



Product: [3X1.0SY](#) 

MachFlex™ 350SY, 3C 1 mm² Str BC, PVC Ins, PVC Inner Jkt, GSW Brd, PVC Outer Jkt

Product Description

MachFlex™ 350SY VDE Certified, 3 Conductor 1 mm² Stranded Bare Copper, PVC Insulation, PVC Inner Jacket, Galvanized Steel Wire Braid, PVC Outer Jacket Control Cable

Technical Specifications

Product Overview

Suitable Applications: Application for occasional flexing or fixed 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 harsh industrial environment.

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Stranding Class	Material
Conductor(s)	3	1 mm ²	Stranded	Class 5	BC - Bare Copper

Insulation

Element	Material	Color Code
Conductor(s)	PVC - Polyvinyl Chloride	Black #1, Black #2, Black #3

Inner Jacket

Material
PVC - Polyvinyl Chloride

Armor

Armor Type & Material
SWB - Steel Wire Braid Armor

Outer Jacket

Material
PVC - Polyvinyl Chloride

Overall Cable Diameter (Nominal): 8.6 mm (0.34 in)

Electrical Characteristics

Voltage

Voltage Rating
300 / 500 V (Max. Operating Voltage)

Mechanical Characteristics

Temperature

Operating	Installation
-15°C to +70°C (Occasional movement)	-40°C to +80°C (Fixed installation)

Bend Radius

Installation Min.	Flexing Min.

51.6 mm (2.03 in) 172 mm

Bulk Cable Weight: 108 kg/km (72.6 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Oil Resistance - EN 50290-2-22 (TM54), Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2, DIN VDE 048233212
Third Party Performance Verification:	VDE Certification No. 40041970, VDE Registration No. 8770
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 0285-525-2-51, EN 50525-2-51, IEC 60227-5

History

Update and Revision: Revision Number: 0.28 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	Length
3X1.0SY 010100M	Black, RAL 9004	100 m
3X1.0SY 010200M	Black, RAL 9004	200 m
3X1.0SY 010300M	Black, RAL 9004	300 m
3X1.0SY G8U100M	Gray, RAL 7001	100 m
3X1.0SY G8U200M	Gray, RAL 7001	200 m
3X1.0SY G8U300M	Gray, RAL 7001	300 m
3X1.0SY 368100M	Transparent	100 m
3X1.0SY 368200M	Transparent	200 m
3X1.0SY 368300M	Transparent	300 m

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