



Product: [HF34G1.0CP](#)

MachFlex™ High Flex 350CP, 33+1G C 1.0mm² Str BC, PVC Ins, PVC Inner Jkt, TCBS, PUR Outer Jkt

Product Description

MachFlex™ High Flex Control 350CP, 33 Conductor + 1 Ground 1.0mm² Stranded Bare Copper, PVC Insulation, PVC Inner Jacket, Tinned Copper Braid Shield, PUR Outer Jacket

Technical Specifications

Product Overview

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|------------------------|---|
| 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 ensures 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. Shielding would highly enable the cables be qualified with excellent immunity. |
|------------------------|---|

Construction Details

Conductor

| Element | No. of Elements | Size | Stranding | Stranding Class | Material |
|--------------|-----------------|-------------------|-----------|-----------------|------------------|
| Conductor(s) | 33 | 1 mm ² | Stranded | Class 6 | BC - Bare Copper |
| Ground | 1 | 1 mm ² | 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, Black #18, Black #19, Black #20, Black #21, Black #22, Black #23, Black #24, Black #25, Black #26, Black #27, Black #28, Black #29, Black #30, Black #31, Black #32, Black #33 |
| Ground | PVC - Polyvinyl Chloride | Yellow/Green |

Outer Shield

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

Inner Jacket

| Material |
|--------------------------|
| PVC - Polyvinyl Chloride |

Outer Jacket

| Material |
|--------------------|
| PUR - Polyurethane |

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| Overall Cable Diameter (Nominal): | 21.6 mm (0.850 in) |
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Electrical Characteristics

Voltage

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

Mechanical Characteristics

Temperature

| Installation | Continuous Flexing |
|-------------------------------------|--------------------|
| -40°C to +80°C (Fixed installation) | 0°C to +70°C |

Bend Radius

| Installation Min. | Flexing Min. |
|-------------------|------------------|
| 86.4 mm (3.40 in) | 162 mm (6.38 in) |

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| Table Notes: | Drag Chain Performance : 1m Travel Distance, Travel Speed 2m/s, Acceleration 4m/s ² ≥ 5,000,000 Cycles; 3m Travel Distance, Travel Speed 3m/s, Acceleration 10m/s ² ≥ 1,000,000 Cycles; 5m Travel Distance, Travel Speed 3m/s, Acceleration 10m/s ² ≥ 200,000 Cycles |
| Bulk Cable Weight: | 745 kg/km (501 lbs/1000ft) |

Standards and Compliance

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|----------------------------------|--|
| Environmental Suitability: | Sunlight Resistance, UV Resistance, Oil Resistance - 70°C x 4h |
| 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 |
| 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, EN 50363-3, EN 50363-10-2, VDE 0295, BS 6360 |

Product Notes

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

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| Update and Revision: | Revision Number: 0.49 Revision Date: 11-28-2023 |
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Part Numbers

Variants

| Item # | Color | Length |
|--------------------|----------------|--------|
| HF34G1.0CP 010100M | Black | 100 m |
| HF34G1.0CP 010200M | Black | 200 m |
| HF34G1.0CP 010300M | Black | 300 m |
| HF34G1.0CP 006100M | Blue | 100 m |
| HF34G1.0CP 006200M | Blue | 200 m |
| HF34G1.0CP 006300M | Blue | 300 m |
| HF34G1.0CP G8U100M | Gray, RAL 7001 | 100 m |
| HF34G1.0CP G8U200M | Gray, RAL 7001 | 200 m |
| HF34G1.0CP G8U300M | Gray, RAL 7001 | 300 m |

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