

Look for Added Product Line  
Inside Back Cover



**ALL-STATES®**

Products for Wiring Management®

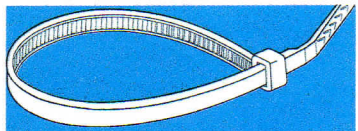




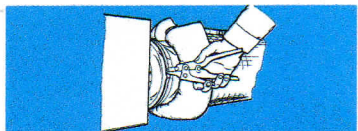
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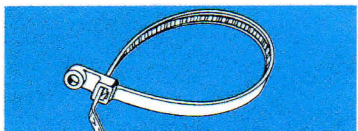
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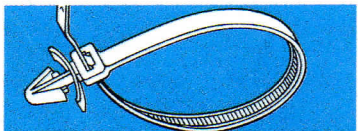
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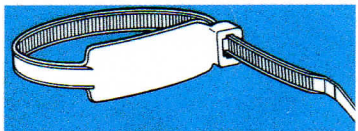
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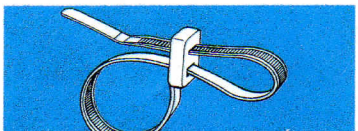
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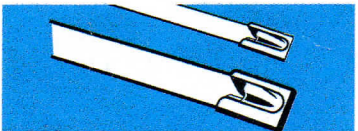
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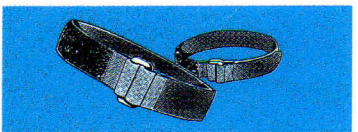
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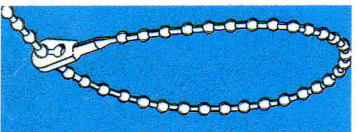
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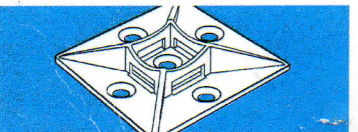
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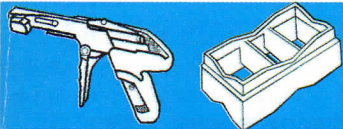
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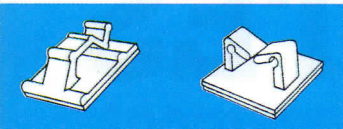
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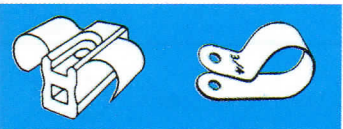
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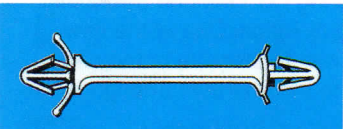
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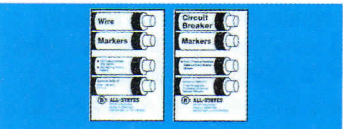
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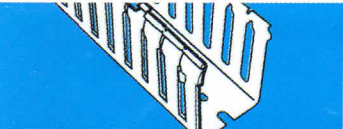
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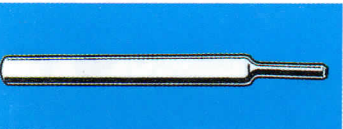
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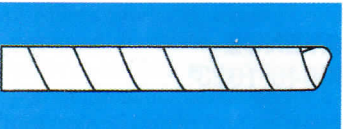
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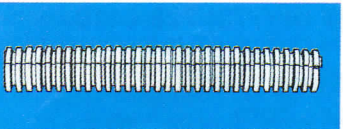
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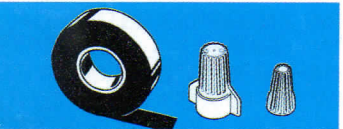
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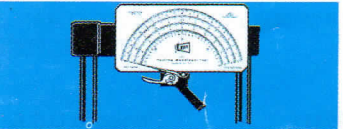
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All-States traces its roots back to 1963 when the original company that produced molds, tools and dies was incorporated as All-States Plastic Manufacturing Co. Our first product line was injection-molded nylon cable clamps. In 1968, we created, patented and began manufacturing our country's first one-piece all nylon cable tie. Prior to this, industry cable ties had been "two-piece" with either a separate inserted metal pawl or a two-piece all-nylon design. Other manufacturers quickly followed our lead, and today, the one-piece cable tie is the industry standard.

By successfully marketing our products primarily through private label accounts, our business grew. In 1982,

All-States Plastic Manufacturing Co. changed ownership, management and marketing direction. One of the new management's major goals was to promote brand name visibility by selling products to the end user through stocking distributors.

In 1984, we changed our company name to All-States Inc. to reflect our commitment to continued growth in existing and future markets, including non-plastic products. Working closely with a quality network of distributors, we are able to effectively serve our customers and establish All-States as a vigorous, effective contributor to the industry.



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## PRODUCTS FOR WIRING MANAGEMENT®

All-States is a completely integrated manufacturer with in-house capabilities to design and fabricate the tools, molds and dies necessary to manufacture our entire nylon and plastic materials product line. Our continuing interest in



• Single-Loop Cable Ties



• Single-Loop HVAC Duct Clamps



• Mounting-Hole Cable Ties



• Push-Mount Cable Ties



• Identification Cable Ties



• Double-Loop Cable Ties



• Stainless Steel Cable Ties



• Velcro Hook and Loop Cable Ties



• Beaded Cable Ties



• Mounting Bases for Cable Ties



• Accessories



• Clips and Saddles



• Cable Clamps



• Printed Circuit Board Supports/Spacers



• Wire Marker Booklets



• Wire Markers and Dispensers



• Wiring Duct and Accessories



• Heat Shrink Tubing



• Spiral Wrapping



• Corrugated Tubing



• Twist-On Connectors



• Electrical Tape

growth opportunities is reflected in our ability and willingness to modify and/or expand our product lines to meet the specific needs of our customers.

## WARRANTY

All-States products, when purchased in the original unopened, All-States brand package, are warranted to be free from defects in materials and workmanship and in optimum product condition for a period of two (2) years from date of production as evidenced by the Quality Control number. All-States' sole obligation, and purchaser's sole remedy, for any breach of this warranty is limited to repair or replacement of the product at All-States' option. Any replacement will be F.O.B. the original point of delivery. Purchaser must notify All-States in writing of any products, which are deemed to be defective, within 90 days after receipt of such products.

ALL-STATES EXPRESSLY DISCLAIMS ANY AND ALL EXPRESSED OR IMPLIED WARRANTIES CONCERNING ITS PRODUCTS, OTHER THAN A WARRANTY OF ITS TITLE TO GOODS AND THE WARRANTY SET FORTH ABOVE. SUCH DISCLAIMER INCLUDES, WITHOUT LIMITATION, WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY.

All-States products are sold with the understanding the buyer will test them in actual use and make a determination as to suitability and acceptability for intended use.

## LIMITATION OF LIABILITY

All-States will not, under any circumstances, be liable for the cost of installation, removal or reinstallation of any All-States product, or the cost of assembly, disassembly or reassembly of equipment involving any All-States product, or for the loss of the use of a purchaser's equipment or facilities, or for loss of any business or good will or profits, or for cost of inspection, transportation or storage, or for any incidental or consequential damages of any nature or description whatever which may arise from the sale of All-States products to the original purchaser or any subsequent purchaser.



## **BASIC TYPE 66 NYLON**

The following information is based on American Society for Testing and Materials (ASTM) test methods at optimum conditions of 73° F (23° C), 50% relative humidity, with the nylon at 2.5% moisture by weight. Further information on ASTM test methods and numbers, and other technical data can be obtained upon request, by calling All-States at 1-800-621-5837 or 1-773-728-0525.

### **Type 66 Nylon Material:**

- Is strong and resilient.
- Fits most common product applications.
- Is resistant to a wide range of inorganic and organic substances, including automotive oils, detergents and alkalis.
- Has a specific gravity of 1.14, measured in relative units to water, which has a value of 1.
- Is derived from two amide-forming ingredients: hexamethylene diamine and adipic acid (each contain six atoms).

### **Facts on Type 66 Nylon's Strength and Density:**

- Tensile yield strength (the load required for a material to lose its elasticity) is 9,000 psi. (Tensile strength and stiffness increase as temperature and/or moisture decrease.)
- Izod impact strength (the amount of energy needed to break a material at a notched point) is 2.1 ft. pounds per inch of notch depth.
- Flexural modulus of elasticity (an inverse linear measure of the relationship between flexibility and strength) is rated at 175,000 psi. (Lower values indicate greater flexibility and less strength.)
- Affected by solvents, strong acids and some salts. Alcohols tend to plasticize the nylon. Contact factory for complete list.

### **Facts on Type 66 Nylon's Temperature Requirements:**

- -40° F (-40° C) to 185° F (85° C) working temperature range.
- 480° F (250° C) to 500° F (260° C) melting point.
- Deflection temperature (a measurement of the temperature at which a specific load will cause permanent deformation of the material) is 430° F (221° C) at 66 psi and 160° F (70° C) at 264 psi.

### **Facts on Type 66 Nylon's Flammability and Dielectric Strength**

- Meets UL94V-2 flammability rating in tests for resistance to flame and electrical charge.
- Minimum oxygen needed to support combustion (the oxygen index) of Type 66 nylon in an oxygen/nitrogen atmosphere is 31%.
- Its dielectric strength (a measure of a material's electrical resistance) is 550 volts per mil.

### **Storage Requirements**

- Because nylon is a hygroscopic material (affected by variations in moisture), all nylon materials optimally require storage at 73° F (±15° F) and 50% RH in sealed containers.
- Failure to keep product sealed, particularly in cold and/or dry environments, will result in moisture loss and a more brittle product.
- All-States packaging initially provides nylon products conditioned to 2.5% moisture added by weight in heavy-wall, polyethylene heat-sealed bags.

## **OTHER TYPE 66 NYLON MATERIALS**

The following materials are Type 66 with additives to modify the nylon for specific applications and environments.

### **Facts on Outdoor, Weather-Resistant/UV-Stabilized Type 66 Nylon:**

- Direct sunlight tests of this material showed virtually no deterioration of properties for at least five years, with minimum loss up to 15 years, due to a carbon black additive used to retard the degrading process of UV light.
- Available in black only, this outdoor, weather-resistant/UV-stabilized nylon is stronger but less ductile than basic Type 66.

### **Heat-Stabilized Nylon**

- Has a higher temperature range than Type 66.
- Meets UL94V-2 flammability rating.

### **Fire-Retardant Nylon**

- Recommended for most UL94V-0 environments.
- About half the tensile strength and slightly less impact strength of Type 66 nylon.

## **OTHER PLASTIC MATERIALS**

### **Polypropylene**

- All-States polypropylene products are more suitable than Type 66 nylon for use in drier environments.
- Since it is not a hygroscopic material, it is relatively unaffected by variations in moisture levels.
- Compared to Type 66 nylon, our polypropylene products:
  - Are resistant to many acids that affect nylon.
  - Are lighter in weight (specific gravity .9).
  - Have about half the tensile strength.
  - Have one-fourth the Izod impact strength.
  - Are less flexible in drier conditions.
  - Meet UL94V-HB flammability rating (horizontally burns).

### **Low-Density Polyethylene**

- Similar to polypropylene in chemical and moisture resistance.
- Has less than half the tensile strength of polypropylene but is over six times more flexible.
- Suitable for use with delicate materials.
- Has no UL flammability rating.

### **Fluoropolymers (Tefzel<sup>®</sup>, Halar<sup>®</sup>)**

- Suitable for many severe environments, including high-energy radiation exposure, acidic areas and have been used in Plenum applications.
- Virtually inert to most solvents, chemicals and strong mineral acids.
- Weather-resistant and virtually unaffected by moisture.
- Meet UL94V-0 flammability rating.

<sup>①</sup>Tefzel<sup>®</sup> is a registered trademark of E.I. DuPont de Nemours & Co.

<sup>②</sup>Halar<sup>®</sup> is a registered trademark of Solvay Solexis



## CROSS-SECTION SERIES

The term "cross-section" (of a cable tie) occurs frequently throughout this catalog. The term, where applicable, is the same as the "Strap Identification Code" in Military Standards MS3367 and MS3368 under MIL-S-23190. This code nomenclature relates to certain specified maximum strap width and thickness dimensions and minimum tensile strengths.

Minimum loop tensile strengths required by the military for each cross-section series are in the following table. All-States cable ties meet or exceed these requirements.

### Minimum Loop Tensile Strength

Cross-Section	lbs.	(Kg)
Miniature	18	(8)
Compact	30	(14)
Intermediate	40	(18)
Standard	50	(23)
Heavy	120	(54)
Very Heavy	175	(879)
Extra Heavy	250	(113)

Material	STRENGTH/DENSITY				TEMPERATURE				FLAMMABILITY		
	Ultimate Tensile Strength psi	Izod Impact Strength ft/lb	Flexural Modulus psi	Specific Gravity	Continuous Usage Temperature Range	Melting Point	Deflection Temperature 66 psi    264 psi		UL Flammability Rating	Dielectric Strength Rating V/Mil	Oxygen Index
NYLON											
Basic Type 66	11,200	2.1	175,000	1.14	-40°F to 185°F (-40°C to 85°C)	485°F to 500°F (221°C to 260°C)	430°F (221°C)	160°F (71°C)	UL94V-2	550	31%
UV-Stabilized	9,000	2.0	191,000	1.15	-40°F to 185°F (-40°C to 85°C)	485°F to 500°F (252°C to 260°C)	446°F (230°C)	190°F (88°C)	UL94V-2	463	26% ③
Heat-Stabilized	11,100	2.7	195,000	1.14	-40°F to 221°F (-40°C to 105°C)	500°F (260°C)	430°F (221°C)	165°F (74°C)	UL94V-2	568	33%
Fire-Retardant	5,500	1.7	200,000	1.27	-40°F to 203°F (-40°C to 95°C)	480°F (249°C)	400°F (204°C)	160°F (71°C)	UL94V-0	620	31%
OTHER MATERIALS											
Polypropylene	5,100	.5	220,000	.90	40°F to 221°F (4°C to 105°C)	334°F (168°C)	220°F (104°C)	N/A	UL94V-HB	600	N/A
Polyethylene	1,925	No Break	34,000	.92	Up to 167°F (Up to 75°C)	375°F (191°C)	108°F (42°C)	N/A	No Rating	450	N/A
Tefzel①	6,500	No Break	200,000	1.70	-65°F to 302°F (-54°C to 150°C)	520°F (271°C)	220°F (104°C)	165°F (74°C)	UL94V-0	400	28-32%
Halar②	7,000	No Break	242,000	1.68	-50°F to 284° F (-46°C to 140°C)	464°F (240°C)	197°F (92°C)	152°F (67°C)	UL94V-0	400	60%

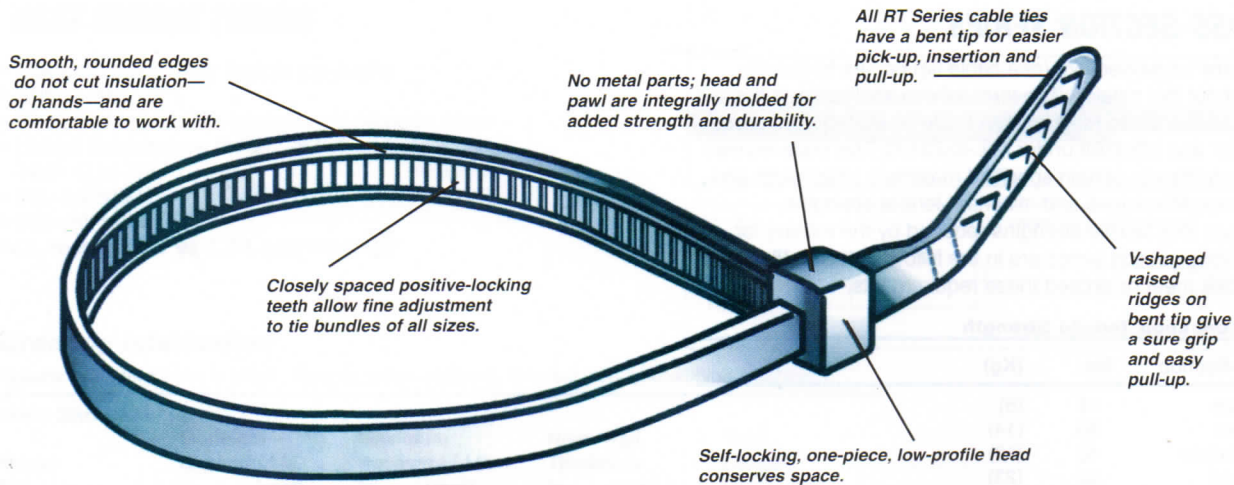
① Tefzel® is a registered trademark of E.I. DuPont de Nemours & Co.

② Halar® is a registered trademark of Solvay Solexis

③ Dry as molded (.02% moisture). All other figures are measured at 2.5% moisture added.

These specifications are taken from the raw material manufacturers' data sheets and are intended only as a guide for selection. All-States Inc. reserves the right to change the raw material on any of its products without notice. Further information is available through the All-States corporate office.





## SINGLE-LOOP CABLE TIES

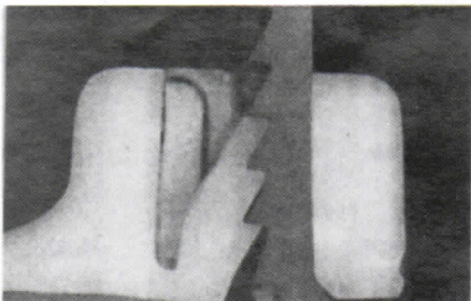
**RT Series** (18# thru 50# tensile strength) cable ties are our most widely used ties. They are available in Miniature (18 lbs.), Compact (30 lbs.), Intermediate (40 lbs.) and Standard (50 lbs.) cross-sections in lengths from 3.75" to 14.50" for bundles from .0625" to 4" diameters.

**RTH Series** (120# tensile strength) cable ties are available in Heavy (120 lbs.) cross-sections in lengths from 8" to 28.5" for bundles from .1875" to 8" diameters.

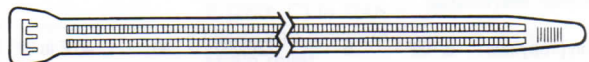
**RTV Series** (175# tensile strength) cable ties are among the toughest ties offered. Widely used in the HVAC industry as duct straps, All-States lists these as **DCV Series** cable ties for marketing purposes. **RTV Series** cable ties are available in Very Heavy (175 lbs.) cross-section in lengths of 17.75" to 45.5" for bundles 5" to 13" diameters.

**RTE Series** (250# tensile strength) cable ties are the strongest tensile strength ties offered. Unique in design, RTE Series cable ties have two tracks and two pawls in the head. Available in Extra Heavy (250 lbs.) cross-section in lengths 15" to 28.75" for bundles 4" to 8" diameters.

- Closely spaced double rows of positive-locking teeth allow fine adjustment.
- Smooth, rounded edges do not cut insulation—or hands—and are comfortable to work with.
- Double-slotted head and pawl are integrally molded for added strength and durability.
- Self-locking, one-piece, low-profile head conserves space.
- Raised parallel ridges on tip give a sure grip and easier pull-up.



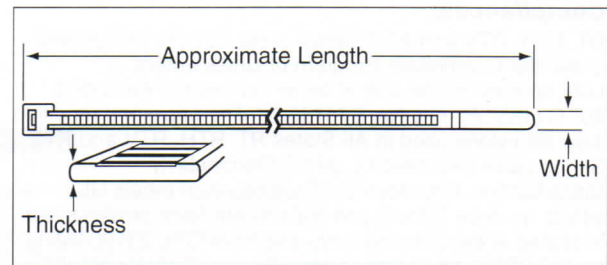
This unretouched photograph is reproduced at a 6x enlargement over actual product size.



RTE Series

**Custom hot stamping of single-loop and identification ties available.**





### Ordering Information

**Materials:** Factory-stocked cable ties include Type 66 nylon (natural and black) and UV-stabilized (black); available on special order are Tefzel® aqua), Halar® (maroon), polypropylene (black and colors).

**Colors:** Cable ties are available in the neon colors of pink, green, yellow, orange and solar blue, or can be custom-matched to your specifications on special order using basic Type 66 nylon. For factory-stocked colors, use the following dash numbers for Mil Spec nylon colors: -0 (Black), -1 (Brown), -2 (Red), -3 (Orange), -4 (Yellow), -5 (Green), -6 (Blue), -7 (Purple), -8 (Gray), -9 (Natural).

