3560
VLDAB60C-CGC00-000	Carling	35-3565
VLDAB60C-CMC00-000	Carling	35-3570
VLDAB60C-CTC00	Carling	35-3575

Competitor #	Competitor	Techspan
GSW10	GB	35-3070
GSW11	GB	35-080
GSW116	GB	35-3158
GSW117	GB	35-155
GSW12	GB	35-130
GSW123	GB	35-150
GSW13	GB	35-110
GSW15	GB	35-146
GSW16	GB	35-148
GSW17	GB	35-3035
GSW18	GB	35-3050
GSW19	GB	35-3009
GSW20	GB	35-060
GSW21	GB	35-422
GSW22	GB	35-3457
GSW23	GB	35-3458
GSW24	GB	35-852
GSW25	GB	35-3460
GSW32	GB	35-864
GSW34	GB	35-867
GSW41	GB	35-691
GSW42	GB	35-3740
GSW61	GB	35-855

Competitor #	Competitor	Techspan
BZ-2R-A2	Honeywell	35-3901
BZ-2RD-A2	Honeywell	35-3903
BZ-2RL2-A2	Honeywell	35-3906
BZ-2RL-A2	Honeywell	35-828
BZ-2RQ181-T4J	Honeywell	54-442
BZ-2RQ18-A2	Honeywell	35-3911
BZ-2RQ18-T4-J	Honeywell	35-3911
BZ-2RS-A2	Honeywell	35-3914
BZ-2RS-T4-J	Honeywell	35-3914
BZ-2RW80-T4-J	Honeywell	54-451
BZ-2RW-822-A2	Honeywell	35-3921
BZ-2RW822-T4-J	Honeywell	54-452
BZ-2RW826-T4-J	Honeywell	35-3922
BZ-2RW82-T4J	Honeywell	35-3906
BZ-R2W826-A2	Honeywell	35-3922

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774000	Ideal	35-155
774002	Ideal	35-854
774003	Ideal	35-3025
774005	Ideal	35-3045
774008	Ideal	35-3005
774009	Ideal	35-155
774011	Ideal	35-080
774012	Ideal	35-144
774013	Ideal	35-148
774014	Ideal	35-3060
774015	Ideal	35-146
774016	Ideal	35-148
774017	Ideal	35-3035
774019	Ideal	35-3160
774020	Ideal	35-060
774021	Ideal	35-3454
774022	Ideal	35-3456
774023	Ideal	35-3457
774027	Ideal	35-3015
774032	Ideal	35-864
774033	Ideal	35-865
774061	Ideal	35-855
774062	Ideal	35-1857
774069	Ideal	35-856
774071	Ideal	35-853
774072	Ideal	35-849
774080	Ideal	35-449
774081	Ideal	35-3425
774089	Ideal	35-141
774091	Ideal	35-3020
774092	Ideal	35-140
774094	Ideal	35-153
774095	Ideal	35-3070
774096	Ideal	35-126
774097	Ideal	35-3075
774098	Ideal	35-3009
774099	Ideal	35-061-BU
774100	Ideal	35-3010
774104	Ideal	35-151
774106	Ideal	35-139
774108	Ideal	35-145
774109	Ideal	35-3080
774110	Ideal	35-143

SWITCH CROSS-REFERENCE

Competitor #	Competitor	Techspan
900001	McGill	35-080
900003	McGill	35-078
909988	McGill	35-060
910001	McGill	35-110
920001	McGill	35-130
930001	McGill	35-155
931003	McGill	35-153
933001	McGill	35-3055
934001	McGill	35-153
1210001	McGill	35-112
1210002	McGill	35-148
1210003	McGill	35-152
1210004	McGill	35-3127
1210010	McGill	35-149
1210017	McGill	35-112
1210018	McGill	35-148
1210019	McGill	35-152
1210020	McGill	35-3127
1210043	McGill	35-3065
1210045	McGill	35-3065
1217001	McGill	35-3060
1403023	McGill	35-140
1403024	McGill	35-141
8011312	McGill	57002-01
8111311	McGill	57008-10
8310316	McGill	57005-11
8512303	McGill	35-3610
8520001	McGill	35-3600
8520002	McGill	35-3620
8520003	McGill	35-3610
8520004	McGill	35-3660
8522103	McGill	35-3610
8522303	McGill	35-3610
8612302	McGill	35-3620
8622122	McGill	35-3620
8622322	McGill	35-3620
19080100	McGill	35-3457
41250001	McGill	35-180
0090-9988	McGill	35-060
0121-0001/BP23	McGill	35-3120
0121-0002/BP-25	McGill	35-148
0121-0003/BP-24	McGill	35-146
0121-0004	McGill	35-150
0121-0007	McGill	35-151
0121-0009	McGill	35-118
0121-0010	McGill	35-3025
0121-0011	McGill	35-117
0121-7000	McGill	35-3060
0121-7007	McGill	35-3060
0140-0420	McGill	35-145
0140-3023	McGill	35-140
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0140-3024/BP-23	McGill	35-141
0140-4020/BP-21	McGill	35-145
0140-4023/BP-22	McGill	35-143
0140-4024	McGill	35-3080
0725-0001	McGill	35-449
0725-0004	McGill	35-3454
0811-0310	McGill	35-3630
0811-1310	McGill	35-3600
0825-1213	McGill	35-654

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0825-1243	McGill	35-654
0825-5213	McGill	35-655
0851-0014	McGill	35-656
086202412	McGill	35-3620
100	McGill	35-3457
100/BP-2	McGill	35-3427
100S	McGill	35-3457
1121-0009	McGill	35-117
1121-0011	McGill	35-118
121-0043	McGill	35-3065
1650	McGill	35-061
2709-1150	McGill	35-982
4125-0004/BP-12	McGill	35-854
4125-001/BP-14	McGill	35-167
4701-2100	McGill	35-3930
4775-1100	McGill	35-823
4777-1130	McGill	35-844
4777-1140	McGill	35-846
4777-1150	McGill	35-848
4777-1160	McGill	35-842
90-0001	McGill	35-080
90-0001/BP-3	McGill	35-080
90-0002	McGill	35-078
90-0003	McGill	35-3005
91-0001	McGill	35-110
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91-0003	McGill	35-3015
92-0001/BP-13	McGill	35-130
93-0001	McGill	35-160
93-1001	McGill	35-153
93-3001	McGill	35-3055
BP11	McGill	35-3425
BP13	McGill	35-3120

Competitor #	Competitor	Techspan
A-20GQ-B7-K	Omron	35-982
A-20GV2-B7-K	Omron	35-986
A-20GV-B7-K	Omron	35-984
SS-10GL	Omron	35-836
V-10G-1B5-K	Omron	35-3930
V-10G-1C24-K	Omron	35-823
V-10G2-1C24-K	Omron	35-880
V-10G3-1C24-K	Omron	35-824
V-10G3-1C25-K	Omron	35-3938
V-10G5-1C24-K	Omron	35-846
V-10G5-1C25-K	Omron	35-3940
V-15G2-1C25-K	Omron	35-844
V-15G4-1C25-K	Omron	35-842
V-15G5-1B5-K	Omron	35-3944
V-15G6-1B5-K	Omron	35-3936
V-15G6-1C25-K	Omron	35-848
Z-15GQ22-B	Omron	35-3910
Z-15GQ-B-7K	Omron	35-896
Z-15GS-B-7K	Omron	35-3914
Z-15GW22	Omron	35-3920
Z-15GW-B-7K	Omron	35-3916

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ECONOMICAL INDUSTRIAL-PACK™ WIRE & CABLE MARKERS

Industrial-Pack™ Wire marker books are manufactured with the same high quality vinyl cloth as our Pocket-Pack™, but are finished with an economical flat stitch for users who do not require removable pages. The Industrial-Pack™ System is convenient and fits into your pocket for travel to the job. The TECHSPAN® LEM, Industrial Pack™ Wire Markers are mounted on our 90# Super Release lay flat liner. The slick surface protects the adhesive until used. This assures full bonding power when applied to a wire. Each book contains 450 wire markers and 450 matching terminal strips. Wire and Cable Markers are printed on vinyl impregnated cloth, the proven general purpose material for maintenance, construction and product identification. A strong adhesive and a flexible material assure a firm lasting wrap on a wire. Easy to read legends are printed on white background. Adhesion to steel is 40 oz./in. with a temperature range of -40°F to 250°F.



WIRE & CABLE MARKER BOOKS

Part #	LEGEND	MARKERS/BOOK
IPWM-1	0-9	45 each
IPWM-2	A-Z, O-15, +, -, /	10 each
IPWM-4	1, 2, 3	150 each
IPWM-5	A, B, C	150 each
IPWM-6	T1, T2, T3	150 each
IPWM-7	L1, L2, L3	150 each
IPWM-8	1-15	6 each
	16-90	4 each
	A-Z, +, -, /, 0	2 each
IPWM-9	1, 2, 3	45 each
	A,B,C	45 each
	L1, L2, L3	30 each
	T1, T2, T3	30 each
IPWM-10	10 NEMA COLOURS	45 each
IPWM-11	1-30	15 each
IPWM-12	A-Z	15 each
	BLANK	45 each
	+	8 each
	-	7 each
IPWM-13	+, -	45 each
	AC, DC	45 each
	POS, NEG, GND	33 each
	NEUT	27 each
	SPARE & BLANK	21 each

Part #	LEGEND	MARKERS/BOOK
IPWM-14	0-45	10 each
IPWM-15	0-9	40 each
	L1, L2, L3, T1, T2, T3	10 each
		10 each
IPWM-16	46 - 90	10 each
IPWM-17	1-33, A, B, C, +, -, T1, Y2, T3	10 each
	L1, L2, L3	Legend
IPWM-18	1-45	5 each
	46-90	5 each
IPWM-20	0-15	6 each
	16-90	4 each
	A-Z	2 each

SOLID NUMBER

Part #	LEGEND	MARKERS/BOOK
IPPD-0	0	450 each
IPPD-1	1	450 each
IPPD-2	2	450 each
thru	thru	Legend
IPPD-10	10	

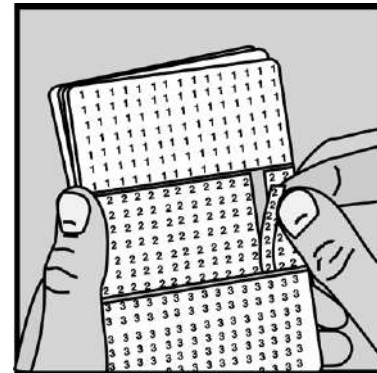
SOLID LETTER

Part #	LEGEND	MARKERS/BOOK
IPPD-A	A	450 each
IPPD-B	B	450 each
IPPD-C	C	450 each
thru	thru	Legend
IPPD-Z	Z	

POCKET-PACK™ WIRE & CABLE MARKERS

TECHSPAN® LEM®'s easy to use wire marker cards and books are ready for immediate delivery. Thousands of legends, numbers, letters, symbols and abbreviations are available from our warehouse inventory. Pocket-Pack™ books are manufactured with spiral hinges to permit easy access. The hinged Pocket-Pack System is convenient since the pages always lay flat and fit into a pocket for travel to the job. TECHSPAN® LEM Wire Markers are mounted on our LPS-3 Heavyweight (12 pt.) Super Release dispenser cards. The slick surface protects the adhesive until the markers are used. This assures full bonding power when applied to a wire.

Each book contains 450 wire markers and 450 matching terminal strips. Wire and cable markers are printed on vinyl impregnated cloth, the proven general purpose material for maintenance, construction and product identification. A strong adhesive and a flexible material assure a firm lasting wrap on a wire. Easy to read black legends are printed on a white background. Adhesion to steel is 40 oz./in. with a temperature range of -40°F to 250°F.

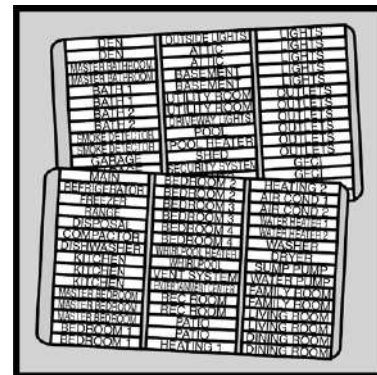


LOAD CENTER AND RESIDENTIAL WIRE MARKERS

- Many household legends (Bath, Bedroom, Den, Kitchen, etc.)
- Fits right on load center
- Comes in ten page pocket-sized book for convenient use (five cards each of two legends)

VINYL CLOTH		
Part #	Size Inches (mm)	Markers each Legend
PPLC	11.55 x .20 (39.37 x 5.08)	5 (min.)

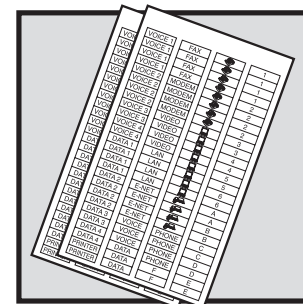
Replaces MKR-BK11



POCKET-PACK™ BOOKS WITH TELECOMMUNICATIONS LEGENDS

- Ten pages per book
- Customized legends for telecommunications applications

VINYL CLOTH			
Part #	Materials	Size Inches (mm)	Markers each Legend
PPTCOM-1	L-133 Polyester Film (White)	.625 x .187 (15.88 x 4.75)	20 (min.)
PPTCOM-2	L-155 Metallized Polyester (Silver)	.625 X .187 (15.88 x 4.75)	20 (min.)

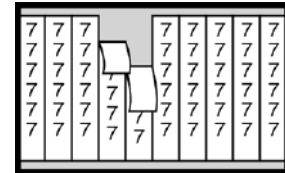


WIRE MARKING CARDS

TECHSPAN® / LEM, Wire Markers are mounted on our LPS-3 Super Release dispenser cards. The slick surface protects the adhesive until you are ready to use the markers. The back strip of the dispenser peels back for quick, easy access to the markers. This assures full bonding power when applied to a wire. Wire and cable markers are printed on vinyl impregnated cloth, the proven general purpose material for maintenance, construction and product identification. A strong adhesive and a flexible material assure a firm lasting wrap on wire. Easy to read legends are printed on a white background. Adhesion to steel is 40 oz./in. with a temperature range of -40°F to 250°F. Packaged 25 cards per box. For smaller diameter wire, markers can be cut in half to 3/4" at no additional charge. Please specify marker length when placing an order.

All wire markers are 1.5" long. 25 cards/box.

