



# Product: <u>6284UE</u> ☑

PTZ, #23-2pr, #16-2c, CMP

# **Product Description**

PTZ (Control + Power) Cable, Plenum-CMP, 2-23 AWG solid bare copper pairs with FEP insulation, 2-16 AWG stranded bare copper conductors with FEP insulation, Flamarrest® 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/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	Total Number of Pairs:		2			

#### Insulation

Element	Material	Nominal Diameter	
Cat 5e Pair	FEP - Fluorinated Ethylene Propylene	0.041 in	
Pair1	PVC - Polyvinyl Chloride	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	Material Trade Name	Nominal Diameter	Nominal Wall Thickness	
PVC - Polyvinyl Chloride	Flamarrest®	0.187 in	0.0145 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

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 Temperature Range:	0°C To +75°C
UL Temp Rating:	75°C
Operating Temperature Range:	-10°C To +75°C
Separation Temp Range:	0°C To +75°C

### **Mechanical Characteristics**

Bulk Cable Weight:	35 lbs/1000ft
Max. Pull Tension:	105 lbs

## Standards

NEC Articles:	Article 800
NEC/(UL) Compliance:	СМР
CEC/C(UL) Compliance:	СМР
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 - Plenum
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: EU CE Mark: MII Order #39 (China RoHS):	Yes Yes
	Yes
MII Order #39 (China RoHS):	
	Yes
Suitability	
Suitability - Indoor:	Yes
Flammability, LS0H, Toxicity Testing	
CSA/C(UL) Flammability:	FT6
UL Flammability:	NFPA 262
UL voltage rating:	300 V RMS
Plenum/Non-Plenum	
Plenum (Y/N):	Yes
Related Part Numbers	
Non-Plenum Number:	5284UE
Variants	
Item # Color UPC	
6284UE 0101000 Black 612825174578	
6284UE 010500 Black 612825174585	
6284UE 0091000 White 612825174554	
6284UE 009500 White 612825174561	
Footnote:	C - CRATE REEL PUT-UP.
Product Notes	
Notes:	Overall jacket sequentially marked.
History	
Update and Revision:	Revision Number: 0.340 Revision Date: 04-29-2024

© 2024 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The 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 regulators based on their individual usage of the product.