

## IE-S1DS2VE0020TM1TM2-E

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

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Germany

[www.weidmueller.com](http://www.weidmueller.com)



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, M8 SPE ( IEC63171-5) - IP67 socket contact - straight, M8 SPE ( IEC63171-5) - IP67 pin contact - straight, PVC, 2 m |
| Order No.  | <a href="#">2726060020</a>   |
| Type       | IE-S1DS2VE0020TM1TM2-E   |
| GTIN (EAN) | 4050118826203  |
| Qty.       | 1 pc(s).   |

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## Technical data

## Dimensions and weights

|            |      |                 |            |
|------------|------|-----------------|------------|
| Length     | 2 m  | Length (inches) | 78.74 inch |
| Net weight | 45 g |                 |            |

## Temperatures

|                       |                |
|-----------------------|----------------|
| Operating temperature | -40 °C...85 °C |
|-----------------------|----------------|

## Electrical properties

|  |                                |       |
|--|--------------------------------|-------|
| Current-carrying capacity              | Current-carrying capacity      | 3.5 A |
|  | Temperature                    | 0 °C  |
| Dielectric strength, contact / contact | 1000 V DC                      |       |
| Dielectric strength, contact / shield  | 2250 V DC                      |       |
| PoE / PoE+                             | PoDL acc. to IEEE 802.3bu / cg |       |

## Standards

|                    |             |
|--------------------|-------------|
| Connector standard | IEC 63171-5 |
|--------------------|-------------|

## 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      | 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, left

|                |   |
|----------------|---|
| Connector left | M8 SPE ( IEC63171-5)<br>- IP67 socket contact -<br>straight |
|----------------|---|

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**Technical data****Plug, right**

|                 |   |                       |            |
|-----------------|---|-----------------------|------------|
| Connector right | M8 SPE ( IEC63171-5) -<br>IP67 pin contact - straight | Housing main material | Elastollan |
|-----------------|---|-----------------------|------------|

**plug**

|                |   |                 |   |
|----------------|---|-----------------|---|
| Connector left | M8 SPE ( IEC63171-5) -<br>IP67 socket contact -<br>straight | Connector right | M8 SPE ( IEC63171-5) -<br>IP67 pin contact - straight |
|----------------|---|-----------------|---|

**Classifications**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002599    | ETIM 7.0    | EC002599    |
| ETIM 8.0    | 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 |             |             |

**Approvals**

Approvals



ROHS Conform

**Downloads**

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

**Data sheet**

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**Drawings**