SOLID NUMBERS



LEGEND	VINYL CLOTH	MARKERS PER CARD 1.50" (38 MM)
0	LWM-0	36
1	LWM-1	36
2	LWM-2	36
and so on thru	and soon on thru	
25	LWM-25	36
26	LWM-26	36
and soon on thru	and soon on thru	36
All Three Digit	LWM-600	25

STANDARD COMBINATION WIRE MARKER PACKS

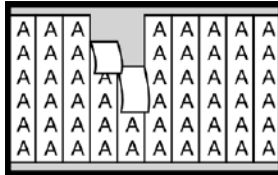


Each pack contains one card each of 25 numbers or 26 letters (A-Z) with all legends identical on each individual card.

LEGEND Solid Number Cards	VINYL CLOTH
1 thru 25	LWMCP-1-25
26 thru 50	LWMCP-26-50
51 thru 75	LWMCP-51-75
76 thru 100	LWMCP-76-100
101 thru 125	LWMCP-101-125
126 thru 150	LWMCP-126-150
151 thru 175	LWMCP-151-175
176 thru 200	LWMCP-176-200
and so on thru	and so on thru
576 thru 600	LWMCP-576-600
A thru Z	LWMCP-A-Z

WIRE MARKER CARDS

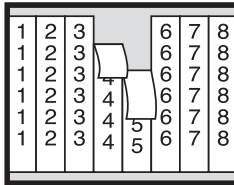
SOLID LETTERS



LEGEND	VINYL CLOTH	MARKERS PER CARD 1.50" (38mm)
A	LWM-A	36
B	LWM-B	36
C	LWM-C	36
and so on thru	and so on thru	
Z	LWM-Z	36

25
Cards Per
Box

CONSECUTIVE NUMBERS

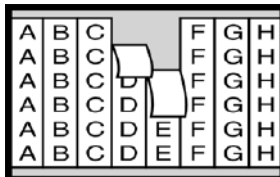


CONSECUTIVE NUMBERS

LEGEND	VINYL CLOTH	QUANTITY EACH			
		NUMBERS PER CARD		MARKERS PER CARD	
		1.50" (38mm)	.75" (19mm)	1.50" (38mm)	.75" (19mm)
1-33	LWM-1-33	1	2	33	66
34-66	LWM-34-66	1	2	33	66
67-99	LWM-67-99	1	2	33	66
100-124	LWM-100-124	1	2	25	50
125-149	LWM-125-149	1	2	25	50
and so on thru	and so on thru				
1999	LWM-1975-1999	1	2	20	40

25
Cards Per
Box

CONSECUTIVE LETTERS



CONSECUTIVE LETTERS

LEGEND	VINYL CLOTH	MARKERS PER CARD	
		1.50" (38mm)	.75" (19mm)
A-Z	LWM-A-Z	26	52
A-Z	LWM-a-z-SML	26	52

25
Cards Per
Box

CONSECUTIVE NUMBERS REPEATED



LEGEND	VINYL CLOTH	QUANTITY EACH			
		SEQUENCES/CARD		MARKERS/CARD	
		1.50" (38mm)	.75" (19mm)	1.50" (38mm)	.75" (19mm)
1-3	LWM-1-3	12	24	36	72
1-4	LWM-1-4	9	18	36	72
1-5	LWM-1-5	7	14	35	70
1-6	LWM-1-6	6	12	36	72
1-8	LWM-1-8	4	8	32	64
1-9	LWM-1-9	4	8	36	72
0-9	LWM-0-9	3	6	30	60
0-10	LWM-0-10	3	6	33	66
1-10	LWM-1-10	3	6	30	60
1-12	LWM-1-12	3	6	36	72
1-16	LWM-1-16	2	4	32	64
1-18	LWM-1-18	2	4	36	72
19-36	LWM-19-36	2	4	36	72

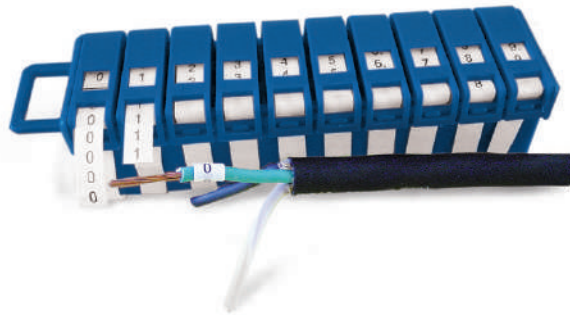
CUT-MARK MARKER DISPENSER & TAPE

CUT MARK DISPENSER AND TAPE

The TECHSPAN® / LEM, Cut-Mark Dispenser is the easiest to use portable wire marker system available. The Cut-Mark Dispenser contains 10 rolls of marker tape, numbered 0-9. Each marker is pre-cut and mounted on a silicone release liner. Simply pull down on the liner and the maker is dispensed. Then lift off and apply.

Each roll has 76 markers, 1-1/4" in length. The markers have an acrylic adhesive, are resistant to oil and water, and can be used from -40°F to 250°F.

Part #	DESCRIPTION
CMD-0-9	Loaded Dispenser with Legends 0-9
REFILLS-10 ROLLS PER PKG.	
CMDR-0-9	1 each of 0-9



LEM SEAL-CODE DISPENSERS

TECHSPAN® / LEM SEAL-CODE™ Write-on Self-Laminating Wire and Cable Marker Dispensers feature a pocket sized dispenser containing a roll of pre-cut, self-laminating markers. Each marker has a white write-on area available for the user to write a legend in pencil or pen. After marking, the user simply pulls down on the marker liner and marker is dispensed. The transparent portion of the marker wraps around itself to protect the white write-on area.

1. Write your own legend on write-on area.
2. Pull backing tape down to dispenser marker.
3. Place written portion on wire or cable.
4. Wrap transparent portion around for full protection.

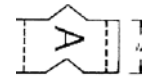
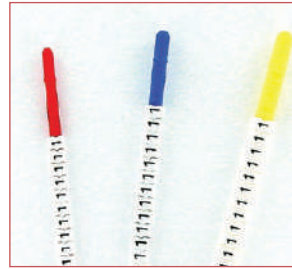


- Available in four marker lengths, each 3/4" wide.

Part #	MARKER SIZE (W x H)	MARKERS PER ROLL	WRITE-ON AREA
LRW 13	.75" x 3.0"	90 markers	.75" x .75"
LRW 16	.75" x 6.0"	40 markers	.75" x 1"
LRW 51	.75" x 1.25"	300 markers	.75" x .313"
LRW 52	.75" x 1.875"	150 markers	.75" x .50"

SNAP-ON™ WIRE MARKERS

- Temperature range: -20°C to 60°C.
TECHSPAN® Snap-on Marker system is permanent since there is no adhesive to dry out.
- Easily marks pre-connected wires and marks wires in areas with limited space.
- Excellent for marking wires with more than 2 digits legends.



SIZE S6
FOR WIRE SIZES*
AWG 18-16
.106"
(2.7 mm) Made of Nylon

Part #	LEGEND
S6-0	0
S6-1	1
thru	thru
S6-9	9
*S6-0-9	0 thru 9
S6-A	A
thru	thru
S6-Z	Z
S6-+	+
S6-MINUS	-
S6-BLANK	BLANK

30 identical markers per wand
Numbers sold in 10 wands per pack
*10 pack- 1 wand of 0, 1 wand of 1, etc.

SIZE S9
FOR WIRE SIZES*
AWG 16-14
.114"
(2.9 mm) Made of Nylon

Part #	LEGEND
S9-0	0
S9-1	1
thru	thru
S9-9	9
*S9-0-9	0 thru 9
S9-A	A
thru	thru
S9-Z	Z
S9-+	+
S9-MINUS	-
S9-BLANK	BLANK

30 identical markers per wand
Numbers sold in 10 wands per pack
*10 pack- 1 wand of 0, 1 wand of 1, etc.

SIZE S12
FOR WIRE SIZES*
AWG 12-10
.173"
(4.4 mm) Made of Nylon

Part #	LEGEND
S12-0	0
S12-1	1
thru	thru
S12-9	9
*S12-0-9	0 thru 9
S12-A	A
thru	thru
S12-Z	Z
S12-+	+
S12-MINUS	-
S12-BLANK	BLANK

30 identical markers per wand
Numbers sold in 10 wands per pack
*10 pack- 1 wand of 0, 1 wand of 1, etc.

Z-MARKERS



- Soft durable PVC
- Service temperature of 85°C
- Black lettering on white background

CABLE MARKER SPOOLS			
Part #	WIRE SIZE	QTY/ROLL	STD. MARKING
CMA-1814-__	18-14 AWG	1000	Solid Number or Letter Per Roll 0, 1, 2...9 A, B, C...Z
CMA-1412-__	14-12 AWG	1000	
CMA-108-__	10-8 AWG	500	
CMA-84-__	8-4 AWG	250	

K-MARKERS



- K-Markers**
- Soft durable PVC
 - Service temperature of 85°C
 - Black lettering on yellow background

- K-Marker Carriers**
- Nylon 66
 - UL 94-2

K-MARKERS			
Part #	DIAMETER RANGE mm ²	QTY/ROLL	STD. MARKING
CMC-128-__	3.5-7.0	500	0-9, A-Z, +, -, /, ⊕

K-MARKER CARRIERS (use with 50lb cable tie max.)		
Part #	DESCRIPTION	PCS/ BAG
PKH070	70mm (9 markers)	100
PKH110	100mm (16 markers)	100
POH07060	6 markers	100
POH18110	17 markers	100



VOLTAGE MARKERS

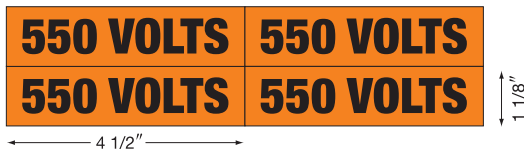


Formats Available

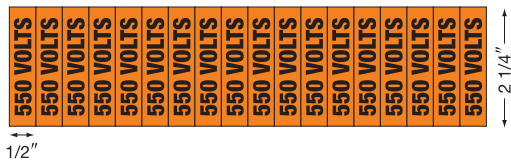
STYLE A - 1 MARKER 2 1/4" X 9"



STYLE B - 4 MARKERS 1 1/8" X 4 1/2"



STYLE C - 18 MARKERS 1/2" X 2 1/4"



Be Sure - Mark power lines, conduits, bus way, fuse boxes switches, electrical equipment and outlets.

Be Sure - Reduce errors, mark positively for safer, faster repair when needed.

Pressure sensitive vinyl markers adhere to the most diverse types of surfaces. Fast and easy to apply! Packaged in 25 identical cards per box.

For "Display Packs" of 5 per hanging bag, add suffix D to stock #.

Colour: Black on Orange

Part #	LEGEND
LVM-110	110 VOLTS
LVM-115	115 VOLTS
LVM-120	120 VOLTS
LVM-208	208 VOLTS
LVM-220	220 VOLTS
LVM-230	230 VOLTS
LVM-240	240 VOLTS
LVM-250	250 VOLTS
LVM-277	277 VOLTS
LVM-347	347 VOLTS
LVM-440	440 VOLTS
LVM-460	460 VOLTS
LVM-480	480 VOLTS
LVM-550	550 VOLTS
LVM-600	600 VOLTS
LVM-2200	2200 VOLTS
LVM-2300	2300 VOLTS
LVM-2400	2400 VOLTS
LVM-4160	4160 VOLTS
LVM-4800	4800 VOLTS
LVM-5000	5000 VOLTS
LVM-6900	6900 VOLTS
LVM-7200	7200 VOLTS
LVM-12000	12000 VOLTS
LVM-12470	12470 VOLTS
LVM-13000	13000 VOLTS
LVM-13200	13200 VOLTS
LVM-13800	13800 VOLTS

Part #	LEGEND
LVM-28	EMERGENCY SERVICE
LVM-29	SINGLE PHASE
LVM-53	TWO PHASE
LVM-31	THREE PHASE
LVM-32	POWER
LVM-33	LIGHTS
LVM-51	LIGHT & POWER
LVM-34	120V TO 208V
LVM-35	277V TO 480V
LVM-27	AC
LVM-38	DC
LVM-49	HEATING
LVM-57	HEATING CIRCUIT
LVM-47	AIR CONDITIONING
LVM-48	TELEPHONE
LVM-50	OUT OF SERVICE
LVM-56	ELECTRIC OUT OF SERVICE
LVM-52	SPARE
LVM-54	FIRE ALARM
LVM-58	ON/OFF
LVM-55	VOLTS
LVM-59	___ VOLTS
LVM-60	CIRCUIT # _____
LVM-61	CIRCUIT BREAKER
LVM-62	FUSE BOX

Add suffix "D" for display pack packaging. This has 5 labels per bag.

Bag has hanging hole for rack display.

WIRE IDENTIFICATION PRODUCTS

Vinyl Cloth Number & Letter Stock Sizes



Part # 5003 Character Height: 5/8"
Marker Size: 9/16" x 3/4" Markers Per Card: 32



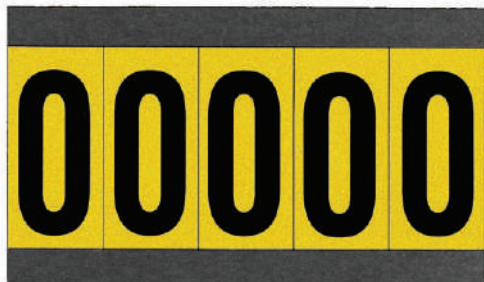
Part # 5004 Character Height: 1"
Marker Size: 7/8" x 1 1/2" Markers Per Card: 10



Part # 5005 Character Height: 2"
Marker Size: 7/8" x 2 1/4" Markers Per Card: 10
Seven "W" Per Card



Part # 5006 Character Height: 3"
Marker Size: 1 1/2" x 3 1/2" Markers Per Card: 6
Four "W" Per Card



Part # 5007 Character Height: 4"
Marker Size: 1 3/4" x 5" Markers Per Card: 5
Three "W" Per Card
Four "M" Per Card

Black
On Yellow
Background



Also available with black numbers or letters on white background (special order).

Part # 5008 Character Height: 6"
Marker Size: 5" x 9" Markers Per Card: 1

Character Legibility table

The Character Legibility Table below can help you determine what size your markers should be for good readability at varying distances

Colour: Black on Yellow						
Character Height (inches)	1"	1-1/2"	2"	3"	4"	6"
Readability Distance (feet)	Up to 40'	up to 60'	up to 75'	up to 105'	up to 150'	up to 300'

HOW TO ORDER Specify stock number for the legend you desire. Vinyl cloth numbers and letters are packaged 25 identical cards per box. Price is per card. Quantities may be aggregated when full box quantities of various legends are ordered at one time. Broken packages are available.

