



Product: [HF34G0.5CP](#)

MachFlex™ High Flex 350CP, 33+1G C 0.5mm² Str BC, PVC Ins, PVC Inner Jkt, TCBS, PUR Outer Jkt

Product Description

MachFlex™ High Flex Control 350CP, 33 Conductor + 1 Ground 0.5mm² Stranded Bare Copper, PVC Insulation, PVC Inner Jacket, Tinned Copper Braid Shield, PUR 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. 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.
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Stranding Class	Material
Conductor(s)	33	0.5 mm <sup>2</sup>	Stranded	Class 6	BC - Bare Copper
Ground	1	0.5 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, 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

Overall Cable Diameter (Nominal):	18.2 mm (0.717 in)
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Electrical Characteristics

Voltage Rating	
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.
72.8 mm (2.87 in)	136.5 mm (5.374 in)

Table Notes:	Drag Chain Performance : 1m Travel Distance, Travel Speed 2m/s, Acceleration 4m/s² ≥ 5,000,000 Cycles; 3m Travel Distance, Travel Speed 3m/s, Acceleration 10m/s² ≥ 1,000,000 Cycles; 5m Travel Distance, Travel Speed 3m/s, Acceleration 10m/s² ≥ 200,000 Cycles
Bulk Cable Weight:	495 kg/km (333 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 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

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

Update and Revision:	Revision Number: 0.51 Revision Date: 07-12-2024
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Part Numbers

Variants

Item #	Color	Length
HF34G0.5CP 010100M	Black	100 m
HF34G0.5CP 010200M	Black	200 m
HF34G0.5CP 010300M	Black	300 m
HF34G0.5CP 006100M	Blue	100 m
HF34G0.5CP 006200M	Blue	200 m
HF34G0.5CP 006300M	Blue	300 m
HF34G0.5CP G8U100M	Gray, RAL 7001	100 m
HF34G0.5CP G8U200M	Gray, RAL 7001	200 m
HF34G0.5CP G8U300M	Gray, RAL 7001	300 m

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