

Product: 5284UE

PTZ, #23-2pr (Cat5e), #16-2c, CMR

Product Description

PTZ (Control + Power) Cable, Riser-CMR, 2-23 AWG solid bare copper pairs with polyolefin insulation (Cat5e), 2-16 AWG stranded tinned copper conductors with polyolefin insulation, PVC jacket

Technical Specifications

Product Overview

Suitable Applications:	Surveillance, CCTV Camera, PTZ (Pan-Tilt-Zoom), UTP-CCTV
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/resources/patents.

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	Nominal Diameter	No. of Conductors	No. of Pairs
Cat 5e Pair	23	Solid	BC - Bare Copper	0.023 in		2
Pair1	16	19x29	TC - Tinned Copper	0.059 in	2	

Conductor Count:	6
Total Number of Pairs:	2

Insulation

Element	Material	Nominal Diameter
Cat 5e Pair	PO - Polyolefin	0.04 in
Pair1	PO - Polyolefin	0.077 in

Color Chart

Number	Color
Cat 5e Pair1	Blue and White/Blue
Cat 5e Pair2	Orange and White/Orange
Pair1	Black & Red

Inner Shield

Element	Material
Cat 5e Pair	No Shield
Pair1	No Shield

Outer Shield

Material
No Shield

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.233 in	0.019 in

Electrical Characteristics

Conductor DCR

Element	Max. Conductor DCR	Max. DCR Unbalance	Nominal Conductor DCR
Cat 5e Pair	27.432 Ohm/1000ft	5 %	90 Ohm/km
Pair1	14.7 Ohm/km		14.7 Ohm/km

Capacitance

Element	Max. Capacitance Unbalance	Nom. Capacitance Conductor to Conductor
Cat 5e Pair	330 pF/ft	15 pF/ft
Pair1		

Delay

Element	Max. Delay	Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
Cat 5e Pair	45 ns/ft	70 ns/100m	45 ns/ft	70%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. PSNEXT [dB]	Min. PSACR [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Fitted Impedance
1 MHz	2 dB/100m	62 dB	60 dB	61 dB	20 dB	100 ± 15%
4 MHz	4.1 dB/100m	53 dB	49 dB	49 dB	23 dB	100 ± 15%
8 MHz	5.8 dB/100m	48 dB	43 dB	43 dB	24.5 dB	100 ± 15%
10 MHz	6.5 dB/100m	47 dB	41 dB	41 dB	25 dB	100 ± 15%
16 MHz	8.2 dB/100m	44 dB	36 dB	37 dB	25 dB	100 ± 15%
20 MHz	9.3 dB/100m	42 dB	34 dB	35 dB	25 dB	100 ± 15%
25 MHz	10.4 dB/100m	41 dB	31 dB	33 dB	24.3 dB	100 ± 15%
31.25 MHz	11.7 dB/100m	39 dB	28 dB	31 dB	23.6 dB	100 ± 15%
62.5 MHz	17 dB/100m	35 dB	19 dB	24 dB	21.5 dB	100 ± 15%
100 MHz	22 dB/100m	32 dB	11 dB	21 dB	20.1 dB	100 ± 15%

Current

Element
Cat 5e Pair
Pair1

Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	Max. Capacitance Unbalance for Pair: 330 pf/ft
Other Electrical Characteristic 2:	Maximum DCR Unbalance for Pair @ 20°C: 5%

Temperature Range

Installation Temp Range:	0°C To +75°C
UL Temp Rating:	75°C
Operating Temp Range:	-20°C To +75°C
Separation Temp Range:	0°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	32 lbs/1000ft
Max. Pull Tension:	105 lbs

Standards

NEC Articles:	Article 800
NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMG
ISO/IEC Compliance:	ISO/IEC 11801, Category 5e for data pairs
Other Standards:	ISO/IEC 11801, Category 5e

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Riser
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes

EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes

Flammability, LS0H, Toxicity Testing

C(UL) Flammability:	FT4
UL Flammability:	UL1666 Riser
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	6284UE

Related Part Numbers

Variants

Item #	Color	UPC
5284UE 0101000	Black	612825158851
5284UE 0091000	White	612825158837
5284UE 009500	White	612825158844

Footnote:	C - CRATE REEL PUT-UP.

Product Notes

Notes:	Overall jacket sequentially marked.

History

Update and Revision:	Revision Number: 0.360 Revision Date: 12-15-2021

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