

WEST PENN WIRE

" EXCEEDING EXPECTATIONS WITH PERFORMANCE "

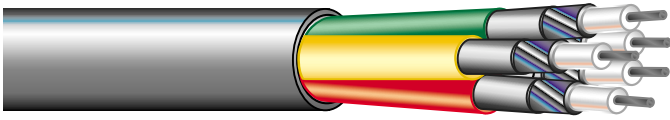
PRO-VIDEO

DIGITAL VIDEO

COMPONENT VIDEO

&

CONNECTORS



RGB BULK CABLES

| WPW PART NO. | CONDUCTORS | AWG | RATING | DESIGN |
|--------------|------------|---------|--------|----------------------------------|
| WP258265 | 5 | 26 | CMP | 5 Miniature Coax Flexible Plenum |
| WP258255 | 5 | 25 | CMP | 5 - SDI Minimax Coax Plenum |
| WP8254 | 4 | 25 | CM | 4 - SDI Minimax Coax Non-Plenum |
| WP8255 | 5 | 25 | CM | 5 - SDI Minimax Coax Non-Plenum |
| WP82561 | 6 + 1 Pair | 25 + 22 | CM | 6 - SDI Minimax Coax + 1 pair 22 |
| WP82564 | 6 + 4 pair | 25 + 22 | CM | 6 - SDI Minimax Coax + 4 pair 22 |
| WP8195 | 5 | 20 | CM | 5 - SDI RG59/U Coax |
| WP258194 | 4 | 20 | CMP | 4 - SDI RG59/U Coax Plenum |
| WP258195 | 5 | 20 | CMP | 5 - SDI RG59/U Coax Plenum |
| WP6354 | 4 | 18 | CM | 4 - SDI RG6/U Coax Non-Plenum |
| WP6355 | 5 | 18 | CM | 5 - SDI RG6/U Coax Non-Plenum |

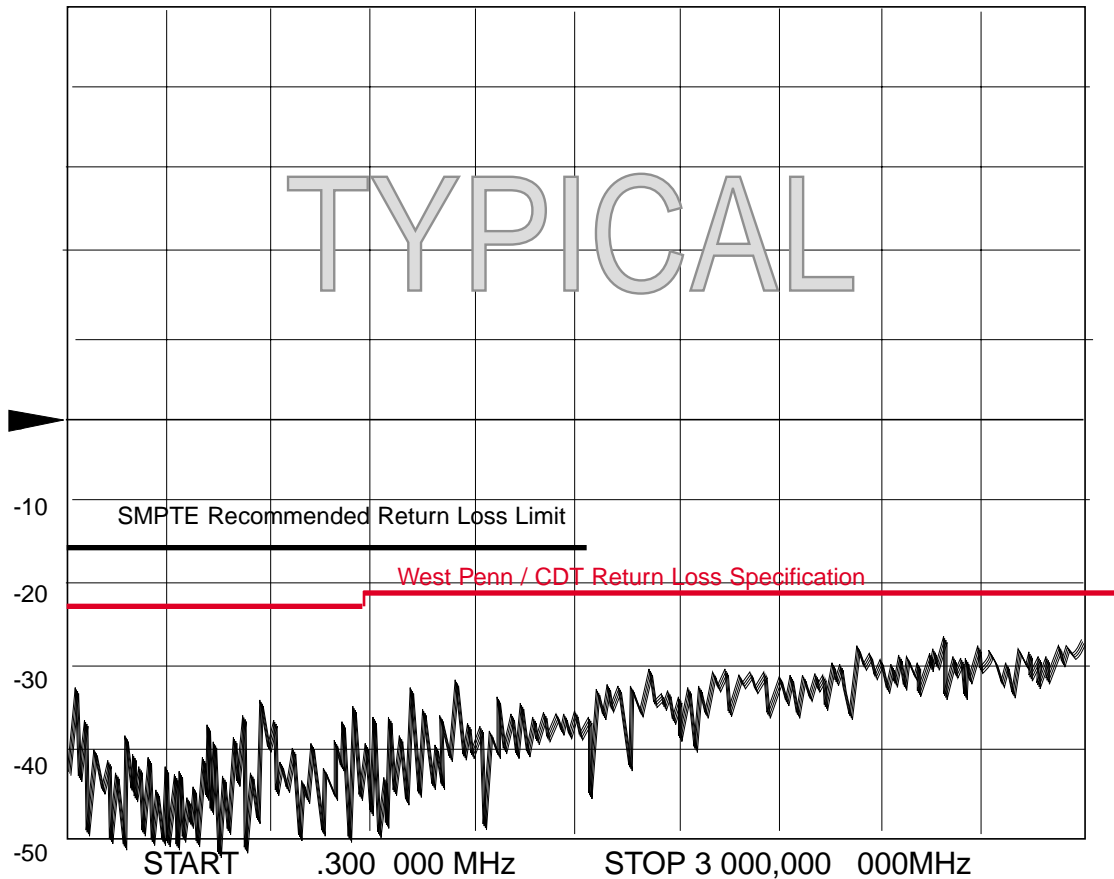
MAXIMUM RECOMMENDED TRANSMISSION DISTANCES

