

**AV6UP Multi-Conductor - Enhanced Category 6 Nonbonded-Pair Cables**

**Preview Document. Not Live Data.**



For more Information  
please call

1-800-Belden1



**Description**

CAT6+ (350 MHz), 4-Pair, U/UTP-Unshielded, Plenum-CMP, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, Dual FRPO/FEP Insulation, Tape Separator, Ripcord, Flamarrest® Jacket

**Usage (Overall):**

Suitable Applications

Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155 ATM, 622 ATM, 250MHz Category 6

**Physical Characteristics (Overall):**

**Conductor:**

AWG

# Pairs	AWG	Stranding	Conductor Material
4	23	Solid	BC - Bare Copper

Total Number of Conductors

8

**Insulation:**

Insulation Material

Insulation Material
FRPO/FEP - Flame Retardant Polyolefin/Fluorinated Ethylene Propylene

**Outer Shield:**

Outer Shield Material

Outer Shield Material
Unshielded

**Outer Jacket:**

Outer Jacket Material

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

Outer Jacket Diameter

Nom. Dia. (in.)
0.230

Outer Jacket Ripcord

Yes

**Overall Cable:**

Overall Cabling Separator Material

Patented Dielectric Tape

Overall Nominal Diameter:

0.23 in.

**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):**

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Storage Temperature Range	-20°C To +75°C
Installation Temperature Range	+5°C To +50°C
Operating Temperature Range	0°C To +75°C
Bulk Cable Weight:	27 lbs/1000 ft.
Min. Bend/Installation:	2.500 in.

**Applicable Specifications and Agency Compliance (Overall):**

**Applicable Standards & Environmental Programs:**

NEC/(UL) Specification	CMP
CEC/C(UL) Specification	CMP
EU Directive 2011/65/EU (ROHS II)	Yes
Other Standards	ISO/IEC 11801 ed 2.1 (2008) Class E
EU CE Mark	Yes
EU Directive 2000/53/EC (ELV)	Yes
EU Directive 2002/95/EC (RoHS)	Yes
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

Applicable Patents

<b>Country</b>
<a href="http://www.belden.com/p">www.belden.com/p</a>

**Flame Test:**

UL Flame Test	NFPA 262 Plenum Flame Test (UL910)(FT6)
C(UL) Flame Test	FT6
CSA Flame Test	FT6

**Suitability:**

Suitability - Indoor	Yes
Suitability - Outdoor	No

**Plenum/Non-Plenum:**

Plenum (Y/N)	Yes
Non-Plenum Number	2412

**Electrical Characteristics (Overall):**

Nom. Mutual Capacitance

<b>Capacitance (pF/ft)</b>
15.000

Maximum Capacitance Unbalance

<b>Capacitance (pF/ft)</b>
330.000

Maximum Capacitance Unbalance (pF/100 m)	330
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Nominal Velocity of Propagation

<b>VP (%)</b>
72.000

Maximum Delay

<b>Delay (ns/100 m)</b>
537 @ 100MHz

Max. Delay Skew

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<b>Delay Skew (ns/100 m)</b>
35.000

Maximum Conductor DC Resistance

<b>DCR @ 20°C (Ohm/100 m)</b>
7.800

Max. Operating Voltage - UL

<b>Voltage</b>
300 V RMS

Maximum DCR Unbalanced

<b>DCR Unbalance @ 20°C (%)</b>
3.000

**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)
1	2.000	75.300	75.300	73.300	73.300	20.000
4	3.700	66.300	66.300	62.600	62.600	23.000
8	5.200	61.800	61.800	56.600	56.600	24.500
10	5.800	60.300	60.300	54.500	54.500	25.000
16	7.400	57.200	57.200	49.900	49.900	25.000
20	8.300	55.800	55.800	47.500	47.500	25.000
25	9.300	54.300	54.300	45.100	45.100	24.300
31.250	10.400	52.900	52.900	42.500	42.500	23.600
62.500	15.000	48.400	48.400	33.400	33.400	21.500
100	19.300	45.300	45.300	26.000	26.000	20.800
155	24.600	42.400	42.400	17.900	17.900	19.500
200	28.300	40.800	40.800	12.500	12.500	18.700
250	32.100	39.300	39.300	7.200	7.200	18.000
300	35.600	38.100	36.100	0.500	0.500	17.500
350	38.900	37.100	35.100	-1.700	-3.700	17.000
400	42.000	36.300	34.300	-5.700	-7.700	16.600
450	45.000	35.500	33.500	-9.500	-11.500	16.200
500	47.900	34.800	32.800	-13.000	-15.000	15.900
550	50.600	34.200	32.200	-16.400	-18.400	15.600

Premise Cable Electrical Table 2

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ACRF (dB)	Min. PSACRF (dB)
1	100 ± 15	100 ± 15	70.800	67.800
4	100 ± 15	100 ± 15	58.800	55.800
8	100 ± 15	100 ± 15	52.700	49.700
10	100 ± 15	100 ± 15	50.800	47.800
16	100 ± 15	100 ± 15	46.700	43.700
20	100 ± 15	100 ± 15	44.800	41.800
25	100 ± 15	100 ± 15	42.800	39.800
31.250	100 ± 15	100 ± 15	40.900	37.900
62.500	100 ± 15	100 ± 15	34.900	31.900
100	100 ± 15	100 ± 15	30.800	27.800
155	100 ± 22	100 ± 15	27.000	24.000
200	100 ± 22	100 ± 15	24.800	21.800
250	100 ± 32	100 ± 15	22.800	19.800
300	100 ± 32	100 ± 15	21.300	18.300
350	100 ± 32	100 ± 15	19.900	16.900
400	100 ± 32	100 ± 15	18.800	15.800
450	100 ± 32	100 ± 15	17.700	14.700
500	100 ± 32	100 ± 15	16.800	13.800
550	100 ± 32	100 ± 15	16.000	13.000

**Notes (Overall):**

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Notes Jacket sequentially marked at 2 ft intervals. Third party verified to ANSI/TIA-568-C.2, Category 6. Values above 350 MHz are for Engineering Information Only.

#### Reference (Overall):

Previous Part Number	24567415, 24567715, 24567736T, 24567615T, 25067545, 25067545T, 25067515T, 24567745T, 24567715T, 25067845, 25067845T, 25067836, 25067836T, 24567815, 24567815T, 2456705T, 24567145, 24567145T, 24567115, 24567115T, 24567345, 24567345T, 24567336, 24567336T, 24567315, 24567315T, 24567445T, 24567436, 24567436T, 24567415T, 24567A15T, 24567945, 24567945T, 24567936T, 24567915, 24567915T
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