



Product: [12X0.5SY](#) 

MachFlex™ 350SY, 12C 0.5 mm² Str BC, PVC Ins, PVC Inner Jkt, GSW Brd, PVC Outer Jkt

Product Description

MachFlex™ 350SY VDE Certified, 12 Conductor 0.5 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)	12	0.5 mm ²	Stranded	Class 5	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

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):	12 mm (0.47 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.

72 mm (2.8 in) | 240 mm (9.4 in)

Bulk Cable Weight: 199 kg/km (134 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: 0.29 Revision Date: 07-04-2024

Part Numbers

Variants

Item #	Color	Length
12X0.5SY 010100M	Black, RAL 9004	100 m
12X0.5SY 010200M	Black, RAL 9004	200 m
12X0.5SY 010300M	Black, RAL 9004	300 m
12X0.5SY G8U100M	Gray, RAL 7001	100 m
12X0.5SY G8U200M	Gray, RAL 7001	200 m
12X0.5SY G8U300M	Gray, RAL 7001	300 m
12X0.5SY 368100M	Transparent	100 m
12X0.5SY 368200M	Transparent	200 m
12X0.5SY 368300M	Transparent	300 m

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.