



Product: [2183NH](#)

4K UHD Media Cable, 4 Pair AWG, LSZH Jacket, CM

Product Description

4K UHD Media Cable, 4-Pair, F/UTP O/A Foil Shielded, CM-LP (0.6A), 23 AWG Solid Bare Copper Conductors, Polyolefin Insulation, FHDPE Rod Filler, Corrugated Flex Shield with helical TC Drain, Ripcord, LSZH Jacket

Technical Drawing



Technical Specifications

Product Overview

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

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
23	Solid	BC - Bare Copper	4

Total Number of Pairs:	4
------------------------	---

Insulation

Material
PO - Polyolefin

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	Aluminum Foil-Polyester Tape	Beldfoil®	100.0 %	TC - Tinned Copper	26

Outer Jacket Material

Material	Nominal Diameter	Ripcord
FRNC / LSZH	0.290 in	Yes

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
93.8 Ohm/km	5.0 %

Capacitance

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

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
100 MHz	537.6 ns/100m	45 ns/100m	72.0 %

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:	37 lbs/1000ft
Max Recommended Pulling Tension:	45 lbs
Min Bend Radius During Installation:	3.0 in
Min Bend Radius/Minor Axis:	1.25 in

Standards

NEC/(UL) Specification:	CM-LP
CEC/C(UL) Specification:	CM-LP
ISO/IEC Compliance:	11801 ed 2.2 (2011) Class D
CPR Euroclass:	Cca-s1a,d1,a1
IEEE Specification:	POE per 802.3af & POE+ 802.3at-2009
Other Specification:	ABS certificate 18-HS1803790-PDA
Other Standards:	C(UL)JUS CM 90C OR (UL) CM-LP (0.6A) OR CL3-LP (0.6A) OR POH, HDBaseT Recommended Cable

Applicable Environmental and Other Programs

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
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL 1685 Vertical Tray
ISO/IEC Flammability:	IEC 60332-1-2

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	2183P

Part Number

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

Variants

Item #	Color	UPC	Length
2183NH	Black		1,000 ft
2183NH 0101000	Black	612825444237	1,000 ft
2183NH 010Z1000	Black	612825444268	1,000 ft
2183NH 0061000	Blue, Light	612825444213	1,000 ft
2183NH 006Z1000	Blue, Light	612825444244	1,000 ft
2183NH 0091000	White	612825444220	1,000 ft
2183NH 009Z1000	White	612825444251	1,000 ft

Product Notes

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

History

Update and Revision:

Revision Number: 0.23 Revision Date: 05-24-2019

© 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.