



Product: [SPE402](#)

DataTuff Ind SPE 40m 1Gbps 100 Ohm 26AWG SFTP PVC

Product Description

DataTuff Industrial Single Pair Ethernet 40m 1Gbps 100 Ohm 26AWG (Solid) Bare Copper, PP Insulation, Overall Beldfoil®+Tinned Copper Braid(80%) Shield, PVC Outer Jacket

Technical Specifications

Product Overview

|                        |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Suitable Applications: | Noisy environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc. |
|------------------------|----------------------------------------------------------------------------------------------------------|

Construction Details

Conductor

| Size   | Stranding | Material         | No. of Pairs |
|--------|-----------|------------------|--------------|
| 26 AWG | Solid     | BC - Bare Copper | 1            |

Insulation

| Material           | Nom. Insulation Diameter | Color Code             |
|--------------------|--------------------------|------------------------|
| PP - Polypropylene | 0.051 in (1.3 mm)        | Natural & Natural/Blue |

Outer Shield

| Shield Type | Material                | Coverage |
|-------------|-------------------------|----------|
| Tape        | Bi-Laminate (Alum+Poly) | 100%     |
| Braid       | Tinned Copper (TC)      | 80%      |

Outer Jacket

| Material                 | Nom. Diameter      |
|--------------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.161 in (4.09 mm) |

Electrical Characteristics

Electricals

| Max. Conductor DCR | Max. Capacitance Unbalance |
|--------------------|----------------------------|
| 145 Ohm/km         | 1,600 pF/km                |

Delay

| Frequency | Max. Delay  | Max. Delay Skew |
|-----------|-------------|-----------------|
| 100 MHz   | 538 ns/100m | 25 ns/100m      |

High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. RL (Return Loss) [dB] | Min. TCL [dB] | Min. ELTCTL [dB] | Max. Surface Transfer Impedance [mOhm/m] | Min. Coupling Attenuation [dB] |
|-----------------|-----------------------------------|----------------------------|---------------|------------------|------------------------------------------|--------------------------------|
| 1               | 3.1 dB/100m                       |                            | 40            | 40               | 15                                       |                                |
| 4               | 5.6 dB/100m                       | 20                         | 40            | 28               | 50                                       |                                |
| 8               | 7.8 dB/100m                       | 24.5                       | 36.5          | 21.9             | 93                                       |                                |
| 10              | 8.7 dB/100m                       | 25                         | 35.0          | 20.0             | 100                                      |                                |
| 16              | 11 dB/100m                        | 25                         | 31.9          | 15.9             | 135                                      |                                |
| 20              | 12.3 dB/100m                      | 25                         | 30.5          | 14               | 155                                      |                                |

|     |              |      |      |      |     |    |
|-----|--------------|------|------|------|-----|----|
| 25  | 13.8 dB/100m | 24.2 | 29   | 12   | 178 |    |
| 30  | 15.1 dB/100m | 23.5 | 27.8 | 10.5 | 200 | 85 |
| 60  | 21.4 dB/100m | 20.9 | 23.3 | 5    |     | 85 |
| 100 | 27.8 dB/100m | 19   | 20   | 5    |     | 85 |
| 200 | 39.7 dB/100m | 16.4 | 15.5 | 5    |     | 79 |
| 250 | 44.6 dB/100m | 15.6 | 14   | 5    |     | 77 |
| 300 | 49.0 dB/100m | 14.9 | 12.8 | 5    |     | 75 |
| 350 | 53.2 dB/100m | 14.3 | 11.8 | 5    |     | 74 |
| 400 | 57.0 dB/100m | 13.8 | 11   | 5    |     | 73 |
| 450 | 60.7 dB/100m | 13.4 | 10.2 | 5    |     | 72 |
| 500 | 64.1 dB/100m | 71   | 9.5  | 5    |     | 71 |
| 550 | 67.5 dB/100m | 12.6 | 8.9  | 5    |     | 70 |
| 600 | 70.7 dB/100m | 12.3 | 8.3  | 5    |     | 69 |

Voltage

| UL Voltage Rating   | Voltage Rating       |
|---------------------|----------------------|
| 300 V (UL AWM 2095) | 300 V (IEC 61156-12) |

Mechanical Characteristics

Temperature

| UL Temperature | Operating      |
|----------------|----------------|
| 80°C           | -20°C To +80°C |

Bend Radius

| Installation Min. |
|-------------------|
| 1.7 in (43 mm)    |

|                    |                |
|--------------------|----------------|
| Bulk Cable Weight: | 7.7 lbs/1000ft |
|--------------------|----------------|

Standards and Compliance

|                                  |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability:       | Indoor, Outdoor, UV Resistance, Oil Resistance                                                                                                      |
| Flammability / Reaction to Fire: | FT2, IEC 60332-1-2                                                                                                                                  |
| AWM Compliance:                  | AWM 2095, AWM I A/B                                                                                                                                 |
| IEEE Compliance:                 | IEEE 802.3bp                                                                                                                                        |
| ISO/IEC Compliance:              | IEC 61156-12                                                                                                                                        |
| European Directive Compliance:   | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16 |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)                                                                                                                     |

Product Notes

|        |                                                                                                                                  |
|--------|----------------------------------------------------------------------------------------------------------------------------------|
| Notes: | Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. |
|--------|----------------------------------------------------------------------------------------------------------------------------------|

History

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Update and Revision: | Revision Number: 0.34 Revision Date: 01-20-2023 |
|----------------------|-------------------------------------------------|

Part Numbers

Variants

| Item #         | Color       | Putup Type | Length   |
|----------------|-------------|------------|----------|
| SPE402 0101000 | Black       | Reel       | 1,000 ft |
| SPE402 0061000 | Blue, Light | Reel       | 1,000 ft |

© 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.