

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.

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

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
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
---------------	----

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15.700

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

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

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

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

Revision Number: 5 Revision Date: 12-13-2016

© 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.