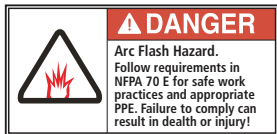
Example: If you want a number "5" with a 1" character height, 7/8" x 1-1/2" overall marker size, then order **5004-5**

WIRE IDENTIFICATION PRODUCTS

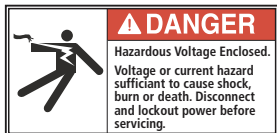
Arc Flash Labels



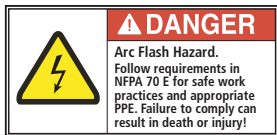
Stock #: LSPAFW7
Size: 3-1/2" x 5"



Stock #: LSPAFW8
Size: 3-1/2" x 5"

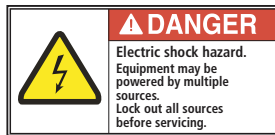


Stock #: LSPAFW9
Size: 3-1/2" x 5"

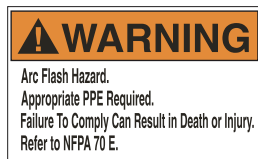


Stock #: LSPAFW10
Size: 3-1/2" x 5"

2002 NEC 110.16
mandates that employees are responsible to label all switchboards, panel boards, industrial control panels, and motor control centers installed after 2002. Equipment installed before 2002 must have labels applied if any modifications or upgrades take place.



Stock #: LSPAFW11
Size: 3-1/2" x 5"



Stock #: LSPAFW35
Size: 3-1/2" x 5"



Stock #: LSPAFW35A
Size: 3-1/2" x 5"

Is your facility SAFE from Arc Flash hazards? Prevent accidents and huge OSHA fines by using Techspan® Arc Flash labels.

After a potential arc flash is identified it should be properly labeled. Techspan® Arc Flash Labels clearly identify equipment

and components for potential arc flash hazards. Techspan® Arc Flash Labels are important for eliminating confusion and ensuring you have a safe workplace.

The new NEC Standard, Article 110.16 Flash Protection states: "Switchboards, Power boards, Control Panels and Motor Control Centers shall be field marked to warn of potential arc flash hazards." Arc flash labels should be clearly visible to qualified persons before they examine service, adjust or perform maintenance on the equipment.

Dropped tools and accidental contact with electrical systems are common causes of arc flash injuries. Prevent accidents; mark your workplace with Techspan® Arc Flash Labels to inform those working in potentially hazardous situations. The Bureau of Labor Statistics states that electrical burns, explosions and electrocution/ electrical shock resulted in over 11,000 days away from work in 1994.

Mark for safety and eliminate the potential for disaster...use Techspan® Arc Flash Labels. Techspan® Arc Flash Labels are available in both stock and custom formats.

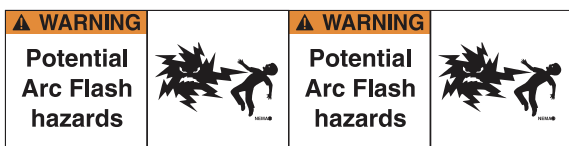
! HOW TO ORDER
Specify the stock number for the label you desire. Arc Flash Labels are sold in packs of 25. Example: If you want an "Arc Flash Warning" marker, order LSPAFW6 .



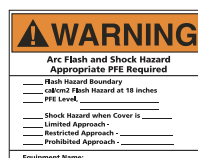
Stock #: LSPAFW6
Size: 3-1/2" x 5"



Stock #: LSPAFW3
Size: 3-1/2" x 5"



Stock #: LSPAFW15
Size: 2-1/2" x 4-1/2"
2 per card



Stock #: LSPAFWC35
Size: 3-1/2" x 5"

WIRE IDENTIFICATION PRODUCTS

Barricade Tapes/1.8 mil – 2 mil

Stock Legend 3" x 1000'	Colour	Part #
Caution Acid Hazard	Yellow	BT-301
Caution Asbestos	Yellow	BT-302
Caution Asbestos Hazard	Yellow	BT-303
Caution Caustic Hazard	Yellow	BT-304
Caution Caution Caution	Yellow	BT-305
Caution Chemical Hazard	Yellow	BT-306
Caution Construction Area	Yellow	BT-307
Caution Do Not Enter	Yellow	BT-308
Caution Energized Area	Yellow	BT-309
Caution Entry Requires Protective Gear	Yellow	BT-310
Caution Hard Hat Area	Yellow	BT-311
Caution High Voltage	Yellow	BT-312
Caution Keep Out	Yellow	BT-313
Caution Men Working	Yellow	BT-314
Caution Men Working Overhead	Yellow	BT-315
Caution No Parking	Yellow	BT-316
Caution No Smoking	Yellow	BT-317
Caution Off Limits	Yellow	BT-318
Caution Open Trench	Yellow	BT-319
Caution People Working Overhead	Yellow	BT-320
Caution Radiation Area	Yellow	BT-321
Caution Unauthorized Persons Keep Out	Yellow	BT-322
Caution Wet Floor	Yellow	BT-323
Caution Wet Paint	Yellow	BT-324
Caution Working Overhead	Yellow	BT-325
Caution Authorized Personnel Only	Yellow	BT-326
Caution Entry Requires Permission	Yellow	BT-327
Caution Restricted Area - Keep Out	Yellow	BT-328

All tape available in 3" x 1000' rolls only. Custom legends are available by contacting your authorized TECHSPAN distributor.



Stock Legend 3" x 1000'	Colour	Part #
Danger Asbestos	Red	BT-329
Danger Asbestos (with cautionary information)	Red	BT-330*
Danger Asbestos Hazard	Red	BT-331
Danger Danger Danger	Red	BT-332
Danger Do Not Enter	Red	BT-333
Danger Hazardous Area	Red	BT-334
Danger Hazardous Area Keep Out	Red	BT-335
Danger Hazardous Material Keep Out	Red	BT-336
Danger High Voltage Area	Red	BT-337
Danger Keep Out	Red	BT-338
Crime Scene Do Not Cross	Yellow	BT-339
Fire Line Do Not Cross	Yellow	BT-340
Police Line Do Not Cross	Yellow	BT-341
Security Line Do Not Cross	Yellow	BT-342
Sheriff's Line Do Not Cross	Yellow	BT-343

*note on BT-330, legend reads: (ASBESTOS, Cancer and Lung Disease Hazard, Authorized Personnel Only, Respirators and Protective Clothing are Required in the Area)

Buried Line Tapes/3.5 mil – 4 mil

Stock Legend 3" & 6" x 1000'	Colour	Part #
Caution Buried Air Line Below	Yellow	BLT-620
Caution Buried Installation Below	Yellow	BLT-621
Caution Buried Processed Line Below	Yellow	BLT-622
Caution Buried Cable T.V. Below	Orange	BLT-623†
Caution Buried Condensate Below	Blue	BLT-624
Caution Buried Diesel Oil Line Below	Yellow	BLT-625
Caution Buried Electric Line Below	Yellow	BLT-626
Caution Buried Electric Line Below	Red	BLT-627
Caution Buried Fuel Line Below	Yellow	BLT-628
Caution Buried Gas Line Below	Yellow	BLT-629
Caution Buried High Voltage Line Below	Yellow	BLT-630
Caution Buried High Voltage Line Below	Red	BLT-631
Caution Buried Natural Gas Line Below	Yellow	BLT-632

Tapes are available in 3" and 6" x 1000' rolls. To specify 3" or 6" roll, add suffix 3 or 6 to the end of the stock number (example: BLT-633-3)

Stock Legend 3" & 6" x 1000'	Colour	Part #
Caution Buried Oil Line Below	Yellow	BLT-633
Caution Buried Pipeline Below	Yellow	BLT-634
Caution Buried Sewer Line Below	Green	BLT-635†
Caution Buried Telephone Line Below	Orange	BLT-636†
Caution Buried Steam Line Below	Blue	BLT-637†
Caution Buried Utilities Underground	Yellow	BLT-638
Caution Buried Utility Line Below	Yellow	BLT-639
Caution Buried Water Line Below	Blue	BLT-640†
Caution Buried Cable Line Below	Orange	BLT-641†
Caution Buried Fiber Optic Line Below	Orange	BLT-642†
Caution Buried Reclaimed Water Line Below	Blue	BLT-643†

†Custom legends are available by contacting your authorized TECHSPAN distributor

TEW WIRE



- CSA and UL Approved
- 600 V Rating
- 105°C
- Assorted colours
- Each spool sealed against dust



- Keep your Inventory clean
- No more cutting master rolls
- No more lost orders on small cuts

Also Available

Welding Cable, Battery Cable, Trailer Cable, and GPT Automotive Cable.

Ask for the Techspan Automotive Catalogue.



Counter wire rack available on request. (holds 16 rolls).

Ask for Part # 768112 c/w TEW Header.

In convenient 30 metre spools

NON-TINNED #	TINNED #	DESCRIPTION	U/M
768599	768662	TEW 18 AWG 98' (30M) PURPLE	SPL
768600	768654	TEW 18 AWG 98' (30M) BLACK	SPL
768601	768655	TEW 18 AWG 98' (30M) BLUE	SPL
768602	768656	TEW 18 AWG 98' (30M) BROWN	SPL
768603	768657	TEW 18 AWG 98' (30M) GREEN	SPL
768604	768658	TEW 18 AWG 98' (30M) ORANGE	SPL
768605	768659	TEW 18 AWG 98' (30M) RED	SPL
768606	768660	TEW 18 AWG 98' (30M) WHITE	SPL
768607	768661	TEW 18 AWG 98' (30M) YELLOW	SPL
768608	768663	TEW 18 AWG 98' (30M) GREY	SPL
768598	768672	TEW 16 AWG 98' (30M) PURPLE	SPL
768609	768664	TEW 16 AWG 98' (30M) BLACK	SPL
768610	768665	TEW 16 AWG 98' (30M) BLUE	SPL
768611	768666	TEW 16 AWG 98' (30M) BROWN	SPL
768612	768667	TEW 16 AWG 98' (30M) GREEN	SPL
768613	768668	TEW 16 AWG 98' (30M) ORANGE	SPL
768614	768669	TEW 16 AWG 98' (30M) RED	SPL
768615	768670	TEW 16 AWG 98' (30M) WHITE	SPL
768616	768671	TEW 16 AWG 98' (30M) YELLOW	SPL
768617	768673	TEW 16 AWG 98' (30M) GREY	SPL
768597	768682	TEW 14 AWG 98' (30M) PURPLE	SPL
768618	768674	TEW 14 AWG 98' (30M) BLACK	SPL
768619	768675	TEW 14 AWG 98' (30M) BLUE	SPL
768620	768676	TEW 14 AWG 98' (30M) BROWN	SPL
768621	768677	TEW 14 AWG 98' (30M) GREEN	SPL
768622	768678	TEW 14 AWG 98' (30M) ORANGE	SPL
768623	768679	TEW 14 AWG 98' (30M) RED	SPL
768624	768680	TEW 14 AWG 98' (30M) WHITE	SPL
768625	768681	TEW 14 AWG 98' (30M) YELLOW	SPL
768626	768683	TEW 14 AWG 98' (30M) GREY	SPL
768627	768684	TEW 12 AWG 98' (30M) BLACK	SPL
768628	768685	TEW 12 AWG 98' (30M) BLUE	SPL
768629	768686	TEW 12 AWG 98' (30M) BROWN	SPL
768630	768687	TEW 12 AWG 98' (30M) GREEN	SPL
768631	768688	TEW 12 AWG 98' (30M) ORANGE	SPL
768632	768689	TEW 12 AWG 98' (30M) RED	SPL
768633	768690	TEW 12 AWG 98' (30M) WHITE	SPL
768634	768691	TEW 12 AWG 98' (30M) YELLOW	SPL
-	768692	TEW 12 AWG 98' (30M) PURPLE	SPL
-	768693	TEW 12 AWG 98' (30M) GREY	SPL
768636	768694	TEW 10 AWG 98' (30M) BLACK	SPL
768637	768695	TEW 10 AWG 98' (30M) BLUE	SPL
768638	768696	TEW 10 AWG 98' (30M) BROWN	SPL
768639	768697	TEW 10 AWG 98' (30M) GREEN	SPL
768640	768698	TEW 10 AWG 98' (30M) ORANGE	SPL
768641	768699	TEW 10 AWG 98' (30M) RED	SPL
768642	768700	TEW 10 AWG 98' (30M) WHITE	SPL
768643	768701	TEW 10 AWG 98' (30M) YELLOW	SPL

Dimensions

Non-Tinned TEW		
98.4' Spools (30m)		
Gauge	Outside Dia.	Stranding
18	.109"	16 x .010"
16	.122"	26 x .010"
14	.136"	41 x .010"
12	.159"	65 x .010"
10	.183"	104 x .010"

Tinned TEW (for Marine Applications)		
98.4' Spools (30m)		
Gauge	Outside Dia.	Stranding
18	.109"	16 x .010"
16	.122"	26 x .010"
14	.136"	41 x .010"
12	.159"	65 x .010"
10	.183"	104 x .010"

SPLIT LOOM TUBING

Polyethylene Split Loom

Black polyethylene split loom provides wire and cable assemblies with protection from heat and sunlight, water, snow, salt, vibration, wear, fraying or puncture. Split construction allows for easy wire insertion. Maximum temperature 93°C (200°F). Available in many packaging variations to suit all needs.

Techspan's split loom can be used for numerous applications as follows:

- Automotive
- Marine & Agricultural Equipment
- Truck and Trailer
- Electrical Panels
- Bus/R.V.
- Appliances/Electronics

Small Packaging – (Rolled neatly in bags)

I.D. Size	10ft Roll	50ft Roll	250ft Roll
1/4"	669870	769870	769871
3/8"	669864	769864	769876
1/2"	669865	769865	769877
5/8"	669873	769873	769872
3/4"	669866	769866	769878
1"	669875	769875	
1-1/4"		769874	769881**
1-1/2"		769879	
2"		769880	

Use loom/tubing cutting tool **WT-1** found on page G-XX.

**769881 is actually a 100ft roll

Also, now available... Flame Retardant Split Loom as well as Non-Split Loom

Bulk Packaging – (Continuous Roll in a Box)

I.D. Size	Part No.	Package quantity	Packaging Type
1/4"	769870B	1 x 3200 ft	Box
3/8"	769864B	1 x 1900 ft	Box
1/2"	769865B	1 x 1100 ft	Box
5/8"	769873B	1 x 800 ft	Box
3/4"	769866B	1 x 550 ft	Box
1"	769875B	1 x 300 ft	Box
1-1/4"	769881B	1 x 250 ft	Box
1-1/2"	769881B	1 x 150 ft	Box
2"	769880B	1 x 100 ft	Box

Use loom/tubing cutting tool **WT-1** found on page G-XX.

