Product: 7967A

Datatuff Ind. Cat. 6 OSP Cable, 4 Pair, F/UTP, Gel Filled, 23AWG. Oil Res II

Product Description

Datatuff Industrial Category 6 Cable (350MHz), OSP Rated, 4-Pair, 23 AWG Solid Bare Copper Conductors, F/UTP, Gel-Filled, Polyethylene Jacket

Technical Specifications

Product Overview

Suitable Applications:	OSP-Outside, Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE, Noisy Environments
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/patents.

Construction Details

Conductor

Size	Stranding	Material	No. of Pairs
23	Solid	BC - Bare Copper	4

Insulation

Material	Color Code
PO - Polyolefin	White & Blue, White & Orange, White & Green, White & Brown

Inner Jacket

Material	Nom. Diameter
PE - Polyethylene	0.26 in (6.6 mm)

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	26 AWG (7x34) TC

Waterblocking:	Gel Filled

Outer Jacket

Nom. Diameter	Ripcord
0.360 in (9.14 mm)	Yes

Overall Cable Diameter (Nominal):	0.360 in (9.14 mm)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km (28.6 Ohm/1000ft)	160 pF/100m

Delay

Frequency	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	45 ns/100m	65%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation) [dB/100m]	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted) [Ohm]	Max./Min. Fitted Impedance [Ohm]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.0	74.3	72.3	70.3	67.8	64.8	20.0	100 ± 15	100 ± 15	40.0	35.0
4	3.8	65.3	63.3	59.5	55.7	52.7	23.0	100 ± 15	100 ± 15	40.0	23.0
8	5.3	60.8	58.8	53.4	49.7	46.7	24.5	100 ± 15	100 ± 15	40.0	16.9
10	6.0	59.3	57.3	51.4	47.8	44.8	25.0	100 ± 15	100 ± 15	40.0	15.0
16	7.6	56.3	54.3	46.7	43.7	40.7	25.0	100 ± 15	100 ± 15	38.0	10.9
20	8.5	54.8	52.8	44.3	41.7	38.7	25.0	100 ± 15	100 ± 15	37.0	9.0
25	9.5	53.3	51.3	41.8	39.8	36.8	24.3	100 ± 15	100 ± 15	36.0	7.0
31.25	10.7	51.9	49.9	39.2	37.9	34.9	23.6	100 ± 15	100 ± 15	35.1	5.1
62.5	15.4	47.4	45.4	30.0	31.8	28.8	21.5	100 ± 15	100 ± 15	32.0	
100	19.8	44.3	42.3	22.5	27.8	24.8	20.1	100 ± 15	100 ± 15	30.0	
155	25.2	41.5	39.5	14.3	23.9	20.9	18.8	100 ± 22	100 ± 15	28.1	
200	29.0	39.8	37.8	8.8	21.7	18.7	18.0	100 ± 22	100 ± 15	27.0	
250	32.8	38.3	36.3	3.5	19.8	16.8	17.3	100 ± 32	100 ± 15	26.0	

Voltage

Voltage Rating
300 V

Mechanical Characteristics

Temperature

Operating	Installation	Storage
-40°C To +75°C	-40°C To +60°C	-40°C To +75°C

Bend Radius

Stationary Min.	Installation Min.
3.0 in (76 mm)	3.75 in (95.3 mm)

Max. Pull Tension:	25 lbs (11 kg)
Bulk Cable Weight:	49 lbs/1000ft (73 kg/km)

Standards and Compliance

Environmental Suitability:	Outdoor, Outdoor, Sunlight Resistance, UV Resistance, Oil Resistance, Aerial - When supported by messenger wire, Burial - Engineered burial only
CPR Compliance:	CPR Euroclass: Fca; CPR UKCA Class: Fca
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA-568.2-E Category 6
ISO/IEC Compliance:	11801 ed 2.2 (2011) Class E
European Directive Compliance:	EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2017-07-10
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Cable not guaranteed to meet TIA 568.2 specification for delay above lengths of 90m. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0. Not Suitable for Direct Burial. Belden recommends using an entrance demarcation point when transitioning inside buildings with gel-filled OSP cables due to the cable design containing gel specific for wet outdoor environments. The suggested transition point is the REVConnect core coupler, part number RVACPKUBK-S1.

History

Update and Revision:	Revision Number: 0.10 Revision Date: 02-13-2025