## **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



## 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 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 (%) 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: **Overall Cable** 6.731 mm **Overall Nominal Diameter:** 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 7	Tomporature Range:	

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	&	<b>Environmental</b>	Programs
Applicable	otaniaa ao	~		og. ao

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

Page 1 of 3

# **Detailed Specifications & Technical Data**

#### **METRIC MEASUREMENT VERSION**



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

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:
UL Flame Test:
CSA Flame Test:
FT4

Suitability
Suitability - Outdoor:
Sunlight Resistance:
Ves
Oil Resistance:
No

Plenum/Non-Plenum
Plenum (Y/N):
No

## Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/m) 49.215

Maximum Capacitance Unbalance (pF/100 m): 330

Nominal Velocity of Propagation:

**VP (%)** 

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 (%)

## **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:

Page 2 of 3 09-11-2017

## **Detailed Specifications & Technical Data**

#### 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.

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

#### **Put Ups and Colors:**

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

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 0 Revision Date: 07-19-2016

© 2017 Belden, Inc All Rights Reserved

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Page 3 of 3