Also, now available... Flame Retardant Split Loom as well as Non-Split Loom

For quick & easy installation, use our NEW Split Loom Installation Tool found on the next page



Nylon (high Temperature) Split Loom

Nylon split loom has a temperature rating of 149°C (300°F) suitable for engine compartments. Identified by its grey stripe.

I.D. Size	Part No.	Package quantity	Packaging Type
1/4"	769901	1 x 50 ft	Bag
1/4"	769901B	1 x 3200 ft	Box
3/8"	769902	1 x 50 ft	Bag
3/8"	769902B	1 x 1900 ft	Box
1/2"	769903	1 x 50 ft	Bag
1/2"	769903B	1 x 1100 ft	Box
5/8"	769904	1 x 50 ft	Bag
5/8"	769904B	1 x 800 ft	Box
3/4"	769905	1 x 50 ft	Bag
3/4"	769905B	1 x 550 ft	Box
1"	769906	1 x 50 ft	Bag
1"	769906B	1 x 300 ft	Box
1-1/4"	769907B	1 x 250 ft	Box
1-1/2"	769908B	1 x 150 ft	Box
2"	769910B	1 x 100 ft	Box

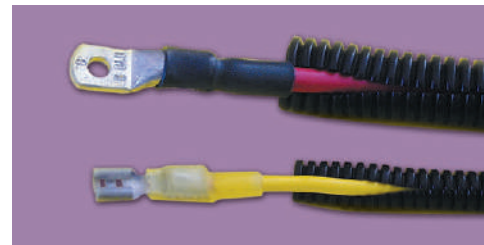
Use loom/tubing cutting tool **WT-1** found on page G-XX.

Also, now available... Flame Retardant Split Loom as well as Non-Split Loom



Now available... Split Loom in 10ft lengths

Polyethylene Split Loom Applications



Polyethylene Split Loom Applications



Split Loom Packaging – 50ft Pack



Polyethylene Split Loom – Bulk Box

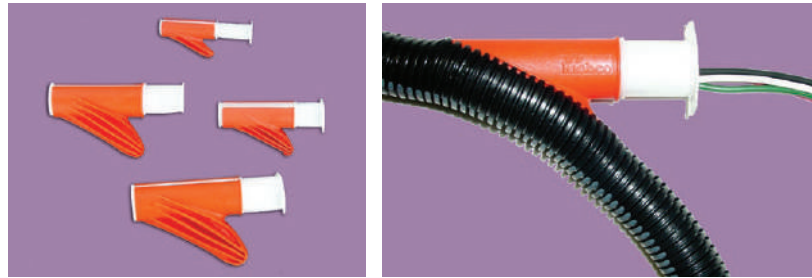


Nylon Split Loom... For Applications up to 149°C (300°F)

Nylon (High Temperature) Split Loom

SPLIT LOOM INSTALLATION TOOL

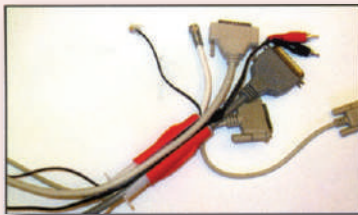
Size Range	Part No.
1/4", 3/8"	769828
1/2", 5/8"	769829
3/4"	769830
1", 1-1/4"	769831
1-1/2", 2"	769832



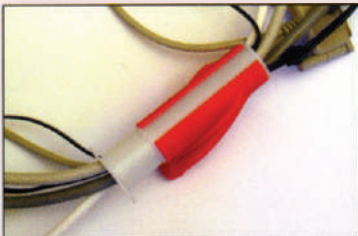
Split Loom Installation Tools

TOOL INSTRUCTIONS:

1. Insert wires into the open barrel of the tool.



2. Rotate the white sleeve to close the barrel.



3. Hold the tool in one hand and feed loom/tubing onto tool and over the wires (as shown in the picture).



4. Using the tabs on the tool, continue to pull the wires through the tool, while supporting the loom/tubing and finished harness with your other hand.

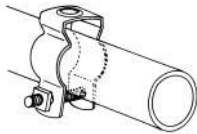


CONDUIT HANGERS & STRAPS



STANDARD CONDUIT HANGERS

ZINC PLATED STEEL AND STAINLESS STEEL



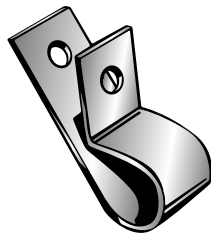
STANDARD CONDUIT HANGERS

Part # Stainless w/o bolts	Fits Rigid Conduit & Pipe	Fits EMT	Std. Pkg.
0-S	3/8"-1/2"	1/2"	100
1-S	3/4"	3/4"	100
2-S	1"	1"	100
2-1/2-S	—	1-1/4"	100
3-S	1-1/4"	1-1/2"	100
4-S	1-1/2"	—	100
5-S	2"	2"	50
6-S	2-1/2"	2-1/2"	50
7-S	3"	3"	25
8-S	3-1/2"	3-1/2"	25
9-S	4"	4"	10

Part # Zinc w/o bolts	Fits Rigid Conduit & Pipe	Fits EMT	Std. Pkg.
0	3/8"-1/2"	1/2"	100
1	3/4"	3/4"	100
2	1"	1"	100
2-1/2	—	1-1/4"	100
3	1-1/4"	1-1/2"	100
4	1-1/2"	—	100
5	2"	2"	50
6	2-1/2"	2-1/2"	50
7	3"	3"	25
8	3-1/2"	3-1/2"	25
9	4"	4"	10
10	5"	—	10

Bolts (for Hangers without Bolts)

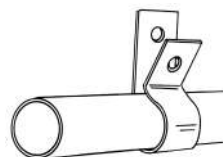
Hanger Number	Bolts Part #		Thread	Length
	Zinc	Stainless		
0	9408	9408-S	1/4"-20	1"
1-3	9410	9410-S	1/4"-20	1-1/4"
4-6	9412	9412-S	1/4"-20	1-1/2"
7-8	9612	9612-S	5/16"	1-1/2"
9-10	9816	9816-S	1/2"	2-1/2"



ALL PURPOSE CLOSED CLIPS

ZINC PLATED STEEL
AFTER FABRICATION

- Supports tubing pipe in sizes 1/4" O.D.



Part # Zinc	Fits Tubing O.D.	Std. Pkg.
1105	1/4"	100

J

CONDUIT HANGERS & STRAPS

STANDARD JIFFY CLIPS

ZINC PLATED STEEL

- Standard Jiffy Clips are a Minerallac original.
- These one hole pipe clamps are ideal for hanging tubing, pipe conduit and BX cable.



STAINLESS STEEL CLIPS

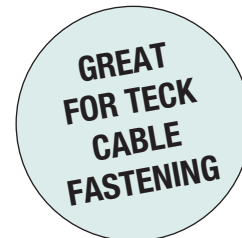
STAINLESS STEEL

- MED Clips have an inverted rib providing more strength at the bend of the clip. Snap-on feature leaves both hands free to work.



Part # Zinc	Fits Copper Tubing Size	Marking on Clip	Std. Pkg.
102	1/8"	—	100
103	3/16"	—	100
105	1/4"	—	100
110	5/16"	—	100
115	3/8"	115	100
125	1/2"	125	100
135	3/4"	750	100
150	1"	150	100
Fits EMT			
130	1/2"	130	100
145	3/4"	145	100
155	1"	1"	100
165	1-1/4"	1-1/4"	100
170	1-1/2"	1-1/4"	100
Fits Rigid Conduit & Pipe			
120	1/8"	120	100
125	1/4"	125	100
140	1/2"	140	100
150	3/4"	150	100
160	1"	1"	100
170	1-1/4"	1-1/4"	100
121	Fits BX Cable		100

Part #	Fits EMT	Fits Rigid/IMC	Std. Pkg.
MED-30-SS	1/2"		100
MED-40-SS		1/2	100
MED-45-SS	3/4"		100
MED-50-SS	3/4"	3/4	100
MED-55-SS	1		100
MED-60-SS		1	100
MED-70-SS		1-1/4	100
MED-80-SS		1-1/2	50
MED-90-SS		2	50



VOICE/DATA & LOW VOLTAGE



CABLE SUPPORT J-HOOKS

- Cost effective alternative to expensive cable tray.
- Accommodates Category 5, fiber-optic, and interduct.
- Provides support without stress to sensitive voice/data cables.
- Continuous wide-base radius supports natural curve of cable eliminating kinking, bending, and crimping.
- Cable wire retainer is supplied with every part.



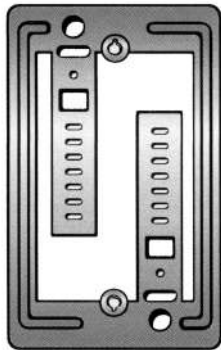
J200

Part #	Description	Std. Pkg.
J200	2" J-Hook	50

Another solution for today's challenging installations!

The new 2" J-Hook cable support system, designed to be versatile, can be attached to a wide variety of structures using beam clamps, clips, and many other support components available from Techspan. The wide-base support eliminates the undesirable impact of point-loads that can cause band-width deterioration and damage to category 5, fiber-optic, and other sensitive cables. This unique system is labour and time saving – another efficient method of installation!

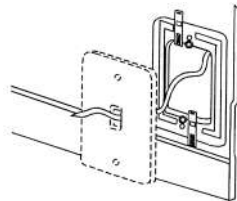
BEAM CLAMPS



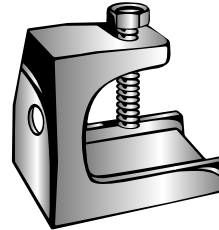
LOW VOLTAGE MOUNTING BRACKET

ZINC PLATED STEEL
HIGH CARBON STEEL

- Provides base for securing communications lines without use of electrical box. Mounts standard plate.



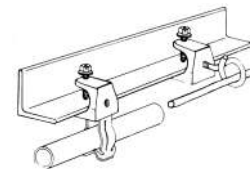
Part #	Description	Std. Pkg.
WBF-1	Mounts standard low voltage plates	100



MALLEABLE BEAM CLAMP

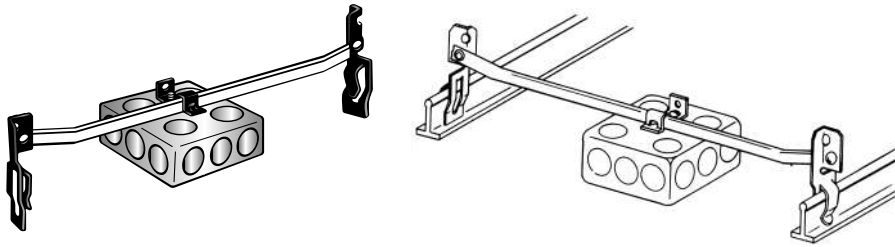
ZINC PLATED STEEL
AFTER FABRICATION

- Used with Hangers, Bridle Rings and Drop Rods, 3/8" to 1/2". Tapped for rods bottom and back on all sizes.
- Case hardened steel set screw tapped at an angle locks on beam.



Part #	Fits Flange	Tapping	Drop Rod	Std. Pkg.
700	Up to 7/8" thick	1/4-20	1/4"	50

T-BAR CLIPS

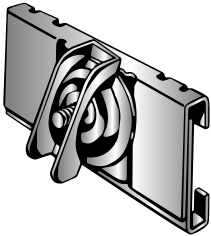


T-BAR ASSEMBLY

ZINC PLATED STEEL WITH HI-C HARDWARE

- Snap-on 24" span box hanger with dual height adjustment allows flush or 3/4" offset mount.
- Hardware included.

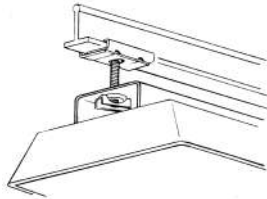
Part #	Description	Std. Pkg.
T-BAR	24" long box hanger	50



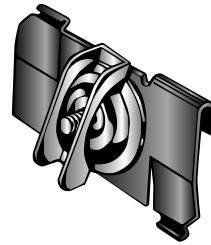
T-BAR HANGERS, TWO-PIECE

ZINC PLATED STEEL AFTER FABRICATION

- Mounts fixtures, boxes or conduit hangers to 1" T-bar with Static Load Capacity of 75 lbs.
- Stud is flat head, square shoulder carriage bolt which will not turn when positioned in slot. Assembled with 1" OD wing nut washers.



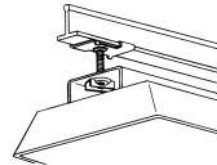
Part #	Description	Std. Pkg.
SCT-2	Has 1/4"-20 x 5/8" square head screw with washer wing nut as shown	100



T-BAR HANGERS, TWIST-ON

HIGH CARBON STEEL

- One-piece clip mounts boxes or conduit hangers to 1" T-bar with Static Load Capacity of 30 lbs.
- Assembled with 1" OD wing nut washer.

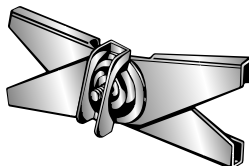


Part #	Description	Std. Pkg.
SCT-3	Has 1/4"-20 x 5/8" stud with wing nut and washer to distribute load as shown	100

SCISSOR CLIPS

ZINC PLATED STEEL AFTER FABRICATION

- Two-piece clip for mounting fixtures, boxes or conduit hangers to 1" T-bar with Static Load Capacity of 100 lbs.
- Includes wing nut washer.



