

## 7936A Multi-Conductor - Category 5e Shielded Low Smoke Zero Halogen



For more Information  
please call

1-800-Belden1



### General Description:

24 AWG Bonded-Pairs solid bare copper conductors, polyolefin insulation, overall Beldfoil® shield (100% coverage), drain wire, low smoke zero halogen. Sequential marking at two foot intervals

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	24	Solid	BC - Bare Copper

Total Number of Conductors: 8

#### Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)
PO - Polyolefin	0.254

#### Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
24	7x32	TC - Tinned Copper

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
LSZH - Low Smoke Zero Halogen

Outer Jacket Ripcord: No

#### Overall Cable

Overall Nominal Diameter: 6.731 mm

#### Pair

Pair Color Code Chart:

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

### Mechanical Characteristics (Overall)

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: 50.599 Kg/Km

Max. Recommended Pulling Tension: 177.928 N

Min. Bend Radius/Minor Axis: 12.700 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CM, UL444

CEC/C(UL) Specification: CMG

EU Directive 2011/65/EU (ROHS II): Yes

EU Directive 2000/53/EC (ELV): Yes

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EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	08/19/2006
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
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

Applicable Patents:

Country
www.belden.com/p

Flame Test

UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT4

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):	330
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Nominal Velocity of Propagation:

VP (%)
70

Maximum Delay:

Delay (ns/100 m)
538 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)
45

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
9.38

Max. Operating Voltage - UL:

Voltage
300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)
3

### 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)	Min. SRL (dB)
1	2.0	65.3	62.3	63.0	60.0	20.0	23
4	4.1	56.3	53.3	51.0	49.0	23.0	23.0
8	5.8	51.8	48.8	46.0	43.0	24.5	24.5
10	6.5	50.3	47.3	43.0	41.0	25.0	25.0
16	8.2	47.3	44.3	39.0	36.0	25.0	25.0
20	9.3	45.8	42.8	36.5	33.5	25.0	25.0
25	10.4	44.3	41.3	33.9	30.9	24.3	24.3
31.25	11.7	42.9	39.9	31.0	28.0	23.6	23.6
62.5	17.0	38.4	35.4	22.0	19.0	21.5	21.5
100	22.0	35.3	32.3	14.0	11.0	20.1	20.1
200	32.4		27.8		1.0		15.0

Premise Cable Electrical Table 2:

## METRIC MEASUREMENT VERSION

### 7936A Multi-Conductor - Category 5e Shielded Low Smoke Zero Halogen

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8
4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.8
100	100 ± 15	100 ± 15	23.8	20.8
200	100 ± 25			14.7

#### Notes (Overall)

**Notes:** Operating temperatures are subject to length de-rating. Cable passes -10C Cold Bend per UL 1581.

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7936A 0101000	1,000 FT	39.000 LB	BLACK	C	4 PR #24 PP FS FRNHPO
7936A 0102000	2,000 FT	76.000 LB	BLACK	C	4 PR #24 PP FS FRNHPO

**Notes:**  
C = CRATE REEL PUT-UP.

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