



Product: [HF18G0.5ECP](#) 

MachFlex™ High Flex Super 350ECP Control Cable, 17C+1G 0.5mm² Str BC, TPE Ins, TPE Inner Jkt, TCBS, PU Outer Jkt

Product Description

MachFlex™ High Flex Super 350ECP Control Cable 17 Conductor + 1 Ground, 0.5mm², Stranded Bare Copper, TPE Insulation, TPE Inner Jacket, Tinned Copper Braid Shield, PU Outer Jacket

Technical Specifications

Product Overview

Suitable Applications:	Applicable for high flexible (5 million flex cycles) 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 noisy industrial environment
------------------------	---

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Stranding Class	Material
Conductor(s)	17	0.5 mm ²	Stranded	Class 6	BC - Bare Copper
Ground	1	0.5 mm ²	Stranded	Class 6	BC - Bare Copper

Insulation

Element	Material	Color Code
Conductor(s)	TPE - Thermoplastic Elastomer	Black #1, Black #2, Black #3, Black #4, Black #5, Black #6, Black #7, Black #8, Black #9, Black #10, Black #11, Black #12, Black #13, Black #14, Black #15, Black #16, Black #17
Ground	TPE - Thermoplastic Elastomer	Yellow/Green

Outer Shield

Shield Type	Material
Braid	Tinned Copper (TC)

Inner Jacket

Material
TPE - Thermoplastic Elastomer

Outer Jacket

Material
PUR - Polyurethane

Overall Cable Diameter (Nominal):	13.7 mm (0.539 in)
-----------------------------------	--------------------

Electrical Characteristics

Voltage

Voltage Rating
300 / 500 V (Max. Operating Voltage)

Mechanical Characteristics

Temperature

Installation	Continuous Flexing
-40°C to +80°C(Fixed installation)	0°C to +70°C

Bend Radius

Installation Min.	Flexing Min.
54.8 mm (2.16 in)	102.75 mm (4.0453 in)

Table Notes:	Drag Chain Performance : 1m Travel Distance, Travel Speed 2m/s, Acceleration 4m/s² ≥ 5,000,000 Cycles; 3m Travel Distance, Travel Speed 3m/s, Acceleration 10m/s² ≥ 1,000,000 Cycles; 5m Travel Distance, Travel Speed 3m/s, Acceleration 10m/s² ≥ 200,000 Cycles
Bulk Cable Weight:	257 kg/km (173 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Oil Resistance - 70°C x 4h
Flammability / Reaction to Fire:	IEC 60332-1-2, DIN VDE 048233212
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 0285-525-2-11, VDE 0285-525-2-51, VDE-PB-0022, EN 50525-2-11, EN 50525-2-51

History

Update and Revision:	Revision Number: 0.27 Revision Date: 03-20-2024
----------------------	---

Part Numbers

Variants

Item #	Color	Length
HF18G0.5ECP 010100M	Black, RAL 9004	100 m
HF18G0.5ECP 010200M	Black, RAL 9004	200 m
HF18G0.5ECP 010500M	Black, RAL 9004	500 m
HF18G0.5ECP G8U100M	Gray, RAL 7001	100 m
HF18G0.5ECP G8U200M	Gray, RAL 7001	200 m
HF18G0.5ECP 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.