



**Product:** [83318E](#)

Electronic, 2 C #24 Str SPC, TFE Ins, OA SPC Brd, TFE Tape Jkt, MIL-W-16878/4 (Type E)

[Request Sample](#)

### Product Description

High Temperature Electronic, 2 Conductor 24AWG (19x36) Silver Plated Copper, TFE Insulation, Overall Silver Plated Copper Braid(85%) Shield, TFE Tape Outer Jacket, MIL-W-16878/4 (Type E)

### Technical Specifications

#### Product Overview

|                        |                                                                                                                     |
|------------------------|---------------------------------------------------------------------------------------------------------------------|
| Suitable Applications: | MIL-W-16878/4 (Type E) Spec; Extreme High/Low Temperature Environments; up to 600V analog signals & voltage control |
|------------------------|---------------------------------------------------------------------------------------------------------------------|

#### Construction Details

##### Conductor

| Element      | No. of Elements | Size   | Stranding | Material             |
|--------------|-----------------|--------|-----------|----------------------|
| Conductor(s) | 2               | 24 AWG | 19x36     | SC - Silvered Copper |

##### Insulation

| Element      | Material                       | Nom. Thickness     | Nom. Insulation Diameter | Color Code   |
|--------------|--------------------------------|--------------------|--------------------------|--------------|
| Conductor(s) | PTFE - Polytetrafluoroethylene | 0.010 in (0.25 mm) | 0.044 in (1.1 mm)        | White, Black |

##### Outer Shield

| Shield Type | Material             | Coverage |
|-------------|----------------------|----------|
| Braid       | Silvered Copper (SC) | 85%      |

##### Outer Jacket

| Material                       | Nom. Thickness     | Nom. Diameter      |
|--------------------------------|--------------------|--------------------|
| PTFE - Polytetrafluoroethylene | 0.011 in (0.28 mm) | 0.131 in (3.33 mm) |

Overall Cable Diameter (Nominal): 0.131 in (3.33 mm)

#### Electrical Characteristics

##### Electricals

| Element      | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Max. Current                |
|--------------|--------------------|-------------------------------|-------------------------------------------------|-----------------------------|
| Conductor(s) | 23 Ohm/1000ft      | 26.5 pF/ft (86.9 pF/m)        | 42.4 pF/ft (139 pF/m)                           | 4 Amps per conductor @ 25°C |

##### Voltage

| Voltage Rating |
|----------------|
| 600 V          |

#### Mechanical Characteristics

##### Temperature

| UL Temperature | Operating       |
|----------------|-----------------|
| 200°C          | -65°C to +200°C |

##### Bend Radius

| Stationary Min.   | Installation Min. |
|-------------------|-------------------|
| 1.31 in (33.3 mm) | 1.31 in (33.3 mm) |

|                    |                    |
|--------------------|--------------------|
| Max. Pull Tension: | 11.8 lbs (5.35 kg) |
| Bulk Cable Weight: | 14 lbs/1000ft      |

## Standards and Compliance

|                                |                                                                                                                           |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Sustainability:                | CA Prop 65                                                                                                                |
| CPR Compliance:                | CPR Euroclass: Eca                                                                                                        |
| NEMA Compliance:               | NEMA HP3                                                                                                                  |
| Military Compliance:           | MIL-W-16878/4 (Type E except stranding), (insulated conductors)                                                           |
| 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) |
| UK Regulation Compliance:      | UKCA Mark                                                                                                                 |
| APAC Compliance:               | China RoHS II (GB/T 26572-2011)                                                                                           |

## Product Notes

|        |                                                                                                         |
|--------|---------------------------------------------------------------------------------------------------------|
| Notes: | Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc. |
|--------|---------------------------------------------------------------------------------------------------------|

## History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.530 Revision Date: 02-15-2024 |
|----------------------|--------------------------------------------------|

## Part Numbers

### Variants

| Item #         | Color | Putup Type | Length   | UPC          | Footnote |
|----------------|-------|------------|----------|--------------|----------|
| 83318E 009500  | White |            |          | 612825203957 | E        |
| 83318E 009100  | White | Reel       | 100 ft   | 612825203940 | E        |
| 83318E 0091000 | White | Reel       | 1,000 ft |              | E        |

© 2024 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.