

7960A Multi-Conductor - Category 5e DataTuff® Quad Cables



For more Information
please call

1-800-Belden1



General Description:

22 AWG Symmetric quad solid bare copper conductors, polyolefin insulation, FRPE bedding, industrial grade sunlight- and oil-resistant PVC jacket, rip cord. Sequential marking at two foot intervals. PROFINET Type A cable

Usage (Overall)

Suitable Applications:

Industrial Ethernet Cable, Harsh Environments, Category 5e, Profinet, 100BaseTX, CMX - Outdoor, PLTC Listed, Approved for Cable Tray Use in Class 1, Division 2, Hazardous Areas and Non-hazardous Areas, Cable Trays, Raceways, Conduit and Supported by Messenger Wires, Approved for Outdoor Usage

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (in.)
4	22	Solid	BC - Bare Copper	0.026

Total Number of Conductors:

4

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
PO - Polyolefin	0.059

Inner Jacket

Inner Jacket Material:

Inner Jacket Material	Nom. Dia. (in.)
FRPE	0.154

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil - Polyester Tape	100.000
2		Braid		85.000

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
Industrial Grade PVC

Overall Cable

Overall Nominal Diameter:

0.256 in.

Pair

Pair Color Code Chart:

Number	Color
1	White
2	Blue
3	Yellow
4	Orange

Mechanical Characteristics (Overall)

Storage Temperature Range: -40°C To +80°C

Installation Temperature Range: -20°C To +60°C

Operating Temperature Range: -40°C To +80°C

Bulk Cable Weight: 40.700 lbs/1000 ft.

Max. Recommended Pulling Tension: 55 lbs.

Min. Bend Radius/Minor Axis: 2.560 in.

7960A Multi-Conductor - Category 5e DataTuff® Quad Cables

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMG, CMX-Outdoor, ITC, PLTC
CEC/C(UL) Specification:	CMG
AWM Specification:	UL Style 21047
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):	01/01/2004
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:	Category 5e - TIA 568.C.2

Flame Test

UL Flame Test:	UL1685 FT4/IEEE 1202 Vertical Tray Flame Test
C(UL) Flame Test:	FT4
IEEE Flame Test:	1202

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Sunlight Resistance:	Yes
Oil Resistance:	Yes

Plenum/Non-Plenum

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

Electrical Characteristics (Overall)

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

15

Maximum Capacitance Unbalance (pF/100 m):	66
---	----

Nominal Velocity of Propagation:

VP (%)

70

Maximum Delay:

Delay (ns/100 m)

552.000

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

5.700

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. ACR (dB)	Min RL (dB)
1	2.100	65.3	63.2	23.000
4	4.000	56.3	52.3	23.000
10	6.300	50.3	43.9	25.000
16	8.000	47.2	39.1	25.000
20	9.000	45.8	35.2	25.000
31.25	11.400	42.9	31.3	23.600

7960A Multi-Conductor - Category 5e DataTuff® Quad Cables

62.5	16.500	38.4	21.6	21.500
100	21.300	35.3	17.1	20.100

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ACRF (dB)
1	100 ± 20.2	105 ± 10	64.0
4	100 ± 14.2	100 ± 10	52.0
10	100 ± 11.3	100 ± 10	44.0
16	100 ± 11.3	100 ± 10	39.9
20	100 ± 11.3	100 ± 10	38.0
31.25	100 ± 13.2	100 ± 10	34.1
62.5	100 ± 16.9	100 ± 10	28.1
100	100 ± 20.0	100 ± 10	24.0

Notes (Overall)

Notes: Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581. Limits below 4 MHz are for information only.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7960A 1SW1000	1,000 FT	44.000 LB	GREEN, RAL 6018		PROFINET TYPE A CAT 5/5E
7960A 1SW2000	2,000 FT	88.000 LB	GREEN, RAL 6018		PROFINET TYPE A CAT 5/5E

Revision Number: 0 Revision Date: 10-23-2015

© 2015 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.