

**IE-S1DS2VE0010T01T01-E****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**SPElink®**

Single pair Ethernet is a technology that only requires one pair of wires to transmit data and power. The resulting benefits will make SPE the preferred network at the field level and beyond.

**Advantages of Single Pair Ethernet**

- Consistent: Single Pair Ethernet enables uniform Ethernet-based communication from the sensor to the cloud
- Future-proof: key technology for Industry 4.0 and IIoT
- Flexible: ranges of up to 1000 m and transmission properties of up to 1 Gbps enable use across applications
- Innovative: lighter, less space required, and reduced installation effort

**General ordering data**

|            |                                                                                                                                           |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Version    | Patch cable, SPE plug (IEC 63171-2) - IP20 socket contact straight, SPE plug (IEC 63171-2) - IP20 socket contact straight, T1-B, PVC, 1 m |
| Order No.  | <a href="#">2725850010</a>                                                                                                                |
| Type       | IE-S1DS2VE0010T01T01-E                                                                                                                    |
| GTIN (EAN) | 4050118824544                                                                                                                             |
| Qty.       | 1 pc(s).                                                                                                                                  |

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## Technical data

## Dimensions and weights

|            |      |                 |            |
|------------|------|-----------------|------------|
| Length     | 1 m  | Length (inches) | 39.37 inch |
| Net weight | 42 g |                 |            |

## Temperatures

|                       |                |
|-----------------------|----------------|
| Operating temperature | -40 °C...80 °C |
|-----------------------|----------------|

## Electrical properties

|                                        |                                   |                                       |           |
|----------------------------------------|-----------------------------------|---------------------------------------|-----------|
| Dielectric strength, contact / contact | 1000 V DC                         | Dielectric strength, contact / shield | 2250 V DC |
| PoE / PoE+                             | PoDL acc. to IEEE<br>802.3bu / cg |                                       |           |

## Standards

|                    |             |
|--------------------|-------------|
| Connector standard | IEC 63171-2 |
|--------------------|-------------|

## Cable structure

|                       |              |                            |                                         |
|-----------------------|--------------|----------------------------|-----------------------------------------|
| Colour coding         | white / blue | Complete shielding         | Shielding braid made from copper wiring |
| Cross-section         | 2*AWG 22     | Insulation                 | PE                                      |
| Insulation diameter 2 | 1.65 mm      | Material sheath            | PVC                                     |
| Number of wires       | 2            | Overlap of shielding braid | 80 %                                    |
| Sheath diameter, max. | 5.3 mm       | Sheath diameter, min.      | 4.9 mm                                  |
| Sheathing colour      | black        | Shielding                  | STP                                     |
| Strands               | 7            |                            |                                         |

## Electrical properties of cable

|                          |                            |                                   |                |
|--------------------------|----------------------------|-----------------------------------|----------------|
| Capacity at 800 Hz       | 1.6 nF/km                  | Category                          | T1-B           |
| Characteristic impedance | 100 ± 15 Ω at 20 MHz       | Coupling attenuation 1 to 600 MHz | Type I         |
| Rated current            | 3.5 A                      | Rated voltage (DC)                | 60 V           |
| Resistance differential  | 2 %                        | Test voltage: wire-wire-shield    | 1 kV DC, 1 min |
| Transmission rate        | 10/100 MBit/s, 1000 MBit/s |                                   |                |

## Mechanical and material properties of cable

|                               |       |                    |                                              |
|-------------------------------|-------|--------------------|----------------------------------------------|
| Bending radius                | 20 mm | Colour             | black                                        |
| Halogen                       | Yes   | Resistance to oils | IRM 902/903 oil resistance test at (70°Cx4h) |
| Resistance to spread of flame | FT1   | UV-resistant       | Complies with UL 1581 Sec. 1200              |

## Plug

|           |                                                                           |            |                                                                           |
|-----------|---------------------------------------------------------------------------|------------|---------------------------------------------------------------------------|
| Plug left | SPE, IP20, female contact, straight, plug, Plastic, IEC 63171-2, shielded | Plug right | SPE, IP20, female contact, straight, plug, Plastic, IEC 63171-2, shielded |
|-----------|---------------------------------------------------------------------------|------------|---------------------------------------------------------------------------|

## Plug, left

|           |                                                                           |
|-----------|---------------------------------------------------------------------------|
| Plug left | SPE, IP20, female contact, straight, plug, Plastic, IEC 63171-2, shielded |
|-----------|---------------------------------------------------------------------------|

Creation date May 11, 2025 10:07:36 PM CEST

Catalogue status 26.04.2025 / We reserve the right to make technical changes.

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## Technical data

## Plug, right

|            |                                                                           |
|------------|---------------------------------------------------------------------------|
| Plug right | SPE, IP20, female contact, straight, plug, Plastic, IEC 63171-2, shielded |
|------------|---------------------------------------------------------------------------|

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002599    | ETIM 7.0    | EC002599    |
| ETIM 8.0    | EC002599    | ETIM 9.0    | EC002599    |
| ETIM 10.0   | EC002599    | ECLASS 9.0  | 27-06-03-08 |
| ECLASS 9.1  | 27-06-03-08 | ECLASS 10.0 | 27-06-03-08 |
| ECLASS 11.0 | 27-06-03-08 | ECLASS 12.0 | 27-06-03-08 |
| ECLASS 13.0 | 27-06-03-08 | ECLASS 14.0 | 27-06-03-08 |
| ECLASS 15.0 | 27-06-03-08 |             |             |

## Environmental Product Compliance

|                        |                             |
|------------------------|-----------------------------|
| RoHS Compliance Status | Compliant without exemption |
| REACH SVHC             | No SVHC above 0.1 wt%       |

## Approvals

Approvals



|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approvals MAMID | <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/</a> <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319228/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319228/-T1z1mm-S800/</a> <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319260/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319260/-T1z1mm-S800/</a> |
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|                         |            |
|-------------------------|------------|
| ROHS                    | Conform    |
| UL File Number Search   | UL Website |
| Certificate no. (cULus) | E316369    |

## Downloads

|                  |                                          |
|------------------|------------------------------------------|
| Engineering Data | <a href="#">CAD data – STEP</a>          |
| Catalogues       | <a href="#">Catalogues in PDF-format</a> |

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## Drawings

### Detailed drawing



### Dimensional drawing