### Single-Loop Cable Ties

Model No.	Min. Loop Tensile Strength Lbs. (Kg)	Max. Bundle Diameter In. (mm)	Approx. Length In. (mm)	Strap Width In. (mm)	Strap Thickness In. (mm)	Cross Section Series ③	Mil. Std. 3367
<b>RT Series</b>							
RT-350	18 (8)	.75 (19)	3.80 (97)	.090 (2.3)	.045 (1.1)	M	-4
RT-304	18 (8)	1.00 (25)	4.25 (108)	.100 (2.5)	.045 (1.1)	M	-4
RT-360	18 (8)	1.50 (38)	6.25 (159)	.090 (2.3)	.045 (1.1)	M	
RT-377	18 (8)	2.00 (51)	8.00 (203)	.090 (2.3)	.045 (1.1)	M	
RT-400	30 (14)	1.00 (25)	5.20 (132)	.115 (2.9)	.045 (1.1)	C	
RT-545	40 (18)	1.25 (31)	6.00 (152)	.135 (3.4)	.050 (1.3)	I	-5
RT-550	40 (18)	1.25 (31)	6.20 (158)	.135 (3.4)	.050 (1.3)	I	-5
RT-508	40 (18)	2.00 (51)	8.25 (210)	.135 (3.4)	.050 (1.3)	I	
RT-511	40 (18)	3.00 (76)	11.50 (292)	.135 (3.4)	.050 (1.3)	I	
RT-514	40 (18)	4.00 (102)	14.50 (368)	.135 (3.4)	.050 (1.3)	I	
RT-604	50 (23)	1.00 (25)	5.10 (130)	.190 (4.8)	.055 (1.4)	S	
RT-606	50 (23)	1.25 (32)	6.70 (170)	.190 (4.8)	.055 (1.4)	S	
RT-675	50 (23)	1.75 (45)	7.50 (191)	.190 (4.8)	.055 (1.4)	S	-1
RT-1100	50 (23)	3.00 (76)	11.50 (292)	.190 (4.8)	.055 (1.4)	S	-7
RT-1400	50 (23)	4.00 (102)	14.50 (368)	.190 (4.8)	.055 (1.4)	S	-2
<b>RTH Series</b>							
RTH-800	120 (54)	2.00 (51)	8.00 (203)	.310 (7.9)	.083 (2.1)	H	
RTH-1400	120 (54)	4.00 (102)	14.75 (375)	.310 (7.9)	.083 (2.1)	H	-3
RTH-1700	120 (54)	5.00 (127)	17.75 (451)	.310 (7.9)	.083 (2.1)	H	
RTH-2100	120 (54)	6.00 (152)	21.75 (553)	.310 (7.9)	.083 (2.1)	H	
RTH-2400	120 (54)	7.00 (178)	24.50 (622)	.310 (7.9)	.083 (2.1)	H	
RTH-2800	120 (54)	8.00 (203)	28.50 (724)	.310 (7.9)	.083 (2.1)	H	-6
<b>RTV Series</b>							
RTV-1700	175 (79)	5.00 (127)	20.40 (518)	.360 (9.1)	.083 (2.1)	V	
RTV-2100	175 (79)	6.00 (152)	23.90 (607)	.360 (9.1)	.083 (2.1)	V	
RTV-2400	175 (79)	7.00 (178)	25.30 (643)	.360 (9.1)	.083 (2.1)	V	
RTV-2800	175 (79)	8.00 (203)	28.80 (732)	.360 (9.1)	.083 (2.1)	V	
RTV-3600	175 (79)	11.30 (287)	36.50 (927)	.360 (9.1)	.083 (2.1)	V	
RTV-4400	175 (79)	13.00 (330)	45.50 (1,156)	.360 (9.1)	.083 (2.1)	V	
RTV-4800	175 (79)	14.00 (355)	48.50 (1,232)	.360 (9.1)	.083 (2.1)	V	
<b>RTE Series</b>							
RTE-1400	250 (113)	4.00 (102)	15.00 (381)	.500 (12.7)	.083 (2.1)	E	
RTE-2100	250 (113)	6.00 (152)	22.00 (559)	.500 (12.7)	.083 (2.1)	E	
RTE-2800	250 (113)	8.00 (203)	28.75 (730)	.500 (12.7)	.083 (2.1)	E	

① Tefzel® is a registered trademark of E.I. DuPont de Nemours & Co.

② Halar® is a registered trademark of Solvay Solexis

③ Cross-Section Series (tensile strength): M = Miniature (18#); C = Compact (30#); I = Intermediate (40#); S = Standard (50#); H = Heavy (120#); V = Very Heavy (175#); and E = Extra Heavy (250#).



## Compliances:

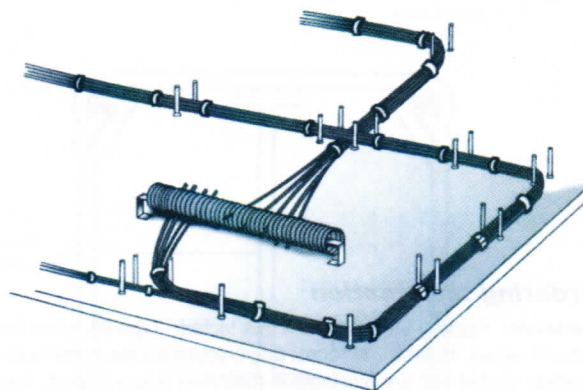
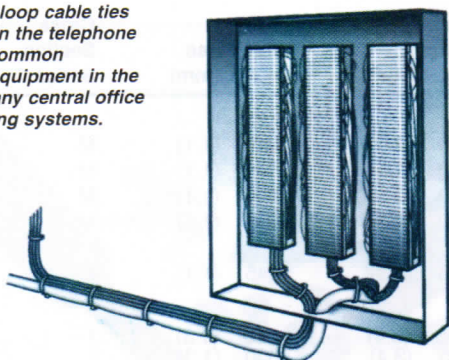
RT, RTH, RTV and RTE Series cable ties are recognized under the Component Program of Underwriters Laboratories Inc. for use at temperatures not exceeding 85° C (185° F). File No. E76766(N). The basic and modified Type 66 nylons used in All-States RT, RTH, RTV and RTE Series cable ties meet UL 94V-2 Flammability Classification. Fire-retardant Type 66 nylon meets UL 94V-0, as does Tefzel<sup>①</sup> and Halar<sup>②</sup>. Mil Spec products are indicated in the ordering table and have QPL 23190 listing for MS-3367. All-States Federal Supply Code for manufacturers (FSCM) is 26863. Products not covered by Mil Specs are manufactured to the same quality standards. U.S. Patent numbers 3,484,905 and 3,605,199 and other foreign patents apply to All-States Cable Ties.

① Tefzel<sup>®</sup> is a registered trademark of E.I. DuPont de Nemours & Co.

② Halar<sup>®</sup> is a registered trademark of Ausimont, Inc.

## Applications

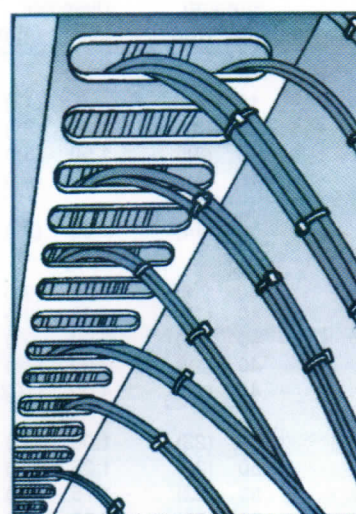
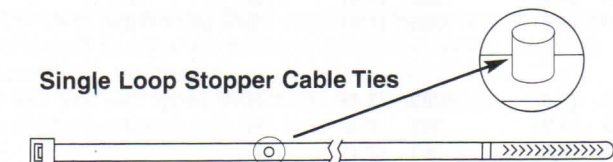
All-States single-loop cable ties are widely used in the telephone industry. Some common uses are within equipment in the telephone company central office and premise wiring systems.



Smaller sizes of All-States cable ties bundle tightly in harness assemblies for electrical/electronic equipment applications without damaging delicate wires.

## SINGLE-LOOP STOPPER CABLE TIES

- Incorporates all the features of our RT Series cable ties.
- Built-in stop limits minimum bundle diameter, prevents damage to delicate cable and wire.



RT, RTH, RTV and RTE Series single-loop cable ties hold all sizes and types of cables securely in cable tray systems and other industrial applications.

## Ordering Information

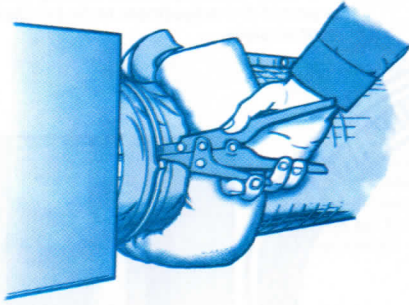
Materials: Type 66 nylon (natural and black).

### Single-Loop Stopper Cable Ties

Model No.	Min. Loop Tensile Strength Lbs (Kg)		Min. Bundle Diameter In. (mm)		Approx. Length In. (mm)		Strap Width In. (mm)		Strap Thickness In. (mm)		Cross Section Series <sup>①</sup>
RTST-550	40	(18)	.75	(19)	6.20	(158)	.135	(3.4)	.050	(1.3)	I
RTST-508	40	(18)	1.00	(25)	8.25	(210)	.135	(3.4)	.050	(1.3)	I

① Cross-Section Series (tensile strength): I = Intermediate (40#).





## DUCT CLAMPS

All-States Duct-Clamp™ Cable Ties connect flexible duct in HVAC applications. DCV Series clamps are offered in Very Heavy (175 lbs.) cross-sections in lengths 18" to 48.5" for bundles 5" to 14".

### Ordering Information

Materials: Type 66 nylon, specify natural or black.

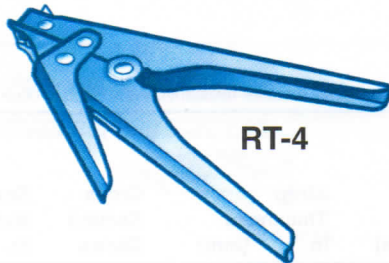
#### Single-Loop HVAC Duct Clamps

Model No.	Min. Loop Tensile Strength		Max. Bundle Diameter		Approx. Length		Strap Width		Strap Thickness	
	Lbs.	(Kg)	In.	(mm)	In.	(mm)	In.	(mm)	In.	(mm)
DCV-5	175	(79)	5.00	(127)	20.40	(518)	.36	(9.1)	.083	(2.1)
DCV-6	175	(79)	6.00	(152)	23.90	(607)	.36	(9.1)	.083	(2.1)
DCV-7	175	(79)	7.00	(178)	25.30	(643)	.36	(9.1)	.083	(2.1)
DCV-8	175	(79)	8.00	(203)	28.80	(732)	.36	(9.1)	.083	(2.1)
DCV-10	175	(79)	11.30	(287)	36.50	(927)	.36	(9.1)	.083	(2.1)
DCV-13	175	(79)	13.00	(330)	45.50	(1,156)	.36	(9.1)	.083	(2.1)s
DCV-14	175	(79)	14.00	(355)	48.50	(1,232)	.36	(9.1)	.083	(2.1)

### CABLE TIE INSTALLATION TOOL

#### RT-4

- Works with Very Heavy (175 lbs.) and smaller cross-section ties.
- Manually tensions cable ties without a pre-set control.
- Separate arm manually cuts tie when desired tension is reached. **Do Not Over Tension.**



RT-4

### OTHER ALL-STATES PRODUCTS FOR THE HVAC MARKETPLACE:

- Cable Ties, including Identification, Mounting, Velcro and Stainless Steel.
- Cable Tie Mounting Bases.
- Cable Clamps.
- Twist-On Wire Connectors.
- Wire Marker Booklets.
- Wire Marker Dispensers.
- Wiring Duct.
- Heat Shrink Tubing.
- Corrugated Tubing.
- Spiral Wrapping.
- Electrical Tape.

### RAP-TIGHT® ASSORTMENT PACKS

Master zip-lock bag contains three factory-sealed bags of cable ties (available in natural or UV nylon). Select your own assortment or buy one of All-States' standard Rap-Tight Assortment Packs such as **Model No. RTAP-4814**.



RTAP-4814 contains the following:

No. Pieces	Model No.	Tensile Strength		Approx. Length	
		Lbs.	(Kg)	In.	(mm)
100	RT-304	18	(8)	4.25	(108)
100	RT-508	40	(18)	8.25	(210)
50	RT-1400	50	(23)	14.50	(368)



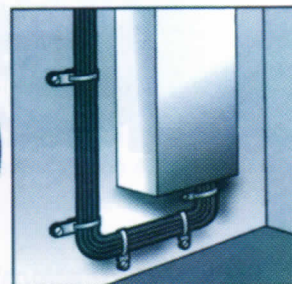
Molded-in screw hole mount provides one-piece mounting and bundling.

V-Shaped raised ridges on bent tip give a sure grip and easier pull-up.

No metal parts; one-piece, self-locking head and pawl are integrally molded for added strength and durability.

Closely spaced positive-locking teeth permit fine adjustment to tie bundles of all sizes.

Smooth, rounded edges do not cut insulation—or hands—and are comfortable to work with.



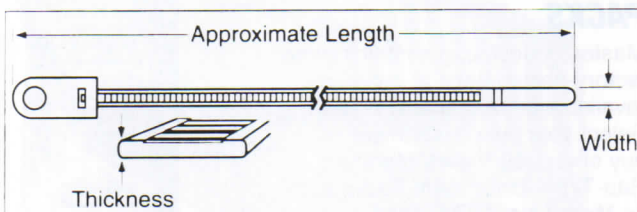
RTM and RTHM Series cable ties can both contain and mount a bundle on any surface that will accept a screw or rivet, where permitted by applicable codes.

## MOUNTING-HOLE CABLE TIES

RTM and RTHM Series (18# thru 120# tensile strength) are available in Miniature (18 lbs.), Compact (30 lbs.), Intermediate (40 lbs.), Standard (50 lbs.) and Heavy (120 lbs.) cross sections, in lengths 4.5" to 29" for bundles from .0625 to 8" diameters.

## Compliances

RTM and RTHM mounting-hole cable ties are recognized under the Component Program of Underwriters Laboratories Inc. for use at temperatures not exceeding 85° C (185° F). File No. E76766(N). The basic and modified Type 66 nylons used in All-States RTM and RTHM Series mounting cable ties meet UL94V-2 Flammability Classification. Fire-retardant Type 66 nylon meets UL 94V-0. All RTM and RTHM Series cable ties are manufactured to the same Mil Spec quality standards required by MS-3367.



## Ordering Information

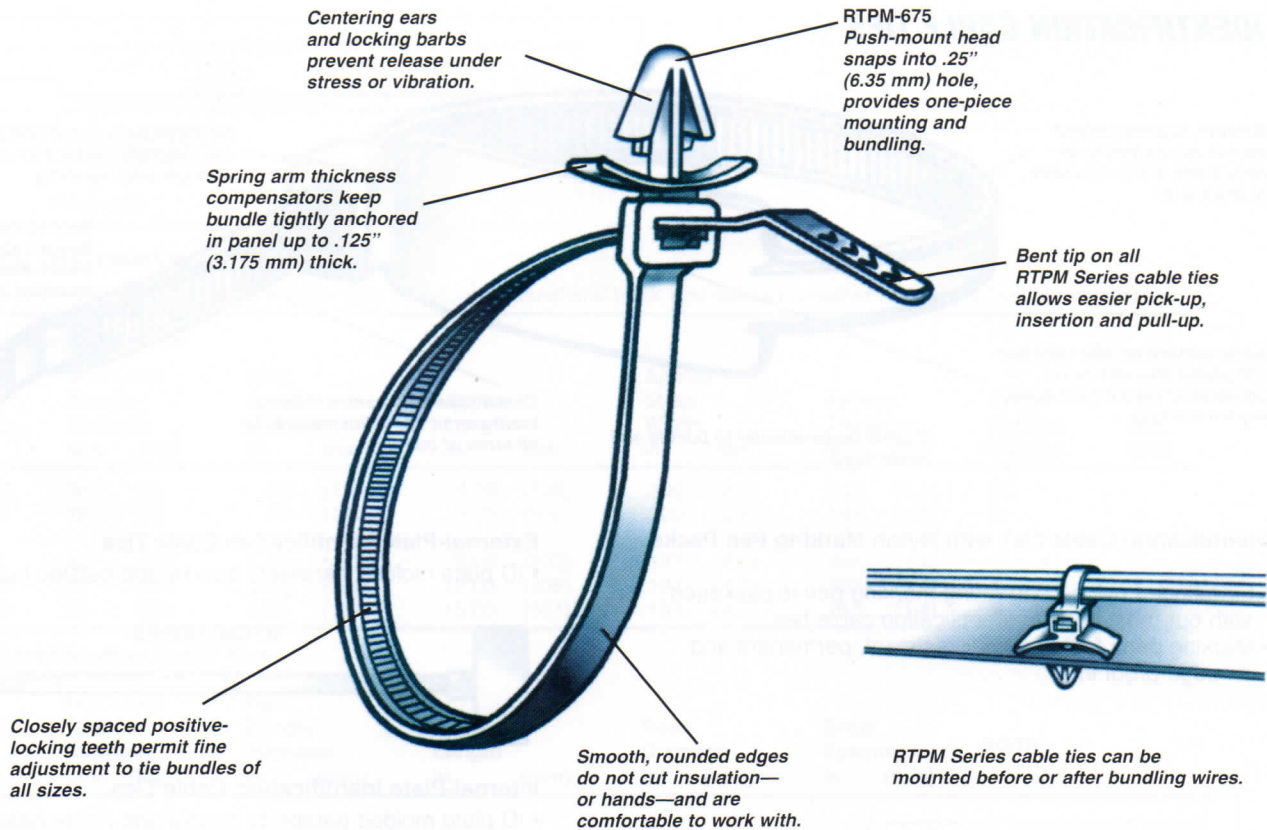
**Materials:** Factory-stocked RTM and RTHM cable ties include Type 66 nylon in natural and black; and outdoor, weather-resistant/UV-stabilized in black.

### Mounting-Hole Cable Ties

Model No.	Min. Loop Tensile Strength		Max. Bundle Diameter		Approx. Length		Strap Width		Strap Thickness		Cross Section Series	Screw Hole Size	
	Lbs.	(Kg)	In.	(mm)	In.	(mm)	In.	(mm)	In.	(mm)		In.	(mm)
<b>RTM Series</b>													
RTM-304	18	(8)	1.00	(25)	4.50	(114)	.100	(2.5)	.045	(1.1)	M	No. 4	(2.8)
RTM-400	30	(14)	1.00	(25)	5.50	(140)	.115	(2.9)	.045	(1.1)	C	No. 4	(2.8)
RTM-550	40	(18)	1.25	(32)	6.50	(165)	.135	(3.4)	.050	(1.3)	I	No. 8	(4.1)
RTM-675	50	(23)	1.75	(45)	8.00	(203)	.190	(4.8)	.055	(1.4)	S	No. 10	(4.8)
RTM-1100	50	(23)	3.00	(76)	12.00	(305)	.190	(4.8)	.055	(1.4)	S	No. 10	(4.8)
RTM-1400	50	(23)	4.00	(102)	15.00	(381)	.190	(4.8)	.055	(1.4)	S	No. 10	(4.8)
<b>RTHM Series</b>													
RTHM-1400	120	(54)	4.00	(102)	15.00	(381)	.310	(7.9)	.083	(2.1)	H	.25	(6.4)
RTHM-2100	120	(54)	6.00	(152)	22.00	(559)	.310	(7.9)	.083	(2.1)	H	.25	(6.4)
RTHM-2800	120	(54)	8.00	(203)	29.00	(737)	.310	(7.9)	.083	(2.1)	H	.25	(6.4)

Cross-Section Series (tensile strength): M = Miniature (18#); C = Compact (30#); I = Intermediate (40#); S = Standard (50#); and H = Heavy (120#).

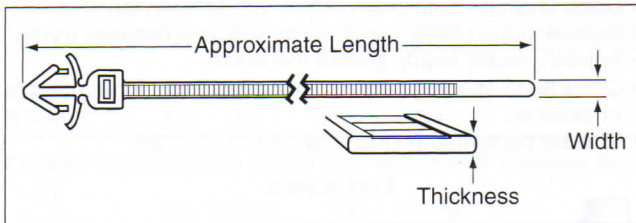




## PUSH-MOUNT CABLE TIES

### RTPM Series Push-Mount

Available in Standard (50 lbs.) cross-section with lengths from 4.75" to 8" to secure .0625" to 1.75" bundle diameters.



### Compliances

RTPM Push-Mount cable ties are recognized under the Component Program of Underwriters Laboratories Inc. for use at temperatures not exceeding 85° C (185° F). File No. E76766(N). The basic and modified Type 66 nylons used in All-States RTPM Series mounting cable ties meet UL94V-2 Flammability Classification. Fire-retardant Type 66 nylon meets UL 94V-0. All RTPM Series cable ties are manufactured to the same Mil Spec quality standards required by MS-3367.

### Ordering Information

**Materials:** Factory-stocked cable ties include Type 66 nylon in natural and black; and outdoor, weather-resistant/UV-stabilized in black.

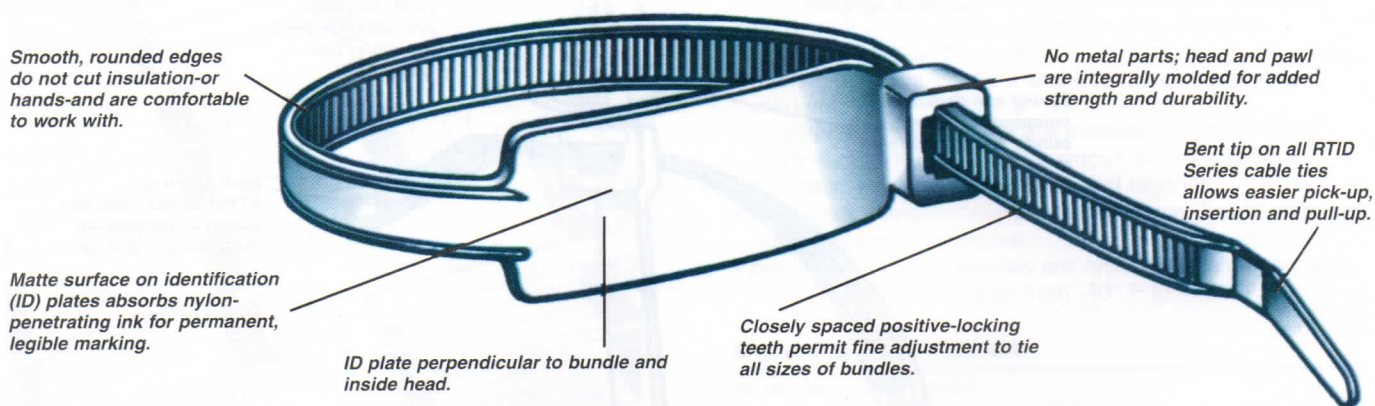
#### Push-Mount Cable Ties

Model No.	Min. Loop Tensile Strength Lbs. (Kg)	Max. Bundle Diameter In. (mm)	Approx. Length In. (mm)	Strap Width In. (mm)	Strap Thickness In. (mm)	Cross Section Series <sup>①</sup>	Screw Hole Size In. (mm)
RTPM-304	18 (8)	1.00 (25)	4.75 (121)	.100 (2.5)	.045 (1.1)	M	.19 (4.8)
RTPM-675	50 (23)	1.75 (45)	8.00 (203)	.190 (4.8)	.055 (1.4)	S	.25 (6.4)

<sup>①</sup> Cross-Section Series (tensile strength): M = Miniature (18#); and S = Standard (50#).

