



Product: [12G1.0CH](#)

MachFlex™ 350CH, 12 C+1G 1 mm² Str BC, PP Ins, TCBS, LSZH Jkt

Product Description

MachFlex™ 350CH, 12 Conductor + 1 Ground 1 mm² Stranded Bare Copper, PP Insulation, Tinned Copper Braid Shield, LSZH 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. Tinned copper braid shield ensures cables with excellent noise immunity. 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	Material
Conductor(s)	11	1 mm ²	Class 5	BC - Bare Copper
Ground	1	1 mm ²	Class 5	BC - Bare Copper

Insulation

Material	Color Code
PP - Polypropylene	Black #1, Black #2, Black #3, Black #4, Black #5, Black #6, Black #7, Black #8, Black #9, Black #10, Black #11
PP - Polypropylene	Green/Yellow

Outer Shield

Shield Type	Material
Braid	Tinned Copper (TC)

Inner Jacket

Material
LSZH - Low Smoke Zero Halogen (Flame Retardant)

Outer Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	13.8 mm (0.543 in)

Electrical Characteristics

Voltage

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

Mechanical Characteristics

Temperature

Operating	Installation
-30°C to +70°C (Occasional movement)	-40°C to +80°C(Fixed installation)

Bend Radius

Installation Min.	Flexing Min.
82.8 mm (3.26 in)	276 mm (10.9 in)

Bulk Cable Weight: 290 kg/km (190 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 0482-332-1-2, DIN EN 60332-1-2
ISO/IEC Compliance:	IEC 60228
CENELEC Compliance:	EN 50290-2-25EN 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)
Other Standard Compliance(s):	VDE 0295, IEC 60227-5, EN 50525-3-11, BS 6360

Product Notes

Notes:	Smoke/Halogen Properties : IEC 61034-2, IEC 60754-1, IEC 60754-2, VDE 0482-754-1, VDE 0482-754-2
--------	--

History

Update and Revision:	Revision Number: 0.52 Revision Date: 05-09-2024
----------------------	---

Part Numbers

Variants

Item #	Color	Length
12G1.0CH 010100M	Black	100 m
12G1.0CH 010200M	Black	200 m
12G1.0CH 010300M	Black	300 m
12G1.0CH 006100M	Blue	100 m
12G1.0CH 006200M	Blue	200 m
12G1.0CH 006300M	Blue	300 m
12G1.0CH G8U100M	Gray, RAL 7001	100 m
12G1.0CH G8U200M	Gray, RAL 7001	200 m
12G1.0CH G8U300M	Gray, RAL 7001	300 m

© 2024 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.