



Product: [H3G10CY](#)

MachFlex™ 610CY Control & Power Cable, 2C+1G 10 mm² Str BC, PVC Ins, PVC Inner Jkt, TCBS, PVC Outer Jkt

Product Description

MachFlex™ 610CY Control & Power Cable, 2 Conductor + 1 Ground 10 mm² Stranded Bare Copper, PVC Insulation, PVC Inner Jacket, Tinned Copper Braid Shield, PVC 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. Tinned copper braid shield ensures cables with excellent noise immunity.
------------------------	--

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Stranding Class	Material
Conductor(s)	2	10 mm ²	Stranded	Class 5	BC - Bare Copper
Ground	1	10 mm ²	Stranded	Class 5	BC - Bare Copper

Insulation

Element	Material	Color Code
Conductor(s)	PVC - Polyvinyl Chloride	Black #1, Black #2
Ground	PVC - Polyvinyl Chloride	Yellow/Green

Outer Shield

Shield Type	Material
Braid	Tinned Copper (TC)

Inner Jacket

Material
PVC - Polyvinyl Chloride

Outer Jacket

Material
PVC - Polyvinyl Chloride

Overall Cable Diameter (Nominal):	20.1 mm (0.791 in)
-----------------------------------	--------------------

Electrical Characteristics

Voltage

Voltage Rating
600/1000 V (Max. Operating Voltage), 4000 V (Testing Voltage)

Mechanical Characteristics

Temperature

Operating	Installation
-5°C to +70°C(Occasional movement)	-40°C to +80°C(Fixed installation)

Bend Radius

Installation Min.	Flexing Min.
120.6 mm (4.748 in)	402 mm (15.8 in)

Bulk Cable Weight: 698 kg/km (469 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Sunlight Resistance, UV Resistance, Oil Resistance - EN 50290-2-22 (TM54)
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
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, DIN VDE 0207-363-4-1, IEC 60227-5, EN 50525-2-51, BS 6360

History

Update and Revision: Revision Number: 0.48 Revision Date: 07-05-2024

Part Numbers

Variants

Item #	Color	Length
H3G10CY 010100M	Black	100 m
H3G10CY 010200M	Black	200 m
H3G10CY 010300M	Black	300 m
H3G10CY G8U100M	Gray, RAL 7001	100 m
H3G10CY G8U200M	Gray, RAL 7001	200 m
H3G10CY G8U300M	Gray, RAL 7001	300 m
H3G10CY 003100M	Orange	100 m
H3G10CY 003200M	Orange	200 m
H3G10CY 003300M	Orange	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.