



Product: <u>5X1.0SH</u> ☑

MachFlex™ 350 SH, 5C 1 mm² Str BC, PP Ins, LSZH Inner Jkt, GSW Brd, LSZH Outer Jkt

Product Description

MachFlex™ 350 SH Control Cable 5 Conductor 1 mm² Stranded Bare Copper, PP Insulation, LSZH Inner Jacket, Galvanized Steel Wire Braiding Armor, LSZH 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. Galvanized steel wire braid armor provides excellent mechanical protection. This LSZH material emits limited smoke and no halogen when exposed to high sources of heat. It can considerably reduce the amount and density of the smoke, toxic and corrosive gas emitted during a fire, enable easier evacuation as well as safer firefighting operations.

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Stranding Class	Material
Conductor(s)	5	1 mm²	Stranded	Class 5	BC - Bare Copper

Insulation

Element	Material	Color Code
Conductor(s)	PP - Polypropylene	Black #1, Black #2, Black #3, Black #4, Black #5

Inner Jacket

Material
LSZH - Low Smoke Zero Halogen (Flame Retardant)

Armor

Armor Type & Material
SWB - Steel Wire Braid Armor

Outer Jacket

	Material
LSZH - Low Smoke 2	Zero Halogen (Flame Retardant)
Overall Cable	

Diameter (Nominal):

10 mm (0.39 in)

Electrical Characteristics

Voltage

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

Mechanical Characteristics

Temperature

Operating	Installation
-25°C to +70°C (Occasional movement)	-40°C to +80°C (Fixed installation)

Bend Radius

Installation Min.	Flexing Min.
60 mm (2.4 in)	200 mm (7.9 in)

Bulk Cable Weight: 144 kg/km (96.8 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	UV Resistance, Oil Resistance
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, EN 50290-2-27 European Directive Compliance: EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2)	

Product Notes

Notes:	Smoke/Halogen Properties : IEC 60754-1, IEC 60754-2, VDE 0482-754-1, VDE 0482-754-2

History

Update and Revision:	Revision Number: 0.19 Revision Date: 07-15-2024

Part Numbers

Variants

Item #	Color	Length
5X1.0SH 010100M	Black	100 m
5X1.0SH 010200M	Black	200 m
5X1.0SH 010300M	Black	300 m
5X1.0SH 006100M	Blue	100 m
5X1.0SH 006200M	Blue	200 m
5X1.0SH 006300M	Blue	300 m
5X1.0SH G8U100M	Gray, RAL 7001	100 m
5X1.0SH G8U200M	Gray, RAL 7001	200 m
5X1.0SH G8U300M	Gray, RAL 7001	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.