



**Product:** [H7G4CH](#) 

MachFlex™ 610CH, 6+1G C 4mm<sup>2</sup> Str BC, LSZH Ins, LSZH Inner Jkt, TCBS, LSZH Outer Jkt, UL AWM Style 21115

## Product Description

MachFlex™ 610CH, 6 Conductor + 1 Ground 4mm<sup>2</sup> Stranded Bare Copper, LSZH Insulation, LSZH Inner Jacket, Tinned Copper Braid Shield, LSZH Outer Jacket, UL AWM Style 21115

## 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. Utilizing LSZH material emits limited smoke and no halogen when exposed to high sources of heat. It can considerably reduce the amount and density of the smoke, toxic and corrosive gas emitted during a fire, enable easier evacuation as well as safer firefighting operations. |
|------------------------|---|

### Construction Details

#### Conductor

| Element      | Size              | Stranding | Material         |
|--------------|-------------------|-----------|------------------|
| Conductor(s) | 4 mm <sup>2</sup> | Class 5   | BC - Bare Copper |
| Ground       | 4 mm <sup>2</sup> | Class 5   | BC - Bare Copper |

#### Insulation

| Material  | Color Code   |
|---|--|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | Black #1, Black #2, Black #3, Black #4, Black #5, Black #6, Green/Yellow |

#### Outer Shield

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

#### Inner Jacket

| Material  |
|---|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) |

#### Outer Jacket

| Material  | Nom. Diameter |
|---|---------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 17.47 mm      |

### Electrical Characteristics

#### Electricals

| Max. Conductor DCR            |
|-------------------------------|
| 4.95 Ohm/km (1.51 Ohm/1000ft) |

#### Voltage

| Voltage Rating   |
|------------------|
| 600/1000 V (IEC) |

### Mechanical Characteristics

#### Temperature

| Operating     | Installation   |
|---------------|----------------|
| 25°C to +70°C | -40°C to +80°C |

#### Bend Radius

| Installation Min. |
|-------------------|
| 6 x OD            |

Bulk Cable Weight: 608 kg/km (409 lbs/1000ft)

#### Standards and Compliance

|                                  |   |
|----------------------------------|---|
| Environmental Suitability:       | Indoor, Outdoor, Sunlight Resistance, UV Resistance, Oil Resistance, Oil Resistance   |
| Flammability / Reaction to Fire: | FT2, IEC 60332-1-2, DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-3-24, IEC 60332-3-25                                  |
| AWM Compliance:                  | AWM 21115   |
| European Halogen Free Standards: | IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 10 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3 |
| European Directive Compliance:   | EU Directive 2011/65/EU (RoHS 2)  |

#### History

|                      |   |
|----------------------|---|
| Update and Revision: | Revision Number: 0.46 Revision Date: 07-05-2024 |
|----------------------|---|

#### Part Numbers

#### Variants

| Item #         | Color            | Length |
|----------------|------------------|--------|
| H7G4CH 010305M | Black, RAL 9005  | 305 m  |
| H7G4CH 010500M | Black, RAL 9005  | 500 m  |
| H7G4CH G8U305M | Gray, RAL 7001   | 305 m  |
| H7G4CH G8U500M | Gray, RAL 7001   | 500 m  |
| H7G4CH 003305M | Orange, RAL 2003 | 305 m  |
| H7G4CH 003500M | Orange, RAL 2003 | 500 m  |

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