

## 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

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Min. Bend Radius/Minor Axis:	12.700 mm
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**Applicable Specifications and Agency Compliance (Overall)****Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CM, UL444
CEC/C(UL) Specification:	CMG
Other Standards:	11801 Category 5
EU Directive 2000/53/EC (ELV):	Yes
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
Telecommunications Standards:	568-B.2 Category 5e
Other Specification:	NEMA WC-63.1 Category 5e, UL verified to Category 5e

**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 (%)

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## 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:

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:** US Patent #'s 5, 606, 151; 5, 734, 126. 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	305 MT	17.690 KG	BLACK	C	4 PR #24 PP FS FRNHPO
7936A 0102000	610 MT	34.473 KG	BLACK	C	4 PR #24 PP FS FRNHPO

**Notes:**

C = CRATE REEL PUT-UP.

## Test Reports

**a) UL**

- i) UL Test Reports are available on-line through the UL Client Document Access web portal.
- ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

**b) CSA**

- i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.
- ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

\* other test data may be available if requested at time of order.

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