



Product: [2C0.5HCH](#)

MachFlex™ LiHCH, 2 C 0.5mm² Str BC, PE Ins, TCBS, LSZH Jkt

Product Description

MachFlex™ LiHCH LSZH Control & Signal Cables, 2 Conductor 0.5mm² Stranded Bare Copper, Polyethylene Insulation, Tinned Copper Braid Shield, LSZH Jacket

Technical Specifications

Product Overview

Suitable Applications:	Designed for applications which are installed in occasional flexing and fixed locations. Cable applications include precision control sensors, pressure gauge, temperature controllers, control panels, vibration monitoring systems, intelligent security controllers, production machinery and many more. Tinned cooper braid shield ensure the cables with excellent noise immunity. This LSZH version with UL certification emits limited smoke and no halogen when exposed to high sources of heat. It can considerably reduce the amount and density of the smoke, toxic and corrosive gas emitted during a fire, enable easier evacuation as well as safer firefighting operations.
------------------------	--

Construction Details

Conductor				
Element	No. of Elements	Size	Stranding	Material
Conductor(s)	2	0.5 mm²	Stranded	BC - Bare Copper

Insulation	
Material	Color Code
PE - Polyethylene	White, Brown

Outer Shield	
Shield Type	Material
Braid	Tinned Copper (TC)

Outer Jacket	
Material	
LSZH - Low Smoke Zero Halogen (Flame Retardant)	
Overall Cable Diameter (Nominal):	4.6 mm (0.18 in)

Electrical Characteristics

Electricals	
Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Shield
80 pF/m (24 pF/ft)	120 pF/m (37 pF/ft)

Voltage	
Voltage Rating	
500 V (Max. Operating Voltage), 1500 V (Testing Voltage)	

Mechanical Characteristics

Temperature	
Operating	Installation
5°C to +70°C(Occasional movement)	40°C to +80°C(Fixed installation)

Bend Radius

Installation Min.	Flexing Min.
27.6 mm (1.09 in)	69 mm (2.7 in)

Bulk Cable Weight: 28 kg/km (19 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Sunlight Resistance, UV Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2, DIN VDE 0482-332-1-2, DIN EN 60332-1-2
ISO/IEC Compliance:	IEC 60228
CENELEC Compliance:	EN 50290-2-22, EN 50363-4-1
European Halogen Free Standards:	IEC 60754-1 - Halogen Amount = IEC 60754-1, IEC 60754-2
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2)
Other Standard Compliance(s):	EN 61034-2, VDE 0812, DIN 47100, BS 6360

Product Notes

Notes:	Smoke/Halogen Properties : IEC 60754-1, IEC 60754-2, VDE 0482-754-1, VDE 0482-754-2
--------	---

History

Update and Revision:	Revision Number: 0.31 Revision Date: 02-15-2024
----------------------	---

Part Numbers

Variants

Item #	Color	Length
2C0.5HCH 010100M	Black	100 m
2C0.5HCH 010200M	Black	200 m
2C0.5HCH 010300M	Black	300 m
2C0.5HCH 006100M	Blue	100 m
2C0.5HCH 006200M	Blue	200 m
2C0.5HCH 006300M	Blue	300 m
2C0.5HCH F2V100M	Gray, RAL 7032	100 m
2C0.5HCH F2V200M	Gray, RAL 7032	200 m
2C0.5HCH F2V300M	Gray, RAL 7032	300 m

© 2025 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.