



**Product:** [12P0.5HCH](#)

MachFlex™ LiHCH (TP), 12 Pr 0.5mm<sup>2</sup> Str BC, PE Ins, TCBS, LSZH Jkt

### Product Description

MachFlex™ LiHCH (TP) Signal Cables, 12 Pair 0.5mm<sup>2</sup> 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. Twistedpair (TP) design reduced crosstalk effects. 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
Pair(s)	12	0.5 mm <sup>2</sup>	Stranded	BC - Bare Copper

##### Insulation

Material	Color Code
PE - Polyethylene	1. White & Brown, 2. Green & Yellow, 3. Grey & Pink, 4. Red & Blue, 5.Black & Violet, 6. Gray/Pink & Red/Blue, 7. White/Green & Brown/Green, 8. White/Yellow & Yellow/Brown, 9. White/Gray & Gray/Brown, 10. White/Pink & Pink/Brown, 11. White/Blue & Brown/Blue, 12. White/Red & Brown/Red

##### Outer Shield

Shield Type	Material
Braid	Tinned Copper (TC)

##### Outer Jacket

Material
LSZH - Low Smoke Zero Halogen (Flame Retardant)

Overall Cable Diameter (Nominal):	13.6 mm (0.535 in)
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#### Electrical Characteristics

##### 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

Stationary Min.	Installation Min.
204 mm (8.03 in)	81.6 mm (3.21 in)

Bulk Cable Weight:	232 kg/km (156 lbs/1000ft)
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## Standards and Compliance

Environmental Suitability:	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 50290-2-23EN 50290-2-27
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):	VDE 0295, BS 6360, VDE 0812, DIN 47100

## Product Notes

Notes:	Smoke/Halogen Properties : IEC 61034-2, IEC 60754-1, IEC 60754-2, VDE 0482-754-1, VDE 0482-754-2
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## History

Update and Revision:	Revision Number: 0.19 Revision Date: 07-15-2024
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## Part Numbers

### Variants

Item #	Color	Length
12P0.5HCH 010100M	Black	100 m
12P0.5HCH 010200M	Black	200 m
12P0.5HCH 010300M	Black	300 m
12P0.5HCH 006100M	Blue	100 m
12P0.5HCH 006200M	Blue	200 m
12P0.5HCH 006300M	Blue	300 m
12P0.5HCH F2V100M	Gray, RAL 7032	100 m
12P0.5HCH F2V200M	Gray, RAL 7032	200 m
12P0.5HCH F2V300M	Gray, RAL 7032	300 m

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