With Fast Support Hanger Assembled

Part #	Fits Stud Length	Fits T-Bar	Std. Pkg.
SCX-1XL	2"	1"	50

GONDOLA DISPLAYS

Available in single sided or double sided configurations.
Size: (36" x 19" x 54")

Copper Lug Display



Ties & Terminals Display



Complete Double-Sided Gondola Pictured

GONDOLA ACCESSORIES:



TI-SIGN-L



768199-TALL
L = 6" x W = 1.75" x H = 1.5"



JL1RACKPEGBIN-7X4X2
7.75" Long x 4.5" Wide



TI-REORDERTAG



768196-6INCHHOOK
6 Inch Black Plastic Hook – 1 Prong



768196-4INCHHOOK
4 Inch Black Plastic Hook – 1 Prong



768196-2INCHHOOK
2 Inch Black Plastic Hook – 1 Prong



DISPLAY-SHELVES 36X16INCH
Gondola Shelves 36" x 16"

K

GRID DISPLAYS

- Durable vinyl-covered steel construction
- 24"W x 72"W (Maximum 80"H with header signage) with 3" square configuration
- Double outside vertical wires for superior strength
- Versatile design allows you to create your own display
- Display products using steel hooks, baskets, shelves & combination basket/shelf
- Easy to assemble



CUSTOMIZE YOUR OWN DISPLAY TO SUIT YOUR CUSTOMER/MARKET REQUIREMENTS

Part#		Qty/Pkg
668200	Grid Panel – 24"W x 72"H	1 PC
668199	Grid Basket – 12" x 12.5" x 8"	1 PC
668195	Grid Basket/Shelf – 23.5" x 12" x 4"	1 PC
668197	Grid Shelf – 23.5" x 12"	1 PC
668194	4" Steel Hook	1 PC
668198	6" Steel Hook	1 PC

Optional Grid Accessories:



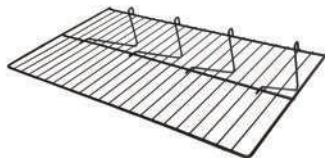
668199

Grid Basket 12" x 12.5" x 8"



668195

Grid Basket/Shelf 23.5" x 12" x 4"



668197

Grid Shelf 23.5" x 12"

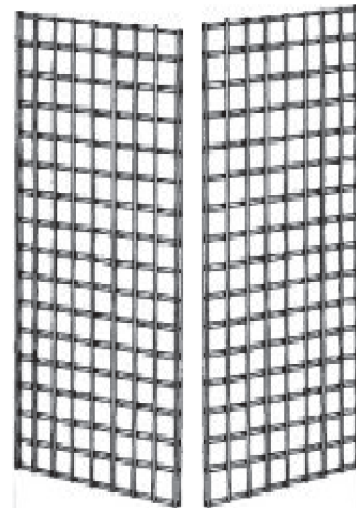
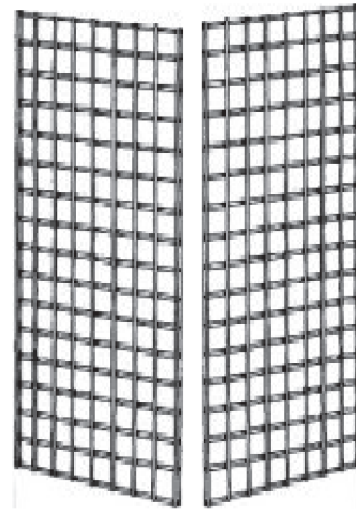


668194

4" Steel Hook

668198

6" Steel Hook



668200

Grid Panels 24"W x 72"H

Each Grid Panel comes with a Header Card describing features and benefits of the product the panel contains!

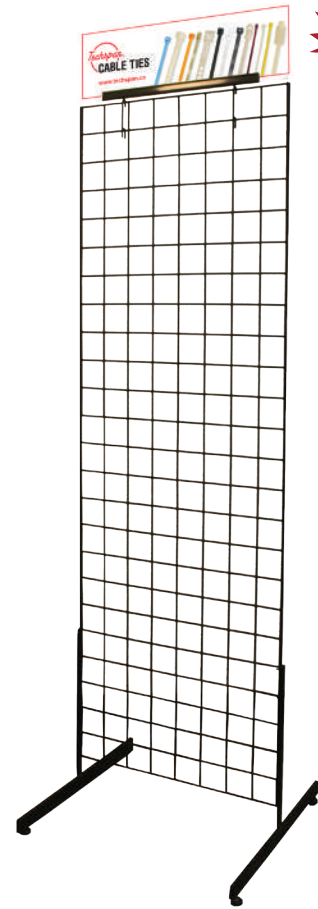
<p>TECK CONNECTORS www.techspan.ca</p>	<p>CABLE TIES www.techspan.ca</p>	<p>RACCORD POUR TECK www.techspan.ca</p>	<p>ATTACHES POUR CÂBLE www.techspan.ca</p>
<p>CRIMP TERMINALS www.techspan.ca</p>	<p>HEAT SHRINK TUBING www.techspan.ca</p>	<p>COSSE À SERTIR www.techspan.ca</p>	<p>TUBES THERMORÉTRACTABLE www.techspan.ca</p>
<p>SPLIT BOLTS & GROUNDING www.techspan.ca</p>	<p>ALUMINUM CORD GRIPS www.techspan.ca</p>	<p>BOULONS FENDUS & MISE À LA TERRE www.techspan.ca</p>	<p>PRESSE-ÉTOUPE EN ALUMINIUM www.techspan.ca</p>
<p>NYLON/BRASS DOME CORD GRIPS www.techspan.ca</p>	<p>COPPER LUGS www.techspan.ca</p>	<p>PRESSE-ÉTOUPE DOME EN NYLON/LAITON www.techspan.ca</p>	<p>CÔSSES EN CUIVRE www.techspan.ca</p>

2-SIDED GRID PANEL DISPLAY

- 2 Sided
- Display unit includes
 - 1 Grid Panel
 - Header Signs (available in English & French)
 - Mounting Hardware for displays and signage
 - Steel hooks
 - TA Re-order tags
- Other options to display product include: baskets, shelves, combination basket/shelf

CUSTOMIZE YOUR OWN DISPLAY TO SUIT YOUR CUSTOMER/MARKET REQUIREMENTS

NEW



2-Sided Display

Part#		Qty/Pkg
668200	Grid Panel – 24"W x 72"H	3 PCs
668196	Grid Panel 'Feet'; (Turns a single grid panel into a 1 or 2-sided self-standing display). Supplied as a pair	1 PAIR

Optional Grid Accessories:

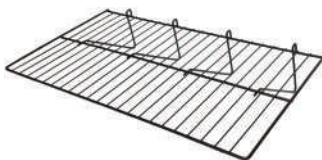
668199	Grid Basket – 12" x 12.5" x 8"	1 PC
668195	Grid Basket/Shelf – 23.5" x 12" x 4"	1 PC
668197	Grid Shelf – 23.5" x 12"	1 PC
668194	4" Steel Hook	1 PC
668198	6" Steel Hook	1 PC



668199
Grid Basket 12" x 12.5" x 8"



668195
Grid Basket/Shelf 23.5" x 12" x 4"



668197
Grid Shelf 23.5" x 12"



668194
4" Steel Hook

668198
6" Steel Hook

Each Grid Panel comes with a Header Card describing features and benefits of the product the panel contains!



Disponible en français aussi!

3-SIDED GRID PANEL DISPLAY

Grid Panel Display

- set up as a triangle, "H" or "U" shape to suit your showroom!
- ideal for displaying cable ties, terminals, tagged heat shrink and much more!
- simple set up makes installation quick and easy!
- additional hooks, panel joiners and signage available!

ALL DISPLAYS INCLUDE (1) TECHSPAN SIGN

Part#		Qty/Pkg
668200	Grid Panel – 24"W x 72"H	3 PCs
668198	6" Steel Hook	30 PCs
	Panel Joiners	4 PCs
	Sign holder clips	2 PCs

Optional Grid Accessories:

668199	Grid Basket – 12" x 12.5" x 8"	1 PC
668195	Grid Basket/Shelf – 23.5" x 12" x 4"	1 PC
668197	Grid Shelf – 23.5" x 12"	1 PC
668194	4" Steel Hook	1 PC
668198	6" Steel Hook	1 PC

Optional Grid Accessories:



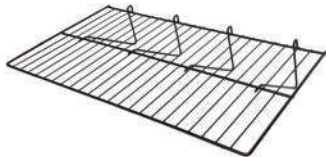
668199

Grid Basket 12" x 12.5" x 8"



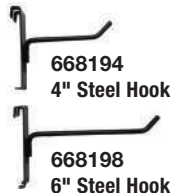
668195

Grid Basket/Shelf 23.5" x 12" x 4"



668197

Grid Shelf 23.5" x 12"

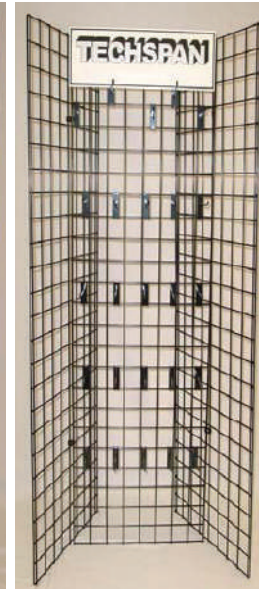
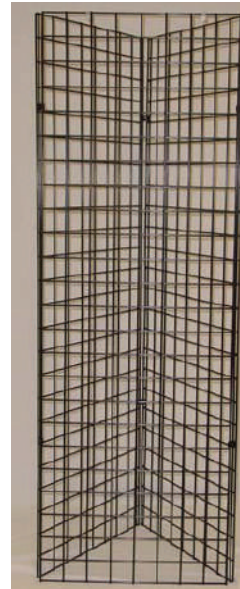


668194

4" Steel Hook

668198

6" Steel Hook



PRODUCT NOT INCLUDED



PRODUCT NOT INCLUDED

Each Grid Panel comes with a Header Card describing features and benefits of the product the panel contains!



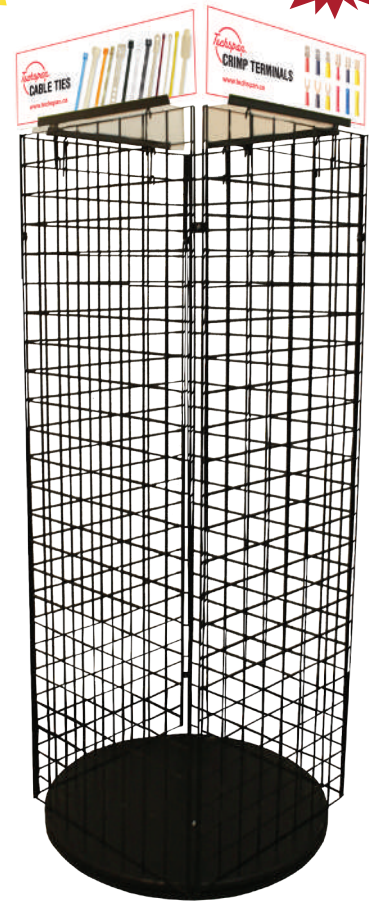
Disponible en français aussi!

4-SIDED GRID PANEL DISPLAY

- 4 Sided
- 360° Rotation
- 34" Diameter Clearance for the floor base (Rotating Lazy Susan). Two layers of 3/4" plywood with steel turntable has 1000LB weight-bearing capacity
- Display unit includes:
 - 4 Grid Panels
 - Header Signs (available in English and French)
 - Rotating Display Base
 - Mounting Hardware for displays and signage
 - Steel hooks
 - TA Re-order tags
- Casters (optional) available upon request

CUSTOMIZE YOUR OWN DISPLAY TO SUIT YOUR CUSTOMER/MARKET REQUIREMENTS

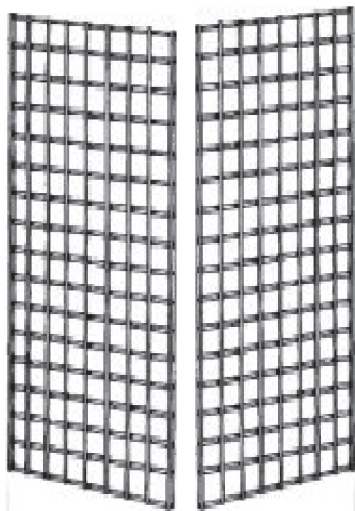
NEW



Part#		Qty/Pkg
668200	Grid Panel – 24"W x 72"H	4 PCs
	Rotating Display Base – 34" Diameter	1 PC

Optional Grid Accessories:

668194	4" Steel Hook	1 PC
668198	6" Steel Hook	1 PC

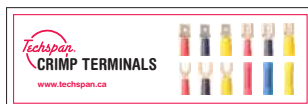


668200
Grid Panels 24"W x 72"H



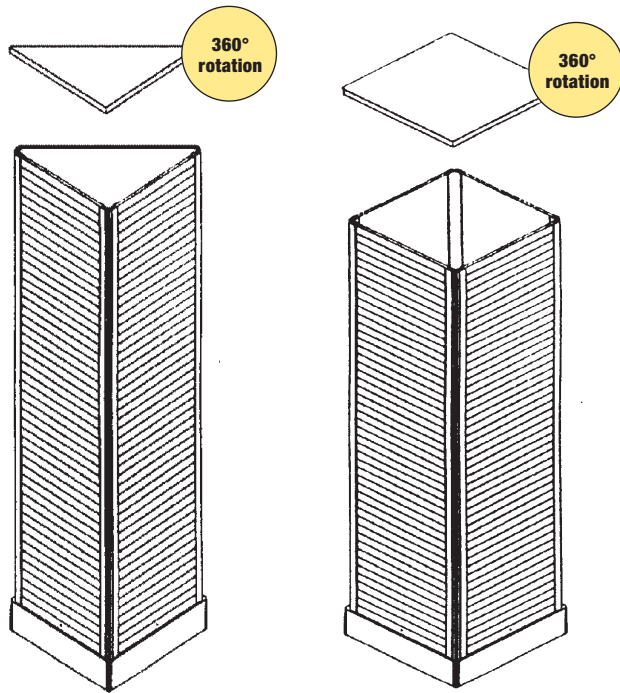
For safety and protection of product, we do not recommend using baskets or shelves on the rotating displays.

Each Grid Panel comes with a Header Card describing features and benefits of the product the panel contains!



Disponible en français aussi!

