

## 6663U5 Multi-Conductor - Compliant Cat 5e for Video, Sound and Security Applications



For more Information  
please call

1-800-Belden1



### General Description:

Surveillance Category Cable, Plenum-CMP, Cat5e (100MHz), 4-24 AWG Solid Bare Copper Pairs with FEP insulation, UTP, Flamarest® jacket with ripcord

### Usage (Overall)

**Suitable Applications:** Video, Sound and Security, Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155 ATM, 622 ATM, 100MHz CAT5e

### 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
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
Flamarest®	LS PVC - Low Smoke Polyvinyl Chloride

**Outer Jacket Ripcord:** Yes

#### Overall Cable

**Overall Nominal Diameter:** 4.826 mm

#### 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:** -20°C To +60°C

**Installation Temperature Range:** 0°C To +60°C

**Operating Temperature Range:** -20°C To +60°C

**Bulk Cable Weight:** 31.252 Kg/Km

**Max. Recommended Pulling Tension:** 177.928 N

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Min. Bend Radius/Minor Axis:	20.320 mm
Min. Bend/Installation:	48.260 mm

### 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
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	03/18/2009
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
Other Specification:	NEMA WC-63.1 Category 5e, ETL Verified to Category 5e

#### Applicable Patents:

Country
www.belden.com/p

#### Flame Test

UL Flame Test:	NFPA 262
CSA Flame Test:	FT6

#### Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Suitability - Burial:	No
Sunlight Resistance:	No
Oil Resistance:	No
Non-halogenated:	No

#### Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	5663U5

### Electrical Characteristics (Overall)

#### Nom. Mutual Capacitance:

Capacitance (pF/m)
49.215

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

VP (%)
72

#### Maximum Delay:

Delay (ns/100 m)
538 @ 100MHz

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### Max. Delay Skew:

Delay Skew (ns/100 m)
45

### Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
9.38

### 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)	Min. SRL (dB)
1	2.000	65.3	62.3	63.0	60.3	20.000	23.0
4	4.100	56.3	53.3	51.0	49.2	23.000	23.0
8	5.800	51.8	48.8	46.0	43.0	24.500	24.5
10	6.500	50.3	47.3	43.0	40.8	25.000	25.0
16	8.200	47.3	44.3	39.0	36.0	25.000	25.0
20	9.300	45.8	42.8	36.5	33.5	25.000	25.0
25	10.400	44.3	41.3	33.9	30.9	24.300	24.3
31.25	11.700	42.9	39.9	31.0	28.2	23.600	23.6
62.5	17.000	38.4	35.4	22.0	19.0	21.500	21.5
100	22.000	35.3	32.3	14.0	10.3	20.100	20.1

### Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8
4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.9
100	100 ± 15	100 ± 15	23.8	20.8

## Notes (Overall)

**Notes:** Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2, Category 5e.

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
6663U5 010U1000	1,000 FT	22.000 LB	BLACK		4 PR #24 FRPO/FEP FLRST
6663U5 010U500	500 FT	11.500 LB	BLACK		4 PR #24 FRPO/FEP FLRST

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## METRIC MEASUREMENT VERSION

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