



**Product:** [UHF3G0.5CY](#) 

MachFlex™ High Flex 350CY UL Certified, 2 C + 1 G 0.5 mm<sup>2</sup> Str BC, PVC Ins, PVC Inner Jkt, TCBS, PVC Outer Jkt

## Product Description

MachFlex™ High Flex Control 350CY UL Certified, 2 Conductors + Ground 0.5 mm<sup>2</sup> 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. This type of cables with flex cycles more than 5 millions would be ideally applied to drag chain and the frequently moving fields. Shielding would highly enable the cables be qualified with excellent immunity. This product group also meets UL standard requirements.
------------------------	---

### Construction Details

#### Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	2	0.5 mm <sup>2</sup>	Stranded	BC - Bare Copper
Ground	1	0.5 mm <sup>2</sup>	Stranded	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	Coverage
Braid	Tinned Copper (TC)	80%

#### Inner Jacket

Material
PVC - Polyvinyl Chloride

#### Outer Jacket

Material
PVC - Polyvinyl Chloride

Overall Cable Diameter (Nominal): 7.4 mm (0.29 in)

### Electrical Characteristics

#### Voltage

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

### Mechanical Characteristics

#### Temperature

Operating	Installation
0°C to +70°C ( UL: +80°C ) (Continuous movement)	40°C to +80°C ( UL: +80°C ) (Fixed installation)

Table Notes:	"Drag Chain Performance : 1m Travel Distance, Travel Speed 2m/s, Acceleration 4m/s <sup>2</sup> ≥ 5,000,000 Cycles; 5m Travel Distance, Travel Speed 3m/s, Acceleration 10m/s <sup>2</sup> ≥ 200,000 Cycles"
--------------	--

#### Bend Radius

Stationary Min.	Installation Min.
55.5 mm (2.19 in)	29.6 mm (1.17 in)

Bulk Cable Weight: 81 kg/km (54 lbs/1000ft)

#### Standards and Compliance

Environmental Suitability:	UV Resistance, Oil Resistance - EN 50290-2-22 (TM54)
Flammability / Reaction to Fire:	FT 1 , VW-1, IEC 60332-1-2, DIN VDE 0482-332-1-2, DIN EN 60332-1-2
AWM Compliance:	AWM 2464, AWM I/II A/B
ISO/IEC Compliance:	IEC 60228
CENELEC Compliance:	EN 50363-4-1, EN 50363-3
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2)
Other Standard Compliance(s):	VDE 0285, UL 1581, VDE 0295, DIN VDE 0207-363-4-1, BS 6360

#### Product Notes

Notes:	General Reference Standards : DIN VDE 0245, DIN VDE 0207-363-3, DIN VDE 0473-811-404, DIN EN 60811-404
--------	--

#### History

Update and Revision:	Revision Number: 0.5 Revision Date: 10-22-2024
----------------------	--

#### Part Numbers

##### Variants

Item #	Color	Length
UHF3G0.5CY 010200M	Black	200 m
UHF3G0.5CY 010300M	Black	300 m
UHF3G0.5CY 010500M	Black	500 m
UHF3G0.5CY 006200M	Blue	200 m
UHF3G0.5CY 006300M	Blue	300 m
UHF3G0.5CY 006500M	Blue	500 m
UHF3G0.5CY G8U200M	Gray, RAL 7001	200 m
UHF3G0.5CY G8U300M	Gray, RAL 7001	300 m
UHF3G0.5CY G8U500M	Gray, RAL 7001	500 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.