



**Product:** [HF12X2.5ECP](#)

MachFlex™ High Flex Super 350ECP Control Cable, 12C 2.5mm<sup>2</sup> Str BC, TPE Ins, TPE Inner Jkt, TCBS, PU Outer Jkt

## Product Description

MachFlex™ High Flex Super 350ECP Control Cable 12 Conductor, 2.5mm<sup>2</sup>, Stranded Bare Copper, TPE Insulation, TPE Inner Jacket, Tinned Copper Braid Shield, PU Outer Jacket

## Technical Specifications

### Product Overview

Suitable Applications:	Applicable for high flexible (5 million flex cycles) installation connecting precision control sensors, multi axis control machines, temperature controllers, control panels, machine cutting tools, auxiliary equipment, motor speed control, production machinery and many more in noisy industrial environment
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### Construction Details

#### Conductor

Element	No. of Elements	Size	Stranding	Stranding Class	Material
Conductor(s)	12	2.5 mm <sup>2</sup>	Stranded	Class 6	BC - Bare Copper

#### Insulation

Element	Material	Color Code
Conductor(s)	TPE - Thermoplastic Elastomer	Black #1, Black #2, Black #3, Black #4, Black #5, Black #6, Black #7, Black #8, Black #9, Black #10, Black #11, Black #12

#### Outer Shield

Shield Type	Material
Braid	Tinned Copper (TC)

#### Inner Jacket

Material
TPE - Thermoplastic Elastomer

#### Outer Jacket

Material
PUR - Polyurethane

Overall Cable Diameter (Nominal):	19.3 mm (0.760 in)
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### Electrical Characteristics

#### Voltage

Voltage Rating
300 / 500 V (Max. Operating 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.

77.2 mm (3.04 in) 144.75 mm (5.6988 in)

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
Bulk Cable Weight:	595 kg/km (400 lbs/1000ft)

## Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Oil Resistance - 70°C x 4h
Flammability / Reaction to Fire:	IEC 60332-1-2, DIN VDE 048233212
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2)
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	VDE 0285-525-2-11, VDE 0285-525-2-51, VDE-PB-0022, EN 50525-2-11, EN 50525-2-51

## History

Update and Revision:	Revision Number: 0.24 Revision Date: 03-20-2024
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## Part Numbers

### Variants

Item #	Color	Length
HF12X2.5ECP 010100M	Black, RAL 9004	100 m
HF12X2.5ECP 010200M	Black, RAL 9004	200 m
HF12X2.5ECP 010500M	Black, RAL 9004	500 m
HF12X2.5ECP G8U100M	Gray, RAL 7001	100 m
HF12X2.5ECP G8U200M	Gray, RAL 7001	200 m
HF12X2.5ECP G8U500M	Gray, RAL 7001	500 m

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