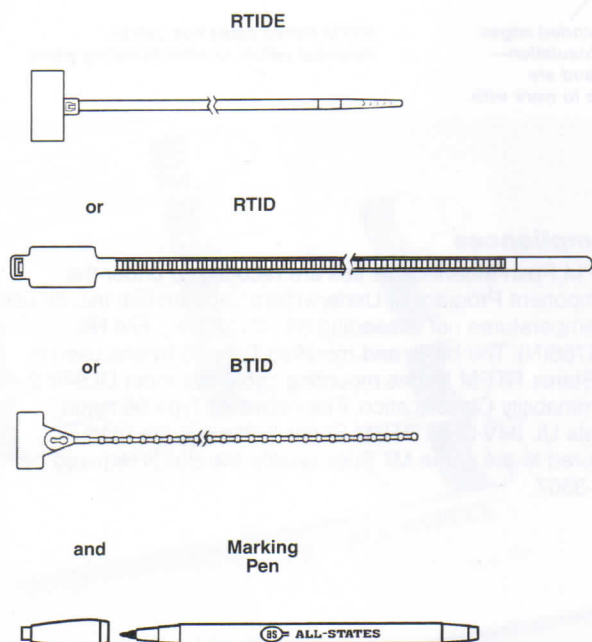


## IDENTIFICATION CABLE TIES



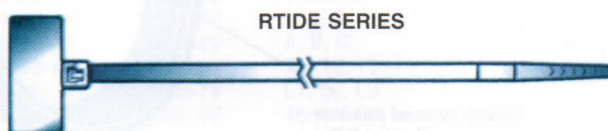
### Identification Cable Ties with Nylon Marking Pen Packs:

- Fine-tipped nylon-penetrating marking pen is packaged with our most popular identification cable ties.
- Marking pens feature water-resistant, permanent and smudge-proof ink.



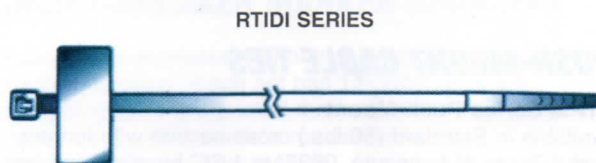
### External-Plate Identification Cable Ties

- ID plate molded parallel to bundle and outside head.



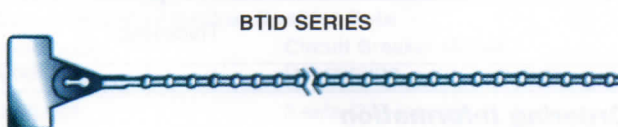
### Internal-Plate Identification Cable Ties

- ID plate molded parallel to bundle and inside head.

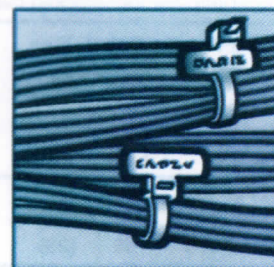


### Beaded Identification Ties

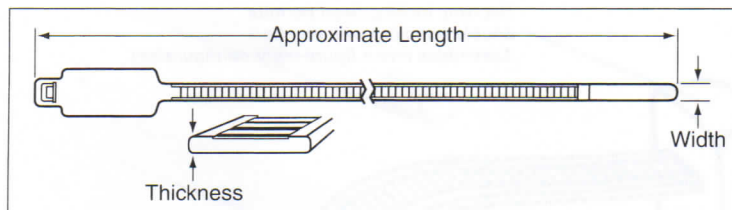
- Matte finish on both sides allows versatility in labeling.
- Positive locking head design holds securely, releases easily.
- Smooth, round beads protect insulation.
- Close bead spacing permits finer adjustment for bundles of all sizes.
- ID plate parallel to bundle and outside of head.



**Custom hot stamping of single-loop and identification ties available.**



RTID Series cable ties provide a convenient, effective means to identify bundles in wiring systems, making it easy to follow circuits.



### Ordering Information

**Materials:** Factory-stocked cable ties include Type 66 nylon in natural and black; and outdoor, weather-resistant/UV-stabilized in black.

#### Identification Cable Ties

Model No.	Min. Loop Tensile Strength Lbs. (Kg)		Max. Bundle Diameter In. mm		Approx. Length In. mm		Approx. Strap Width In. mm		Approx. Thickness In. mm		Cross Section Series <sup>①</sup>	Mil. Std. 3368
RTIDE-350	18	(8)	.75	(19)	4.25	(108)	.100	(2.5)	.045	(1.1)	M	
RTIDI-350	18	(8)	.75	(19)	3.75	(95)	.100	(2.5)	.045	(1.1)	M	-5
RTID-675	50	(23)	1.75	(45)	8.00	(203)	.187	(4.7)	.055	(1.4)	S	-1
RTID-1100	50	(23)	3.00	(76)	12.00	(305)	.187	(4.7)	.055	(1.4)	S	
RTID-1400	50	(23)	4.00	(102)	15.00	(381)	.187	(4.7)	.055	(1.4)	S	-2

#### Beaded Identification Cable Ties

Model No.	Min. Loop Tensile Strength		Max. Bundle Diameter		Approx. Length		Bead Diameter		Bead Spacing	
	Lbs.	(Kg)	In.	(mm)	In.	(mm)	In.	(mm)	In.	(mm)
Nylon										
BTID-10N	75	(34)	3.00	(76)	11.00	(279)	.12	(3.1)	.25	(6.4)
BTID-14N	75	(34)	4.00	(102)	15.00	(381)	.12	(3.1)	.25	(6.4)
BTID-17N	75	(34)	5.00	(127)	18.00	(457)	.12	(3.1)	.25	(6.4)
Polyethelene										
BTID-10PE	18	(8)	3.00	(76)	11.00	(279)	.12	(3.1)	.25	(6.4)
BTID-14PE	18	(8)	4.00	(102)	15.00	(381)	.12	(3.1)	.25	(6.4)
BTID-17PE	18	(8)	5.00	(127)	18.00	(457)	.12	(3.1)	.25	(6.4)

#### Single-Loop Identification Cable Ties with Nylon Marking Pen

Model No.	Min. Tensile Strength Lbs. (Kg)		Max. Bundle Diameter In. (mm)		Length In. (mm)		No. Pieces	Cable Tie Style
RTIDK-1	18	(8)	.75	(19)	4.25	(108)	100	RTIDE
RTIDK-2	50	(23)	1.75	(45)	8.00	(203)	100	RTID

#### Beaded Identification Cable Ties with Nylon Marking Pen

Model No.	Min. Tensile Strength Lbs. (Kg)		Max. Bundle Diameter In. (mm)		Length In. (mm)		No. Pieces	Cable Tie Style
BTIDK-1	75	(34)	3.00	(76)	11.00	(279)	50	BTID
BTIDK-2	75	(34)	4.00	(102)	15.00	(381)	50	BTID
BTIDK-3	75	(34)	5.00	(127)	18.00	(457)	50	BTID

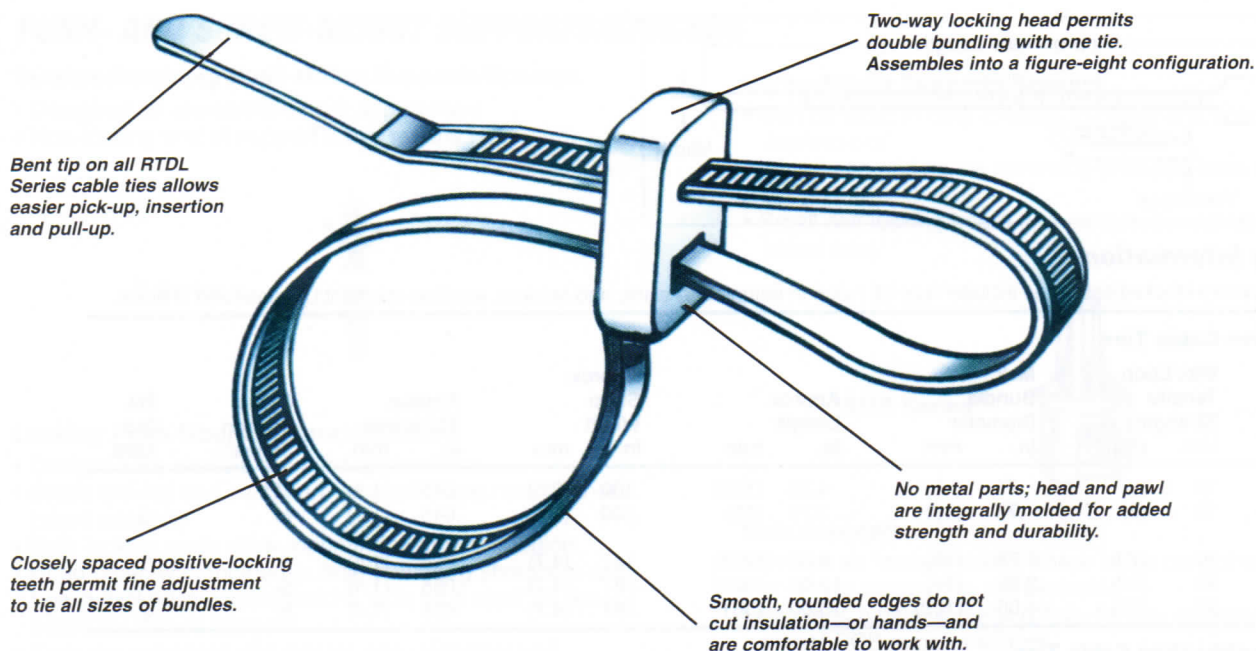
<sup>①</sup> Cross-Section Series (tensile strength): M = Miniature (18#); and S = Standard (50#).

### Compliances

The basic and modified Type 66 nylons used in All-States RTID and BTID Series cable ties meet UL94V-2 Flammability Classification. Mil Spec products are indicated in the ordering table and have QPL 23190 listing for MS-3368. All-States Federal Supply Code for manufacturers (FSCM) is 26863. Products not covered by Mil Specs are manufactured to the same quality standards.

**Note:** U.S. Patent numbers 3,484,905 & 3,605,199 and other foreign patent numbers apply to All-States RTID and BTID Series cable ties.





## DOUBLE-LOOP CABLE TIES

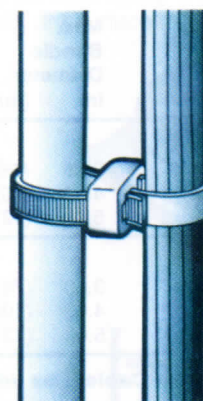
### RTDL Series Double Loop Cable Ties

Available with standard cross-section in lengths from 8" to 15" to accommodate 1.5" to 4" combined maximum diameters. Minimum bundle diameters are .06" for the first bundle, .13" for the second.

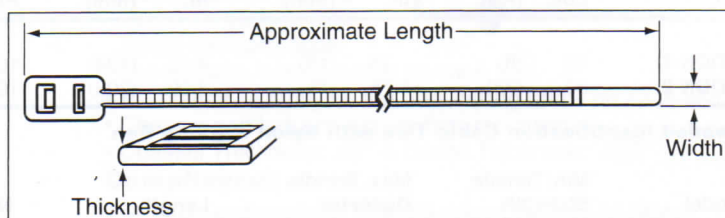
### Compliances

The basic and modified Type 66 nylons used in All-States RTDL Series cable ties meet UL94V-2 Flammability Classification. Mil Spec Products are indicated in the ordering table and have QPL 23190 listing. All-States Federal Supply Code for manufacturers (FSCM) is 26863. Products not covered by Mil Specs are manufactured to the same quality standards.

**Note:** U.S. Patent numbers 3,484,905 and 3,605,199 and other foreign patent numbers apply to All-States RTDL Series cable ties.



RTDL Series Double-Loop Cable Ties assemble in a figure eight to hold two bundles. Can also be used to attach cords or cables to a conduit run or structures.



### Ordering Information

**Materials:** Factory-stocked cable ties include Type 66 nylon in natural and black; and outdoor, weather-resistant/UV-stabilized in black.

### Double-Loop Cable Ties

Model No.	Min. Loop Tensile Strength Lbs. (Kg)		Max. Bundle Diameter <sup>②</sup> In. (mm)		Approx. Strap Length In. (mm)		Approx. Strap Width In. (mm)		Approx. Thickness In. (mm)		Cross-Section Series <sup>①</sup>
RTDL-675	50	(23)	1.50	(38)	8.00	(203)	.187	(4.8)	.055	(1.4)	S
RTDL-1100	50	(23)	3.00	(76)	12.00	(305)	.187	(4.8)	.055	(1.4)	S
RTDL-1400	50	(23)	4.00	(102)	15.00	(381)	.187	(4.8)	.055	(1.4)	S

<sup>①</sup> Cross-Section Series (tensile strength): S = Standard (50#).

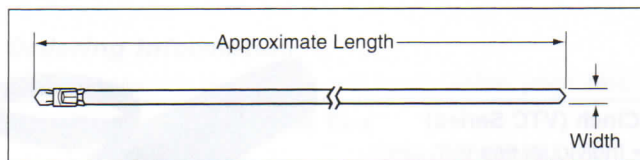
<sup>②</sup> Maximum bundle diameter is that of the combined two bundles.

## STAINLESS-STEEL CABLE TIES

These highly durable cable ties are designed for use in harsh environments where abrasion, corrosion, temperature extremes and other adverse affects are a concern. Suitable for indoor, outdoor and underground applications.

### Features:

- Low profile, self-locking clamp.
- Adjustable throughout full length of bundle range.
- Smooth, rounded edges protect bundles from damage while assuring safe handling.
- Can be installed by hand or with tool.
- Temperature range: -112° F (-80° C) to +1,000° F (+538° C).
- AISI 304 is suitable for most stainless steel applications; AISI 316 is suitable for most applications requiring superior corrosion resistance.
- Material tie thickness: .010"



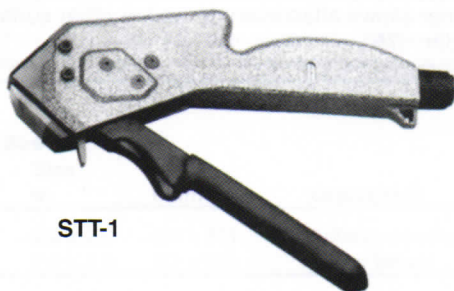
### Ordering Information

**Materials:** Manufactured from AISI 304 and AISI 316 stainless steel.

#### Stainless-Steel Cable Ties

Model No.	Min. Loop Tensile Strength		Maximum Bundle Diameter		Approximate Length		Width		AISI	Package Quantity
	Lbs.	(Kg)	In.	(mm)	In.	(mm)	In.	(mm)		
STH-504	100	(45)	1.00	(25)	5.40	(137)	.18	(4.6)	304	100
STH-804	100	(45)	2.00	(51)	8.40	(213)	.18	(4.6)	304	100
STH-1104	100	(45)	2.75	(70)	10.90	(277)	.18	(4.6)	304	100
STH-1504	100	(45)	4.00	(102)	14.90	(379)	.18	(4.6)	304	100
STH-2104	100	(45)	6.00	(152)	20.90	(531)	.18	(4.6)	304	100
STH-2804	100	(45)	8.00	(203)	27.40	(696)	.18	(4.6)	304	100
STH-3404	100	(45)	10.00	(254)	33.40	(848)	.18	(4.6)	304	100
STH-4304	100	(45)	12.00	(305)	42.40	(1,077)	.18	(4.6)	304	100
STH-4804	100	(45)	14.00	(356)	47.40	(1,204)	.18	(4.6)	304	100
STE-804	250	(113)	2.00	(51)	7.90	(201)	.31	(7.9)	304	50
STE-1404	250	(113)	4.00	(102)	14.30	(363)	.31	(7.9)	304	50
STE-2004	250	(113)	6.00	(152)	20.50	(521)	.31	(7.9)	304	50
STE-2704	250	(113)	8.00	(203)	26.80	(681)	.31	(7.9)	304	50
STE-3304	250	(113)	10.00	(254)	33.00	(838)	.31	(7.9)	304	50
STE-4004	250	(113)	12.00	(305)	40.00	(1,016)	.31	(7.9)	304	50
STH-506	100	(45)	1.00	(25)	5.40	(137)	.18	(4.6)	316	100
STH-806	100	(45)	2.00	(51)	8.40	(213)	.18	(4.6)	316	100
STH-1106	100	(45)	2.75	(70)	10.90	(277)	.18	(4.6)	316	100
STH-1506	100	(45)	4.00	(102)	14.90	(379)	.18	(4.6)	316	100
STH-2106	100	(45)	6.00	(152)	20.90	(531)	.18	(4.6)	316	100
STH-2806	100	(45)	8.00	(203)	27.40	(696)	.18	(4.6)	316	100
STH-3406	100	(45)	10.00	(254)	33.40	(848)	.18	(4.6)	316	100
STH-4306	100	(45)	12.00	(305)	42.40	(1,077)	.18	(4.6)	316	100
STH-4806	100	(45)	14.00	(356)	47.40	(1,204)	.18	(4.6)	316	100
STE-806	250	(113)	2.00	(50)	7.90	(201)	.31	(7.9)	316	50
STE-1406	250	(113)	4.00	(102)	14.30	(363)	.31	(7.9)	316	50
STE-2006	250	(113)	6.00	(152)	20.50	(521)	.31	(7.9)	316	50
STE-2706	250	(113)	8.00	(203)	26.80	(681)	.31	(7.9)	316	50
STE-3306	250	(113)	10.00	(254)	33.00	(838)	.31	(7.9)	316	50
STE-4006	250	(113)	12.00	(305)	40.00	(1,016)	.31	(7.9)	316	50

**Note:** All-States Stainless Steel Cable Ties and materials should be tested thoroughly under end-use conditions to determine suitability for the application.



STT-1

### STAINLESS-STEEL CABLE-TIE TOOL

- Designed for use with STH and STE Stainless-Steel Cable Ties.
- Side entry allows instant positioning of cable tie and tool.
- Adjustment knob allows fast, precise tension setting (displayed in handle).
- Automatically cuts stainless steel cable ties of .18" to .31" widths.
- Padded grip for comfortable, non-slip single-hand operation.
- Heavy-duty construction for long life and consistent, reliable performance.



## Roll (VTR Series)

- Continuous roll, cut to desired length.
- Tie width: .75".
- Roll length: 15'.
- **VTRAH Series** for air handling applications are UL-listed.



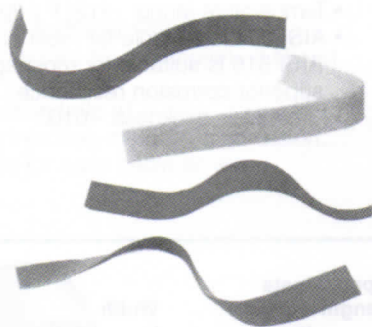
## Loop (VTL Series)

- Perforated roll, slotted head.
- Can also anchor with #10 Screw.
- Loop section width: 1".
- Tie width: .50".
- Tie lengths: 8", 12".
- 10 ties per roll.
- **VTLAH Series** for air handling applications are UL-listed.



## Strip (VTS Series)

- Perforated roll of strips.
- Tie width: .75".
- Tie lengths: 6", 12" & 18".
- 10 ties per roll.
- **VTSAH Series** for air handling applications are UL-listed.



## Cinch (VTC Series)

- Individual ties with cinch ring for secure bundling.
- Tie width: .75".
- Tie lengths: 12", 18".
- 10 ties per bag.



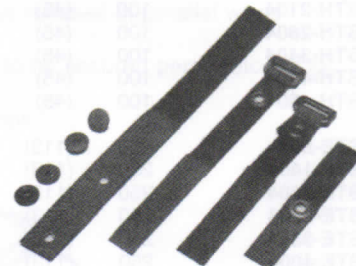
## Adhesive-Backed Roll (VWNH and VWNL Series)

- Widths: .5", .75", 1", 1.50", 2.00", 4.00".
- Roll length: 25 yards.
- Order hook and loop separately.
- Black only.



## Rivet & Grommet Series

- Black only.



## ABMX-4, SMX-4 Mounting Bases

- 4-way entry.
- Large openings accept velcro ties
- Use with Extra Heavy (250 lbs.) and smaller cross-section ties.
- **ABMX-4** with adhesive-backing has countersunk holes for optional screw mounting.
- **SMX-4** has holes for screw mounting, only.

## Rivet (VRRC Series)

- Strap attaches permanently (without tools) for quick access to coiled cable or cord.
- Tie widths: .75", 1", 1.5".
- Tie lengths: 6", 9", 12", 15", 20".

## External Grommet (VRGE Series)

- Grommet allows attachment to wall or other surfaces.
- Cinch ring increases holding strength.
- Tie width: .75".
- Tie lengths: 4", 6", 9", 12".

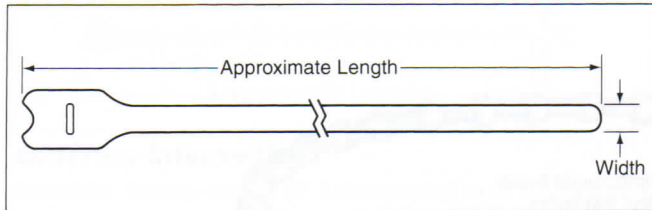
## Internal Grommet (VRGI Series)

- Grommet allows attachment to wall or other surfaces.
- Cinch ring increases holding strength.
- Tie width: .75".
- Tie lengths: 4", 6", 9", 12".

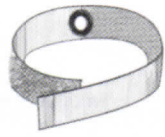
## Middle Grommet (VRGM Series)

- Grommet allows attachment to wall or other surfaces.
- Tie width: .75".
- Tie lengths: 4", 6", 9", 12".

\*Velcro is a registered trademark of the Velcro Companies.


**Rivet**

**External Grommet**

**Internal Grommet**

**Middle Grommet**

### Ordering Information

Colors: Available in black, brown, red, orange, yellow, green, blue, violet, gray, white and tan.