| RGBHV VIDEO TRANSMISSION DISTANCES | | | | | | | | | | | | | | | |
|---|--|-------|-------|-------------|-------|-------|--------------|-------|-------|----------------|-------|-------|----------------|-------|--------|
| RESOLUTION | VGA 640X480 | | | SVGA800X600 | | | XGA 1024X768 | | | SXGA 1280X1024 | | | UXGA 1600X1200 | | |
| IMAGE REFRESH RATE | 60HZ | 75HZ | 85HZ | 60HZ | 75HZ | 85HZ | 60HZ | 75HZ | 85HZ | 60HZ | 75HZ | 85HZ | 60HZ | 75HZ | 85HZ |
| IMAGE REFRESH RATE | 31.5KHZ | 39KHZ | 45KHZ | 38KHZ | 50KHZ | 54KHZ | 48KHZ | 50KHZ | 68KHZ | 64KHZ | 80KHZ | 91KHZ | 75KHZ | 94KHZ | 107KHZ |
| WPW/CDT CABLE TYPES | RECOMMENDED DISTANCES BASED ON THE 3RD HARMONIC AT -3dB (Distances are in feet) | | | | | | | | | | | | | | |
| MINIATURE HIGH RESOLUTION 26 AWG | 90 | 76 | 63 | 61 | 48 | 40 | 38 | 30 | 25 | 23 | 16 | 14 | 14 | 11 | 10 |
| MINIMAX HIGH RESOLUTION 25 AWG | 135 | 115 | 95 | 91 | 70 | 59 | 54 | 42 | 36 | 31 | 22 | 19 | 19 | 15 | 13 |
| RG59/U HIGH RESOLUTION 20 AWG | 461 | 360 | 300 | 290 | 230 | 195 | 180 | 144 | 120 | 109 | 80 | 67 | 67 | 52 | 46 |
| RG6/U HIGH RESOLUTION 18 AWG | 770 | 600 | 500 | 484 | 384 | 326 | 300 | 240 | 200 | 182 | 133 | 113 | 113 | 86 | 76 |

Distances are based on the resolution and refresh rates. Distances are in feet.

DIGITAL COAXIAL CABLE DESIGN

The SMPTE recommendation for return loss is -15 dB (5- 1500 MHz). West Penn Wire strives to meet a higher manufacturing standard at -23 dB (5-850 MHz), and -21dB (851- 3000 MHz). As seen on the actual test results for part no. 6350, West Penn Wire/ CDT exceed both SMPTE and West Penn Wire/CDT limits and specifications.



Typical test results for West Penn Wire part no. 6350

West Penn Wire Part No. 6350 is a SDI coaxial cable. West Penn Wire Part No. WP6355 Super High Resolution RGB cable consists of 5 - 6350 coaxial cables

West Penn Wire strives to achieve -30dB through out the 3 Ghz. sweep.

