




Product: [H18G1.0CY](#) 

MachFlex™ 610CY, 17+1G C 1.0mm² Str BC, PVC Ins, PVC Inner Jkt, TCBS, PVC Outer Jkt

Product Description

MachFlex™ 610CY, 17 Conductor + 1 Ground 1.0mm² 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.

Physical Characteristics (Overall)

Conductor

| Element | AWG | Stranding | Material | No. of Conductors |
|--------------|-------------------|-----------|------------------|-------------------|
| Conductor(s) | 1 mm ² | Class 5 | BC - Bare Copper | 17 |
| Ground | 1 mm ² | Class 5 | BC - Bare Copper | 1 |

Conductor Count: 18

Insulation

| Material |
|--------------------------|
| PVC - Polyvinyl Chloride |

Color Chart

| Color |
|--------------|
| Black #1 |
| Black #2 |
| Black #3 |
| Black #4 |
| Black #5 |
| ... |
| Black #17 |
| Green/Yellow |

Inner Jacket

| Material |
|--------------------------|
| PVC - Polyvinyl Chloride |

Outer Shield

| Type | Material |
|-------|--------------------|
| Braid | Tinned Copper (TC) |

Outer Jacket

| Material | Nominal Diameter |
|--------------------------|------------------|
| PVC - Polyvinyl Chloride | 19.4mm |

Electrical Characteristics

Conductor DCR

| |
|---------------------------|
| Max. Conductor DCR |
| 19.5 Ohm/km |

Voltage

| Dielectric Withstand Voltage | Non-UL Description | Non-UL Voltage Rating |
|------------------------------|--------------------|-----------------------|
| 4000 V | IEC: | 600/1000 V |

Temperature Range

| | |
|--------------------------|----------------|
| Installation Temp Range: | -40°C to +80°C |
| Operating Temp Range: | -5°C to +70°C |

Mechanical Characteristics

| | |
|---------------------------------------|-----------|
| Oil Resistance: | Yes |
| UV Resistance: | Yes |
| Bulk Cable Weight: | 549 kg/km |
| Min. Bend Radius During Installation: | 6 x OD |
| Min. Bend Radius During Operation: | 20 x OD |

Standards

| | |
|----------------------|---|
| Other Specification: | IEC 60227-5, EN 50525-2-51, VDE 0281-13 |
|----------------------|---|

Applicable Environmental and Other Programs

| | |
|-----------------------------------|-----|
| EU Directive 2011/65/EU (RoHS 2): | Yes |
|-----------------------------------|-----|

Suitability

| | |
|------------------------------------|-----|
| Suitability - Indoor: | Yes |
| Suitability - Oil Resistance: | Yes |
| Suitability - Outdoor: | Yes |
| Suitability - Sunlight Resistance: | Yes |

Flammability, LS0H, Toxicity Testing

| | |
|---------------------|--|
| IEC Flammability: | IEC 60332-1-2 |
| Other Flammability: | DIN VDE 0482-332-1-2, DIN EN 60332-1-2 |

Related Part Numbers

Variants

| Item # | Color | Length |
|--------------------|------------------|---------|
| H18G1.0CY 010500M | Black, RAL 9005 | 500 m |
| H18G1.0CY 0101000M | Black, RAL 9005 | 1,000 m |
| H18G1.0CY G8U500M | Gray, RAL 7001 | 500 m |
| H18G1.0CY G8U1000M | Gray, RAL 7001 | 1,000 m |
| H18G1.0CY 003500M | Orange, RAL 2003 | 500 m |
| H18G1.0CY 0031000M | Orange, RAL 2003 | 1,000 m |

History

| | |
|----------------------|---|
| Update and Revision: | Revision Number: 0.39 Revision Date: 12-15-2021 |
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