#### Velcro Hook and Loop Cable Ties

Model No.		Minimum Loop Tensile Strength <sup>②</sup> Lbs. (Kg)		Maximum Bundle Diameter In. (mm)		Roll Size (w x l) In. (mm)		Roll Pkg. Qty.	Roll Ctn. Qty.	
Roll										
VTR-6		50	(23)	N/A	N/A	.75 x 180	(19.1 x 4,572)	1	10	
Strip										
VTS-606	VTSAH-606 <sup>③</sup>	50	(23)	1.00	(25)	.75 x 6	(19.1 x 152)	1	10	
VTS-612	VTSAH-612 <sup>③</sup>	50	(23)	3.00	(76)	.75 x 12	(19.1 x 305)	1	10	
VTS-618	VTSAH-618 <sup>③</sup>	50	(23)	5.00	(127)	.75 x 18	(19.1 x 457)	1	10	
Loop										
VTL-508	VTLAH-508 <sup>③</sup>	40	(18)	1.50	(38)	.50 x 8	(12.7 x 203)	1	10	
VTL-512	VTLAH-512 <sup>③</sup>	40	(18)	3.00	(76)	.50 x 12	(12.7 x 305)	1	10	
								Pieces Per Bag	Pieces Per Carton	
Cinch <sup>①</sup>		50	(23)	3.00	(76)	.75 x 12	(19.1 x 305)	10	100	
VTC-618		50	(23)	5.00	(127)	.75 x 18	(19.1 x 457)	10	100	
Rivet <sup>①</sup>										
VRRC-606		7.3	(3.3)	1.00	(25)	.75 x 6	(19.1 x 152)	10	100	
VRRC-809		9.75	(4.4)	2.25	(57)	1.00 x 9	(25.4 x 229)	10	100	
VRRC-812		9.75	(4.4)	3.25	(83)	1.00 x 12	(25.4 x 305)	10	100	
VRRC-915		14.6	(6.6)	4.25	(108)	1.50 x 15	(38.1 x 381)	10	100	
VRRC-920		14.6	(6.6)	7.75	(197)	1.50 x 20	(38.1 x 508)	10	100	
External Grommet <sup>①</sup>		Internal Grommet <sup>①</sup>		Middle Grommet <sup>①</sup>						
VRGE-604	VRGI-604	VRGM-604	7.3	(3.3)	1.00	(25)	.75 x 4	(19.1 x 102)	10	100
VRGE-606	VRGI-606	VRGM-606	7.3	(3.3)	1.50	(38)	.75 x 6	(19.1 x 152)	10	100
VRGE-609	VRGI-609	VRGM-609	7.3	(3.3)	2.50	(64)	.75 x 9	(19.1 x 229)	10	100
VRGE-612	VRGI-612	VRGM-612	7.3	(3.3)	3.50	(89)	.75 x 12	(19.1 x 305)	10	100
Adhesive-Backed <sup>①</sup>										
Hook Loop						In. x Yd.	(mm x m)			
VWNH-50	VWNL-50	N/A	N/A	N/A	N/A	.50 x 25	(12.7 x 22.5)	1	4	
VWNH-75	VWNL-75	N/A	N/A	N/A	N/A	.75 x 25	(19.1 x 22.5)	1	4	
VWNH-100	VWNL-100	N/A	N/A	N/A	N/A	1.00 x 25	(25.4 x 22.5)	1	4	
VWNH-150	VWNL-150	N/A	N/A	N/A	N/A	1.50 x 25	(38.1 x 22.5)	1	4	
VWNH-200	VWNL-200	N/A	N/A	N/A	N/A	2.00 x 25	(50.8 x 22.5)	1	4	
VWNH-400	VWNL-400	N/A	N/A	N/A	N/A	4.00 x 25	(101.6 x 22.5)	1	4	

① Available in black only.

② Minimum 2" (51 mm) overlap required to achieve loop tensile rating.

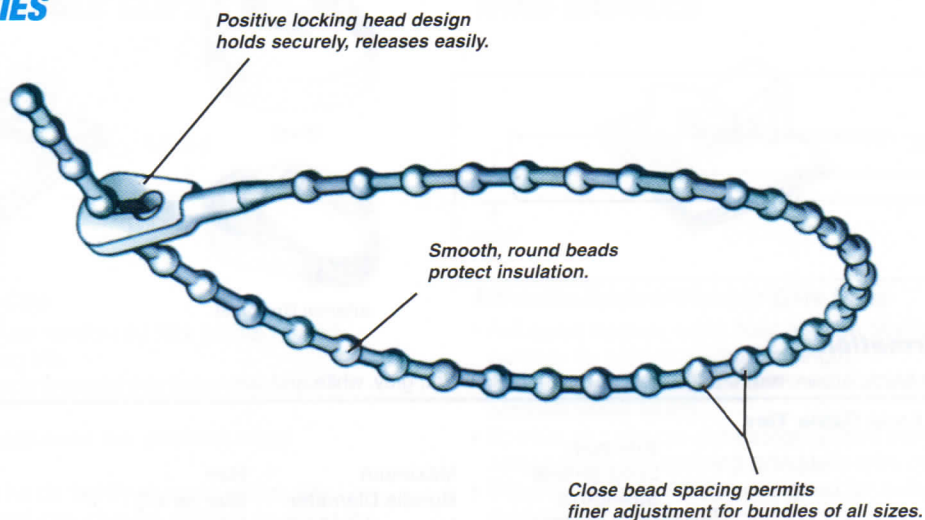
③ "AH" in model number signifies use in air handling applications and is UL listed.

#### Mounting Bases

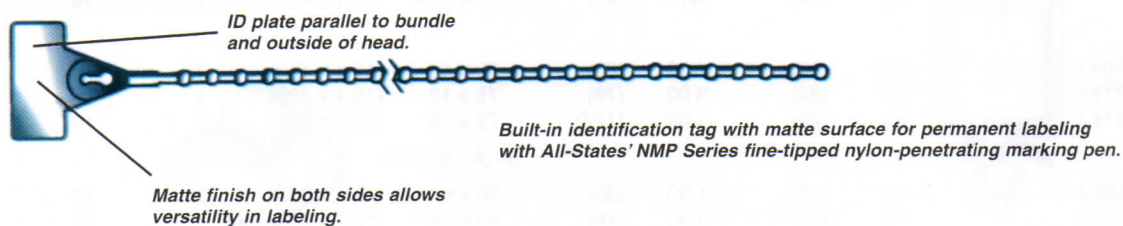
Model No.	Size In. (mm)	Description
ABMX-4	2.0 x 2.0 (51 x 51)	Adhesive-backed
SMX-4	2.0 x 2.0 (51 x 51)	Screw Mount



## BEADED CABLE TIES



## BEADED IDENTIFICATION CABLE TIES



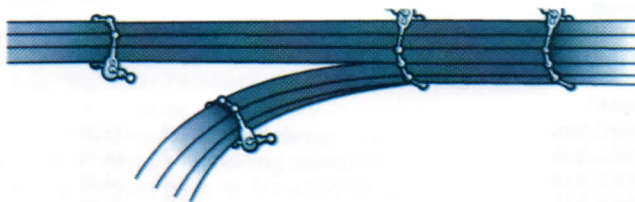
### Beaded Mounting Base

#### ABM-1

- 4-way entry with rounded openings accept all sizes of All-States beaded cable ties.
- Adhesive-backed base has holes for optional #6 screws for added holding strength and for use outdoors.

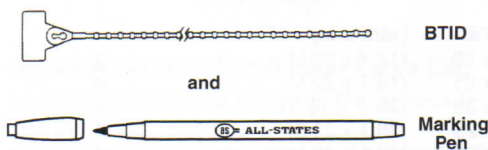


ABM-1



Beaded cable ties are reusable and make temporary or permanent bundling a simple operation.

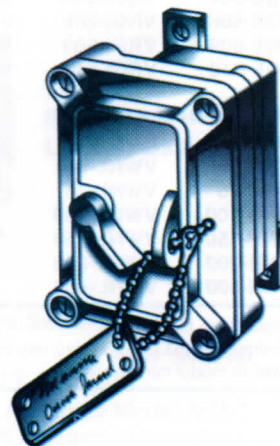
### Identification Cable Ties with Nylon Marking Pen Packs:

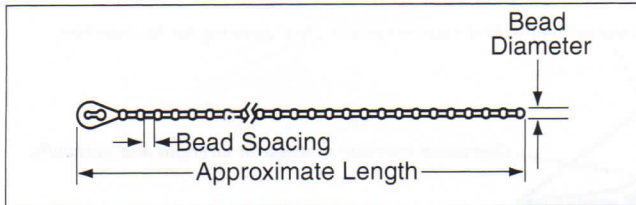


#### Tie/Pen Packs

- **BTIDK-1** includes 50 BTID-10N cable ties and one nylon black marking pen.
- **BTIDK-2** includes 50 BTID-14N cable ties and one nylon black marking pen.
- **BTIDK-3** includes 50 BTID-17N cable ties and one nylon black marking pen.

In addition to tagging equipment with permanent information, beaded cable ties provide an easy, visible method for temporary safety tagging during maintenance operation.





### Compliances

The basic and modified Type nylons used in All-States Beaded Cable Ties meet UL94V-2 Flammability Classification. Fire-retardant Type 66 nylon meets UL94V-0, as does Tefzel. Low-density polyethylene is not rated.

### Ordering Information

**Materials:** Factory-stocked BT Series beaded cable ties include Type 66 nylon in natural; and low-density polyethylene in natural and black.

**Colors:** Beaded cable ties can be special ordered in a wide variety of colors using basic Type 66 nylon or polyethylene. Use the following dash numbers for colors: -0 (Black), -1 (Brown), -2 (Red), -3 (Orange), -4 (Yellow), -5 (Green), -6 (Blue), -7 (Purple), -8 (Gray), -9 (Natural).

#### Beaded Cable Ties

Model No.	Min. Loop Tensile Strength Lbs. (Kg)	Max. Bundle Diameter In. (mm)	Approx. Length In. (mm)	Bead Diameter In. (mm)	Bead Spacing In. (mm)
<b>Nylon</b>					
BT-4N	40 (18.0)	1.13 (29)	4.25 (108)	.09 (2.3)	.13 (3.3)
BT-5N	40 (18.0)	1.38 (35)	5.00 (127)	.09 (2.3)	.13 (3.3)
BT-6N	75 (33.8)	1.88 (47)	6.75 (172)	.13 (3.3)	.25 (6.4)
BT-8N	75 (33.8)	2.50 (64)	9.00 (229)	.13 (3.3)	.25 (6.4)
BT-10N	75 (33.8)	3.00 (76)	11.00 (279)	.13 (3.3)	.25 (6.4)
BT-14N	75 (33.8)	4.00 (102)	15.00 (381)	.13 (3.3)	.25 (6.4)
BT-17N	75 (33.8)	5.00 (127)	18.00 (457)	.13 (3.3)	.25 (6.4)
<b>Polyethylene</b>					
BT-4PE	10 (4.5)	1.13 (29)	4.25 (108)	.09 (2.3)	.13 (3.3)
BT-5PE	10 (4.5)	1.38 (35)	5.00 (127)	.09 (2.3)	.13 (3.3)
BT-6PE	18 (8.1)	1.88 (48)	6.75 (172)	.13 (3.3)	.25 (6.4)
BT-8PE	18 (8.1)	2.50 (64)	9.00 (229)	.13 (3.3)	.25 (6.4)
BT-10PE	18 (8.1)	3.00 (76)	11.00 (279)	.13 (3.3)	.25 (6.4)
BT-14PE	18 (8.1)	4.00 (102)	15.00 (381)	.13 (3.3)	.25 (6.4)
BT-17PE	18 (8.1)	5.00 (127)	18.00 (457)	.13 (3.3)	.25 (6.4)
<b>Nylon with Identification Tag, Matte-Finish for Permanent Labeling</b>					
BTID-10N	75 (33.8)	3.00 (76)	11.00 (279)	.13 (3.3)	.25 (6.4)
BTID-14N	75 (33.8)	4.00 (102)	15.00 (381)	.13 (3.3)	.25 (6.4)
BTID-17N	75 (33.8)	5.00 (127)	18.00 (457)	.13 (3.3)	.25 (6.4)
<b>Polyethylene with Identification Tag, Matte-Finish for Permanent Labeling</b>					
BTID-10PE	18 (8.1)	3.00 (76)	11.00 (279)	.13 (3.3)	.25 (6.4)
BTID-14PE	18 (8.1)	4.00 (102)	15.00 (381)	.13 (3.3)	.25 (6.4)
BTID-17PE	18 (8.1)	5.00 (127)	18.00 (457)	.13 (3.3)	.25 (6.4)

#### Beaded Mounting Base

Model No.	Base Dimensions In. (mm)	2-way or 4-way Entry	Thickness In. (mm)	Screw Hole Size No. (mm)
ABM-1	.75 x .75 (19 x 19)	4	.31 (7.9)	2-No. 8 (4.1)

#### Beaded Identification Cable Ties with Nylon Marking Pen

Our most popular identification cable ties with matte surface for permanent labeling are conveniently packaged with our fine-tipped nylon-penetrating black marking pen.

Model No.	Min. Tensile Strength Lbs. (Kg)	Max. Bundle Diameter In. (mm)	Length In. (mm)	No. Pieces	Cable Tie Style
BTIDK-1	75 (33.8)	3.00 (76)	11.00 (279)	50	BTID
BTIDK-2	75 (33.8)	4.00 (102)	15.00 (381)	50	BTID
BTIDK-3	75 (34.0)	5.00 (127)	18.00 (457)	50	BTID



## ADHESIVE, SCREW AND PUSH-MOUNT MOUNTING BASES

Saddle design provides firm support for wire bundles or components.

Structurally designed to exceed maximum cable tie installation tension.

4-way entry simplifies orientation and speeds installation.

Screw or rivet hole is countersunk to clear opening for tie insertion.

One-piece injection-molded for strength and durability.

ABM-4  
SM-4

Rubber-based adhesive holds securely on metal, plastic, glass, paper and paint. (Acrylic-based adhesive also available.)

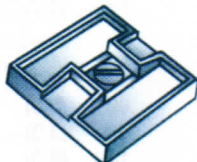
### ABM-1, SM-1

- 4-way entry.
- Rounded openings for beaded cable ties.
- **ABM-1** adhesive-backed base has holes for optional screw mounting; **SM-1** has holes for screw mounting, only.



### ABM-2, SM-2

- 2-way entry.
- Use with Standard (50 lbs.) and smaller cross-section ties.
- **ABM-2** adhesive-backed base has hole for optional screw mounting; **SM-2** has holes for screw mounting, only.



### ABM-4, SM-4

- 4-way entry.
- Use with Standard (50 lbs.) and smaller cross-section ties.
- **ABM-4** adhesive-backed base has hole for optional screw mounting; **SM-4** has hole for screw mounting, only.



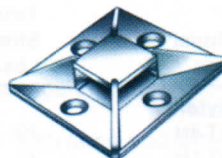
### ABMM-4

- 4-way entry.
- Adhesive-backed base; no screw mount holes.
- Use with Intermediate (40 lbs.) and smaller cross-section ties.



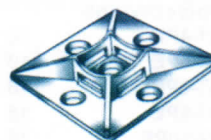
### ABMLS, SMLS ABMLH, SMLH

- 4-way entry.
- **ABMLS** and **ABMLH** adhesive-backed base for Standard (50 lbs.) and Heavy (120 lbs.) cross section ties, respectively, also have holes for optional screw mount.
- **SMLS** and **SMLH** for Standard and Heavy cross section ties, respectively, have holes for screw mounting, only.



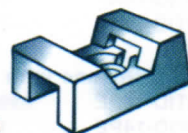
### ABMX-4, SMX-4

- 4-way entry.
- Large openings accept velcro ties.
- Use with Extra Heavy (250 lbs.) and smaller cross-section ties.
- **ABMX-4** with adhesive backing has countersunk holes for optional screw mounting.
- **SMX-4** has holes for screw mounting, only.



### SM-10, -25, -68

- 2-way entry.
- Deep cradle design for extra support with larger bundles.
- **SM-10** and **SM-25** for use with Heavy (120 lbs.) and smaller cross-section ties.
- **SM-68s** for use with Standard (50 lbs.) and smaller cross-section ties.



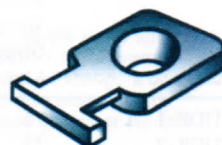
### PM-1

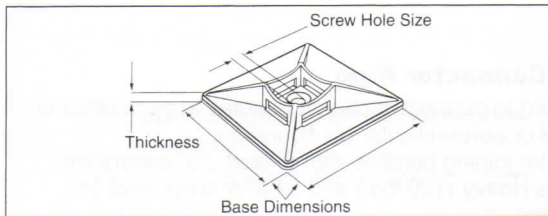
- 2-way entry.
- Push-mount for panels with 1/4" hole.
- Use with Standard (50 lbs.) and smaller cross-section ties.



### LPM-56, -68

- 2-way entry.
- Low-profile base with countersunk screw hole.
- Use with Standard (50 lbs.) and smaller cross-section ties.





### Ordering Information

**Materials:** Factory-stocked mounting bases include Type 66 nylon in natural and black with rubber-based adhesive.

### Mounting Bases

Model No.	Base Dimensions		2-way or 4-way Entry	Thickness		Accepts Tie Cross Section <sup>①</sup>	Screw Hole Size No. (mm)	
	In.	(mm)		In.	(mm)			
<b>Adhesive-Backed (Rubber-Based Adhesive)</b>								
ABM-1	.75 x .75	(19 x 19)	4	.31	(7.9)	B	2-No. 8	(4.1)
ABM-2	1.00 x 1.00	(25 x 25)	2	.25	(6.4)	M,C,I,S	1-No. 8	(4.1)
ABM-4	1.12 x 1.12	(28 x 28)	4	.31	(7.9)	M,C,I,S	1-No. 8	(4.1)
ABMM-4	.75 x .75	(19 x 19)	4	.19	(4.8)	M,C,I	None	
ABMLS	1.50 x 1.50	(38 x 38)	4	.30	(7.6)	M,C,I,S	.25	(6.4)
ABMLH	1.50 x 1.50	(38 x 38)	4	.30	(7.6)	M,C,I,S,H,V,E	.25	(6.4)
ABMX-4	2.00 x 2.00	(51 x 51)	4	.44	(11.2)	M,C,I,S,H,V,E	.25	(6.4)
<b>Screw-Mount</b>								
SM-1	.75 x .75	(19 x 19)	4	.28	(7.1)	B	2-No. 8	(4.1)
SM-2	1.00 x 1.00	(25 x 25)	2	.22	(5.6)	M,C,I,S	1-No. 8	(4.1)
SM-4	1.12 x 1.12	(28 x 28)	4	.28	(7.1)	M,C,I,S	1-No. 8	(4.1)
SMLH	1.50 x 1.50	(38 x 38)	4	.28	(7.1)	M,C,I,S,H,V,E	.25	(6.4)
SMLS	1.50 x 1.50	(38 x 38)	4	.28	(7.1)	M,C,I,S	.25	(6.4)
SMX-4	2.00 x 2.00	(51 x 51)	4	.41	(10.4)	M,C,I,S,H,V,E	.25	(6.4)
SM-10	.62 x .87	(16 x 22)	2	.37	(9.4)	M,C,I,S,H	1-No. 10	(5.1)
SM-25	.62 x .87	(16 x 22)	2	.37	(9.4)	M,C,I,S,H	1-.25	(6.4)
SM-68	.37 x .62	(9.4 x 16)	2	.25	(6.4)	M,C,I,S	1-No. 8	(4.1)
<b>Push-Mount</b>								
PM-1	.31 x .56	(7.9 x 14)	2	.69	(17.5)	M,C,I,S	.25	(6.4)
<b>Low-Profile</b>								
LPM-56	.40 x .31	(10.2 x 7.9)	2	.09	(2.3)	M	#5-#6	
LPM-68	.75 x .50	(19.1 x 12.7)	2	.12	(3.1)	M,C,I,S	#6-#8	

<sup>①</sup> Cross-Section Series (tensile strength): B = Beaded Ties; M = Miniature (18#); C = Compact (30#); I = Intermediate (40#); S = Standard (50#); H = Heavy (120#); V = Very Heavy (175#); and E = Extra Heavy (250#).

### Adhesives

Adhesive-backed mounting bases are intended for attaching to clean and dry, metal, plastic, glass, paper and painted surfaces. Not recommended for concrete, bare wood or other porous or irregular surfaces—do not use outdoors without fasteners.

**Rubber-based adhesive** is for general purpose applications. It provides high initial tack and quickly reaches maximum holding strength. It will hold under continuous temperatures up to 125° F (52° C). The continuous straight-pull rated load is 1 lb. per square inch of adhesive.

**Acrylic-based adhesive** is available for greater holding power and/or higher temperature applications, up to continuous temperatures of 185° F (85° C). It is intended for use with the same clean, dry surfaces as rubber-based adhesive. The continuous straight-pull rated load is 1 lb. per square inch of adhesive.

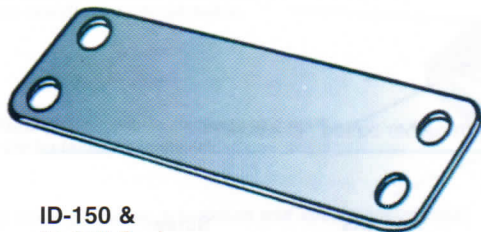
### Compliances:

The basic and modified Type 66 nylons used in All-States mounting bases for cable ties meet UL94V-2 Flammability Classification. Mounting bases with acrylic-based adhesive (special order), and screw-mount and push-mount bases are recognized under the Component Program of Underwriters Laboratories Inc. for use at temperatures not exceeding 85° C (185° F). File No. E76766. For detailed specifications, technical data and other information on materials, see the Materials Section.



## ACCESSORIES

### Identification Plates & NMP Series Marking Pens



ID-150 &  
ID-250 Series

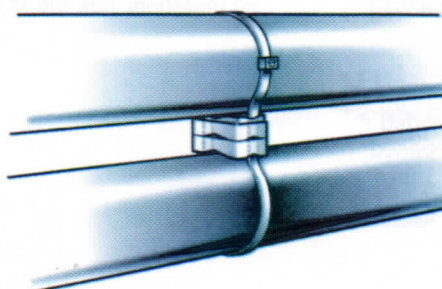
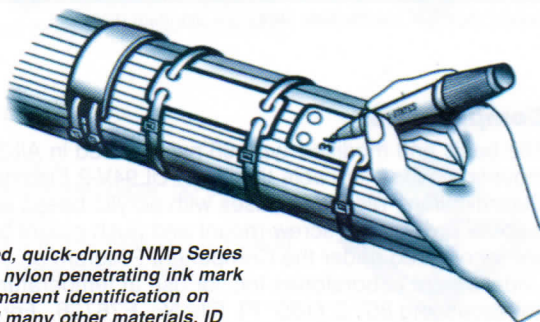
- Injection-molded plate useful in identifying wire and cable bundles, runs of tubing or pipe.
- Round holes in each corner accept a full range of miniature, compact, intermediate and standard cross-section ties.
- Dual-sided matte finish allows permanent, virtually smudge-proof labeling with ink or hot stamping.
- For best results, use All-States NMP-Series fine-tipped marking pens with quick-drying, nylon-penetrating ink.
- Basic Type 66 natural (off-white) nylon is standard and stocked for ID plates. Other materials and colors are available on special order.