SPINNER DISPLAYS



768195 Triangle Spinner (3-Sided)

768196 Cube Spinner (4-Sided)

Triangle Spinner (3-Sided) and Cube Spinner (4-Sided)

- Rugged black plastic slatwall design
- Simple and quick assembly
- Lightweight polymer construction
- Full 360° rotation
- Dimensions Height 60" x Panel Width 18.5"
*Same panel width for both Triangle and Cube Spinners
- Each spinner includes Techspan header card
Product plan-a-gram
Plastic hooks and re-order tags

Part#		Qty/Pkg
768195	Triangle Spinner – 18.5"W x 60"H	1 PC
768196	Cube Spinner – 18.5"W x 60"H	1 PC

POINT OF SALE DISPLAY



K

HS-DISPLAY-COMplete

*For our full line of heat shrink product, please see section C of our WMP catalogue

Heat Shrink Display

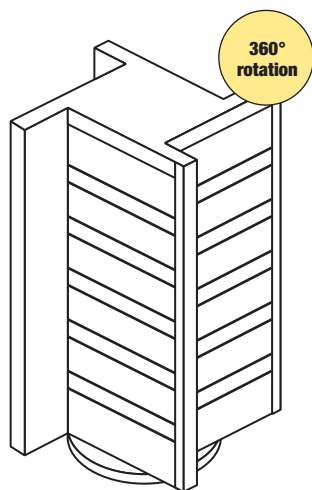
Part#		Qty/Pkg
HS-DISPLAY	Display only – no product	1 PC
HS-DISPLAY-COMplete	Contains the Display and following part numbers:	
PART NUMBER	DESCRIPTION	Qty/PC
HAPO-350-0-IIL	HT SHK HVY SEAL .35" ID BLK 4FT	5
HAPO-500-0-IIL	HT SHK HVY SEAL 1/2" ID BLK 4FT	5
HAPO-750-0-IIL	HT SHK HVY SEAL 3/4" ID BLK 4FT	5
HAPO-1100-0-IIL	HT SHK HVY SEAL 1.1" ID BLK 4FT	2
HAPO-1500-0-IIL	HT SHK HVY SEAL 1.5" ID BLK 4FT	2
HAPO-2000-0-IIL	HT SHK HVY SEAL 2" ID BLK 4FT	1
HAPO-2700-0-IIL	HT SHK HVY SEAL 2.7" ID BLK 4FT	1
HAPO-3500-0-IIL	HT SHK HVY SEAL 3.5" ID BLK 4FT	1
ALPO-125-0-IIL	HT SHK SEAL WALL 1/8" ID BLK 4FT	10
ALPO-187-0-IIL	HT SHK SEAL WALL 3/16" ID BLK 4FT	10
ALPO-250-0-IIL	HT SHK SEAL WALL 1/4" ID BLK 4FT	10
ALPO-375-0-IIL	HT SHK SEAL WALL 3/8" ID BLK 4FT	10
ALPO-500-0-IIL	HT SHK SEAL WALL 1/2" ID BLK 4FT	10
ALPO-750-0-IIL	HT SHK SEAL WALL 3/4" ID BLK 4FT	10
ALPO-1000-0-IIL	HT SHK SEAL WALL 1" ID BLK 4FT	5
MHSP-1/16-0-IIL	HT SHK THIN-WALL 1/16" ID BLK 4FT	10
MHSP-1/2-0-IIL	HT SHK THIN-WALL 1/2" ID BLK 4FT	20
MHSP-3/32-0-IIL	HT SHK THIN-WALL 3/32" ID BLK 4FT	10
MHSP-1/8-0-IIL	HT SHK THIN-WALL 1/8" ID BLK 4FT	20
MHSP-1/4-0-IIL	HT SHK THIN-WALL 1/4" ID BLK 4FT	20
MHSP-5/16-0-IIL	HT SHK THIN-WALL 5/16" ID BLK 4FT	5
MHSP-3/16-0-IIL	HT SHK THIN-WALL 3/16" ID BLK 4FT	10
MHSP-3/8-0-IIL	HT SHK THIN-WALL 3/8" ID BLK 4FT	10
MHSP-3/4-0-IIL	HT SHK THIN-WALL 3/4" ID BLK 4FT	10
MHSP-1-0-IIL	HT SHK THIN-WALL 1" ID BLK 4FT	5

ADHESIVE LINED UNDERGROUND SPLICING

ADHESIVE LINED SPLICING

SINGLE WALL

COUNTER-TOP MERCHANDISING



768192 Counter-Top Spinner (4-Sided)

Counter-Top (4-Sided) Spinner

- Rugged black plastic slatwall design
- Simple and quick assembly
- Lightweight polymer construction
- Full 360° rotation
- Dimensions Height 19" x Panel Width 9.5"
- Spinner includes Techspan header card
Product plan-a-gram
Plastic hooks and re-order tags

INCLUDES:

- (1) 19" x 15" SPINNER
- (36) 2" HOOKS
- (1) SIGN HOLDER



PRODUCT NOT INCLUDED

Part#		Qty/Pkg
768192	Counter-top 4-sided spinner – 9.5"W x 19"H	1 PC



Mini Spool Wire Merchandiser

INCLUDES:

- (1) 13.5" x 15" DISPLAY
- Ideal for counter display!!!

Part#		Qty/Pkg
	Counter-top mini spool wire merchandiser – 13.5"W x 15"L	1 PC

Note: wire sold separately



MERCHANDISING/STORING

Wire Spool Racks

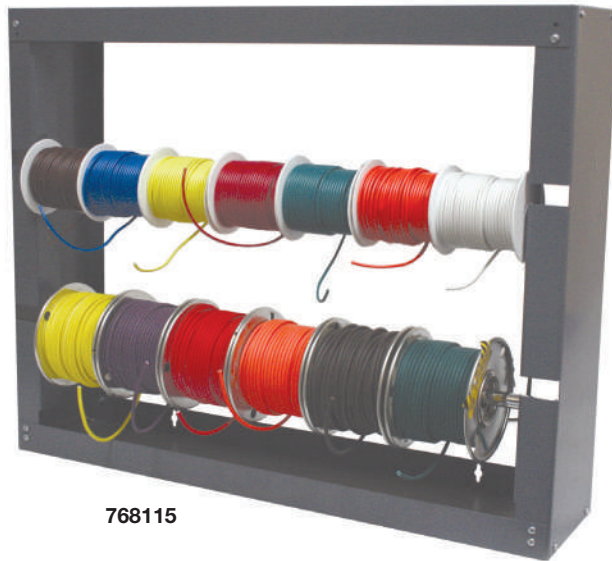
Wire Spool Racks allow users to store different sized reels on the same rod to facilitate dispensing. Specifications: rolled steel construction with grey powder coated finish and polished steel rods that are 5/8" in diameter. Will hold spools up to 10" in diameter. Punched side panels allow for quick changing of spools. Mounting holes are provided for wall mounting hardware included. Easy to assemble. Wire shown are for illustration purposes only. Wire not included.

# of Rows	Dimensions	Part #
1	26-1/8"W x 6"D x 10-3/8"H	768114
2	26-1/8"W x 6"D x 17-7/8"H	768115
4	26-1/8"W x 6"D x 37-1/8"H	768116

768114 has a carrying handle attached to the top of the unit



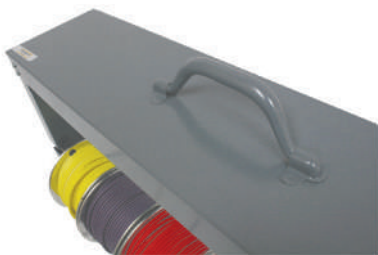
768116



768115



768114



K

MERCHANDISING/STORING



FLIP KITS

Compatible! Trays' universal overall dimensions will allow them to fit into most slider storage racks

Convenient! Handle & Latch allow for portability

Durable! High impact plastic means trays wont rust or dent

Flexible! Compartments are adjustable to suit your requirements. You can store up to 32 items

New Design! Red tray... clear lid... grey rack

Organized! Keep parts in their own compartments. Informational label is included for easy identification of each compartment



Grey Metal Rack

768188 Grey metal rack will hold 4 of our new Flip Kits. Heavy-duty steel construction with 4 sliders. Dimensions: 20-3/4"W x 12-1/2"L x 15"H. Storage trays not included.



Plastic 'Make-It-Yourself' Assortment Trays – Flip Kit

#FLIPKIT-RED Red Empty Storage Tray ('Flip' Kit). With 32 adjustable compartments, you can make up your own kit. These trays are from 'high-impact' plastic, and have a carrying handle. Dimensions: 18"W x 12"L x 3"H



768189 Red Empty Storage Tray ('Flip' Kit)
32 adjustable compartments

768186 Grey Empty Storage Tray ('Flip' Kit). With 32 adjustable compartments, you can make up your own kit. These trays are from 'high-impact' plastic, and have a carrying handle. Dimensions: 18"W x 12"L x 3"H



768186 Grey Empty Storage Tray ('Flip' Kit) 32 adjustable compartments



MERCHANDISING/STORING

Plastic 'Make-It-Yourself' Storage Trays

Clear plastic compartment empty storage trays are a handy way to make up your own assortments. Available with 6, 12, 13 & 18 compartments, all have dimensions of: 11"W x 6"L x 1"H. Call Techspan if you require other configurations.

# of Compartments	Part#
6 Compartments	763006
12 Compartments	763019
13 Compartments	763001
18 Compartments	763012



763006 6 compartments



763019 12 compartments



763001 13 compartments



763012 18 compartments

Metal 'Make-It-Yourself' Storage Trays

763007 Grey heavy-gauge metal storage trays (Empty) with carrying handle. With 24 compartments in all, it's handy for making up your own assortments. Dimensions: 18"W x 12"L x 3"H. Call Techspan if you require other configurations.

763004 Grey heavy gauge metal storage trays (Empty) with carrying handle. With 21 compartments in all, it's handy for making up your own assortments. Dimensions: 12"W x 9"L x 2"H. Call Techspan if you require other configurations.



763007 Grey Metal Storage Tray (24 compartments)



763004 Grey Metal Storage Tray (21 compartments)

Technical Annex, Chemical resistance of plastic materials

+ stands for: resistant o stands for: conditionally resistant - stands for: not resistant	Concentration %	at temp. +° C	Poly-amide	Poly-amide	Poly-amide	Thermo-plastic Polyurethane	Poly-propylene	Poly-ethylene	Poly-ethylene	Poly-styrene	Thermo-plastic elastomere	Nitrile butadiene-rubber
Reagents			PA 6	PA 66	PA 12	PU	PP	HD-PE	LD-PE	PS	TPE	NBR
Acetaldehyde	40	20	o	o	+		+					20°C o
Acetic acid	100	20					+	+	+			o
Acetone	100	20	+	+	+	-	+	o	o			-
Acrylic acid	100	> 30	-	-	-					-		
Allyl alcohol	96	20	o	o	+		+	+	+	20% +		
Alum, hydrous	dilute	40					+	+	+	+		20°C +
Aluminium chloride, hydrous	dilute	40					+	+	+	+		20°C +
Aluminium sulphate, hydrous	dilute	40					+	+	+	+		20°C +
Ammonia solution, hydrous	saturated	20	20% +	20% +	20% +		+	+	+	20% +		
Ammonium chloride, hydrous	saturated	60				3% o	+	+	+			20% +
Ammonium nitrate, hydrous	dilute	40					+	+	+	+		20% +
Ammonium sulphate, hydrous	dilute	40					+	+	+			-
Aniline hydrochloride, hydrous	saturated	20					+	o	o			
Aniline, pure	100	20	o	o	o		+	+	+	-	+	
Benzaldehyde, hydrous	saturated	20	pure o	pure o	pure o		+			-		-
Benzine	100	20	+	+	+		o	+	o	-	o	+
Benzoic acid, hydrous	any	40	20% o	20%o			+	+	+	+		-
Benzole	100	20	+	+	+		o	o	o	-		-
Bleaching liquor	12,5 Cl	20	-	-	o	3%-	+	+	+	+		-
Borax, hydrous	dilute	40					+	+	+	+		20% o
Boric acid, hydrous	dilute	40	o	o	o	3%o	+	+	+			20% +
Bromine, liquid	100	20	-	-	-		-	-	-	-	-	-
Butanediol, hydrous	to 10	20	pure +	pure +			+	+	+			
Butanol	to 100	20					+	+	+	+		+
Butylacetate	100	20	+	+	+		o	o	o	-		-
Calcium chloride, hydrous	saturated	40	+	+	+		+	+	+	+		20% +
Carbon bisulphide	100	20	+	+	+		+	o	o	-		-
Carbon dioxide	100	60	+	+	+							20% +
Carbon dioxide, dry	100	60					+	+	+	50°C +		20% +
Carbon tetrachloride	100	20	+	+	+		-	o	-	-		
Caustic pot ash solution, hydrous	50	20	+	+	+		+	+	+	+	10% +	
Caustic soda lye, hydrous	10	20	+	+	+	3%o	+	+	+	+	50% +	
Chlorine	any	20	-	-	-		-	-	-	-	-	-
Chrome alum, hydrous	dilute	40					+	+	+			20% +
Citric Acid	to 10	40	20% +	20% +	20% +	3%o	+	+	+	+		20% +
Cooling liquids DIN 53521		120	o	o								
Copper monochloride, hydrous	saturated	20					+	+	+			+
Copper sulphate, hydrous	saturated	60					+	+	+			20% +
Cresol, hydrous	to 90	20	pure -	pure -			+	+	o	o		-
Cyclohexanol	-	20	+	+	+		+	+	+	+		+
Diesel fuel		85	+	+	+	20% +	20% +	20% +	20% +			
Drilling oil			+	+	+							
Ethanoic acid	10	20	o	o	+	3% o	+	+	+	o	+	
Ethyl alcohol, hydrous	10	20	40 Vol.%+	40 Vol.%+	40 Vol.%+		+				+	+
Ethyl dichloride	100	20					o	-	-			-
Ethyl ether	100	20					o					o
Ethylene oxide, liquid	100	20					o					
Ferric cyanide, hydrous	saturated	60					+	+	+			
Ferrous chloride, hydrous, indiff.	10	20	+	+		+	+	+	+		+	
Fluorine	50	40	pure -	pure -	pure -		-	-	-			
Formaldehyde, hydrous	dilute	40	pure +	pure +	pure +		40% +	40% +	40% +	30% +		20°C o
Formic acid, hydrous	10	20	o	o	+		+	+		+		
Glucose, hydrous	any	50					+	+	+			
Hydraulic fluid, hardly inflammable		80	+	+	+							
Hydraulic oil H and HL (DIN 51524)		100	+	+	+							



