# **Detailed Specifications & Technical Data**

### **METRIC MEASUREMENT VERSION**



# 7935A Multi-Conductor - Category 5e Low Smoke Zero Halogen



For more Information please call

1-800-Belden1



### **General Description:**

24 AWG Bonded-Pairs solid bare copper conductors, polyolefin insulation, sunlight - resistant LSZH jacket, rip cord. Sequential marking at two foot intervals.

## **Physical Characteristics (Overall)** Conductor AWG: # Pairs AWG Stranding Conductor Material Dia. (mm) 24 Solid BC - Bare Copper 0.508 **Total Number of Conductors:** 8 Insulation Insulation Material: Insulation Material Wall Thickness (mm) Dia. (mm) PO - Polyolefin 0.2286 0.889 **Outer Shield** Outer Shield Material: **Outer Shield Material** Unshielded **Outer Jacket** Outer Jacket Material: **Outer Jacket Material** LSZH - Low Smoke Zero Halogen Outer Jacket Ripcord: Yes **Overall Cable Overall Nominal Diameter:** 5.842 mm Pair Pair Color Code Chart: Number Color White/Blue Stripe & Blue White/Orange Stripe & Orange White/Green Stripe & Green White/Brown Stripe & Brown **Mechanical Characteristics (Overall)** Storage Temperature Range: -10°C To +75°C Installation Temperature Range: +5°C To +75°C

# Storage Temperature Range: -10°C To +75°C Installation Temperature Range: +5°C To +75°C Operating Temperature Range: -10°C To +75°C Bulk Cable Weight: 28.276 Kg/Km Max. Recommended Pulling Tension: 177.928 N Min. Bend Radius/Minor Axis: 6.350 mm

Applicable Specifications and Agency Compliance (Overall)			
Applicable Standards & Environmental Programs			
CEC/C(UL) Specification:	CM		
EU Directive 2011/65/EU (ROHS II):	Yes		
EU Directive 2000/53/EC (ELV):	Yes		
EU Directive 2002/95/EC (RoHS):	Yes		
EU RoHS Compliance Date (mm/dd/yyyy):	08/30/2006		
EU Directive 2002/96/EC (WEEE):	Yes		

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EU Directive 2003/11/EC (BFR): CA Prop 65 (CJ for Wire & Cable): Yes MII Order #39 (China RoHS): Yes Other Specification: NEMA WC-63.1 Category 5e, UL verified to Category 5e, Ethernet/IP  $^{\text{\tiny{TM}}}$  Compliant Applicable Patents: Country www.belden.com/p Flame Test **UL Flame Test:** UL1581 Vertical Tray, UL1685 Vertical Tray Flame Test **CSA Flame Test:** FT1 Suitability Suitability - Outdoor: Yes Sunlight Resistance: Yes Oil Resistance: No Plenum/Non-Plenum Plenum (Y/N): No

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## **Electrical Characteristics (Overall)**

Nom. Mutual Capacitance:

Capacitance (pF/m) 49.215

Maximum Capacitance Unbalance (pF/100 m):

Nominal Velocity of Propagation:

**VP (%)** 

Maximum Delay:

**Delay (ns/100 m)** 510

Max. Delay Skew:

Delay Skew (ns/100 m) 25

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

Max. Operating Voltage - UL:

Voltage 300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

# **Electrical Characteristics-Premise (Overall)**

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.0	65.3	65.3	63.3	63.3	20.0
4	4.0	56.3	56.3	52.3	52.3	23.6
8	5.7	51.8	51.8	46.1	46.1	25.4
10	6.4	50.3	50.3	43.9	43.9	26.0
16	8.1	47.3	47.3	39.1	39.1	26.0
20	9.2	45.8	45.8	35.2	35.2	26.0
25	10.3	44.3	44.3	34.1	34.1	25.5
31.25	11.6	42.9	42.9	31.3	31.3	25.0
62.5	16.8	38.4	38.4	21.6	21.6	23.5
100	21.7	35.3	35.3	17.1	17.1	22.5
155	27.7	32.5	32.5	4.7	4.7	19.0
200	32.0	30.8	30.8	3.0	3.0	19.0
250	36.4	29.3	29.3	>0	>0	18.0
300	40.5	28.2	28.2	>0	>0	18.0
310	41.3	27.9	27.9			18.0
350	44.3	27.2	27.2			17.0

Premise Cable Electrical Table 2:

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# **Detailed Specifications & Technical Data**

### METRIC MEASUREMENT VERSION



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Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 12	95-110	63.8	60.8
4	100 ± 12	95-110	51.7	48.7
8	100 ± 12	95-107	45.7	42.7
10	100 ± 12	95-107	43.8	40.8
16	100 ± 12	95-107	39.7	36.7
20	100 ± 12	95-107	37.7	34.7
25	100 ± 15	95-107	35.8	32.8
31.25	100 ± 15	95-107	33.9	30.9
62.5	100 ± 15	95-107	27.8	24.8
100	100 ± 15	95-107	23.8	20.8
155	100 ± 18	100 ± 10	19.9	16.9
200	100 ± 20	100 ± 10	17.7	14.7
250	100 ± 20	100 ± 10	15.8	12.8
300	100 ± 20	100 ± 10	14.2	11.2
310	100 ± 20	100 ± 10	13.9	10.9
350	100 ± 22	100 ± 10	12.9	9.9

### Notes (Overall)

Notes: EtherNet IP is a trademark of ControlNet International, Ltd. under license by Open DeviceNet Vendor Association, Inc. Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581.

Notes (Cont'd.):

T568A Plug Compatible Part Number: R301603 T568B Plug Compatible Part Number: R301604

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7935A 0101000	1,000 FT	30.000 LB	BLACK	С	4 PR #24 PP FRNHPO
7935A 0102000	2,000 FT	58.000 LB	BLACK	С	4 PR #24 PP FRNHPO

Notes: C = CRATE REEL PUT-UP.

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