### Marking Pens

- Fine point allows sharp, clear writing.
- Fast-drying ink is water-resistant, permanent and virtually smudge-proof.
- Color-coded cap indicates red or black ink.



*Fine-tipped, quick-drying NMP Series pens with nylon penetrating ink mark clear, permanent identification on nylon and many other materials. ID plates' matte surface absorbs ink or hot stamping without smudging.*



### Cable Connector Ring

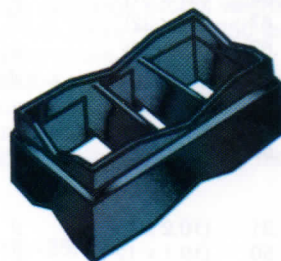
- Designed to connect cables or bundles to each other in parallel or perpendicular configuration.
- Useful for joining bundles with a fixed .75" separation.
- Accepts Heavy (120 lbs.) and smaller cross-section cable ties.
- Basic Type 66 natural (off-white) nylon is standard and stocked for connector rings.



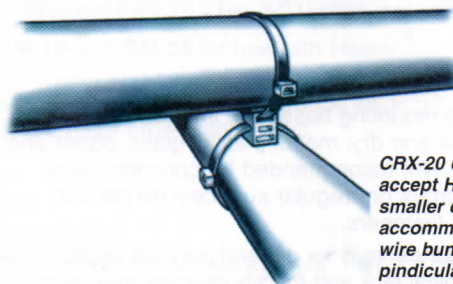
CRX-20

### Spacers

- Useful for hanging cables from messengers or other construction members.
- Two cradle sizes provide support for both large and small cables or bundles.
- Recommended for use with parallel bundles to give separation.
- Accepts all cross-sections of ties.
- Basic Type 66 black nylon is standard and stocked; other materials and colors are available on special order.
- **CS-10** has two equal-size end compartments of .71" and a middle compartment of .47."
- **CS-11** has three equal compartments of .63."



CS-10



*CRX-20 connector rings accept Heavy (120 lbs.) and smaller cable ties and will accommodate cables or wire bundles either perpendicular or parallel to each other.*

*All-States CS-10 and CS-11 stackable cable spacers separate cables or wire bundles in 1/2" increments. They can also hang cables from messengers or other construction members. Two cradle sizes provide support for both large and small cables or bundles.*

## ACCESSORIES

### Cable-Tie Installation Tools

- Two styles of **RT Series** cable tie installation tools tighten and trim cable ties.
- Handles are designed for comfort and easy handling to minimize operator fatigue.

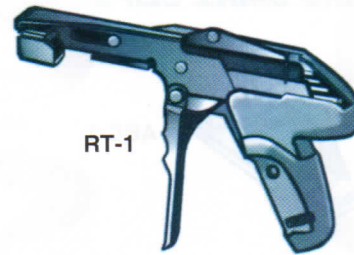
#### RT-1

- Automatically tightens and cuts cable ties flush with head in one operation.
- Tension control allows adjustment (numbers 1-8) for light-weight through heavy tension settings.
- Installs Standard (50 lbs.) and smaller cross-section ties.

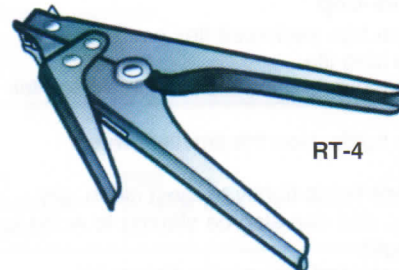
#### RT-4

- Works best with Very Heavy (175 lbs.) and Heavy (120 lbs.) cross-section ties.
- Manually tensions cable ties without a pre-set control.
- Separate arm manually cuts tie when desired tension is reached. **Do Not Over Tension.**

RT-3 (not shown) has been replaced by RT-4.



RT-1



RT-4

### Ordering Information

**Materials and Colors:** Factory-stocked cable spacers include Type 66 nylon in black; other materials and colors are available on special order.

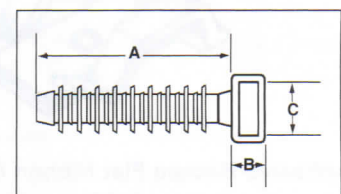
#### Accessories

Model No.	Description	Size (l x w x t or h)		Tie Cross Sections <sup>①</sup>	Spacer Compartments End, Center, End	
		In.	(mm)		In.	(mm)
ID-150	Identification Plates, Nylon	1.50 x .75 x .03	(38 x 19 x .76)	M,C,I,S		
ID-250	Identification Plates, Nylon	2.50 x .75 x .03	(64 x 19 x .76)	M,C,I,S		
CRX-20	Cable Connector Ring, Nylon	.62 x .62 x .75	(16 x 16 x 19)	M,C,I,S,H		
CS-10	Cable Spacer, Nylon	2.00 x 1.12 x .75	(51 x 29 x 19)	M,C,I,S,H,V,E	.71, .47, .71	(18, 12, 18)
CS-11	Cable Spacer, Nylon	2.00 x 1.12 x .75	(51 x 29 x 19)	M,C,I,S,H,V,E	.63, .63, .63	(16, 16, 16)
NMP-BK	Nylon Marking Pen, Black Ink					
NMP-R	Nylon Marking Pen, Red Ink					
RT-1	Installation Tool, Automatic Cut-Off			M,C,I,S		
RT-4	Installation Tool, Manual Cut-Off (Replaces RT-3)			H,V		

<sup>①</sup> Cross-Section Series (tensile strength): M = Miniature (18#); C = Compact (30#); I = Intermediate (40#); S = Standard (50#); H = Heavy (120#); V = Very Heavy (175#); and E = Extra Heavy (250#).

### Masonry Tie Push Mounts

- Provides secure cable-tie anchorage to masonry surfaces.
- Quick and easy installation.
- Designed for indoor and outdoor applications.



### Ordering Information

**Materials:** Weather-resistant nylon in black.

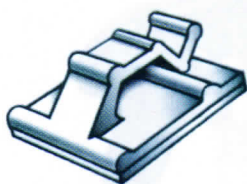
#### Masonry Push Mounts

Model No.	Use with Cross Sections	Dimensions A, B, C In. (mm)	Hole Dimensions Diameter In. (mm)	Depth In. (mm)	Package Quantity	Carton Quantity
MPM-187	M, I, S	.97, .25, .22 (24.6, 6.4, 5.6)	.187 (4.8)	1.25 (32)	100	500
MPM-250	M, I, S	.97, .25, .22 (24.6, 6.4, 5.6)	.250 (6.4)	1.25 (32)	100	500
MPM-312	M, I, S, H, V	1.12, .30, .38 (28.5, 7.6, 9.7)	.375 (9.5)	1.50 (38)	100	500

<sup>①</sup> Cross-Section Series (tensile strength): M = Miniature (18#); I = Intermediate (40#); S = Standard (50#); H = Heavy (120#); and V = Very Heavy (175#).



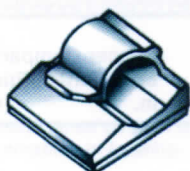
## WIRE, CORD AND CABLE CLIPS



ABC-1

**Adhesive-Backed Mini-Clip**

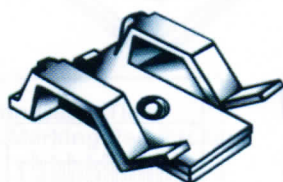
- Extra wide spring arm has reinforced flex points to add strength and assure long life.
- Funnel-V opening extends beyond the retaining ridge for easy wire insertion.
- Front retaining ridge holds even the smallest wires securely in place.
- Adhesive-backed base holds tightly to most clean, dry, non-porous surfaces, and can also be stapled to wood for added holding strength.
- One-piece, injection-molded, low-profile design for strength and versatility.



ACC-3, -4, -6

**Adhesive-Backed Cord Clip**

- Thick, strong retaining arm with round contour holds larger cords, cables or wire bundles.
- Extra-wide opening allows easy insertion and removal.
- Retaining platform keeps cord in place.
- Adhesive-backed base may also be stapled to mounting surface for added holding strength.

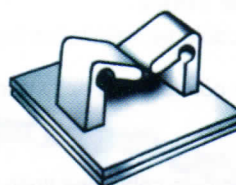


FRC-1

**Adhesive-Backed Flat Ribbon Cable Clip**

- Accepts all sizes of ribbon cable by securing to the edge of the ribbon cable.
- Wide spring arms securely hold cable(s) without damaging internal conductors.
- Adhesive-backed base allows quick, secure mounting on most clean, dry, non-porous surfaces.
- Center screw or rivet hole for extra mounting strength where needed.

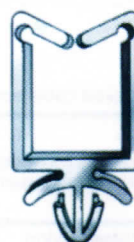
## WIRE SADDLES



ABWS

**Adhesive-Backed Tension-Gate Style**

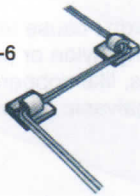
- Adhesive-backed base may also be stapled to mounting surface for added holding strength.
- Strong hinged arms flex both ways to insert, hold and remove wires easily.
- Special circular cut-out design allows easy hinged flexing action while maintaining adequate wire retaining strength.
- T-Series (Tension-Gate) designed for extra easy wire insertion and removal.

PMWS  
Tension Gate**Push-Mount Tension-Gate Wire Saddles**

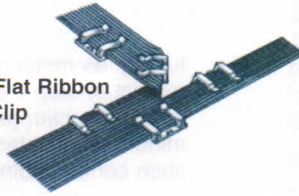
- Strong hinged arms flex both ways to insert, hold and remove wires easily.
- Spring base thickness compensators hold saddle tight in chassis.
- Special circular cut-out design allows easy hinged flexing action while maintaining adequate wire retaining strength.
- Push-mount base is designed for quick and easy insertion or removal. Centering "ears" automatically position in hole and lock securely.
- Available in smaller versions as PMMWS (see Ordering Information).

PMWS  
Locking Gate**Push-Mount Locking-Gate Wire Saddles**

- Top arms lock together, but still allow for easy removal.
- Available only with push-mount bases.
- Push-mount can be used with All-States Model APA-1 "Instant-Hole" adapter. (See PCB supports/spacers.)

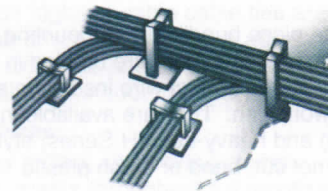
ACC-3, -4, -6  
Cord Clips

Holds single cord or cable firmly in any desired route. Useful for other applications, such as wiring for stereo, telephone, etc.

FRC-1 Flat Ribbon  
Cable Clip

FRC Series clips secure and route all sizes of flat ribbon cable. Designed to hold edges of flat cable. Securely holds cable folded to make right angle turn without damage to internal conductor.

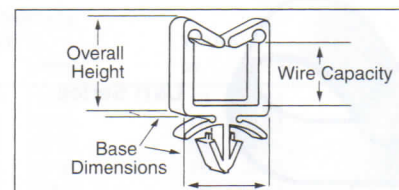
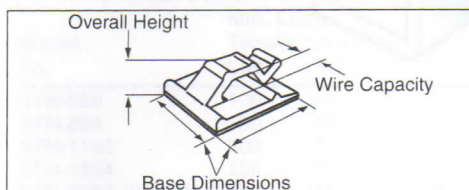
Tension-Gate Wire Saddles



Allows easy insertion and removal of wires. Holds most sizes of wire bundles in any desired mounting orientation. Available with adhesive-backed bases or push-mount base that snaps quickly into place.

### Compliances

The basic and modified Type 66 nylons used in All-States clips and saddles meet UL94V-2 Flammability Classification. Fire-retardant Type 66 nylon meets UL94V-0. All push-mount wire, cord and cable clips, and wire saddles are recognized under the Component Program of Underwriters Laboratories Inc. for use at temperatures not exceeding the following: V-2 nylon, 85° C (185° F); V-0, fire-retardant nylon, 95° C (203° F). File No. E76766. Wire, cord and cable clips, and wire saddles (ABWS Series) with acrylic-based, adhesive-backed bases (special order) are recognized under the Component Program of Underwriters Laboratories Inc. for use at temperatures not exceeding 85° C (185° F). File No. E76766. For detailed specifications, technical data and other information on materials, see Materials Section. For further information on UL and other test data, see Testing & Compliances Section.



### Ordering Information

**Materials:** Factory-stocked wire clips and saddles include Type 66 nylon in natural and black; Rubber-based adhesive is standard. On special order, push-mount wire saddles are available in the following Type 66 nylons: heat-stabilized (black and colors) and fire-retardant (natural, off-white only). Acrylic-based adhesive is also available. Note: Adhesive-backed wire clips and saddles are not recommended for outdoor use and are not suitable with fire-retardant material.

**Colors:** Clips and saddles can be special ordered using basic Type 66 nylon in Mil Spec colors. Colors can also be custom matched to your specifications.

Model No.	Base Dimensions		Overall Height		Wire Capacity		Mounting Hole Size	
	In.	(mm)	In.	(mm)	In.	(mm)	In.	(mm)
<b>Wire, Cord and Cable Clips, Adhesive-Backed Bases (Rubber-Based Adhesive)</b>								
ABC-1	.63 x .63	(16 x 16)	.25	(6.4)	.13 x .25	(3.3 x 6.4)	N/A	N/A
ACC-3	.63 x .63	(16 x 16)	.31	(7.9)	.19 dia.	(4.8) dia.	N/A	N/A
ACC-4	.63 x .63	(16 x 16)	.38	(9.7)	.25 dia.	(6.4) dia.	N/A	N/A
ACC-6	.75 x .75	(19 x 19)	.50	(12.7)	.38 dia.	(9.7) dia.	N/A	N/A
FRC-1	1.00 x 1.13	(25 x 28)	.32	(8.1)	.13 x .50	(3.3 x 12.7)	N/A	N/A
<b>Wire Saddles, Adhesive-Backed Bases (Rubber-Based Adhesive) Tension Gate</b>								
ABWS-1T	.75 x .75	(19 x 19)	.50	(12.7)	.19 x .44	(4.8 x 11.2)	N/A	N/A
ABWS-2T	.75 x .75	(19 x 19)	.69	(17.5)	.38 x .44	(9.7 x 11.2)	N/A	N/A
ABWS-3T	.75 x .75	(19 x 19)	1.06	(26.9)	.75 x .44	(19.1 x 11.2)	N/A	N/A
ABWS-11T	.75 x 1.19	(19 x 30)	.50	(12.7)	.19 x .75	(4.8 x 19.1)	N/A	N/A
<b>Wire Saddles, Push Mount, Tension Gate</b>								
PMWS-1T	.19 x .63	(4.8 x 16)	.56	(14.2)	.19 x .44	(4.8 x 11.2)	.19	(4.8)
PMWS-2T	.19 x .63	(4.8 x 16)	.75	(19.1)	.38 x .44	(9.7 x 11.2)	.19	(4.8)
PMWS-3T	.19 x .63	(4.8 x 16)	1.13	(28.7)	.75 x .44	(19.1 x 11.2)	.19	(4.8)
PMWS-4T	.19 x .63	(4.8 x 16)	1.44	(36.6)	1.00 x .44	(25 x 11.2)	.19	(4.8)
<b>Wire Saddles, Push Mount, Micro Sizes, Tension Gate</b>								
PMMWS-1	.17 x .36	(4.3 x 9)	.29	(7.4)	.25 x .16	(6.4 x 4.1)	.12	(3.1)
PMMWS-2	.17 x .36	(4.3 x 9)	.29	(7.4)	.25 x .16	(6.4 x 4.1)	.14	(3.6)
PMMWS-3	.17 x .48	(4.3 x 12)	.45	(11.4)	.37 x .25	(9.4 x 6.4)	.14	(3.6)
<b>Wire Saddles, Push Mount, Locking Gate</b>								
PMWS-1L	.19 x .63	(4.8 x 16)	.57	(14.5)	.19 x .44	(4.8 x 11.2)	.19	(4.8)
PMWS-2L	.19 x .63	(4.8 x 16)	.75	(19.1)	.38 x .44	(9.7 x 11.2)	.19	(4.8)
PMWS-3L	.19 x .63	(4.8 x 16)	1.13	(28.7)	.75 x .44	(19.1 x 11.2)	.19	(4.8)
PMWS-4L	.19 x .63	(4.8 x 16)	1.44	(36.6)	1.00 x .44	(25 x 11.2)	.19	(4.8)



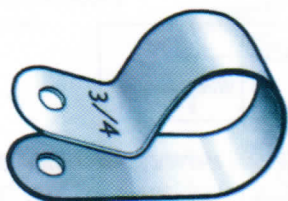
## CABLE CLAMPS

Cable clamps provide one-piece bundling and mounting. Easy-to-read maximum bundle diameters are molded in. Smooth, rounded internal edges protect wire insulation and are safe, comfortable to work with. They are available in both light-duty (L Series) and heavy-duty (H Series) styles. Plastic cable clamps will not cut, bend or crush plastic

tubing, as metal clamps can. They won't cause leaks, or restrict or stop the flow of fluids. Using nylon or polypropylene cable clamps on metallic tubings, like copper or aluminum, eliminates the possibility of galvanic corrosion at such contact points.

### Screw-Mount Clamp (Light- & Heavy-Duty)

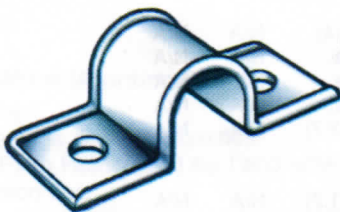
- Mounting hole for .203" (standard No. 10 screw)—**LN** and **HN** Series.
- **LNSH** Series have a mounting hole of .172".
- Strong, flexible, one-piece injection-molded construction.
- Molded in open "V" position for easy cable or wire bundle insertion.



L&H Series

### U-Clamp (Screw & Adhesive)

- **U** Series attaches with screws.
- **UR** Series attaches with adhesive backing and has holes for optional screws.



U & UR Series

### Half U-Clamp (Screw & Adhesive)

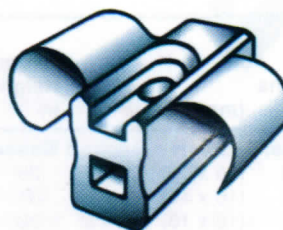
- Useful in tight spaces where space is limited.
- **HU** Series attaches with screw.
- **HUR** Series attaches with adhesive backing and has hole for optional screw.



HU & HUR Series

### Dual Clamp

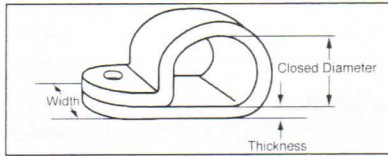
- Allows easy insertion and removal of parallel wires or bundles.
- Allows one or two wires to be secured perpendicular to third wire or bundle.
- Mounting hole for #6 screw.



DC Series

### Compliances

All nylon L-Series and H-Series cable clamps are recognized under the Component Program of Underwriters Laboratories Inc. for use at temperatures not exceeding 85° C (185° F). File No E76766(N). The basic and modified Type 66 nylons used in All-States L-Series and H-Series cable clamps meet UL 94V-2 Flammability Classification. Fire-retardant Type 66 nylon meets UL94V-0, as does Tefzel. All model "LN" and "HN" Series (nylon) cable clamps meet applicable National Aerospace Standard (NAS) No. 1397, Procurement Specification MIL-S 23190, plain design, dash numbers -2 through -24. "LN" models must be ordered with a .172" (4.3688 mm) mounting hole. For detailed specifications, technical data and other information on materials, see the Materials Section.



### Ordering Information

**Materials:** Factory-stocked L-Series and H-Series cable clamps are available in Type 66 nylon in natural and black; H-Series cable clamps are also stocked in natural polypropylene. Special order cable clamps in the following Type 66 nylons: outdoor, weather-resistant/UV-stabilized (black and colors) and fire-retardant (natural, off-white only); also available in polypropylene (black).

**Colors:** Cable clamps can be special ordered using basic Type 66 nylon in the typical Mil Spec colors of brown, red, orange, yellow, green, blue, purple and gray; colors can also be custom matched to your specifications.

