



Product: 7401WS ☑

MachFlex™, 2+1G C #20 Str BC, PVC Ins, OA TC Brd, TPE Jkt, PLTC

Request Sample

Product Description

MachFlex™ for High Flex, 2+1G Conductor 20AWG (19x32) Bare Copper, PVC Insulation, Overall Tinned Copper Braid(85%) Shield, TPE Outer Jacket, PLTC

Technical Specifications

Physical Characteristics (Overall)

Conductor

| Element | AWG | Stranding | Material | No. of Conductors |
|------------------|-----|-----------|------------------|-------------------|
| | 20 | 19x32 | BC - Bare Copper | 2 |
| Ground Wire | 20 | 19x32 | BC - Bare Copper | 1 |
| Conductor Count: | | 3 | | |

Insulation

| Material | Nominal Wall Thickness |
|--------------------------|------------------------|
| PVC - Polyvinyl Chloride | 0.015 in |

Color Chart

| Number | Color |
|--------|----------------------|
| 1 | Black and Numbered 1 |
| 2 | Black and Numbered 2 |
| 3 | Green/Yellow |

Inner Jacket

| Material | Nominal Diameter | Nominal Wall Thickness |
|-------------------------------|------------------|------------------------|
| TPE - Thermoplastic Elastomer | 0.197 in | 0.025 in |

Outer Shield

| Type | Material | Coverage [%] | Nominal Diameter |
|-------|--------------------|--------------|------------------|
| Braid | Tinned Copper (TC) | 85% | 0.219 in |

Outer Jacket

| Material | Nominal Diameter | Nominal Wall Thickness |
|-------------------------------|------------------|------------------------|
| TPE - Thermoplastic Elastomer | 0.303 in | 0.042 in |

Electrical Characteristics

Conductor DCR



Voltage



Temperature Range

| UL Temp Rating: | 90°C |
|-----------------|------|

| Operating Temperature Range: | -40°C (-5°C Flexing) To +90°C |
|------------------------------|-------------------------------|
| Other Temp Range: | Flexing: -5°C To +90 °C |

Mechanical Characteristics

| Oil Resistance: | Yes |
|--|------------------|
| UV Resistance: | Yes |
| Flex Cycle Rating: | 1 Million Flexes |
| Bulk Cable Weight: | 56 lbs/1000ft |
| Max. Pull Tension: | 39 lbs |
| Min. Bend Radius (Continuous Flexing): | 3 in |

Standards

| NEC/(UL) Compliance: | PLTC |
|--------------------------|--------------|
| UL AWM Style Compliance: | AWM 20327 |
| CSA AWM Compliance: | AWM I/II A/B |

Applicable Environmental and Other Programs

| EU Directive 2000/53/EC (ELV): | Yes |
|--|-------------------------------|
| EU Directive 2011/65/EU (RoHS 2): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU (RoHS 2 amendment): | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| MII Order #39 (China RoHS): | Yes |

Suitability

| Suitability - Non-Halogenated: | No |
|------------------------------------|------------------|
| Suitability - Oil Resistance: | Yes - Oil Res II |
| Suitability - Sunlight Resistance: | Yes |

Flammability, LS0H, Toxicity Testing

| UL Flammability: | UL1685 UL Loading |
|--------------------|-------------------|
| CSA Flammability: | FT4 |
| IEEE Flammability: | IEEE 1202 FT4 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

| Plenum (Y/N): | No |
|---------------|----|
|---------------|----|

Related Part Numbers

Variants

| Item # | Color | Put-Up Type | Lengt | h UPC |
|----------------|--------|-------------|--------|-----------------|
| 7401WS 060250 | Chrome | Reel | 250 ft | 612825185314 |
| 7401WS 0601000 | Chrome | Reel | 1,000 | ft 612825185307 |
| 7401WS 0605000 | Chrome | Reel | 5,000 | ft 612825185321 |
| Footnote: | | | | C - CRATE REEL |

History

| Update and Revision: | Revision Number: 0.340 Revision Date: 02-03-2025 |
|----------------------|--|
|----------------------|--|

© 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Belden Wire & Cable:

7401WS 0601000 7401WS 060250