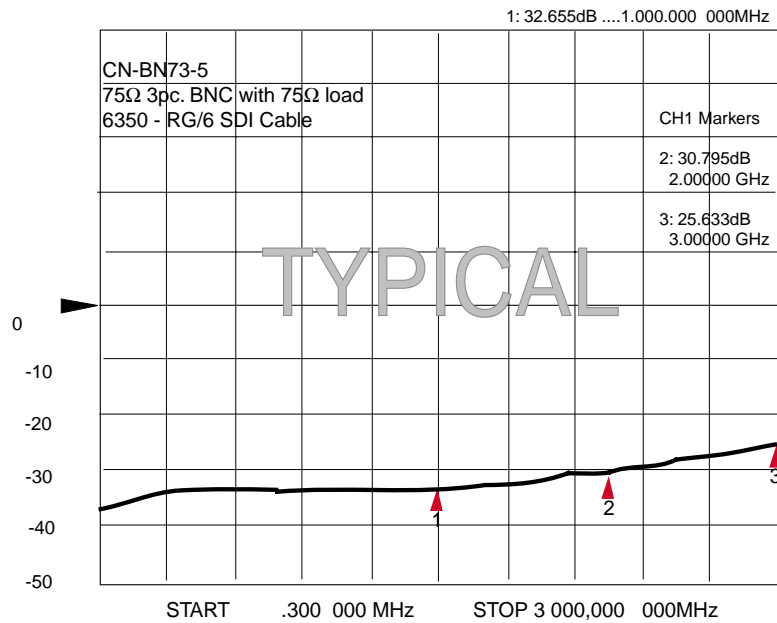
WEST PENN WIRE

75 Ohm CONNECTORS

Typical
Return Loss Test:
75Ω BNC CONNECTOR

WEST PENN WIRE
SPECIFICATIONS
3 PIECE BNC

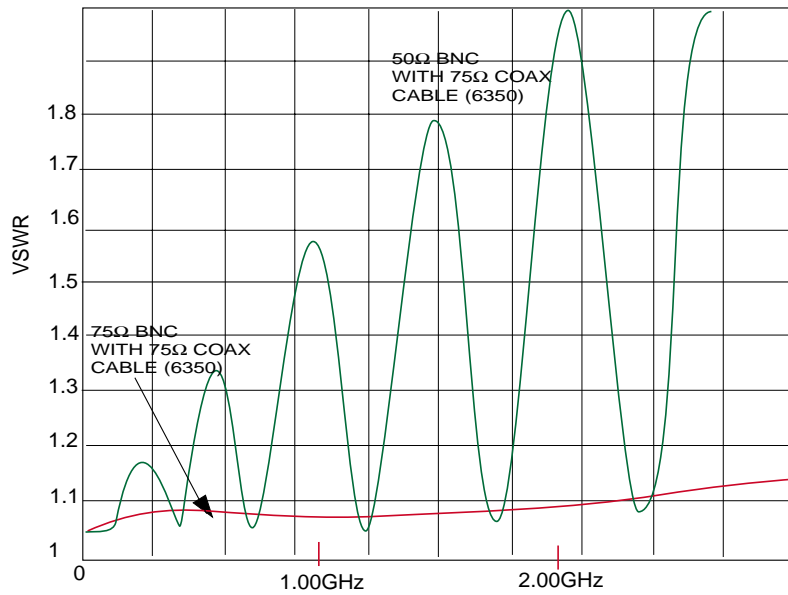
SRL: > -26dB up to 3GHz



VSWR Test

VSWR:- UNDER 1.1 - DC to 2GHz

50Ω BNC Connector
Connector:
VSWR:- Beyond 1.8 at 2GHz

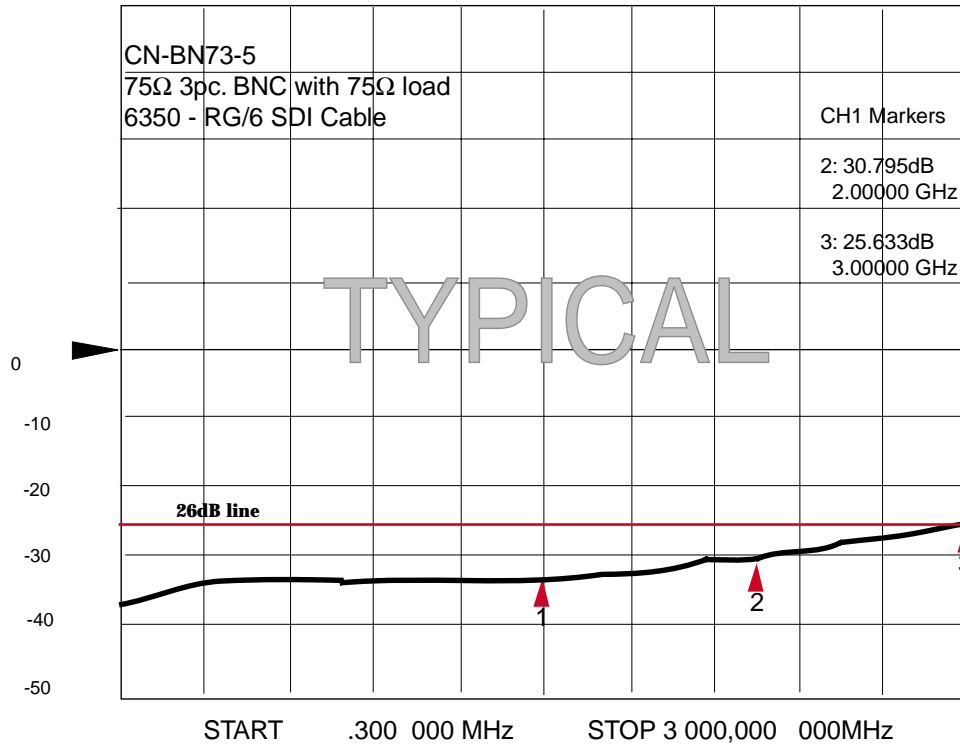


SDI COAXIAL CABLE CONNECTOR CROSS-REFERENCE

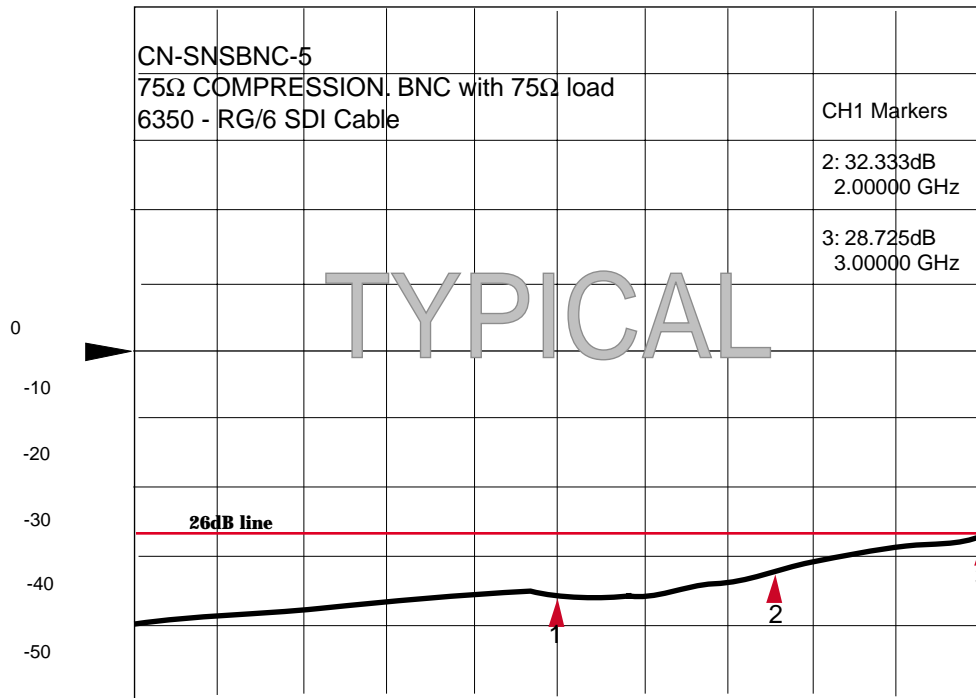
| SDI COAXIAL CABLES AND CONNECTOR CROSS REFERENCE | | | | | |
|---|------------|------------------------|-------------|--------|-------------|
| WPW CABLE | WPW | KINGS | CANARE | ADC | TROMPETER |