#### Cable Clamps

Model No.	Nominal Clamping Dia. In.	(mm)	Closed Diameter In.	(mm)	Strap Width In.	(mm)	Strap Thickness In.	(mm)	Mounting Hole In.	(mm)	NAS 1397
<b>Nylon, Light-Duty Series, Screw-Mount</b>											
2-LN	.125	(3.2)	.115	(2.9)	.375	(9.5)	.050	(1.3)	.203	(5.2)	P-2E
3-LN	.187	(4.8)	.172	(4.4)	.375	(9.5)	.050	(1.3)	.203	(5.2)	P-3E
4-LN	.250	(6.4)	.234	(5.9)	.375	(9.5)	.050	(1.3)	.203	(5.2)	P-4E
5-LN	.312	(7.9)	.297	(7.5)	.375	(9.5)	.050	(1.3)	.203	(5.2)	P-5E
6-LN	.375	(9.5)	.359	(9.1)	.375	(9.5)	.050	(1.3)	.203	(5.2)	P-6E
7-LN	.437	(11.1)	.422	(10.7)	.375	(9.5)	.050	(1.3)	.203	(5.2)	P-7E
8-LN	.500	(12.7)	.484	(12.3)	.375	(9.5)	.050	(1.3)	.203	(5.2)	P-8E
<b>Nylon, Light-Duty, Small-Hole Series, Screw-Mount</b>											
2-LNSH	.125	(3.2)	.115	(2.9)	.375	(9.5)	.050	(1.3)	.172	(4.4)	P-2
3-LNSH	.187	(4.8)	.172	(4.4)	.375	(9.5)	.050	(1.3)	.172	(4.4)	P-3
4-LNSH	.250	(6.4)	.234	(5.9)	.375	(9.5)	.050	(1.3)	.172	(4.4)	P-4
5-LNSH	.312	(7.9)	.297	(7.5)	.375	(9.5)	.050	(1.3)	.172	(4.4)	P-5
6-LNSH	.375	(9.5)	.359	(9.1)	.375	(9.5)	.050	(1.3)	.172	(4.4)	P-6
7-LNSH	.437	(11.1)	.422	(10.7)	.375	(9.5)	.050	(1.3)	.172	(4.4)	P-7
8-LNSH	.500	(12.7)	.484	(12.3)	.375	(9.5)	.050	(1.3)	.172	(4.4)	P-8
<b>Nylon, Heavy Duty Series, Screw-Mount</b>											
2-HN	.125	(3.2)	.115	(2.9)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-2C
3-HN	.187	(4.8)	.172	(4.4)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-3C
4-HN	.250	(6.4)	.234	(5.9)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-4C
5-HN	.312	(7.9)	.297	(7.5)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-5C
6-HN	.375	(9.5)	.359	(9.1)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-6C
7-HN	.437	(11.1)	.422	(10.7)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-7C
8-HN	.500	(12.7)	.484	(12.3)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-8C
9-HN	.562	(14.3)	.547	(13.9)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-9
10-HN	.625	(15.9)	.609	(15.5)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-10
11-HN	.687	(17.5)	.672	(17.1)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-11
12-HN	.750	(19.1)	.734	(18.6)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-12
13-HN	.812	(20.6)	.797	(20.2)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-13
14-HN	.875	(22.2)	.859	(21.8)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-14
16-HN	1.000	(25.4)	.984	(25.0)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-16
18-HN	1.125	(28.6)	1.100	(27.9)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-18
19-HN	1.187	(30.2)	1.160	(29.5)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-19
20-HN	1.250	(31.8)	1.230	(31.2)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-20
22-HN	1.375	(34.9)	1.350	(34.3)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-22
24-HN	1.500	(38.1)	1.480	(37.6)	.500	(12.7)	.060	(1.5)	.203	(5.2)	P-24
<b>U-Clamp, Screw-Mount</b>											
2-U	.125	(3.2)	.125	(3.2)	.375	(9.5)	.082	(2.1)	.150	(3.8)	
4-U	.250	(6.4)	.250	(6.4)	.500	(12.7)	.082	(2.1)	.171	(4.3)	
6-U	.375	(9.5)	.375	(9.5)	.500	(12.7)	.082	(2.1)	.171	(4.3)	
8-U	.500	(12.7)	.500	(12.7)	.500	(12.7)	.082	(2.1)	.171	(4.3)	
<b>U-Clamp, Adhesive-Mount</b>											
2-UR	.125	(3.2)	.125	(3.2)	.375	(9.5)	.122	(3.1)	.150	(3.8)	
4-UR	.250	(6.4)	.250	(6.4)	.500	(12.7)	.122	(3.1)	.171	(4.3)	
6-UR	.375	(9.5)	.375	(9.5)	.500	(12.7)	.122	(3.1)	.171	(4.3)	
8-UR	.500	(12.7)	.500	(12.7)	.500	(12.7)	.122	(3.1)	.171	(4.3)	
<b>Half U-Clamp, Screw-Mount</b>											
2-HU	.125	(3.2)	N/A	N/A	.375	(9.5)	.082	(2.1)	.150	(3.8)	
4-HU	.250	(6.4)	N/A	N/A	.500	(12.7)	.082	(2.1)	.171	(4.3)	
6-HU	.375	(9.5)	N/A	N/A	.500	(12.7)	.082	(2.1)	.171	(4.3)	
8-HU	.500	(12.7)	N/A	N/A	.500	(12.7)	.082	(2.1)	.171	(4.3)	
<b>Half U-Clamp, Adhesive-Mount</b>											
2-HUR	.125	(3.2)	N/A	N/A	.375	(9.5)	.122	(3.1)	.150	(3.8)	
4-HUR	.250	(6.4)	N/A	N/A	.500	(12.7)	.122	(3.1)	.171	(4.3)	
6-HUR	.375	(9.5)	N/A	N/A	.500	(12.7)	.122	(3.1)	.171	(4.3)	
8-HUR	.500	(12.7)	N/A	N/A	.500	(12.7)	.122	(3.1)	.171	(4.3)	
<b>Dual Clamp</b>											
DC-8	.500	(12.7)	N/A	N/A	N/A	N/A	N/A	N/A	#6 screw		



## PUSH- AND SCREW-MOUNT SUPPORTS/SPACERS

### Tension-Retaining Push-Mount Supports/Spacers

- Designed for chassis-to-board applications.
- Non-locking end of support firmly retains PC board.

T Series



### Locking Push-Mount Supports/Spacers

- Designed for chassis-to-board applications.
- Board locking end, with barb-strengthening ribs, anchors board securely.
- Both locking ends allow mounting in any orientation.
- Head base, with molded-in hole-centering shoulders and board thickness compensators, acts as a shelf for the board for secure support.
- Barb strengthening ribs flex for easy insertion and removal, yet lock securely.
- Molded-in location guides center head in chassis hole for secure locking of both barbs.
- One-piece injection molding assures strength and durability.
- Spring-arm chassis thickness compensators provide firm anchoring of the PCB support on chassis.

L Series



### Double-Locking Push-Mount Supports/Spacers

- Locking barbs on both ends hold boards tightly in any orientation.
- Designed for secure board-to-board applications.

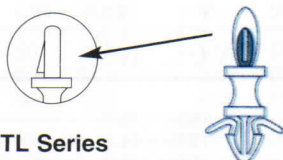
DL Series



### Tension-Style Locking-Head Supports/Spacers

- Tension-style locking-head releases easily by depressing locking mechanism inside head.
- Locking end holds securely to board or chassis.

S-TL Series



### Screw-Mount Supports/Spacers

- Can be used in both chassis-to-board and board-to-board applications.
- Wide base and screw mounting provides extra secure support.
- Small self-locking board end conserves valuable PC board area.

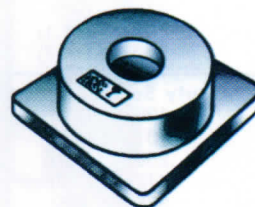
SMS Series



### Hole Adapters

- Serves as "instant holes" where holes cannot be drilled, or where screws are not desirable.
- Provides a base mounting hole for any All-States push-mount PCB support/spacer.
- Adhesive backing adheres tightly to panels, cabinets and most other smooth, dry surfaces.

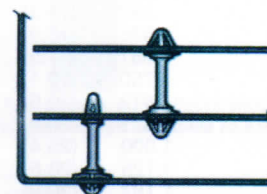
APA Series



### Applications

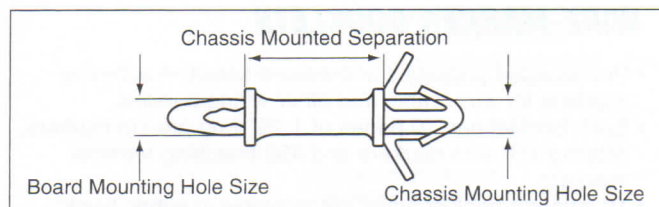
#### Double-locking Series Push-Mount Supports/Spacers

- Designed with locking barbs on each end for board-to-board applications with locking barbs on each end.
- PC boards sit firmly on the non-locking barbs on each end.
- Chassis end locks to assure firm mounting.
- Chassis Thickness: .07" & Board Thickness: .062"



#### Compliances

The basic and modified Type 66 nylons used in All-States printed circuit board supports/spacers meet UL94V-2 Flammability Classification. Fire-retardant Type 66 nylon meets UL94V-0 Flammability Classification. All push-mount, nylon printed circuit board supports/spacers are recognized under the Component Program of Underwriters Laboratories, Inc. for use at temperatures not exceeding the following: V-2 nylon, 85° C (185° F); V-0, fire-retardant nylon, 95°C (203° F). Nylon push-mount adapters (APA Series) with acrylic-based, adhesive-backed bases (special order) are recognized under the Component Program of Underwriters Laboratories, Inc. for use at temperatures not exceeding 85°C (185°F). For detailed specifications, technical data and other information on materials, see the Materials Section. For further information on UL and other test data, see the Testing & Compliances Section. U.S. patent numbers 4,143,577 (printed circuit board supports/spacers) and 4,567,546 (hole adapters) and foreign patents apply to these products.



## Ordering Information

**Materials:** Factory-stocked printed circuit board supports/spacers and push-mount adapters are available in Type 66 nylon in natural; rubber-based adhesive is standard on push-mount adapters. On special order, push-mount printed circuit board supports/spacers are available in fire-retardant Type 66 nylon; push-mount adapters are available with acrylic-based adhesive.

### Chassis-to-Board, Push Mount

Board Tension-Style <sup>①</sup>	Board Locking-Style <sup>①</sup>	Locking Tension-Style Head	Mounted Separation In. (mm)	Chassis Mounting Hole Size In. (mm)	Board Mounting Hole Size In. (mm)
S-3T	S-3L	S-3TL	.19 (4.8)	.19 (4.8)	.16 (4.1)
S-4T	S-4L	S-4TL	.25 (6.4)	.19 (4.8)	.16 (4.1)
S-6T	S-6L	S-6TL	.38 (9.7)	.19 (4.8)	.16 (4.1)
S-7T	S-7L	S-7TL	.44 (11.2)	.19 (4.8)	.16 (4.1)
S-8T	S-8L	S-8TL	.50 (12.7)	.19 (4.8)	.16 (4.1)
S-10T	S-10L	S-10TL	.63 (16.0)	.19 (4.8)	.16 (4.1)
S-12T	S-12L	S-12TL	.75 (19.1)	.19 (4.8)	.16 (4.1)
S-14T	S-14L	S-14TL	.88 (22.4)	.19 (4.8)	.16 (4.1)
S-16T	S-16L	S-16TL	1.00 (25.4)	.19 (4.8)	.16 (4.1)
S-18T	S-18L	S-18TL	1.13 (28.7)	.19 (4.8)	.16 (4.1)
S-20T	S-20L	S-20TL	1.25 (31.8)	.19 (4.8)	.16 (4.1)
S-22T	S-22L	S-22TL	1.38 (35.1)	.19 (4.8)	.16 (4.1)

### Board-to-Board Supports or Spacers, Push Mount

Board Locking Style	Mounted Separation In. (mm)	Both Mounting Hole Sizes In. (mm)
S-3DL	.16 (4.1)	.16 (4.1)
S-4DL	.22 (5.6)	.16 (4.1)
S-6DL	.34 (8.6)	.16 (4.1)
S-7DL	.41 (10.4)	.16 (4.1)
S-8DL	.47 (11.9)	.16 (4.1)
S-10DL	.59 (15.0)	.16 (4.1)
S-12DL	.72 (18.3)	.16 (4.1)
S-14DL	.84 (21.3)	.16 (4.1)
S-16DL	.97 (24.6)	.16 (4.1)
S-18DL	1.09 (27.7)	.16 (4.1)
S-20DL	1.22 (31.0)	.16 (4.1)
S-22DL	1.34 (34.0)	.16 (4.1)

### Chassis-to-Board Supports, Screw Mount

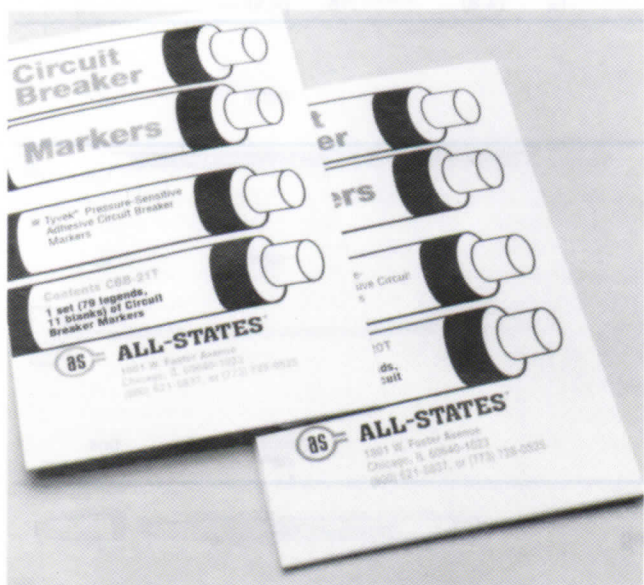
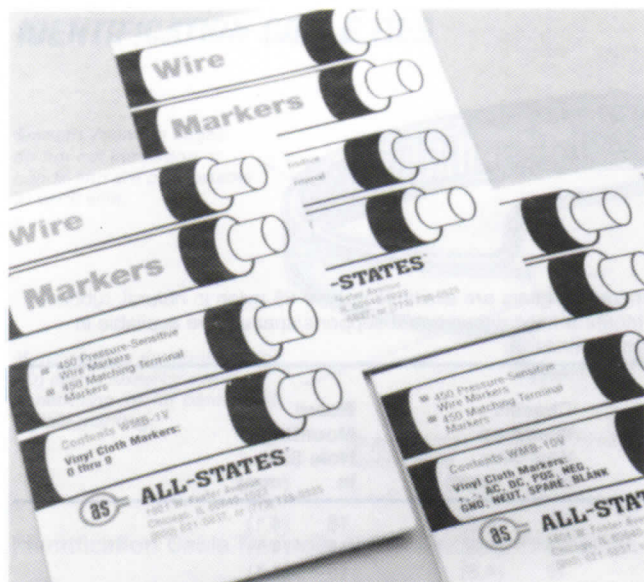
Board Locking Style	Mounting Separation In. (mm)	Chassis Hole Size	Both Mounting Hole Sizes In. (mm)
SMS-4L	.25 (6.4)	No. 4 or 6 Screw	.16 (4.1)
SMS-6L	.38 (9.7)	No. 4 or 6 Screw	.16 (4.1)
SMS-8L	.50 (12.7)	No. 4 or 6 Screw	.16 (4.1)

### Push-Mount Adapters, Adhesive-Backed Base (Rubber-Based Adhesive)

Model No.	Base Dimension In. (mm)	Overall Height In. (mm)	Hole Size In. (mm)
APA-0	.75 x .75 (19 x 19)	.44 (11.2)	.25 (6.4)
APA-1	.75 x .75 (19 x 19)	.25 (6.4)	.19 (4.8)
APA-2	.75 x .75 (19 x 19)	.38 (9.7)	.16 (4.1)

<sup>①</sup> UL recognized component.





## WIRE-MARKER BOOKLETS

- Pocket-sized packages of pressure-sensitive adhesive markers for wire, cable and other wiring bundles.
- Each booklet has 10 pages of 1.25" long pre-cut markers, totaling 450 wire markers and 450 matching terminal markers.
- 10 different booklet types are available in either Tyvek® or Vinyl-cloth materials with various combinations of numbers, letters, NEMA colors and legends.
- Vinyl-cloth markers have acrylic adhesive; Tyvek® markers have rubberized adhesive.
- Both wire marker materials are resistant to oil, water and abrasion, and are usable from -40° F to +250° F.

### Ordering Information

#### Wire-Marker Booklets

Tyvek® Model No.	Vinyl Cloth Model No.	Wire Marker Description
WMB-1T	WMB-1V	0-9
WMB-2T	WMB-2V	A to Z, 0 to 15, +, -, /
WMB-3T	WMB-3V	1 thru 45
WMB-4T	WMB-4V	1, 2, 3
WMB-5T	WMB-5V	A, B, C
WMB-6T	WMB-6V	T1, T2, T3
WMB-7T	WMB-7V	L1, L2, L3
WMB-8T	WMB-8V	46 thru 90
WMB-9T	WMB-9V	10 NEMA Colors
WMB-10T	WMB-10V	+, -, AC, DC, POS, NEG, GND, NEUT, SPARE, BLANK

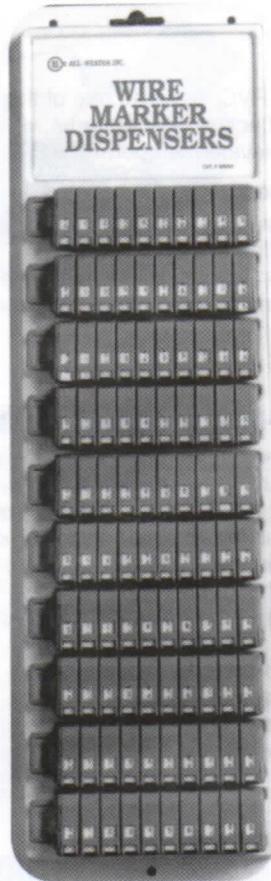
## CIRCUIT-BREAKER MARKER BOOKLETS

- Booklets are available with one or three sets of circuit breaker markers. Each set has 11 blank "write-on" markers and 79 pre-printed markers for identifying each circuit inside and outside a residential home.
- Circuit Breaker Markers include: All major kitchen appliances, heating and air conditioners, clothes washers & dryers, water heaters, sump pumps, and pool heaters; outlets and lighting for kitchens, bedrooms, living rooms, dens, family rooms, recreation rooms, dining rooms, sun rooms, laundry rooms, basements, attics, garages, drive-ways, patios, pools and sheds.

### Ordering Information

#### Circuit-Breaker Marker Booklet Sets

Tyvek only Model No.	Circuit Breaker Marker Description
CBB-20T	3 sets (237 legends, 33 blanks)
CBB-21T	1 set (79 legends, 11 blanks)



### WIRE-MARKER DISPENSER

- Reusable Polypropylene Dispensers contain 10 individual .25" x 96" tape rolls of self-sticking markers numbered 0 through 9 (one number per roll).
- Marker Rolls Pre-cut into .25" x 1.25" markers that automatically peel and separate as backing is pulled from dispenser.
- Replaceable Marker Number Rolls that can be purchased individually or in complete dispenser sets.
- DuPont TYVEK® Acrylic adhesive tape marker rolls are resistant to oil, water and abrasion, and are usable in temperatures from -40° F to +250° F.

### Ordering Information

#### Wire Marker Dispensers

Model No.	Item
WMDD-1	Display (Includes 10 dispensers)
WMD-1	Dispenser (Each)
WMRR-1	Set of 10 (0-9) Refill Marker Rolls

#### Individual Refill Marker Rolls

WMR-0	Refill #0
WMR-1	Refill #1
WMR-2	Refill #2
WMR-3	Refill #3
WMR-4	Refill #4
WMR-5	Refill #5
WMR-6	Refill #6
WMR-7	Refill #7
WMR-8	Refill #8
WMR-9	Refill #9

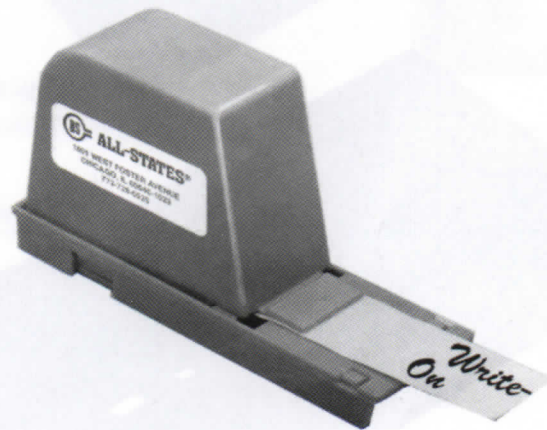
### WRITE-ON MARKER TAPE DISPENSERS

- Contains a roll of pre-cut, blank wire markers that can be custom labeled with a pen or pencil.
- Markers are .75" wide and made of .004" clear vinyl film with acrylic adhesive.
- Resistant to oil, water and abrasion, the markers are usable from -40° F to +200° F.
- Backing tape automatically ejects next marker.

### Ordering Information

#### Write-On Marker Tape Dispensers

Model No.	Size (w x l)		No. of Markers	Labeling Surface	
	In.	(mm)		In.	(mm)
WOD-1	.75 x 1.25	(19 x 32)	300	.75 x .31	(19 x 7.9)
WOD-2	.75 x 1.88	(19 x 48)	150	.75 x .50	(19 x 12.7)
WOD-3	.75 x 3.00	(19 x 76)	90	.75 x .75	(19 x 19)
WOD-4	.75 x 6.00	(19 x 152)	40	.75 x 1.00	(19 x 25)





## WIRING DUCT



**All-States Wiring Duct** provides a convenient, safe way to channel wire or cable. Made of high impact, rigid PVC, our Wiring Duct is available in **Slotted**, **Narrow Slotted** and **Solid** models in the following colors: gray, white, black & intrinsic blue. Also available with adhesive backing.

**Duct Covers:** Feature an integral flexible vinyl lining along inside of walls to provide a high frictional surface.



### Material:

Made of rigid PVC, rated as one of the industry's highest rated heat deflection temperatures, which minimizes distortion at elevated temperatures.

### Compliances:



- UL Recognized,  CSA certified 
- UL flame rating of 94V-O.
- Rated for continuous use temperature of 122° F (50° C).
- Meets JIC and DIN mounting specification 43659.

