



Product: [3C1.0HCH](#)

MachFlex™ LiHCH, 3 C 1 mm² Str BC, PE Ins, TCBS, LSZH Jkt

Product Description

MachFlex™ LiHCH LSZH Control & Signal Cables, 3 Conductor 1 mm² 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.
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	3	1 mm²	Stranded	BC - Bare Copper

Insulation

Material	Color Code
PE - Polyethylene	White, Brown, Green

Outer Shield

Shield Type	Material
Braid	Tinned Copper (TC)

Outer Jacket

Material
LSZH - Low Smoke Zero Halogen (Flame Retardant)

Overall Cable Diameter (Nominal):	5.6 mm (0.22 in)
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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.
33.6 mm (1.32 in)	84 mm (3.3 in)

Bulk Cable Weight: 51 kg/km (34 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
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History

Update and Revision:	Revision Number: 0.27 Revision Date: 01-09-2024
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Part Numbers

Variants

Item #	Color	Length
3C1.0HCH 010100M	Black	100 m
3C1.0HCH 010200M	Black	200 m
3C1.0HCH 010300M	Black	300 m
3C1.0HCH 006100M	Blue	100 m
3C1.0HCH 006200M	Blue	200 m
3C1.0HCH 006300M	Blue	300 m
3C1.0HCH F2V100M	Gray, RAL 7032	100 m
3C1.0HCH F2V200M	Gray, RAL 7032	200 m
3C1.0HCH F2V300M	Gray, RAL 7032	300 m

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