



Product: [MSH010](#)

MachFlex™ SERVO Hybrid 610BY, 3C+1G 4mm² Str BC, PP Ins, 1 Pr 1.0mm² + 1 Pr 1.5mm² BC, PP Ins IS + TC Brd, PVC Jkt

Product Description

MachFlex™ SERVO Hybrid 610BY, 3 Conductor + 1 Ground 4mm² Stranded Bare Copper, PP Insulation, 1 Pair 1.0mm² + 1 Pair 1.5mm² Bare Copper, PP Insulation, Aluminium Foil and Tinned Copper Braid Shield Over Each pair, PVC Jacket, 1000V Flexible SERVO Motor Supply Cable

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | Designed for connecting servo controller with motor. Cable applications include motor speed control, printing machine, production machinery and machine tools. This type of cables suitable for plant engineering both of static or flexible use. |
|------------------------|---|

Construction Details

Conductor

| Element | No. of Elements | Size | Stranding | Stranding Class | Material |
|----------------|-----------------|---------------------|-----------|-----------------|------------------|
| Conductor(s) | 3 | 4 mm ² | Stranded | Class 5 | BC - Bare Copper |
| Ground | 1 | 4 mm ² | Stranded | Class 5 | BC - Bare Copper |
| Signal Pair #1 | 1 | 1 mm ² | Stranded | Class 5 | BC - Bare Copper |
| Signal Pair #2 | 1 | 1.5 mm ² | Stranded | Class 5 | BC - Bare Copper |

Insulation

| Element | Material | Color Code |
|----------------|--------------------|------------------------------|
| Conductor(s) | PP - Polypropylene | Black #1, Black #2, Black #3 |
| Ground | PP - Polypropylene | Yellow/Green |
| Signal Pair #1 | PP - Polypropylene | Black #5&Black #6 |
| Signal Pair #2 | PP - Polypropylene | |

Inner Shield

| Element | Shield Type | Material | Coverage |
|-----------|-------------|-------------------------|----------|
| Each Pair | Tape | Bi-Laminate (Alum+Poly) | 100% |
| Each Pair | Braid | Tinned Copper (TC) | 85% |

Outer Jacket

| Material | PVC - Polyvinyl Chloride |
|-----------------------------------|--------------------------|
| Overall Cable Diameter (Nominal): | 15.5 mm (0.610 in) |

Electrical Characteristics

Voltage

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

Mechanical Characteristics

Temperature

| Operating | Installation |
|-----------|--------------|
|-----------|--------------|

| | |
|------------------------------------|-------------------------------------|
| -5°C to +80°C(Occasional movement) | -40°C to +80°C (Fixed installation) |
|------------------------------------|-------------------------------------|

Bend Radius

| Installation Min. | Flexing Min. |
|-------------------|---------------------|
| 93 mm (3.7 in) | 232.5 mm (9.154 in) |

| | |
|--------------------|----------------------------|
| Bulk Cable Weight: | 370 kg/km (250 lbs/1000ft) |
|--------------------|----------------------------|

Standards and Compliance

| | |
|----------------------------------|--|
| Environmental Suitability: | Sunlight Resistance, UV Resistance, Oil Resistance - 70°C x 4h |
| Flammability / Reaction to Fire: | VW-1, FT1, IEC 60332-1-2, DIN VDE 0482-332-1-2, DIN EN 60332-1-2 |
| AWM Compliance: | AWM 2570 |
| CENELEC Compliance: | EN 50290-2-25, EN 50363-4-1 |
| European Directive Compliance: | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2) |

History

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|----------------------|---|
| Update and Revision: | Revision Number: 0.94 Revision Date: 07-05-2024 |
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Part Numbers

Variants

| Item # | Color | Length |
|----------------|-------|--------|
| MSH010 010100M | Black | 100 m |
| MSH010 010200M | Black | 200 m |
| MSH010 010300M | Black | 300 m |

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