### SLOTTED-WALL WIRING DUCT

- Designed for long, straight wire runs where minimum or no break-outs are required.
- Break-away plastic fingers give fast and easy wire or cable access for installation and removal.
- Plastic fingers have a lower score line that allows individual or groups of fingers to be removed.
- Plastic fingers have rounded edges to protect wires and hands from abrasion.
- Factory-stocked in 6.5-ft. lengths.
- Slot widths are .31 inches.
- UL recognized, 
- CSA certified 



### NARROW SLOTTED-WALL WIRING DUCT

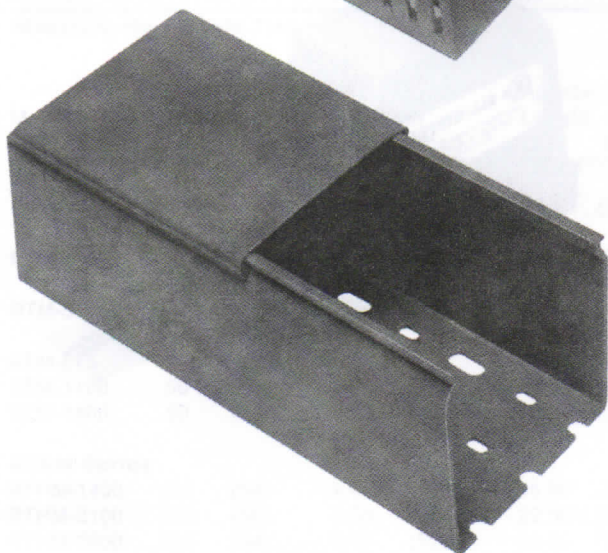
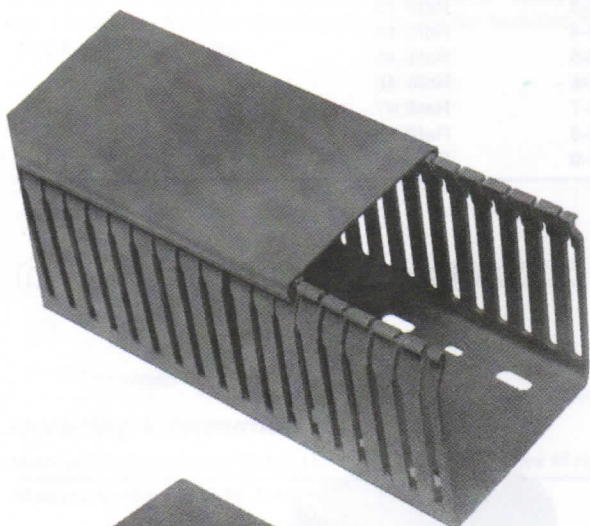
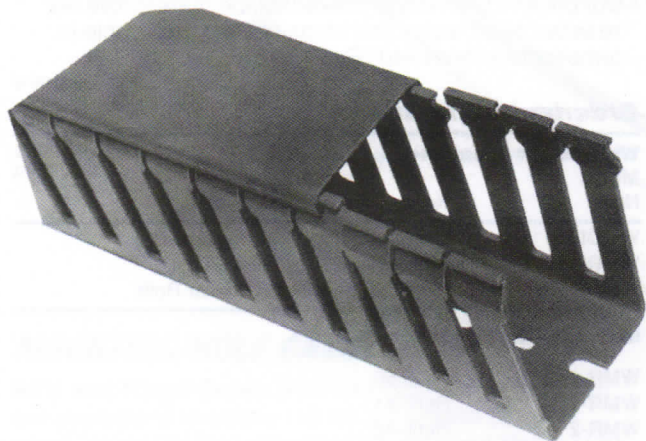
**Narrow Slotted-Wall Wiring Duct** is used with high density relays/terminal blocks.

- Features break-away plastic fingers and a lower score line that allows additional access.
- Designed for wire and cable management where space is limited.
- Factory-stocked in 6.5-ft. lengths.
- Slot widths are .13 inches.
- UL recognized, 
- CSA certified 

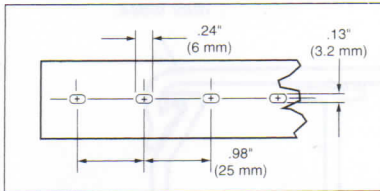
### SOLID-WALL WIRING DUCT

**Solid Wall Wiring Duct** is designed for long, straight wire runs where minimum or no break-outs are required.

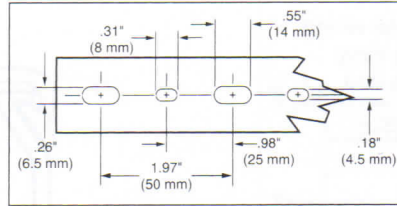
- Surface raceway for interior trunk lines (i.e., under floor and telecommunication closet installations).
- Flush cover design.
- Factory-stocked in 6.5-ft. lengths.
- Can be supplied without mounting slots.
- UL recognized, 
- CSA certified 



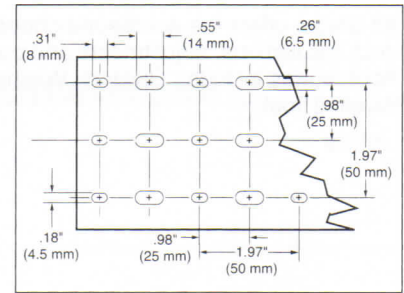
### Dimensional Drawings



Single row mounting slots for the width of .5" PVC.

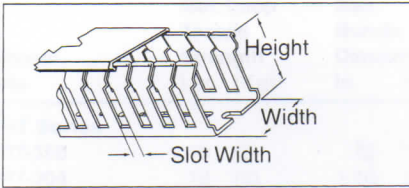


Single row mounting slots for widths of .75," 1," 1.5" and 2" PVC.

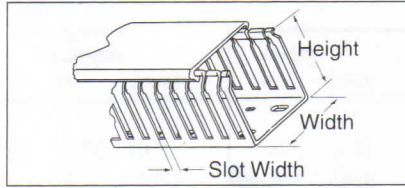


Triple row mounting slots for widths of 3," 4" and 5" PVC.

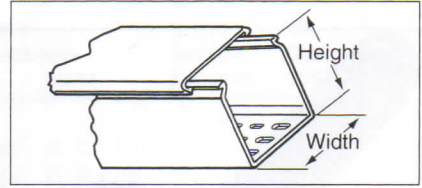
### Slotted Wall



### Narrow Slotted Wall



### Solid Wall



### Ordering Information (Duct and covers must be ordered separately.)

#### Wiring Duct

Slotted Wall Model No. ①	Narrow Slotted Wall Model No. ②	Solid Wall Model No.	Nominal Size (wxh) In. (mm)	Standard Carton Qty. Ft. (m)
WD.5x.5*	WDN.5x.5*	WDS.5x.5	.5 x .5 (13 x 13)	<b>"Consult Factory"</b>
WD.75x2	WDN.75x2	WDS.75x2	.75 x 2 (19 x 51)	
WD1x.75*	WDN1x.75*	WDS1x.75	1 x .75 (25 x 19)	
WD1x1.5	WDN1x1.5	WDS1x1.5	1 x 1.5 (25 x 38)	
WD1x2	WDN1x2	WDS1x2	1 x 2 (25 x 51)	
WD1x3	WDN1x3	WDS1x3	1 x 3 (25 x 76)	
WD1x4	WDN1x4	WDS1x4	1 x 4 (25 x 102)	
WD1.5x1.5	WDN1.5x1.5	WDS1.5x1.5	1.5 x 1.5 (38 x 38)	
WD1.5x2	WDN1.5x2	WDS1.5x2	1.5 x 2 (38 x 51)	
WD1.5x3	WDN1.5x3	WDS1.5x3	1.5 x 3 (38 x 76)	
WD1.5x4	WDN1.5x4	WDS1.5x4	1.5 x 4 (38 x 102)	
WD2x1	WDN2x1	WDS2x1	2 x 1 (51 x 25)	
WD2x1.5	WDN2x1.5	WDS2x1.5	2 x 1.5 (51 x 38)	
WD2x2	WDN2x2	WDS2x2	2 x 2 (51 x 51)	
WD2x3	WDN2x3	WDS2x3	2 x 3 (51 x 76)	
WD2x4	WDN2x4	WDS2x4	2 x 4 (51 x 102)	
WD3x1.5	WDN3x1.5	WDS3x1.5	3 x 1.5 (76 x 38)	
WD3x2	WDN3x2	WDS3x2	3 x 2 (76 x 51)	
WD3x3	WDN3x3	WDS3x3	3 x 3 (76 x 76)	
WD3x4	WDN3x4	WDS3x4	3 x 4 (76 x 102)	
WD4x1.5	WDN4x1.5	WDS4x1.5	4 x 1.5 (102 x 38)	
WD4x2	WDN4x2	WDS4x2	4 x 2 (102 x 51)	
WD4x3	WDN4x3	WDS4x3	4 x 3 (102 x 76)	
WD4x4	WDN4x4	WDS4x4	4 x 4 (102 x 102)	
WD4x5	WDN4x5	WDS4x5	4 x 5 (102 x 127)	
WD5x3	WDN5x3	WDS5x3	5 x 3 (127 x 76)	

#### Wiring Duct Covers

Model No.	Standard Carton Qty. Ft. (m)
WDC.5	<b>"Consult Factory"</b>
WDC.75	
WDC1	
WDC1	
WDC1	
WDC1	
WDC1	
WDC1.5	
WDC1.5	
WDC1.5	
WDC1.5	
WDC2	
WDC2	
WDC2	
WDC2	
WDC2	
WDC3	
WDC3	
WDC3	
WDC3	
WDC4	
WDC4	
WDC4	
WDC4	
WDC5	

Available colors include: gray, white, black and intrinsic blue. Contact All-States for minimum quantity requirements.

① Slot widths are .31" (7.9 mm).

② Slot widths are .13" (3.2 mm).

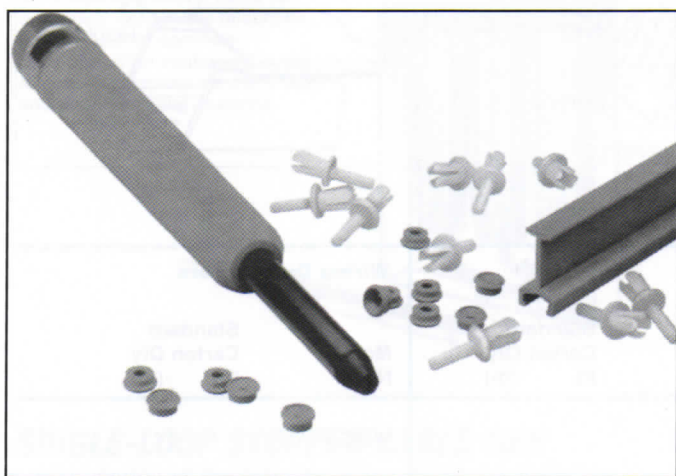
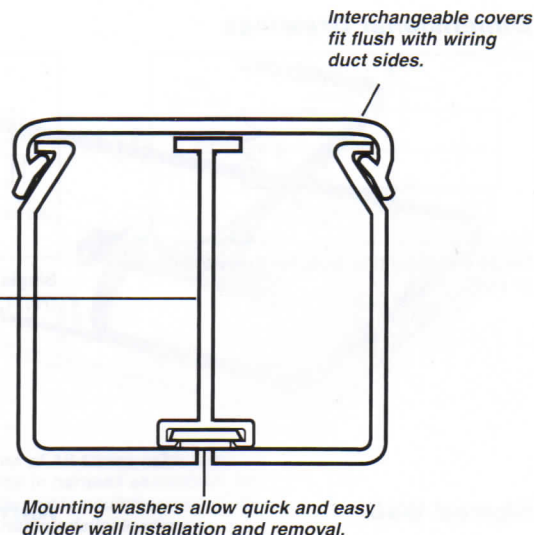
\* Closed slotted style, consult factory.



## WIRING DUCT ACCESSORIES

All-States offers the accessories needed to make wiring duct installations, adjustments and customizing easy. Accessories include: Dividers, Washers, Rivets and Riveting Tool.

Divider walls create multiple channels.



**Riveting Tool** allows quick and easy installation of All-States' RN1 and RN2 rivets.

**Dividers for Wiring Duct** create multiple channels within one duct to separate wiring or groups of wiring. Must be used with mounting washers listed below.

- For use with types WD, WDN and WDS duct.
- Factory-stocked in 6.5-ft. lengths.

### Other Accessories:

- **Mounting Washers** provide location for dividers.
- **Rivets** applied to panels with hand riveting tool without the need for rear access.
- **Riveting Tool** for installation of rivets.

### Ordering Information

#### Wiring Duct Accessories

Model No.	Description	Size In.	(mm)	Plate Thickness	Hole Diameter	Color	Pieces per Carton
WDDW*	Mounting Washer	.146	(3.7)	N/A	N/A	Gray	50
		(internal diameter)					
RN1	Plastic Rivet	N/A	N/A	.031-.140	.125-.147	Natural	100
RN2	Plastic Rivet	N/A	N/A	.218-.375	.250-.270	Natural	100
RNT1	Riveting Tool	N/A	N/A	N/A	N/A	N/A	N/A

\* Use of 4 washers per every 6 feet of divider wall is recommended. Use with #8 or #10 flathead screws.

### Ordering Information

#### Dividers for Wiring Duct

Model No.	Size In.	(mm)	Pieces per Carton	Packed Carton ft.	(m)
WDD1.5	1.5	(38)	4	26	(8)
WDD2	2.0	(51)	4	26	(8)
WDD3	3.0	(76)	4	26	(8)

## ALL-STATES WIRING DUCT FILL CAPACITY GUIDE



(This information is to be used as a guide for selecting the proper size duct and is based upon 50% fill capacity. Amounts may vary due to method of installation.)

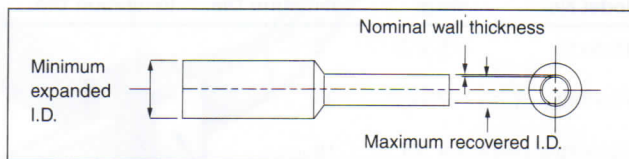
### Wiring Duct

ALL-STATES Model No.	Size WxH	Fill Capacity 12AWG 0.158 Insulation Dia.	Fill Capacity 14AWG 0.165 Insulation Dia.	Fill Capacity 14AWG 0.139 Insulation Dia.	Fill Capacity 16AWG 0.125 Insulation Dia.	Fill Capacity 18AWG 0.113 Insulation Dia.	Fill Capacity 22AWG 0.065 Insulation Dia.
WD.5x.5	.5 x .5	6	5	8	9	11	35
WD.75x2	.75 x 2	35	32	45	56	68	208
WD1x.75	1 x .75	18	17	24	29	36	109
WD1x1.5	1 x 1.5	37	34	48	59	72	218
WD1x2	1 x 2	47	43	61	75	92	279
WD1x3	1 x 3	74	68	96	118	145	438
WD1x4	1 x 4	96	88	124	153	187	566
WD1.5x1.5	1.5 x 1.5	55	50	71	88	107	325
WD1.5x2	1.5 x 2	69	63	89	110	135	408
WD1.5x3	1.5 x 3	110	101	142	175	215	649
WD1.5x4	1.5 x 4	146	134	189	233	285	863
WD2x1	2 x 1	48	44	62	77	94	283
WD2x1.5	2 x 1.5	73	67	94	117	143	432
WD2x2	2 x 2	93	86	121	149	183	552
WD2x3	2 x 3	146	134	188	233	285	860
WD2x4	2 x 4	190	174	246	304	372	1124
WD3x1.5	3 x 1.5	107	96	138	170	208	630
WD3x2	3 x 2	136	125	176	217	266	804
WD3x3	3 x 3	210	192	271	335	410	1240
WD3x4	3 x 4	279	256	361	446	546	1649
WD4x1.5	4 x 1.5	146	134	188	233	285	860
WD4x2	4 x 2	194	178	250	310	379	1146
WD4x3	4 x 3	285	262	389	456	558	1687
WD4x4	4 x 4	387	355	500	618	756	2285
WD4x5	4 x 5	489	448	632	781	956	2890
WD5x3	5 x 3	351	322	454	561	687	2077



## HEAT SHRINK TUBING

- Made of crosslinked flexible polyolefin.
- Shrink ratio: 2:1.
- Designed to insulate, protect and manage wires.
- Useful temperature range: -67° F to 275° F (-55° C to 135° C).
- MIL-1-23053/5.
- 600-volt rating.
- UL recognized,  CSA approved. 



## Ordering Information

Colors: Standard color is black. Specify, when ordering, for clear, red, yellow, blue or white.

## Heat Shrink Tubing

Model No.	Minimum Expanded I.D.		Maximum Recovered I.D.		Nom. Wall Thickness		Total Length	
	In.	(mm)	In.	(mm)	In.	(mm)	Ft.	(m)
<b>Individual 4' lengths</b>								
HST-046	.046	(1.2)	.023	(0.6)	.016	(0.4)	100	(30.3)
HST-062	.062	(1.6)	.031	(0.8)	.017	(0.4)	100	(30.3)
HST-093	.093	(2.4)	.046	(1.2)	.020	(0.5)	100	(30.3)
HST-125	.125	(3.2)	.062	(1.6)	.020	(0.5)	100	(30.3)
HST-187	.187	(4.8)	.093	(2.4)	.020	(0.5)	100	(30.3)
HST-250	.250	(6.4)	.125	(3.2)	.025	(0.6)	100	(30.3)
HST-375	.375	(9.5)	.187	(4.8)	.025	(0.6)	100	(30.3)
HST-500	.500	(12.7)	.250	(6.4)	.025	(0.6)	20	(6.1)
HST-625	.625	(15.9)	.312	(7.9)	.030	(0.8)	20	(6.1)
HST-750	.750	(19.1)	.375	(9.5)	.030	(0.8)	20	(6.1)
HST-1000	1.000	(25.4)	.500	(12.7)	.035	(0.9)	20	(6.1)
HST-1500	1.500	(38.1)	.750	(19.1)	.040	(1.0)	20	(6.1)

## On Reels

HSTR-046	.046	(1.2)	.023	(0.6)	.016	(0.4)	1,000	(303)
HSTR-062	.062	(1.6)	.031	(0.8)	.017	(0.4)	1,000	(303)
HSTR-093	.093	(2.4)	.046	(1.2)	.020	(0.5)	1,000	(303)
HSTR-125	.125	(3.2)	.062	(1.6)	.020	(0.5)	1,000	(303)
HSTR-187	.187	(4.8)	.093	(2.4)	.020	(0.5)	1,000	(303)
HSTR-250	.250	(6.4)	.125	(3.2)	.025	(0.6)	500	(152)
HSTR-375	.375	(9.5)	.187	(4.8)	.025	(0.6)	500	(152)
HSTR-500	.500	(12.7)	.250	(6.4)	.025	(0.6)	200	(61)
HSTR-625	.625	(15.9)	.312	(7.9)	.030	(0.8)	200	(61)
HSTR-750	.750	(19.1)	.375	(9.5)	.030	(0.8)	100	(30.3)
HSTR-1000	1.000	(25.4)	.500	(12.7)	.035	(0.9)	100	(30.3)
HSTR-1500	1.500	(38.1)	.750	(19.1)	.040	(1.0)	100	(30.3)

## ACCESSORIES

## Heat Gun Model HSTG-1

- Designed for use on all types of heat-shrink tubing, except type TFE and FEP fluoroplastic Tefzel<sup>①</sup> and Kynar<sup>②</sup>.
- Variable temperature range from 500° F (260° C) to 750° F (399° C).
- Neoprene jacketed cord with molded strain relief.
- Comes with adjustable stand.
- Replaceable bearings, brushes and heating elements for long life.

<sup>①</sup> Tefzel<sup>®</sup> is a registered trademark of E.I. DuPont de Nemours & Co.

<sup>②</sup> Kynar is a registered trademark of Elf Atochem.

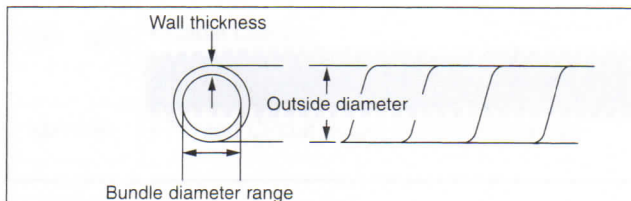
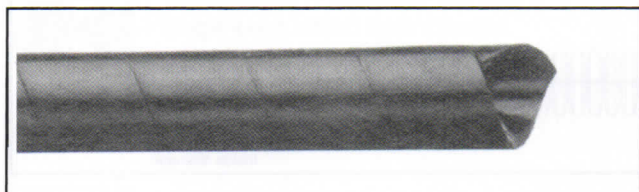
## Heat Gun Attachments

- **Model HSTG-D1** deflector for use on tubing up to .75" inside diameter.
- **Model HSTG-D2** deflector for use on tubing up to 1.5" inside diameter.
- **Model HSTG-D3** deflector concentrates hot air on tubing, away from heat sensitive items.

## SPIRAL WRAPPING

- Organizes multiple wires into one bundle.
- Protects wire from abrasion.
- Allows breakouts of single or multiple wires for re-routing or replacement.

- Flame-Retardant Polyethylene material meets UL requirements for 94V-0 flame rating.
- Applications include communications and computer equipment, OEM protection of tubes and harnesses, protection of glass tubing.