Technical Annex, Chemical resistance of plastic materials

+ stands for: resistant o stands for: conditionally resistant - stands for: not resistant	Concentration %	at temp. +° C	Polyamide	Polyamide	Polyamide	Thermoplastic Polyurethane	Polypropylene	Polyethylene	Polyethylene	Polystyrene	Thermoplastic elastomere	Nitrile butadiene-rubber
Reagents			PA 6	PA 66	PA 12	PU	PP	HD-PE	LD-PE	PS	TPE	NBR
Hydrobromic acid, hydrous	to 10	40	-	-	-		+	+	+			-
Hydrochloric acid, hydrous	30	20	20% -	20% -	20% -	3% -	+	+	+	15% +	10% +	o
Hydrogen	100	60	20°C +	20°C +	20°C +		+	+	+			20°C +
Hydrosilicofluoric acid, hydrous	to 30	20	-	-			+	+	+			
Hydroxylamine sulphate, hydrous	to 12	30					+					
Kerosine	100	80	+	+	+		20°C +	20°C +	20°C o	-		
Lactic acid, hydrous	to 90	20	10% +	10% +	10% +	3% o	+	+	+	80% +		+
Lubricating grease, base diester oil		110	o	o								
Lubricating grease (base polyphenyle ester)		110	+	+	+							
Lubricating grease, base silicone oil		110	+	+	+							
Magnesium carbonate, hydrous	saturated	100					+			50°C +		
Magnesium chloride, hydrous	saturated	20	10% +	10% +	10% +		+	+	+	+		+
Mercury	pure	20	+	+	+		+	+	+	+		+
Methyl alcohol	100	20	+	+	+		40°C +	+	+	+	+	+
Methylene chloride	100	20	o	o	o		o	o	-			
Mineral oil			+	+	+		20°C +	20°C +	20°C +			
Nickel chloride, hydrous	saturated	20	10% o	10% o	10% o		+			+		+
Nickel sulphate, hydrous	saturated	20	10% o	10% o	10% o		+	+	+			+
Nitric acid, hydrous	50	20	-	-	-	3% -	o	o	o	30% +		-
Nitro glycerin	dilute	20						-	-			
Oil and grease		20	+	+	+		o				o	
Oleic acid	-	20	+	+	+		+	+	+	+		o
Oxalic acid	any	20	10% o	10% o	10% o	3% o	+	+	+	+		o
Ozone	pure		-	-	-		o	o	o			
Phosgene, gaesous	100	20					o	o	o			
Phosphoric acid, hydrous	dilute	20	10% -	10% -	10% -	3% o	+	+	+	86% +		-
Phosphorus pentoxide	100	20					+					
Potassium bromide, hydrous	any	20	10% +	10% +	10% +		+	+	+	+		
Potassium chloride, hydrous	10	20	+	+	+		+	+	+	+		+
Potassium dichromate, hydrous	40	20	5% o	5% o	5% o		+	+	+			+
Potassium nitrate, hydrous	any	20	10% +	10% +	10% +		+	+	+	+		+
Potassium permanganate, hydrous	saturated	20					+			+		
Sea water		40	+	+	+	20°C +	+	+	+	+	+	20°C +
Soap solution, hydrous	any	20	dilute +	dilute +	dilute +		+	+	+			+
Sodium chlorate, hydrous	saturated	20	10% o	10% o	10% o		+	+	+			
Sodium sulphide, hydrous	dilute	40					+	+	+			
Sulphuric acid, hydrous	10	20	-	-	-	3% -	50% +	50% +	50% +	+	98% +	-
Tin dichloride, hydrous	dilute	40					+	+	+	-	10% +	20°C +
Toluene	100	20	+	+	+	-		o	o	o		-
Trichloroethylene	100	20	o	o	o		o	o	-			
Urea, hydrous	to 10	40	20% +	20% +	20% +		+	+	+	+		
Vinyl acetate	100	20					+					
Waste gas-, containing carbon dioxide	any	60						+	+			
Waste gas-, containing SO2	low	60						+	+			
Xylene	100	20	+	+	+		-	o	o	-		-
Zinc chloride, hydrous	dilute	60	10% o	10% o			+	+	+	50°C +		20°C +
Zinc sulphate, hydrous	dilute	60					+	+	+			20°C +

Source: *Plastic Table*, B. Carlowitz, Carl Hanser Verlag, et. al.

The above mentioned data enable a preselection. However it is not the use of the data, to promise definite properties of the products or their suitability for a concrete application purpose. The data doesn't release the purchaser to control the quality conformance.

Technical Annex

CHART I International Protection (IP) Ratings to IEC 529

Protection Modes to EN 60529 DIN VDE 0470 Part 1		Second Digit – Degree of Water Protection								
First Digit		IP 0X No Protection	IP X1 Protection against dripping water falling vertically	IP X2 Protection against dripping water even when tilted 15° vertically	IP X3 Protection against dripping water even when tilted 60°	IP X4 Protection against splashing water from any direction	IP X5 Protection against water jets from any direction	IP X6 Protection against heavy seas from any direction	IP X7 Protection against effects of immersion	IP X8 Protection against submersion
	Person touching									
IP X0	No protection	IP 00								
IP 1X	Protection against touching with the hand	IP 10	IP 11 IP	IP 12						
IP 2X	Protection against touching with the finger	IP 20	IP 21	IP 22	IP 23					
IP 3X	Protection against touching with tools, wires, etc., >2.5 mm Ø	IP 30	IP 31	IP 32	IP 33	IP 34				
IP 4X	Protection against touching with tools, wires, etc., >1 mm Ø	IP 40	IP41	IP 42	IP 43	IP 44				
IP 5X	Protection against touching with tools, wires, etc., >1mm Ø	IP 50				IP 54	IP 55			
IP 6X	Protection against touching with tools, wires, etc., >1mm Ø	IP 60					IP 65	IP 66	IP 67	IP 68

In some countries a third digit is added. It gives information about the mechanical properties of the equipment. This designation has not yet been standardized according to current DIN and IEC regulations. Devices in this catalogue correspond to digit IP .7.

CHART II NEMA / IP Cross Reference

The chart below provides a cross-reference from NEMA to International Protection (IP) Ratings. This cross-reference is an approximation based on the most current information available. It is not sanctioned by NEMA, IEC, or any other regulatory body. This chart should be used only as a guideline.

IEC 529 Protection Ratings	NEMA Ratings									
	1	2	3	3R	4	4X	5	6	12	13
IP 00	↓									
IP 10		↓								
IP 11										
IP 20										
IP 21										
IP 22										
IP 23										
IP 30										
IP 31										
IP 32				↓						
IP 33										
IP 40										
IP 41										
IP 42										
IP 43										
IP 50							↓			
IP 51										
IP 52										
IP 53										
IP 54										
IP 55										
IP 56										
IP 60										
IP 61										
IP 62										
IP 63			↓							
IP 64										
IP 65					↓					
IP 66						↓				
IP 67							↓	↓		
IP 68									↓	



Guide to NEMA and IEC Enclosure Ratings

Application Note #4

Overview

There are a number of standards that exist worldwide to define the type and applicability of enclosures. In the United States the **National Electrical Manufacturers Association (NEMA)** are the most prevalent, worldwide the **International Electrotechnical Commission (IEC)** standards are most prevalent. Why is there not a single standard to define enclosures and their suitability for various applications? Why ask why?

More information on both of these organizations can be found at the following websites:

NEMA – www.nema.org - NEMA Standards Publication 250

IEC – www.iec.ch - Ingress Protection (IP) Standard 60529

This Application Note will discuss in limited detail the NEMA standards, the IEC standards, and then provide a cross reference from NEMA standards to IEC standards. Please refer to the appropriate sections of the latest revision of NEMA Standards Publication No. 250 for complete information regarding applications, features and design tests. Refer to the corresponding IP Standard 60529 for similar information on the IEC standards.

NEMA Definitions Pertaining to Non-Hazardous Locations:

Type	Description
1	Intended for use primarily to provide a degree of protection against limited amounts of falling dirt.
3	Intended for outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust, and damage from external ice formation.
3R	Intended for outdoor use primarily to provide a degree of protection against rain, sleet, and damage from external ice formation.
3S	Intended for outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust, and to provide for operation of external mechanisms when ice laden.
4	Intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, hose-directed water, and damage from external ice formation.
4X	Intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, hose-directed water, and damage from ice formation
6	Intended for indoor or outdoor use primarily to provide a degree of protection against hosedirected water, the entry of water during occasional temporary submersion at a limited depth, and damage from external ice formation.
6P	Intended for indoor or outdoor use primarily to provide a degree of protection against hosedirected water, the entry of water during prolonged submersion at a limited depth, and damage from external ice formation.
12	Intended for indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping non-corrosive liquids.
12K	Type 12 with knockouts.

NEMA Definitions Pertaining to Hazardous Locations:

Type	Description
7	Intended for indoor use in locations classified as Class I, Groups A, B, C, or D, as defined in the National Electrical Code.
8	Intended for indoor or outdoor use in locations classified as Class I, Groups A, B, C, or D, as defined in the National Electrical Code.
9	Intended for indoor use in locations classified as Class II, Groups E, F, or G, as defined in the National Electrical Code.
10	Constructed to meet the applicable requirements of the Mine Safety and Health Administration.

Guide to NEMA and IEC Enclosure Ratings (cont'd)

IEC Definitions

The IEC, standard 60529, has defined Ingress Protection as a two digit code. The **first digit** describes the degree of protection against access to hazardous parts and ingress of solid objects. The **second digit** designates the Ingress Protection against water. Please refer to the appropriate sections of IEC 60529 for complete information regarding applications, features, and design tests.

Therefore an **IP 65** rating means that the unit is: Protected against access with a wire (1.0 mm), is Dust tight and can handle Jetting water - any direction.

Protection Against Access to Hazardous Parts (*First Digit*)

Number	Description
0	Non-protected
1	Protected against access with back of hand (50 mm)
2	Protected against access with jointed finger (12 mm x 80 mm)
3	Protected against access with a tool (2.5 mm)
4, 5, 6	Protected against access with a wire (1.0 mm).

Protection Against Ingress of Solid Foreign Objects (*First Digit*)

Number	Description
0	Non-protected
1	Objects equal or greater than 50mm
2	Objects equal or greater than 12.5mm
3	Objects equal or greater than 2.5mm
4	Objects equal or greater than 1mm
5	Dust protected
6	Dust tight

Protection Against Ingress of Liquids (*Second Digit*)

Number	Description
0	Non-protected
1	Water dripping vertically
2	Water dripping, enclosure tilted up to 15°
3	Spraying water, up to 60° angle from vertical
4	Splashing water, any direction
5	Jetting water, any direction
6	Powerful jetting water, any direction
7	Temporary immersion in water
8	Continuous immersion in water



Guide to NEMA and IEC Enclosure Ratings (cont'd)

NEMA To IEC Enclosure Designations

The following information is provided by NEMA Standard No. 250 Appendix A as a guide to comparing NEMA enclosure types to IEC designations.

IEC Publication 60529 Classification of Degrees of Protection Provided by Enclosures provides a system for specifying the enclosures of electrical equipment on the basis of the degree of protection provided by the enclosure. IEC 60529 does not specify degrees of protection against mechanical damage of equipment, risk of explosions, or conditions such as moisture (produced for example by condensation), corrosive vapors, fungus, or vermin (those creatures looking for a new home or to sharpen their teeth). NEMA Standards Publication 250 does test for environmental conditions such as corrosion, rust, icing, oil, and coolants. For this reason, and because the tests and evaluations for other characteristics are not identical, the IEC Enclosure Classification Designations **cannot be exactly equated** with NEMA Enclosure Type Numbers.

The following table provides a guide for converting from NEMA Enclosure Type Numbers to IEC Enclosure Classification Designations. The NEMA Types meet or exceed the test requirements for the associated IEC Classifications; for this reason the table should not be used to convert from IEC classifications to NEMA Types and the NEMA to IEC conversion should be verified by test.

NEMA Enclosure Type Number	IEC Enclosure Designation
1	IP10
2	IP11
3	IP54
3R	IP14
3S	IP54
4 and 4X	IP56
5	IP52
6 and 6P	IP67
12 and 12K	IP52
13	IP54

IP69K – What is IP69K?

IP69K Rating

The IP69K rating is for applications where high pressure and high temperature washdown is used to sanitize equipment.

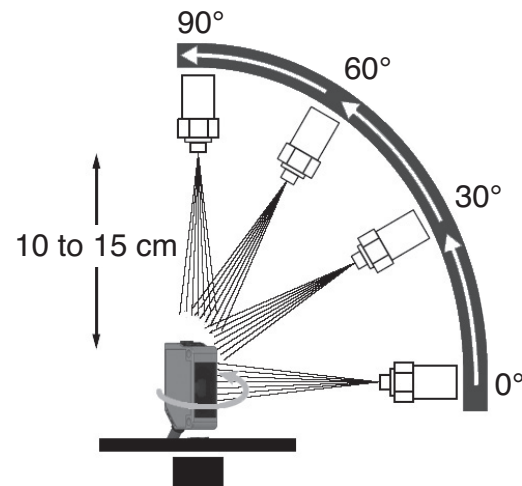
The IP69K test specification was initially developed for road vehicles, especially those that need regular intensive cleaning (dump trucks, cement mixers, etc.), but has been widely adopted in the Food & Beverage industries as a test of products to withstand sanitary washdown.

What does IP69K mean?

In the IEC 60529 rating system, IP6 refers to the product's ability to resist ingress of dust. The 69K refers to the product's ability to resist ingress of high temperature (Steam)/high pressure water.

How is the product tested?

- Products rated to IP69K must be able to withstand high-pressure and steam cleaning.
- The test specifies a spray nozzle that is fed with 80 °C water at 80-100 bar (-1160-1450) and a flow rate of 14-16 L/min.
- The nozzle is held 10-15 cm from the tested device at angles of 0°, 30°, 60° and 90° for 30 seconds each.
- The test device sits on a turntable that rotates once every 12 seconds.



