



**Product:** [20G1.5CH](#) 

MachFlex™ 350CH, 20 C+1G 1.5 mm<sup>2</sup> Str BC, PP Ins, TCBS, LSZH Jkt

## Product Description

MachFlex™ 350CH, 20 Conductor + 1 Ground 1.5 mm<sup>2</sup> Stranded Bare Copper, PP 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, multi axis control machines, temperature controllers, control panels, machine cutting tools, auxiliary equipment, motor speed control, production machinery and many more. Tinned copper braid shield ensures cables with excellent noise immunity. 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 | Material         |
|--------------|-----------------|---------------------|-----------|------------------|
| Conductor(s) | 19              | 1.5 mm <sup>2</sup> | Class 5   | BC - Bare Copper |

#### Insulation

| Material           | Color Code   |
|--------------------|--|
| PP - Polypropylene | Black #1, Black #2, Black #3, Black #4, Black #5, Black #6, Black #7, Black #8, Black #9, Black #10, Black #11, Black #12, Black #13, Black #14, Black #15, Black #16, Black #17, Black #18, Black #19 |
| PP - Polypropylene | Green/Yellow   |

#### Outer Shield

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

#### Inner Jacket

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

#### Outer Jacket

| Material  | Nom. Diameter      |
|---|--------------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 18.3 mm (0.720 in) |

### Electrical Characteristics

#### Voltage

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

### Mechanical Characteristics

#### Temperature

| Operating                            | Installation                       |
|--------------------------------------|------------------------------------|
| -30°C to +70°C (Occasional movement) | -40°C to +80°C(Fixed installation) |

#### Bend Radius

| Installation Min.   | Flexing Min.     |
|---------------------|------------------|
| 109.8 mm (4.323 in) | 366 mm (14.4 in) |

Bulk Cable Weight: 528 kg/km (355 lbs/1000ft)

## Standards and Compliance

|                                  |  |
|----------------------------------|--|
| Environmental Suitability:       | Sunlight Resistance, UV Resistance, Oil Resistance - 70°C x 4h                                   |
| 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 50290-2-25, 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, BS 6360  |

## 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: 0.19 Revision Date: 05-09-2024 |
|----------------------|---|

## Part Numbers

### Variants

| Item #           | Color          | Length |
|------------------|----------------|--------|
| 20G1.5CH 010100M | Black          | 100 m  |
| 20G1.5CH 010200M | Black          | 200 m  |
| 20G1.5CH 010300M | Black          | 300 m  |
| 20G1.5CH 006100M | Blue           | 100 m  |
| 20G1.5CH 006200M | Blue           | 200 m  |
| 20G1.5CH 006300M | Blue           | 300 m  |
| 20G1.5CH G8U100M | Gray, RAL 7001 | 100 m  |
| 20G1.5CH G8U200M | Gray, RAL 7001 | 200 m  |
| 20G1.5CH G8U300M | Gray, RAL 7001 | 300 m  |

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