| HD825, WP8255 | CN-BM74-18 | 2065-11-9 | BCP-C25-15D | BNC-12 | UPL-2000-D1 |
| 819, WP8195 | CN-BM73-2 | 2065-2-9 | BPC-C4F | BNC-1 | UPL-2000-D2 |
| 6350, WP6355 | CN-BM73-5 | 2065-10-9 | BPC-C53 | BNC-8 | UPL-2000-D4 |
| 7210 | CN-BM73-7 | 2065-12-9 | -- | -- | -- |
| 1135 | CN-BM73-26 | 2065-8-9 | BPC-C71A | BNC-25 | UPL-2000-D5 |
| PLENUM SDI COAXIAL CABLES AND CONNECTOR CROSS REFERENCE | | | | | |
| HD25825, WP258255 | CN-BM74-18 | 2065-11-9 | BCP-C25-15D | BNC-12 | UPL-2000-D1 |
| 25819 WP258195 | CN-BM73-30 | 2065-2-9 | BCP-C32 | BNC-6 | UPL-2000-D8 |
| 256350 | CN-BM73-4 | 2065-22-9 2065-10-9 | BCP-C55A | BNC-10 | UPL-2000-D6 |
| 257210 | CN-BM73-7P | 2065-12-9 | -- | -- | -- |

