



Product: [3X1.0SH](#) 

MachFlex™ 350 SH, 3C 1 mm² Str BC, PP Ins, LSZH Inner Jkt, GSW Brd, LSZH Outer Jkt

Product Description

MachFlex™ 350 SH Control Cable 3 Conductor 1 mm² Stranded Bare Copper, PP Insulation, LSZH Inner Jacket, Galvanized Steel Wire Braiding Armor, LSZH Outer 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, multi axis control machines, temperature controllers, control panels, machine cutting tools, auxiliary equipment, motor speed control, production machinery and many more. Galvanized steel wire braid armor provides excellent mechanical protection. This LSZH material 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 | Stranding Class | Material |
|--------------|-----------------|-------------------|-----------|-----------------|------------------|
| Conductor(s) | 3 | 1 mm ² | Stranded | Class 5 | BC - Bare Copper |

Insulation

| Element | Material | Color Code |
|--------------|--------------------|------------------------------|
| Conductor(s) | PP - Polypropylene | Black #1, Black #2, Black #3 |

Inner Jacket

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

Armor

| Armor Type & Material |
|------------------------------|
| SWB - Steel Wire Braid Armor |

Outer Jacket

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

| | |
|-----------------------------------|------------------|
| Overall Cable Diameter (Nominal): | 8.6 mm (0.34 in) |
|-----------------------------------|------------------|

Electrical Characteristics

Voltage

| Voltage Rating |
|--|
| 300 / 500 V (Max. Operating Voltage), 4000 V (Testing Voltage) |

Mechanical Characteristics

Temperature

| Operating | Installation |
|--------------------------------------|-------------------------------------|
| -25°C to +70°C (Occasional movement) | -40°C to +80°C (Fixed installation) |

Bend Radius

| Installation Min. | Flexing Min. |
|-------------------|--------------|
| 51.6 mm (2.03 in) | 172 mm |

Bulk Cable Weight: 103 kg/km (69.2 lbs/1000ft)

Standards and Compliance

| | |
|----------------------------------|--|
| Environmental Suitability: | UV Resistance, Oil Resistance |
| Flammability / Reaction to Fire: | IEC 60332-1-2, DIN VDE 048233212, DIN EN 6033212 |
| ISO/IEC Compliance: | IEC 60228 |
| CENELEC Compliance: | EN 50290-2-22, 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, IEC 60227-5, EN 50525-3-11, EN 61034-2, BS 6360 |

Product Notes

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

History

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|----------------------|---|
| Update and Revision: | Revision Number: 0.20 Revision Date: 09-07-2025 |
|----------------------|---|

Part Numbers

Variants

| Item # | Color | Length |
|-----------------|----------------|--------|
| 3X1.0SH 010100M | Black | 100 m |
| 3X1.0SH 010200M | Black | 200 m |
| 3X1.0SH 010300M | Black | 300 m |
| 3X1.0SH 006100M | Blue | 100 m |
| 3X1.0SH 006200M | Blue | 200 m |
| 3X1.0SH 006300M | Blue | 300 m |
| 3X1.0SH G8U100M | Gray, RAL 7001 | 100 m |
| 3X1.0SH G8U200M | Gray, RAL 7001 | 200 m |
| 3X1.0SH G8U300M | Gray, RAL 7001 | 300 m |

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