



Product: [OSP6F](#)

Category 6 OSP Cable, 4 Pair, F/UTP, Gel Filled

Product Description

Category 6 Premise Horizontal 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	Number 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

Outer Jacket

Material	Nom. Diameter	Ripcord
PO - Polyolefin	0.360 in (9.14 mm)	Yes

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

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km	160 pF/100m

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	537.6 ns/100m	45 ns/100m	65%

High Frequency

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

Max. Pull Tension:	25 lbs (11 kg)
Bulk Cable Weight:	50 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Outdoor, Outdoor, Sunlight Resistance, Aerial - When supported by messenger wire
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA-568.2-D 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)
Other Standard Compliance(s):	Verified Category 6, ANSI/ICEA S-56-434 Outdoor Use and ANSI/ICEA S-99-689 Broadband Outdoor Use

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. 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.
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History

Update and Revision:	Revision Number: 0.335 Revision Date: 01-23-2023
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
OSP6F 0101000	Black	Reel	1,000 ft	612825400868

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