



Product: [16P0.5HCH](#)

MachFlex™ LiHCH (TP), 16 Pr 0.5mm² Str BC, PE Ins, TCBS, LSZH Jkt

Product Description

MachFlex™ LiHCH (TP) Signal Cables, 16 Pair 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. 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. |
|------------------------|---|

Construction Details

| Conductor | | | | |
|-----------|-----------------|---------|-----------|------------------|
| Element | No. of Elements | Size | Stranding | Material |
| Pair(s) | 16 | 0.5 mm² | 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, 13. White/Black & Brown/Black, 14. Gray/Green & Yellow/Gray, 15. Pink/Green & Yellow/Pink, 16. Green/Blue & Yellow/Blue |

| Outer Shield | |
|--------------|--------------------|
| Shield Type | Material |
| Braid | Tinned Copper (TC) |

| Outer Jacket | |
|---|--|
| Material | |
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | |

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|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 15.1 mm (0.594 in) |
|-----------------------------------|--------------------|

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. |
| 226.5 mm (8.917 in) | 90.6 mm (3.57 in) |

| | |
|--------------------|----------------------------|
| Bulk Cable Weight: | 290 kg/km (190 lbs/1000ft) |
|--------------------|----------------------------|

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 50290-2-23, EN 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

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| 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

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|----------------------|---|
| Update and Revision: | Revision Number: 0.15 Revision Date: 07-04-2024 |
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Part Numbers

Variants

| Item # | Color | Length |
|-------------------|----------------|--------|
| 16P0.5HCH 010100M | Black | 100 m |
| 16P0.5HCH 010200M | Black | 200 m |
| 16P0.5HCH 010300M | Black | 300 m |
| 16P0.5HCH 006100M | Blue | 100 m |
| 16P0.5HCH 006200M | Blue | 200 m |
| 16P0.5HCH 006300M | Blue | 300 m |
| 16P0.5HCH F2V100M | Gray, RAL 7032 | 100 m |
| 16P0.5HCH F2V200M | Gray, RAL 7032 | 200 m |
| 16P0.5HCH F2V300M | Gray, RAL 7032 | 300 m |

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