



Product: [2183P](#)

4K UHD Media Cable, 4 Pair 23 AWG, Flamarrest® Jacket, CMP

Product Description

4K UHD Media Cable, 4-Pair, F/UTP O/A Foil Shielded, Plenum CMP-LP (0.6A), 23 AWG Solid Bare Copper Conductors, Helical TC Drain, Solid FEP Insulation, FEP Rod Filler, Corrugated Flex Shield, Rip Cord, Flamarrest® Jacket

Technical Specifications

Product Overview

Suitable Applications:	HDBaseT, Full 5-Play, 4K (UHD/DCI), POH, POE
------------------------	--

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Pairs
Pair(s)	23	Solid	BC - Bare Copper	4

Conductor Count:	8
Total Number of Pairs:	4

Insulation

Element	Material
Pair(s)	FEP - Fluorinated Ethylene Propylene

Bonded-Pair:	Yes
--------------	-----

Color Chart

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Outer Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG
Corrugated Tape	Alum / Poly	Beldfoil®	100 %	TC - Tinned Copper	26

Outer Jacket Material

Material	Material Trade Name	Nominal Diameter	Ripcord
PVC-LS - Polyvinyl Chloride (Low Smoke)	Flamarrest®	0.260 in	Yes

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
93.8 Ohm/km	5 %

Capacitance

Max. Capacitance Unbalance	Nom. Mutual Capacitance
330 pF/100m	15 pF/ft

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	2 dB/100m
4 MHz	3.8 dB/100m
8 MHz	4.3 dB/100m
10 MHz	5.9 dB/100m
16 MHz	7.5 dB/100m
20 MHz	8.3 dB/100m
25 MHz	9.3 dB/100m
31.2 MHz	10.4 dB/100m
62.5 MHz	14.8 dB/100m
100 MHz	18.8 dB/100m
125 MHz	21 dB/100m
155 MHz	23 dB/100m
175 MHz	24.9 dB/100m

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
100 MHz	537.6 ns/100m	45 ns/100m	72 %

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted)
1 MHz	2.0 dB/100m	65.3 dB	62.3 dB	63.3 dB	60.3 dB	63.8 dB	60.8 dB	20.0 dB	100 +/- 15
4 MHz	3.8 dB/100m	56.3 dB	53.3 dB	52.5 dB	49.5 dB	51.8 dB	48.8 dB	23.0 dB	100 +/- 15
8 MHz	5.3 dB/100m	51.8 dB	48.8 dB	46.5 dB	43.5 dB	45.7 dB	42.7 dB	24.5 dB	100 +/- 15
10 MHz	5.9 dB/100m	50.3 dB	47.3 dB	44.4 dB	41.4 dB	43.8 dB	40.8 dB	25.0 dB	100 +/- 15
16 MHz	7.5 dB/100m	47.2 dB	44.2 dB	39.8 dB	36.8 dB	39.7 dB	36.7 dB	25.0 dB	100 +/- 15
20 MHz	8.4 dB/100m	45.8 dB	42.8 dB	37.4 dB	34.4 dB	37.8 dB	34.8 dB	25.0 dB	100 +/- 15
25 MHz	9.3 dB/100m	44.3 dB	41.3 dB	35.0 dB	32.0 dB	35.8 dB	32.8 dB	24.3 dB	100 +/- 15
31.25 MHz	10.5 dB/100m	42.9 dB	39.9 dB	32.4 dB	29.4 dB	33.9 dB	30.9 dB	23.6 dB	100 +/- 15
62.5 MHz	14.8 dB/100m	38.4 dB	35.4 dB	23.6 dB	20.6 dB	27.9 dB	24.9 dB	21.5 dB	100 +/- 15
100 MHz	18.8 dB/100m	35.3 dB	32.3 dB	16.5 dB	13.5 dB	23.8 dB	20.8 dB	20.1 dB	100 +/- 15
125 MHz	21.0 dB/100m	33.8 dB	30.8 dB	12.8 dB	9.8 dB	21.9 dB	18.9 dB	19.4 dB	100 +/- 22
155 MHz	23.4 dB/100m	32.4 dB	29.4 dB	9.0 dB	6.0 dB	20.0 dB	17.0 dB	18.8 dB	100 +/- 22
175 MHz	24.9 dB/100m	31.7 dB	28.7 dB	6.8 dB	3.8 dB	18.9 dB	15.9 dB	18.4 dB	100 +/- 22
200 MHz	26.6 dB/100m	30.8 dB	27.8 dB	4.1 dB	1.1 dB	17.8 dB	14.8 dB	18.0 dB	100 +/- 22
250 MHz	29.8 dB/100m	29.3 dB	26.3 dB			15.8 dB	12.8 dB	17.3 dB	100 +/- 22
300 MHz	32.7 dB/100m	28.1 dB	25.1 dB			14.3 dB	11.3 dB	16.8 dB	100 +/- 22
400 MHz	35.4 dB/100m	27.1 dB	24.1 dB			12.9 dB	9.9 dB	16.3 dB	100 +/- 22
450 MHz	37.9 dB/100m	26.3 dB	23.3 dB			11.8 dB	8.8 dB	15.9 dB	100 +/- 32
500 MHz	42.5 dB/100m	24.8 dB	21.8 dB			9.8 dB	6.8 dB	15.2 dB	100 +/- 32

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Installation Temp Range:	0°C To +75°C
UL Temp Rating:	90°C
Storage Temp Range:	-20°C To +75°C
Operating Temp Range:	-20°C To +75°C

Mechanical Characteristics

Cold Bend Test:	-20°C Compliance per UL 1581
Bulk Cable Weight:	36 lbs/1000ft
Max Recommended Pulling Tension:	45 lbs
Min Bend Radius During Installation:	2.75 in
Min Bend Radius/Minor Axis:	1.0 in

Standards

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
ISO/IEC Compliance:	11801 ed 2.2 (2011) Class D
IEEE Specification:	POE per 802.3af & POE+ 802.3at-2009
Other Standards:	C(UL)US CMP 90C OR (UL) CMR-LP (0.6A) OR CL3R-LP (0.6A) OR POH, HDBaseT Recommended Cable

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Plenum
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
EU REACH SVHC Compliance (yyyy-mm-dd):	2017-07-10
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	No
Suitability - Oil Resistance:	No
Suitability - Outdoor:	No
Suitability - Sunlight Resistance:	No

Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262 Plenum (UL 910)
CSA Flammability:	FT6
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
---------------	-----

Part Number

Non-Plenum Number:	2183R
--------------------	-------

Variants

Item #	Color	Putup Type	Length	UPC
2183P 010A250	Black	Reel-in-Box	250 ft	612825392958
2183P 0101000	Black	Reel	1,000 ft	612825391678
2183P 010A1000	Black	Reel-in-Box	1,000 ft	612825391708
2183P 010Z1000	Black	ReelTuff Box	1,000 ft	612825433231
2183P D15A1000	Blue	Reel-in-Box	1,000 ft	612825391685
2183P D15Z1000	Blue	ReelTuff Box	1,000 ft	612825433286
2183P 009A1000	White	Reel-in-Box	1,000 ft	612825391692
2183P 009Z1000	White	ReelTuff Box	1,000 ft	612825433187

Product Notes

Notes:	Values Above 100 MHz are for Engineering Information Only. Print Includes Descending Footage Markings.
--------	--

History

Update and Revision:	Revision Number: 0.239 Revision Date: 05-11-2020
----------------------	--

© 2020 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 regulations based on their individual usage of the product.