RoHS Compliance

RoHS COMPLIANCE

The RoHS (Restriction of Hazardous Substances) Directive 2002/95/EC dated 27th January 2003 addresses the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Producers of certain categories of electrical and electronic equipment cannot use high levels of the following six banned substances:

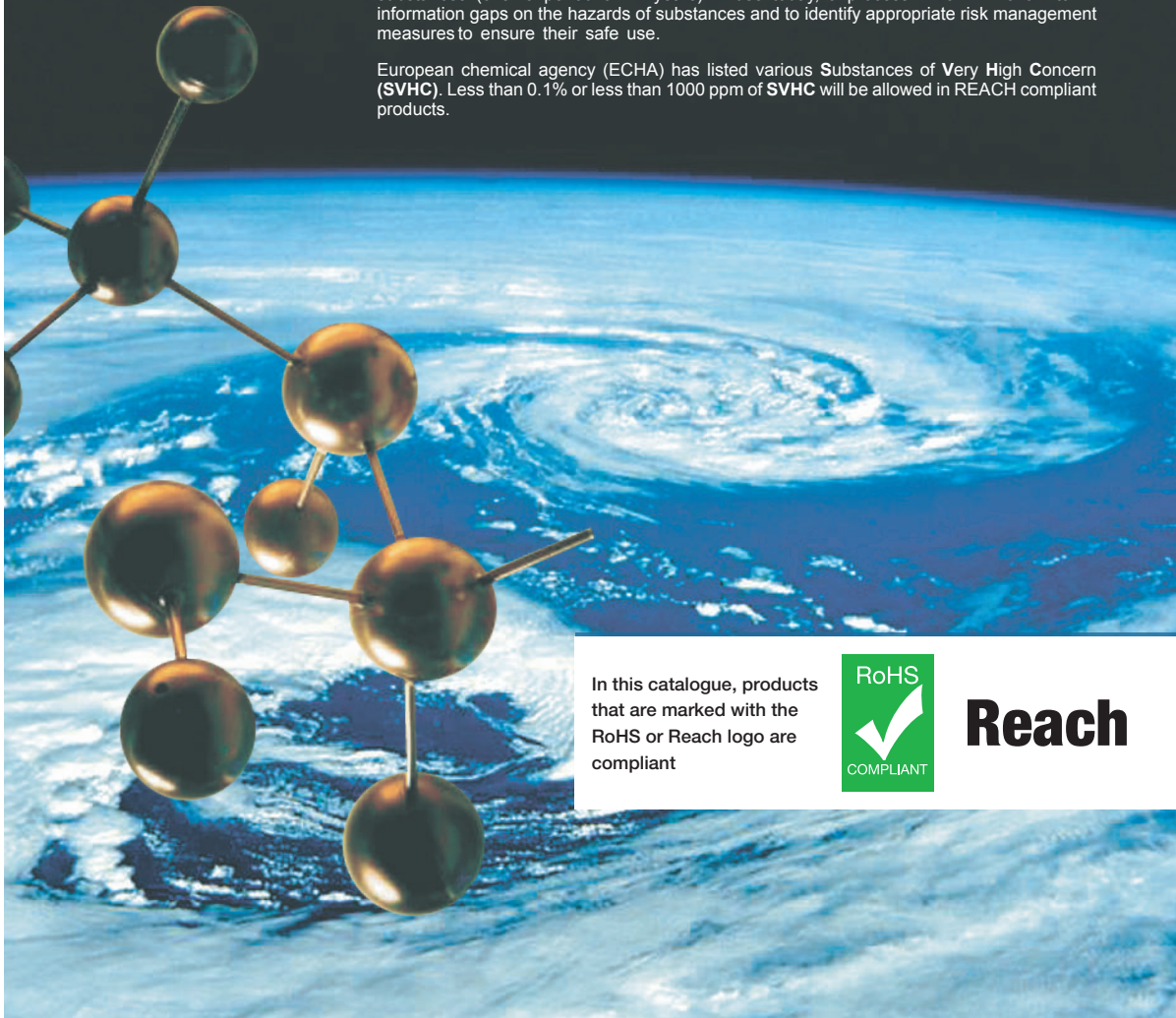
Lead (Pb)	Hexavalent chromium (Cr-VI)
Mercury (Hg)	Cadmium (Cd)
Polybrominated biphenyls (PBB) [flame retardant]	Polybrominated diphenyl ether (PBDE) [flame retardant]

REACH COMPLIANCE

REACH is the regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18, concerning the Registration, Evaluation, Authorization and Restriction of Chemicals.

Implemented on 1st June 2007, **REACH** requires the registration of some 30000 chemical substances (over a period of 11 years) in use today, a process which will allow to fill information gaps on the hazards of substances and to identify appropriate risk management measures to ensure their safe use.

European chemical agency (ECHA) has listed various **Substances of Very High Concern (SVHC)**. Less than 0.1% or less than 1000 ppm of **SVHC** will be allowed in REACH compliant products.



In this catalogue, products that are marked with the RoHS or Reach logo are compliant



Reach

Conversion Tables

Length		
inch [in.]	x 25.4	=millimeters
millimeters [mm]	x 0.03937	=inches
meters [m]	x 3.281	=feet
miles [mi]	x 1.609	=kilometers
kilometers [km]	x 0.6214	=miles
Torque		
Newtonmeter [Nm]	x 0.738	=lb-ft
lb-ft	x 1.356	=Nm
lb-in	x 0.113	=Nm
oz-in	x 0.0071	=Nm
Power		
kilowatt [kW]	x 1.341	=hp
hp	x 0.7457	=kW
Moment of Inertia (WR²)		
lb-ft ²	x 0.042	=kgm ²
kilogrammeter ² [kgm ²]	23.720	=lb-ft ²
Weight Mass and Force		
Newton [N]	x 0.2248	=pound
kilogram [kg]	x 2.205	=pounds
pound [lb]	x 4.448	=N
pound [lb]	x 0.4536	=kg

Metric Cross-Sectional Areas ^a		American Wire Gauge		Metric Cross-Sections Areas ^a		American Wire Gauge	
Cross-Sectional Area mm ²	Equivalent Metric Area mm ²	AWG or MCM	Cross-Sectional Area mm ²	Equivalent Metric Area mm ²	AWG or MCM	Cross-Sectional Area mm ²	Equivalent Metric Area mm ²
0.50	0.519	20 AWG	25.0	21.15	4 AWG		
	0.653	19		26.67	3		
0.75	0.823	18	35.0	33.63	2		
	1.04	17		42.41	1		
	1.31	16	50.0	53.48	1/0		
1.5	1.65	15		67.43			
	2.08	14	70.0	85.03	2/0		
2.5			95.0		3/0		
	2.62	13		107.20			4/0
	3.31	12		126.64			250 MCM
4.0	4.17	11	120.0	152.00			300
	5.26	10		177.35			350
			150.0	202.71			400
6.0				253.35			500
	6.63	9	240.0				
	8.37	8		380.00			750
10.0			300.0				
	10.55	7	400.0	506.71			1000
	13.30	6					
16.0	16.77	5	500.0				
			625.0				

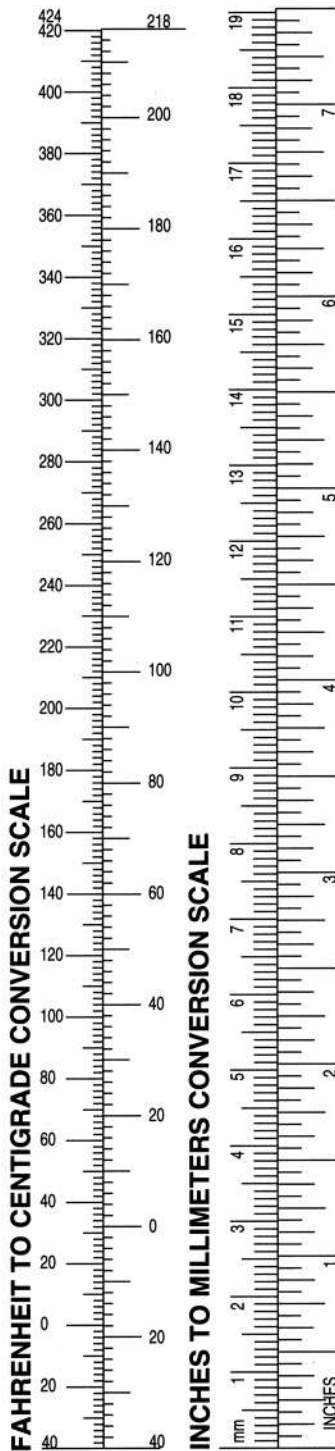
^a As per IEC Publ. 228

DEGREES CELSIUS VERSUS DEGREES FAHRENHEIT															
°C	°F	°C	°F	°C	°F	°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
-80	-112.0	-20	-4.0	5	41.0	30	86.0	55	131.0	80	176.0	105	221.0	130	266.0
-70	-94.0	-19	-2.2	6	42.8	31	87.8	56	132.8	81	177.8	106	222.8	131	267.8
-60	-65.0	-18	-0.4	7	44.6	32	89.6	57	134.6	82	179.6	107	224.6	132	269.6
-50	-58.0	-17	+1.4	8	46.4	33	91.4	58	136.4	83	181.4	108	226.4	133	271.4
-45	-49.1	-16	3.2	9	48.2	34	93.2	59	138.2	84	183.2	109	228.2	134	273.2
-40	-40.0	-15	5.0	10	50.0	35	95.0	60	140.0	85	185.0	110	230.0	135	275.0
-39	-38.2	-14	6.8	11	51.8	36	96.8	61	141.8	86	186.8	111	231.8	136	276.8
-38	-36.4	-13	8.6	12	53.6	37	98.6	62	143.6	87	188.6	112	233.6	137	278.6
-37	-34.6	-12	10.4	13	55.4	38	100.4	63	145.4	88	189.4	113	235.4	138	280.4
-36	-32.8	-11	12.2	14	57.2	39	102.2	64	147.2	89	192.2	114	237.2	139	282.2
-35	-31.0	-10	14.0	15	59.0	40	104.0	65	149.0	90	194.0	115	239.0	140	284.0
-34	-29.2	-9	15.8	16	60.8	41	105.8	66	150.8	91	195.8	116	240.8	141	285.8
-33	-27.4	-8	17.6	17	62.6	42	107.6	67	152.6	92	197.6	117	242.6	142	287.6
-32	-25.6	-7	19.4	18	64.4	43	109.4	68	154.4	93	199.4	118	244.4	143	289.4
-31	-23.8	-6	21.2	19	66.2	44	111.2	69	156.2	94	201.2	119	246.2	144	291.2
-30	-22.0	-5	23.0	20	68.0	45	113.0	70	158.0	95	203.0	120	248.0	145	293.0
-29	-22.0	-4	24.8	21	69.8	46	114.8	71	159.8	96	204.8	121	249.8	146	294.8
-28	-18.4	-3	26.6	22	71.6	47	116.6	72	161.6	97	206.6	122	251.6	147	296.6
-27	-16.6	-2	28.4	23	73.4	48	118.4	73	163.4	98	208.4	123	253.4	148	298.4
-26	-14.8	-1	30.2	24	75.2	49	120.2	74	165.2	99	210.2	124	255.2	149	300.2
-25	-13.0	0	32.0	25	77.0	50	122.0	75	167.0	100	212.0	125	257.0	150	302.0
-24	-11.2	1	33.8	26	78.8	51	123.8	76	168.8	101	213.8	126	258.8	160	320.0
-23	-9.4	2	35.6	27	80.6	52	125.6	77	170.6	102	215.6	127	260.6	170	338.0
-22	-7.6	3	37.4	28	82.4	53	127.4	78	172.4	103	217.4	128	262.4	180	356.0
-21	-5.8	4	39.2	29	84.2	54	129.2	79	174.2	104	219.2	129	264.2	190	374.0

Conversion Formula °F = 9/5°C + 32° °C = 5/9(°F-32°)



Conversion Tables



Wire gauge conversion to decimal equivalents

INCH FRAC.	INCH DEC.	MILLI-METERS	INCH FRAC.	INCH DEC.	MILLI-METERS
1/64	.0156	0,397	33/64	.5156	13,097
1/32	.0312	0,794	17/32	.5312	13,494
3/64	.0468	1,191	35/64	.5468	13,891
1/16	.0625	1,588	9/16	.5625	14,288
5/64	.0781	1,984	37/64	.5781	14,684
3/32	.0937	2,381	19/32	.5937	15,081
7/64	.1093	2,778	39/64	.6093	15,478
1/8	.1250	3,175	5/8	.6250	15,875
9/64	.1406	3,572	41/64	.6406	16,272
5/32	.1562	3,969	21/32	.6562	16,669
11/64	.1718	4,366	43/64	.6718	17,066
3/16	.1875	4,763	11/16	.6875	17,463
13/64	.2031	5,159	45/64	.7031	17,859
7/32	.2187	5,556	23/32	.7187	18,256
15/64	.2343	5,954	47/64	.7343	18,653
1/4	.2500	6,350	3/4	.7500	19,050
17/64	.2656	6,747	49/64	.7656	19,447
9/32	.2812	7,144	25/32	.7812	19,844
19/64	.2968	7,541	51/64	.7968	20,241
5/16	.3125	7,938	13/16	.8125	20,638
21/64	.3281	8,334	53/64	.8281	21,034
11/32	.3437	8,731	27/32	.8437	21,431
26/64	.3593	9,128	55/64	.8593	21,828
3/8	.3750	9,525	7/8	.8750	22,225
25/64	.3906	9,922	57/64	.8906	22,622
13/32	.4062	10,319	29/32	.9062	23,019
27/64	.4218	10,716	59/64	.9218	23,416
7/16	.4375	11,113	15/16	.9375	23,813
29/64	.4531	11,509	64/64	.9531	24,209
15/32	.4687	11,906	31/32	.9687	24,606
31/64	.4843	12,303	63/64	.9843	25,003
1/2	.5000	12,700	1	1.0000	25,400

Move decimal point three places to the right to read mills.

DIAMETER			DIAMETER		
AWG	INCHES	CMA	AWG	INCHES	CMA
4/0	.460	212,000	12	.081	6,530
3/0	.410	168,000	13	.072	5,180
2/0	.365	133,000	14	.064	4,110
1/0	.325	106,000	15	.057	3,260
1	.289	83,700	16	.051	2,580
2	.258	66,400	17	.045	2,050
3	.229	52,600	18	.040	1,620
4	.204	41,700	19	.036	1,290
5	.182	33,100	20	.032	1,020
6	.162	26,300	21	.0285	810
7	.144	20,800	22	.0253	642
8	.128	16,500	23	.0226	509
9	.114	13,100	24	.0201	404
10	.102	10,400	25	.0179	320

AWG	mm ²	Standard wires mm ²					
26-22	0,1-0,4	0,14	0,20	0,25	0,35		
22-16	0,25-1,6	0,25	0,35	0,50	0,75	1,0	1,5
16-14	1,0-2,6	1,0	1,5	2,5			
12-10	2,7-6,6	4,0	6,0				
8	6,6-10,5	10					
6	10,5-16,8	16					
4	16,8-26,6	2,5					
2	26,6-42,4	35					
1/0	42,4-60,5	50					
2/0	60,5-76,2	70					
3/0	76,2-96,3	95					
4/0	96,3-117,0	120					

Hole diameter #10 and 3/8" are available in metric ref.

#10 .190 .209 (5,31) M5
 3/8" .375 .413 (10,5) M9-10

* All decimals plus or minus .003"
 Fractions plus or minus .055".

Stud size with hole sizes.

STANDARD STUD SIZE	SCEW DIA. (")	ETC HOLE DIA. INCH/mm	DIN.
• #0	.060	.094 (2,39)	M1,7-2,2
• #1	.073		
• #2	.086		
• #3	.099	.120 (3,025)	M2,6
• #4	.112		
• #5	.125	.146 (3,71)	M3-3,5
• #6	.138		
• #8	.164	.173 (4,39)	M4
• #10	.190	.198 (5,03)	
• #12	.216	17/64 (6,75)	M6
• #14	.242		
• 1/4"	.250		
• 5/16"	.312	21/64 (8,33)	M8
• 3/8"	.375	25/64 (9,92)	M9
• 7/16"	.437	29/64 (11,51)	M11
• 1/2"	.500	33/64 (13,10)	M12
• 5/8"	.625	21/32 (16,67)	M16
• 3/4"	.750	25/32 (19,84)	M18
• 7/8"	.875	29/32 (23,02)	M20
• 1"	1.000	1-1/32 (26,19)	M25

Notes

A series of horizontal dotted lines for taking notes, spanning the width of the page.



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