



**Product:** [HF18G1.0P](#)

**MachFlex™ High Flex Super 350YP Control Cable 17C+1G 1mm<sup>2</sup> Str BC, PVC Ins, PUR Jkt**

### Product Description

MachFlex™ High Flex Super 350YP Control Cable 17 Conductor + 1 Ground 1mm<sup>2</sup> Stranded Bare Copper, PVC Insulation, PUR 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. PUR jacket ensure the cable with excellent abrasion resistance and flex cycles more than 5 million would be ideally applied to drag chain and the frequently moving fields.

#### Construction Details

##### Conductor

| Element      | No. of Elements | Size              | Stranding | Stranding Class | Material         |
|--------------|-----------------|-------------------|-----------|-----------------|------------------|
| Conductor(s) | 17              | 1 mm <sup>2</sup> | Stranded  | Class 6         | BC - Bare Copper |
| Ground       | 1               | 1 mm <sup>2</sup> | Stranded  | Class 6         | BC - Bare Copper |

##### Insulation

| Element      | Material                 | Color Code   |
|--------------|--------------------------|--|
| Conductor(s) | PVC - Polyvinyl Chloride | 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 |
| Ground       | PVC - Polyvinyl Chloride | Yellow/Green   |

##### Outer Jacket

| Material                          |                    |
|-----------------------------------|--------------------|
| PUR - Polyurethane                |                    |
| Overall Cable Diameter (Nominal): | 13.8 mm (0.543 in) |

#### Electrical Characteristics

##### Voltage

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

#### Mechanical Characteristics

##### Temperature

| Operating                          | Installation                       |
|------------------------------------|------------------------------------|
| -5°C to +70°C(Occasional movement) | -40°C to +80°C(Fixed installation) |

**Table Notes:** "Drag Chain Performance : 1m Travel Distance, Travel Speed 2m/s, Acceleration 4m/s<sup>2</sup> ≥ 5,000,000 Cycles; 3m Travel Distance, Travel Speed 3m/s, Acceleration 10m/s<sup>2</sup> ≥ 1,000,000 Cycles; 5m Travel Distance, Travel Speed 3m/s, Acceleration 10m/s<sup>2</sup> ≥ 200,000 Cycles"

##### Bend Radius

| Installation Min. | Flexing Min.        |
|-------------------|---------------------|
| 55.2 mm (2.17 in) | 103.5 mm (4.075 in) |

|                    |                            |
|--------------------|----------------------------|
| Bulk Cable Weight: | 305 kg/km (205 lbs/1000ft) |
|--------------------|----------------------------|

## Standards and Compliance

|                                  |  |
|----------------------------------|--|
| Environmental Suitability:       | Sunlight Resistance, UV Resistance, Oil 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  |
| 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 0285, EN 50525-2-51, VDE 0285-525-2-51, VDE 0295, EN 50363-3, EN 50363-10-2, BS 6360         |

## Product Notes

|        |   |
|--------|---|
| Notes: | General Reference Standards : VDE 0207-363-3, VDE 0207-363-10-2 |
|--------|---|

## History

|                      |   |
|----------------------|---|
| Update and Revision: | Revision Number: 0.70 Revision Date: 03-20-2024 |
|----------------------|---|

## Part Numbers

### Variants

| Item #            | Color           | Length |
|-------------------|-----------------|--------|
| HF18G1.0P 010100M | Black, RAL 9004 | 100 m  |
| HF18G1.0P 010200M | Black, RAL 9004 | 200 m  |
| HF18G1.0P 010300M | Black, RAL 9004 | 300 m  |
| HF18G1.0P 006100M | Blue            | 100 m  |
| HF18G1.0P 006200M | Blue            | 200 m  |
| HF18G1.0P 006300M | Blue            | 300 m  |
| HF18G1.0P G8U100M | Gray, RAL 7001  | 100 m  |
| HF18G1.0P G8U200M | Gray, RAL 7001  | 200 m  |
| HF18G1.0P G8U300M | Gray, RAL 7001  | 300 m  |

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