



**Product:** [HF25G1.0CY](#)

MachFlex™ High Flex 350CY, 24 C + 1 G 1.0 mm<sup>2</sup> Str BC, PVC Ins, PVC Inner Jkt, TCBS, PVC Outer Jkt

## Product Description

MachFlex™ High Flex Control 350CY VDE Certified, 24 Conductor + 1 Ground 1.0 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: | Applicable for high flexible (up to 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) | 24              | 1 mm <sup>2</sup> | Stranded  | Class 6         | BC - Bare Copper |
| Ground       | 1               | 1 mm <sup>2</sup> | Stranded  | Class 6         | BC - Bare Copper |

#### Insulation

| Element      | Material                 | Color Code  |
|--------------|--------------------------|---|
| Conductor(s) | PVC - Polyvinyl Chloride | 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, Black #18, Black #19, Black #20, Black #21, Black #22, Black #23, Black #24 |
| 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): | 19.2 mm (0.756 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.     |
|-------------------|------------------|
| 76.8 mm (3.02 in) | 144 mm (5.67 in) |

|                    |   |
|--------------------|---|
| Table Notes:       | Drag Chain Performance : 1m Travel Distance, Travel Speed 2m/s, Acceleration 4m/s <sup>2</sup> ≥ 5,000,000 Cycles; 3m Travel Distance, Travel Speed 3m/s, Acceleration 10m/s <sup>2</sup> ≥ 1,000,000 Cycles; 5m Travel Distance, Travel Speed 3m/s, Acceleration 10m/s <sup>2</sup> ≥ 200,000 Cycles |
| Bulk Cable Weight: | 600 kg/km (400 lbs/1000ft)  |

## Standards and Compliance

|                                       |   |
|---------------------------------------|---|
| Environmental Suitability:            | Indoor, Outdoor, Oil Resistance - EN 50290-2-22 (TM54), Oil Resistance                    |
| Flammability / Reaction to Fire:      | IEC 60332-1-2, DIN VDE 048233212  |
| Third Party Performance Verification: | VDE Certification No. 40051701, VDE Registration No. F743                                 |
| 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: 0.76 Revision Date: 03-20-2024 |
|----------------------|---|

## Part Numbers

### Variants

| Item #             | Color           | Length |
|--------------------|-----------------|--------|
| HF25G1.0CY 010100M | Black, RAL 9004 | 100 m  |
| HF25G1.0CY 010200M | Black, RAL 9004 | 200 m  |
| HF25G1.0CY 010300M | Black, RAL 9004 | 300 m  |
| HF25G1.0CY G8U100M | Gray, RAL 7001  | 100 m  |
| HF25G1.0CY G8U200M | Gray, RAL 7001  | 200 m  |
| HF25G1.0CY G8U300M | Gray, RAL 7001  | 300 m  |
| HF25G1.0CY 368100M | Transparent     | 100 m  |
| HF25G1.0CY 368200M | Transparent     | 200 m  |
| HF25G1.0CY 368300M | Transparent     | 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.