75 Ohm CONNECTORS: 3 pc. 75Ω BNC vs. 75Ω Compression BNC

1: 32.655dB1.000.000 000MHz



1: 35.625dB1.000.000 000MHz



| COMPANY | CONNECTOR | RETURN LOSS SPECIFICATIONS |
|-----------------|---------------------|---|
| WEST PENN WIRE | 3 PC 75Ω BNC | >26dB to 2Ghz |
| WEST PENN WIRE | 75Ω COMPRESSION BNC | >30dB @ 1Ghz, >26dB @ 2Ghz |
| ADC | 3 PC 75Ω BNC | >35dB @ 1Ghz, >30dB @ 2Ghz, >26dB @3Ghz |
| AMPHENOL | 3 PC 75Ω BNC | >26dB to 2Ghz |
| CANARE | 3 PC 75Ω BNC | >26dB to 2Ghz |
| GEM ELECTRONICS | 3 PC 75Ω BNC HDTV | >32dB to 3Ghz |
| KINGS | 3 PC 75Ω BNC | >36dB@ 1Ghz, >26dB to 2Ghz |
| TROMPETER | 3 PC 75Ω BNC | >30dB @ 1Ghz, >28dB @ 2Ghz |

SERIAL DIGITAL INTERFACE

| Data Rate | 143Mbps | 177Mbps | 270Mbps | 360Mbps | 540Mbps | 1.485Gbps |
|----------------------------|-------------------|------------------|--------------------|-------------------------|--------------------|-----------|
| Specs | SMPTE259M | ITU-RBT.601 | SMPTE259M | SMPTE259M | SMPTE344M | SMPTE292M |
| Application WPW/CDT No. | Composite NTSC | Composite PAL | Component Video | Component Widescreen | Compressed HDTV | HDTV |
| HD825 | 769 | 705 | 576 | 509 | 415 | 158 |
| 819 | 1399 | 1292 | 1067 | 915 | 712 | 290 |
| 6350 | 1840 | 1746 | 1399 | 1205 | 947 | 380 |
| 7210 | 2045 | 1875 | 1543 | 1364 | 1107 | 450 |
| 1135 | 2432 | 2250 | 1862 | 1646 | 1337 | 513 |

Notes:

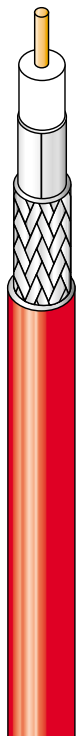
Lengths are calculated in feet.

The Serial Digital interconnect standards are designed to operate where the signal loss at 1/2 the clock frequency does not exceed the approximate loss values listed below. The maximum length values shown are based on typical attenuation values for the cables listed and the following criteria:

- Maximum length= 30 dB loss at 1/2 the clock frequency
 - SMPTE259M and ITU-R BT.601
- Maximum length= 20 dB loss at 1/2 the clock frequency
 - SMPTE292M

The bit error rate (BER) can vary dramatically as the calculated distances are approached. BER is dependent on receiver design and the losses of the actual coax used. West Penn Wire/ CDT recommended distance is 90% of the calculated maximum distance, which allows a safety margin for typical lot-to-lot cable attenuation variation, patch panel equipment loss, connectors loss and ensures operation below the "error cliff" region. Contact equipment manufactures for recommended transmission distances, and cable selection.

