



Product: [83027](#)

Lead Wire, #20 Str SPC, TFE Ins, AWM 1180

Request Sample

Product Description

High Temp Plastic Lead Wire, 20AWG (19x32) Silver Plated Copper, TFE Insulation, AWM 1180 300V 200C TYPE EE MIL-W-16878/5 1000V 200C

Technical Specifications

Product Overview

| | |
|------------------------|--|
| Suitable Applications: | high temperature, inter-connection circuits, internal wiring of computer and electronic equipments, (Type EE) MIL-W-16878/5 applications |
|------------------------|--|

Construction Details

Conductor

| Element | Number of Element | Size | Stranding | Material |
|--------------|-------------------|--------|-----------|----------------------|
| Conductor(s) | 1 | 20 AWG | 19x32 | SC - Silvered Copper |

Insulation

| Material | Nom. Thickness | Nom. Insulation Diameter |
|--------------------------------|--------------------|--------------------------|
| PTFE - Polytetrafluoroethylene | 0.015 in (0.38 mm) | 0.068 in (1.7 mm) |

| | |
|-----------------------------------|-------------------|
| Overall Cable Diameter (Nominal): | 0.068 in (1.7 mm) |
|-----------------------------------|-------------------|

Electrical Characteristics

Electricals

| Nom. Conductor DCR | Max. Current |
|--------------------|--|
| 4.0 Ohm/1000ft | Mil-Std-975M Table 3.16 (single wire): 6.5 A |

Voltage

| UL Voltage Rating |
|---|
| 300 V RMS (UL AWM 1180), 1000 V RMS (Mil-W-16878/5) |

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|----------------|-----------------|
| 200°C | -70°C To +200°C |

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 0.68 in (17 mm) | 0.68 in (17 mm) |

| | |
|--------------------|-----------------|
| Max. Pull Tension: | 16 lbs (7.3 kg) |
| Bulk Cable Weight: | 6 lbs/1000ft |

Standards and Compliance

| | |
|----------------------------------|-----------------|
| Environmental Suitability: | Indoor, Outdoor |
| Sustainability: | CA Prop 65 |
| Flammability / Reaction to Fire: | VW-1 |
| AWM Compliance: | AWM 1180 |

| | |
|--------------------------------|---|
| NEMA Compliance: | HP3 |
| Military Compliance: | MIL-W-16878/5 |
| European Directive Compliance: | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |

History

| | |
|----------------------|--|
| Update and Revision: | Revision Number: 0.467 Revision Date: 01-20-2023 |
|----------------------|--|

Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC |
|---------------|-------------|------------|----------|--------------|
| 83027 010500 | Black | | | |
| 83027 010100 | Black | Reel | 100 ft | 612825354543 |
| 83027 0101000 | Black | Reel | 1,000 ft | 612825399520 |
| 83027 006100 | Blue, Light | Reel | 100 ft | 612825354482 |
| 83027 0061000 | Blue, Light | Reel | 1,000 ft | 612825399513 |
| 83027 001100 | Brown | Reel | 100 ft | 612825354727 |
| 83027 008100 | Gray | | | |
| 83027 005100 | Green, Dark | Reel | 100 ft | |
| 83027 0051000 | Green, Dark | Reel | 1,000 ft | |
| 83027 0031000 | Orange | | | |
| 83027 003100 | Orange | Reel | 100 ft | 612825354635 |
| 83027 002100 | Red | Reel | 100 ft | 612825354758 |
| 83027 0021000 | Red | Reel | 1,000 ft | 612825354505 |
| 83027 007100 | Violet | Reel | 100 ft | |
| 83027 0071000 | Violet | Reel | 1,000 ft | |
| 83027 009100 | White | Reel | 100 ft | 612825354499 |
| 83027 0091000 | White | Reel | 1,000 ft | 612825354512 |
| 83027 0041000 | Yellow | | | |
| 83027 004100 | Yellow | Reel | 100 ft | 612825354475 |

© 2023 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.