### Ordering Information

#### Spiral Wrapping

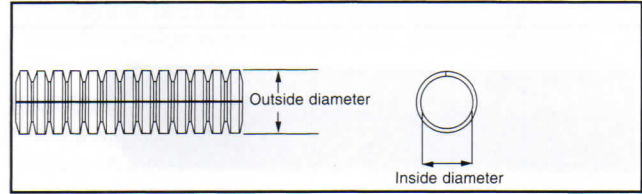
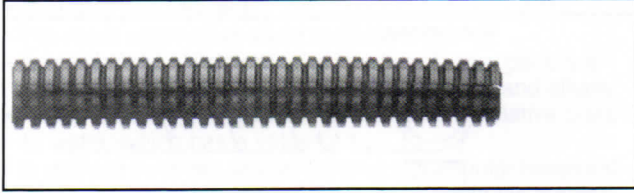
Model No.	O.D. Size In. (mm)	Bundle Diameter Range In. (mm)	Wall Thickness In. (mm)	Standard Package Length Ft. (m)	Bulk Reel Ft. (m)
<b>Polyethylene</b> —Natural (Also available in UV-black, brown, red, orange, yellow, green, blue, purple and gray.)					
SW-125	.125 (3.2)	.063—.50 (1.6—12.7)	.032 (.8)	100 (30.3)	500 (152)
SW-187	.187 (4.8)	.125—.75 (3.2—19.1)	.030 (.8)	100 (30.3)	500 (152)
SW-250	.250 (6.4)	.188—2.0 (4.8—50.8)	.035 (.9)	100 (30.3)	500 (152)
SW-250H	.250 (6.4)	.188—2.0 (4.8—50.8)	.045 (1.1)	100 (30.3)	500 (152)
SW-375	.375 (9.5)	.313—3.0 (8.0—76.2)	.052 (1.3)	100 (30.3)	500 (152)
SW-500	.500 (12.7)	.375—4.0 (9.5—101.6)	.062 (1.6)	100 (30.3)	500 (152)
SW-625	.625 (15.9)	.500—4.5 (12.7—114.3)	.062 (1.6)	100 (30.3)	250 (76)
SW-750	.750 (19.1)	.625—5.0 (15.9—127.0)	.065 (1.7)	100 (30.3)	200 (61)
SW-1000	1.000 (25.4)	.875—6.0 (22.2—152.4)	.080 (2.0)	100 (30.3)	100 (30.3)
SW-1250	1.250 (31.8)	1.125—7.0 (28.6—177.8)	.090 (2.3)	50 (15.2)	50 (15.2)
<b>Flame-Retardant Polyethylene</b> —White (Also available in UV-black.)					
SW-125	.125 (3.2)	.063—.50 (1.6—12.7)	.032 (.8)	100 (30.3)	500 (152)
SW-250	.250 (6.4)	.188—2.0 (4.8—50.8)	.045 (1.1)	100 (30.3)	500 (152)
SW-375	.375 (9.5)	.313—3.0 (8.0—76.2)	.052 (1.3)	100 (30.3)	500 (152)
SW-500	.500 (12.7)	.375—4.0 (9.5—101.6)	.062 (1.6)	100 (30.3)	500 (152)
SW-625	.625 (15.9)	.500—4.5 (12.7—114.3)	.062 (1.6)	100 (30.3)	250 (76)
SW-750	.750 (19.1)	.625—5.0 (15.9—127.0)	.065 (1.7)	100 (30.3)	200 (61)
SW-1000	1.000 (25.4)	.875—6.0 (22.2—152.4)	.080 (2.0)	100 (30.3)	100 (30.3)
<b>Nylon</b> —Natural (Also available in UV-black.)					
SW-125	.125 (3.2)	.063—.50 (1.6—12.7)	.015 (.4)	100 (30.3)	500 (152)
SW-250	.250 (6.4)	.188—2.0 (4.8—50.8)	.020 (.5)	100 (30.3)	500 (152)
SW-375	.375 (9.5)	.313—3.0 (8.0—76.2)	.035 (.9)	100 (30.3)	500 (152)
SW-500	.500 (12.7)	.375—4.0 (9.5—101.6)	.035 (.9)	100 (30.3)	500 (152)
SW-625	.625 (15.9)	.500—4.5 (12.7—114.3)	.032 (.8)	100 (30.3)	250 (76)
SW-750	.750 (19.1)	.625—5.0 (15.9—127.0)	.032 (.8)	100 (30.3)	200 (61)
SW-1000	1.000 (25.4)	.875—6.0 (22.2—152.4)	.032 (.8)	100 (30.3)	100 (30.3)
<b>Teflon</b> —Natural					
SW-062	.062 (1.6)	.040—.09 (1.0—2.3)	.016 (.4)	100 (30.3)	500 (152)
SW-125	.125 (3.2)	.063—.50 (1.6—12.7)	.020 (.5)	100 (30.3)	500 (152)
SW-125H	.125 (3.2)	.063—.50 (1.6—12.7)	.030 (.8)	100 (30.3)	500 (152)
SW-187	.187 (4.8)	.063—.75 (1.6—19.1)	.030 (.8)	100 (30.3)	500 (152)
SW-250	.250 (6.4)	.188—2.0 (4.8—50.8)	.030 (.8)	100 (30.3)	500 (152)
SW-375	.375 (9.5)	.313—3.0 (8.0—76.2)	.030 (.8)	100 (30.3)	500 (152)
SW-500	.500 (12.7)	.375—4.0 (9.5—101.6)	.030 (.8)	100 (30.3)	500 (152)
SW-625	.625 (15.9)	.500—4.5 (12.7—114.3)	.030 (.8)	100 (30.3)	250 (76)
SW-750	.750 (19.1)	.625—5.0 (15.9—127.0)	.032 (.8)	100 (30.3)	200 (61)
SW-1000	1.000 (25.4)	.875—6.0 (22.2—152.4)	.040 (1.0)	100 (30.3)	100 (30.3)



## CORRUGATED TUBING

- Slit and Not Slit models route wires and harnesses.
- Provides extra protection from abrasion, impact, and weather elements.
- Applications include: vehicular, machinery, communication and computer equipment.

- Temperature Range:  
Polyethylene -40°F to 200°F (-40°C to 93°C)  
Nylon -40°F to 300°F (-40°C to 149°C)



### Ordering Information

**Materials:** Available in polyethylene and nylon, slit and not slit.


**Colors:** Standard color for polyethylene is black. Specify, when ordering, for nylon in black with gray stripe.

#### Corrugated Tubing

Not Slit Model No.	Slit Model No.	Nominal Size In. (mm)	Inside Diameter In. (mm)	Outside Diameter In. (mm)	Standard Reel Length Ft. (m)	Bulk Reel Length Ft. (m)
<b>Polyethylene or Nylon</b>						
COT-250	COTS-250	.250 (6.4)	.242 (6.1)	.397 (10.1)	100 (30.3)	3,200 (969.7)
COT-375	COTS-375	.375 (9.5)	.347 (8.8)	.514 (13.1)	100 (30.3)	2,000 (606.1)
COT-438	COTS-438	.438 (11.1)	.403 (10.2)	.590 (15.0)	100 (30.3)	1,600 (484.9)
COT-500	COTS-500	.500 (12.7)	.481 (12.2)	.688 (17.5)	100 (30.3)	1,200 (363.6)
COT-625	COTS-625	.625 (15.9)	.598 (15.2)	.827 (21.0)	100 (30.3)	900 (272.7)
COT-750	COTS-750	.750 (19.1)	.724 (18.4)	.976 (24.8)	100 (30.3)	600 (181.8)
COT-875	COTS-875	.875 (22.2)	.840 (21.3)	1.140 (29.0)	50 (15.2)	450 (136.4)
COT-1000	COTS-1000	1.000 (25.4)	.976 (24.8)	1.284 (32.6)	50 (15.2)	350 (106.1)
COT-1125	COTS-1125	1.125 (28.6)	1.092 (27.7)	1.360 (34.5)	N/A	300 (90.9)
COT-1250	COTS-1250	1.250 (31.8)	1.198 (30.4)	1.470 (37.3)	N/A	300 (90.9)
COT-1500	COTS-1500	1.500 (38.1)	1.540 (39.1)	1.900 (48.3)	N/A	150 (45.5)
COT-2000	COTS-2000	2.000 (50.8)	1.980 (50.3)	2.400 (61.0)	N/A	100 (30.3)

## ELECTRICAL TAPE



- Heavy-duty vinyl tape useful for general applications.
- Resists ultraviolet rays, moisture, moderate alkalis and acids.
- Temperature range -14° F to +176° F (-10° C to +80° C).
- Adhesion: 1 lb./sq. in.
- Elongation: 200%.
- Breakdown voltage: 7,000 V.
- UL listed. 

### Ordering Information

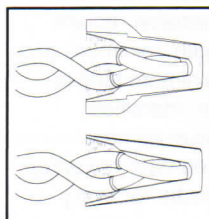
Materials: PVC

Colors: Standard color is black. Specify, when ordering, for red, blue, yellow, orange, green.

#### Electrical Tape

Model No.	Color	Tensile Strength Lbs. Kg.	Width In. (mm)	Thickness Mils	Roll Length Ft. (m)	Rolls Per Package	Rolls Per Carton
ELT-60	Black	15.43 (7)	.75 (19)	7	60 (18.2)	10	200

## TWIST-ON WIRE CONNECTORS



### Ordering Information

Materials:

#### Twist-On Wire Connectors

Model No.	Wire Range AWG		Color	Package Quantity	Carton Quantity
	Minimum	Maximum			
Standard Style					
TOC-1	(1) #14	(2) #18, (1) #20 & (1) #22	Gray	100	1,000
TOC-2	(3) #16	(2) #16, (1) #20 & (1) #22	Blue	100	1,000
TOC-3	(2) #18 & (1) #22	(2) #16 & (2) #20	Orange	100	1,000
TOC-4	(2) #12	(3) #14, (1) #18 & (2) #22	Yellow	100	1,000
TOC-6	(1) #8	(4) #16 & (1) #18	Red	100	1,000
Wing Style					
TOCW-1	(4) #22	(3) #12	Yellow	100	1,000
TOCW-2	(5) #22	(3) #12 & (1) #8	Red	100	1,000
TOCW-3	(2) #12	(2) #10, (2) #12 & (2) #14	Gray	50	1,000
TOCW-4	(3) #12	(6) #12	Blue	50	1,000



## MILITARY SPECIFICATIONS

Military specifications are one of the key design requirement standards for cable ties and similar products. Because the military was an early large-scale user of these products, the industry adopted their specifications. Consequently, many users have adopted the Mil Specs as their criteria.

Mil Spec classifications do not exist for every type of product in all types of materials. However, All-States products are all designed to meet similar standards, even if there is no specific Mil Spec category for that product. Products that have a Mil Spec listing are identified in the ordering information tables.

All-States tests all applicable products with an independent testing laboratory to confirm conformance to Mil Specs. Test results are on file for inspection at the All-States corporate office.

### The Mil Spec Numbering System

There are three kinds of numbers in the Mil Spec system. The MS (Military Standard) number covers the physical dimensions and strengths that a product must meet. The MIL (Military Specification) number represents the actual testing procedures utilized to determine whether the product meets the MS requirements. The MIL number also contains information on how to certify and qualify products and how to maintain the qualification. Finally, the QPL (Qualified Products List) number is assigned to a company's products that meet the MS criteria, as determined by the MIL number tests.

#### MS Numbers

The MS number defines the specifications and criteria a product must meet. It gives maximum dimension requirements, with the exception of minimum length; minimum and maximum bundle diameter ranges; and minimum tensile strength. It also specifies the cross-section, identifies installation tools and settings, and gives procurement specifications. MS3367, for example, is a number covering cable ties. All-States manufactures a cable tie for every MS3367 dash number (1 through 7).

#### MIL Numbers

The MIL number covers the testing procedures required for a product to meet MS standards. MIL-S-23190, for example, is the military specification number for straps, clamps, mounting hardware, plastic for cable harness tying and support. It contains standards ranging from sampling procedures to testing equipment calibration, as well as a battery of product tests.

#### QPL Numbers

The QPL number is a means of identifying a company's products that meet Mil Spec. For example, those All-States cable ties that meet MS3367 and MS3368 have QPL-23190 listing. The numerical portion is the same as the MIL with a different prefix, "QPL." The Qualified Products List is published by the military and lists all model numbers and manufacturer names that meet the Mil Spec. All-States Federal Supply Code for Manufacturers (FSCM) is 26863.

## UNDERWRITERS LABORATORIES

UL is an independent, not-for-profit organization, testing for public safety, founded in 1894. They examine and test devices, systems and materials to determine their relation to life, fire, casualty hazards and crime prevention. UL's



standards are widely accepted over a broad range of industry and public interests. Their credibility has been established by exhaustive testing, follow-up and documentation procedures.

### Flammability Ratings

In the case of All-States products, specifically the product materials, UL is primarily concerned with possible danger from electrical or heat sources. Materials rated by UL with the best flammability rating (i.e., least flammable material) being UL94V-0. The fire-retardant nylon which All-States uses meets UL94V-0, as does Tefzel®. All other nylon materials meet UL94V-2. Polypropylene is classified as UL94V-HB (horizontally burns) and polyethylene has no UL flammability rating.

### Component Program

Because All-States products are designed and used as parts of a finished assembly, they are tested in accordance with Underwriters Laboratories' Component Program. Those All-States products recognized by UL are identified in the ordering information tables within each product listing. Like "complete" UL listed products, components undergo comprehensive testing and follow-up procedures. Using recognized component products can reduce the amount of testing to be done to the finished product by UL.

Recognized components may be identified with the following mark:



In addition to testing to their Safety Standards, the Component Program verifies manufacturers' published claims about their products and material specifications. UL requires in-plant checking for the amount of re-grind material used in the All-States manufacturing process. They also check color additives to determine whether the right amount is added, and that the colorants are of a comparable material.

During in-plant inspections, UL also checks mold release materials for possible contamination and incompatibility with the product's material. Mold release materials are frequently used to assist in removing the finished product from the mold. Mold release additives may change the UL flammability rating for nylon; therefore, All-States uses lubricated nylon to avoid the need for applying mold releases.

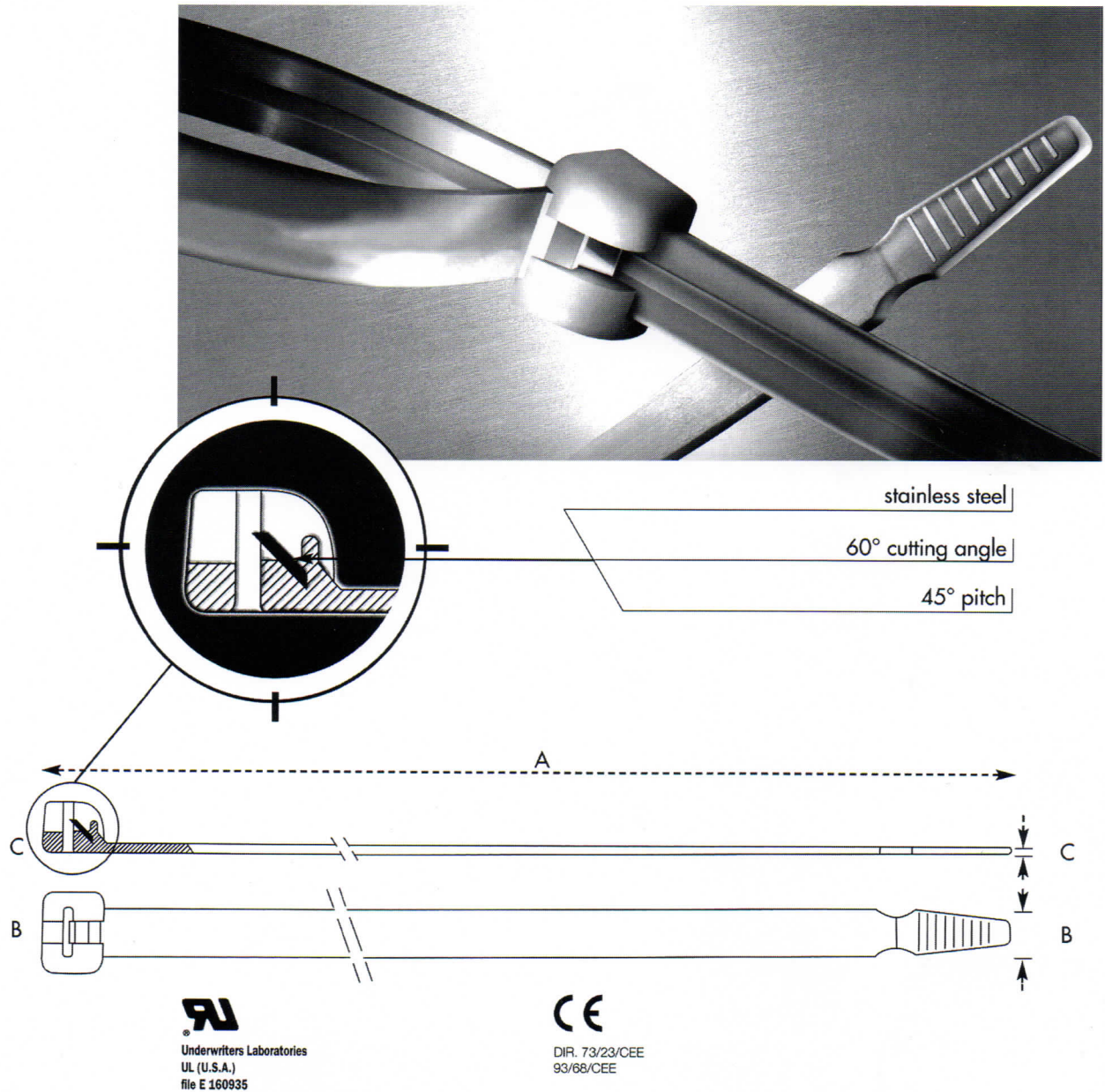
### RoHS Compliance

All All-States Inc. products manufactured from Type 66 Nylon, Polyethylene, Tefzel® & Halar®, are RoHS & WEEE compliant. For specific questions, consult factory.

① Tefzel® is a registered trademark of E.I. DuPont de Nemours & Co.

② Halar® is a registered trademark of Solvay Solexis





### Ordering Information

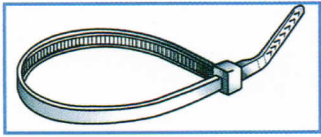
**Materials:** Factory-stocked RTSP Cable Ties include Type 66 nylon in Natural Nylon, black, outdoor, weather-resistant/UV-stabilized.

#### Single Loop Cable Ties with Stainless Steel Tooth

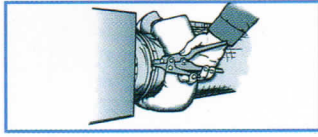
Model No.	Min. Loop Tensile Strength Lbs. (Kg)	Max. Bundle Diameter In. (mm)	Approx Length In. (mm)	Strap Width In. (mm)	Strap Thickness In. (mm)	Cross Section Series
<b>RTSP Series</b>						
RTSP-304	18 (8.160)	.94 (24.0)	3.90 (100)	.098 (2.5)	.035 (0.9)	M
RTSP-308	18 (8.160)	2.00 (55.0)	7.85 (200)	.098 (2.5)	.035 (0.9)	M
RTSP-506	30 (13.60)	1.40 (36.0)	5.50 (140)	.140 (3.5)	.040 (1.0)	I
RTSP-508	30 (13.60)	2.00 (55.0)	7.85 (200)	.140 (3.5)	.040 (1.0)	I
RTSP-511	30 (13.60)	3.00 (80.0)	11.00 (280)	.140 (3.5)	.040 (1.0)	I
RTSP-608	50 (22.65)	2.00 (51.0)	7.30 (186)	.180 (4.5)	.045 (1.1)	S
RTSP-611	50 (22.65)	3.00 (76.0)	11.40 (290)	.180 (4.5)	.045 (1.1)	S
RTSP-614	50 (22.65)	4.00 (101.0)	14.10 (360)	.180 (4.5)	.045 (1.1)	S
RTSP-708	120 (54.40)	2.20 (56.0)	8.65 (220)	.295 (7.5)	.060 (1.5)	H
RTSP-714	120 (54.40)	4.40 (101.0)	14.10 (360)	.295 (7.5)	.060 (1.5)	H



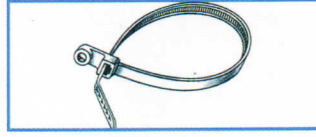
# All-States Products



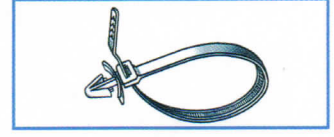
Single-Loop Cable Ties



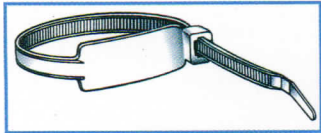
Single-Loop HVAC Duct Clamps



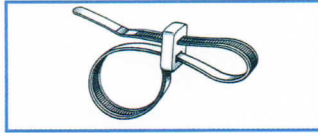
Mounting-Hole Cable Ties



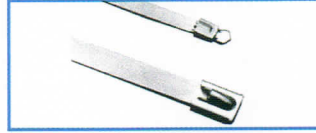
Push-Mount Cable Ties



Identification Cable Ties



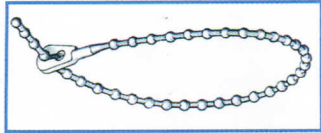
Double-Loop Cable Ties



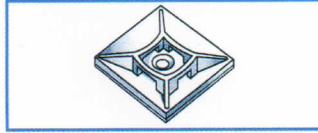
Stainless Steel Cable Ties



Velcro Hook & Loop Cable Ties



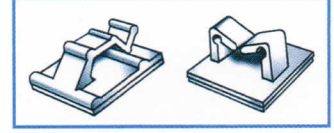
Beaded Cable Ties



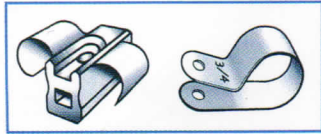
Mounting Bases for Cable Ties



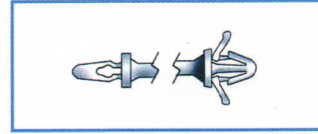
Accessories



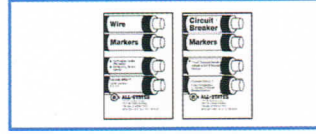
Clips and Saddles



Cable Clamps



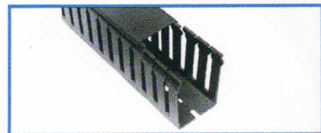
Printed Circuit Board  
Supports/Spacers



Wire Marker Booklets



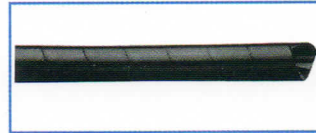
Wire Markers and Dispensers



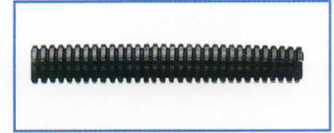
Wiring Duct and Accessories



Heat-Shrink Tubing



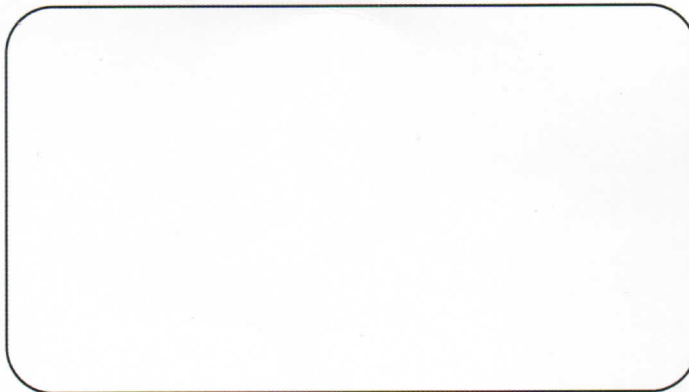
Spiral Wrapping



Corrugated Tubing



Twist-On Connectors



Electrical Tape



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