PROFESSIONAL/ DIGITAL VIDEO CABLES



| 75Ω SDI COAXIAL CABLES NON-PLENUM | |
|-----------------------------------|---|
| HD825 | MINIMAX 25 AWG SDI NON-PLENUM COAX |
| 819 | RG59/U 20 AWG SDI NON-PLENUM COAX |
| 6350 | RG6/U 18 AWG SDI NON-PLENUM COAX |
| 7210 | RG7/U 16 AWG SDI NON-PLENUM COAX |
| 1135 | RG11/U 14 AWG SDI NON-PLENUM COAX |
| 75Ω SDI COAXIAL CABLES PLENUM | |
| HD25825 | MINIMAX 25 AWG SDI PLENUM COAX |
| 25819 | RG59/U 20 AWG SDI PLENUM COAX |
| 256350 | RG6/U 18 AWG SDI PLENUM COAX |
| 257210 | RG7/U 16 AWG SDI PLENUM COAX |
| SVHS (S-VIDEO) CABLES | |
| 2825 | SVHS BULK CABLE SIAMESE MINIATURE 25AWG.COAX NON-PLENUM |
| 252825 | SVHS BULK CABLE SIAMESE MINIATURE 25AWG.COAX PLENUM |
| PRECISION VIDEO COAXIAL CABLE | |
| P806 | PRECISION RG59/U 20 AWG. SOLID DIELECTRIC NON-PLENUM |

BROADCAST VIDEO CABLES CROSS-REFERENCE

| WEST PENN WIRE | DESCRIPTION | BELDEN | GEPKO | EXTRON | CANARE |
|----------------|---------------------------|--------|------------|-------------------|---------|
| 1135 | RG11/U SDI NON PLENUM | 7731A | VHD1100 | -- | L-7CFB |
| 252825 | S-VIDEO PLENUM | 7700A | | 22-129-03 | |
| 25819 | RG59/U SDI PLENUM | 1506A | VPM2000TS | 22-146-03 | |
| 256350 | RG6/U SDI PLENUM | 1695A | VSD2001TS | 22-164-03 | |
| 257210 | RG7/U SDI PLENUM | -- | -- | -- | |
| 2825 | S-VIDEO NON PLENUM | 9555 | VDM250D | 22-123.03 | |
| 6350 | RG6/U SDI NON PLENUM | 1694A | VSD2001 | 22-098-03 | L-5CFB |
| 7210 | RG7/U SDI NON PLENUM | 7855A | VHD7000 | -- | -- |
| 819 | RG59/U SDI NON PLENUM | 1505A | VPM2000 | 22-154-03 | L-4CFB |
| HD25825 | MINIMAX SDI PLENUM | -- | -- | -- | -- |
| HD825 | MINIMAX SDI NON PLENUM | 1865A | VDM250 | -- | -- |
| WP258195 | RGB 5 - RG59/U PLENUM | 1826A | -- | -- | -- |
| WP258255 | RGB 5 - MINMAX PLENUM | -- | -- | -- | -- |
| WP258265 | RGB 5 - 26AWG FLEX PLENUM | 1418B | RGBSC260TS | 22-103.03 | -- |
| WP6355 | RGB 5 - RG6/U NON PLENUM | 7712A | VS52001 | 22-100-02 | V5-5CFB |
| WP8195 | RGB 5 - RG59/U NON PLENUM | -- | -- | -- | -- |
| WP8255 | RGB 5 MINMAX NON PLENUM | 7789A | RGBSC250 | 22-020-03 (26AWG) | -- |

Note:

INFORMATION CONTAINED IN THE CHART MAY CHANGE, OR OTHER PART NUMBERS MAY APPLY. CALL WEST PENN WIRE ENGINEERING DEPARTMENT TO RECEIVE UPDATED CABLE CROSS-REFERENCES. 800-245-4964 OR E-MAIL info@westpenn-cdt.com

THE CHART ONLY MAKES REFERENCE TO 5 COAXIAL RGB CABLES. WEST PENN WIRE MANUFACTURES THREE AND FOUR COAXIAL RGB CABLE DESIGNS, REFER TO WEST PENN WIRE ENGINEERING DEPARTMENT.

WEST PENN WIRE

" EXCEEDING EXPECTATIONS WITH PERFORMANCE "

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