



Product: [4P1.0HCH](#)

MachFlex™ LiHCH (TP), 4 Pr 1mm² Str BC, PE Ins, TCBS, LSZH Jkt

Product Description

MachFlex™ LiHCH (TP) Signal Cables, 4 Pair 1mm² 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)   | 4               | 1 mm² | Stranded  | BC - Bare Copper |

| Insulation        |  |
|-------------------|--|
| Material          | Color Code   |
| PE - Polyethylene | 1. White & Brown, 2. Green & Yellow, 3. Grey & Pink, 4. Red & Blue |

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

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

|                                   |                  |
|-----------------------------------|------------------|
| Overall Cable Diameter (Nominal): | 9.8 mm (0.39 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. |
| 147 mm (5.79 in) | 58.8 mm (2.31 in) |

|                    |                             |
|--------------------|-----------------------------|
| Bulk Cable Weight: | 135 kg/km (90.7 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

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

History

|                      |   |
|----------------------|---|
| Update and Revision: | Revision Number: 0.17 Revision Date: 07-15-2024 |
|----------------------|---|

Part Numbers

Variants

| Item #           | Color          | Length |
|------------------|----------------|--------|
| 4P1.0HCH 010100M | Black          | 100 m  |
| 4P1.0HCH 010200M | Black          | 200 m  |
| 4P1.0HCH 010300M | Black          | 300 m  |
| 4P1.0HCH 006100M | Blue           | 100 m  |
| 4P1.0HCH 006200M | Blue           | 200 m  |
| 4P1.0HCH 006300M | Blue           | 300 m  |
| 4P1.0HCH F2V100M | Gray, RAL 7032 | 100 m  |
| 4P1.0HCH F2V200M | Gray, RAL 7032 | 200 m  |
| 4P1.0HCH F2V300M | Gray, RAL 7032 | 300 m  |

© 2024 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.