

OSP6U Multi-Conductor - Category 6 Nonbonded-Pair Outside Plant Cable



For more Information
please call

1-800-Belden1



General Description:

CAT6 (350MHz), 4-Pair, U/UTP-Unshielded, OSP Rated, Premise Horizontal Cable, 24 AWG solid bare copper conductors, polyolefin insulation, gel-filled, Patented X-Spline, PE jacket

Usage (Overall)

Suitable Applications:

Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, 350MHz Category 6, Outside Plant, Duct

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
PO - Polyolefin

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

Outer Jacket Diameter:

Nom. Dia. (in.)
0.251

Overall Cable

Overall Cabling Fillers:

Pat

Overall Cabling Separator Material:

Patented X-Spline

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: -40°C To +75°C

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

Operating Temperature Range: -40°C To +60°C

Bulk Cable Weight: 31 lbs/1000 ft.

Max. Recommended Pulling Tension: 35 lbs.

Min. Bend Radius/Minor Axis: 1 in.

Min. Bend/Installation: 2.510 in.

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Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

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):	07/01/2005
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 6 - TIA 568.C.2
ANSI Specification:	ANSI/NEMA WC-66, ANSI/UL 444
Other Specification:	REA-PE200 Approved Jacket Material

Suitability

Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - Black only, when supported by messenger wire.
Suitability - Burial:	Yes - Telcordia, IEC, ICEA
Sunlight Resistance:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)

15.700

Maximum Capacitance Unbalance (pF/100 m):	66
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Nominal Velocity of Propagation:

VP (%)

65

Max. Delay Skew:

Delay Skew (ns/100 m)

25

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

8.9

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. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)
0.772	1.800	77	75	75.2	73.2	
1	2.000	75.3	73.3	73.3	71.3	20.000
4	3.800	66.3	64.3	62.5	60.5	23.000
8	5.300	61.8	59.8	56.5	54.5	24.500
10	5.900	60.3	58.3	54.4	52.4	25.000
16	7.500	57.2	55.2	49.7	47.7	25.000
20	8.400	55.8	53.8	47.4	45.4	25.000
25	9.400	54.3	52.3	44.9	42.9	24.300
31.25	10.600	52.9	50.9	42.3	40.3	23.600
62.5	15.300	48.4	46.4	33.1	31.1	21.500
100	19.700	45.3	43.3	25.6	23.6	20.100
155	25.000	42.4	40.4	17.4	15.4	18.800
200	28.800	40.8	38.8	12	10	18.000

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250	32.600	39.3	37.3	6.7	4.7	17.300
300	36.200	38.1	36.1	2	0	16.800
350	39.500	37.1	35.1			16.300
400	42.700	36.3	34.3			15.900
500	48.600	34.8	32.8			15.200
550	51.500	34.2	32.2			14.900

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	70	68
4	100 ± 15	100 ± 15	58	56
8	100 ± 15	100 ± 15	51.9	49.9
10	100 ± 15	100 ± 15	50	48
16	100 ± 15	100 ± 15	45.9	43.9
20	100 ± 15	100 ± 15	44	42
25	100 ± 15	100 ± 15	42	40
31.25	100 ± 15	100 ± 15	40.1	38.1
62.5	100 ± 15	100 ± 15	34.1	32.1
100	100 ± 15	100 ± 15	30	28
155	100 ± 18	100 ± 15	26.2	24.2
200	100 ± 18	100 ± 15	24	22
250	100 ± 22	100 ± 15	22	20
300	100 ± 22	100 ± 15	20.5	18.5
350	100 ± 22	100 ± 15	19.1	17.1

Notes (Overall)

Notes: Frequencies above 350 MHz are for reference only. Cable is water emersion capable (burial in conduit or engineered backfill below the frost line). "BELDEN P/N OSP6U OSP CABLE -4PR24 CAT 6-- ROHS (DATE CODE) Jacket sequentially marked at 2 ft. intervals.

Reference (Overall)

Previous Part Number: 24564495

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
OSP6U 0101000	1,000 FT	30.000 LB	BLACK		CAT6 4PR U/UTP OSP REEL

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