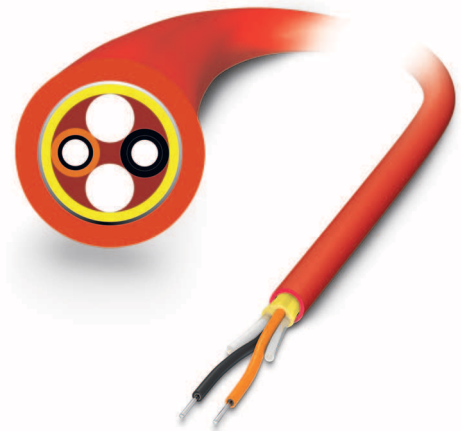


PSM-LWL-RUGGED-980/1000

Polymer fiber cable, duplex 980/1000 μm , heavy version for fixed indoor installation



Data sheet
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1 Description

The **PSM-LWL-RUGGED-980/100** fiber optic cable is a heavy round cable for fixed indoor installation.

1.1 Properties

- Robust installation cable for fixed indoor installation
- Designed to meet increased requirements in terms of tensile and lateral loads
- Polyurethane (PUR) outer sheath
- 2.2 mm single wires made from extremely hard-wearing polyamide (PA)
- Halogen-free, ozone and UV resistant

1.2 Structure

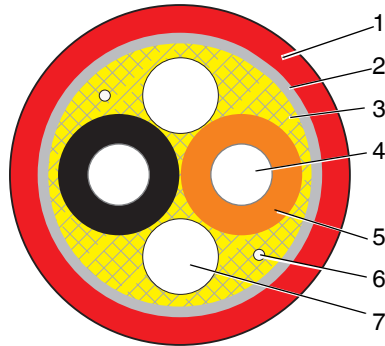


Figure 1 Cross section drawing

- 1 PUR outer sheath
- 2 Separator foil
- 3 Strain relief
- 4 Fibers
- 5 PA sheath
- 6 Tearing wire
- 7 Blind element



Make sure you always use the latest documentation.
It can be downloaded at www.phoenixcontact.net/catalog.



This data sheet is valid for all products listed on the following page:

2 Ordering data

Cables

| Description | Type | Order No. | Pcs. / Pkt. |
|--|--------------------------|-----------|-------------|
| Polymer fiber cable , duplex 980/1000 µm, medium-weight version for fixed indoor installation, by the meter without plug | PSM-LWL-RUGGED-980/1000 | 2744322 | 1 |
| Polymer fiber cable , duplex 980/1000 µm, medium-weight version for fixed indoor installation, assembled with plugs (IP20 heads only) | FOC-RUGGED-1012/IP20/... | 2901548 | 1 |
| Polymer fiber cable , duplex 980/1000 µm, medium-weight version for fixed indoor installation, assembled with plugs | FOC-RUGGED-1012/.. | 1402185 | 1 |

Accessories

| Description | Type | Order No. | Pcs. / Pkt. |
|---|----------------------------|-----------|-------------|
| Fiber optic plug-in connector , SCRJ plug set for polymer fibers, consisting of two duplex quick mounting plugs with bend protection | PSM-SET-SCRJ-DUP/2-POF | 2708656 | 1 |
| Fiber optic plug-in connector , F-SMA plug set for polymer fibers, consisting of four quick mounting plugs with bend protection | PSM-SET-FSMA/4-KT | 2799720 | 1 |
| Polymer fiber assembly kit , consisting of: stripping blade, stripping pliers, polishing wheels for F-SMA and SCRJ quick mounting plugs, polishing pad, and emery paper | PSM-POF-KONFTOOL | 2744131 | 1 |
| Polymer fiber polishing set , for F-SMA quick mounting plugs | PSM-SET-FSMA-POLISH | 2799348 | 1 |
| Refilling set , for VS-SCRJ-POF-POLISH, consisting of two polishing discs and a polisher | VS-SCRJ-POF-POLISH | 1656673 | 1 |
| Stripping tool , for removing cables (especially fiber optic cables) of Ø 4 mm ... 16 mm | WIREFOX-D 16 | 1212173 | 1 |
| Fiber optic measuring case , consisting of an optical power meter, F-SMA, B-FOC adapters, reference fibers, and operating instructions | PSM-FO-POWERMETER | 2799539 | 1 |
| Fiber optic measuring case supplementary set , for devices with SCRJ interface, consisting of one-meter polymer reference fiber (SC Simplex to F-SMA plug), one-meter HCS GI reference fiber (SC Simplex to B-FOC plug), and SCRJ coupling | PSM-FO-POWERMETER SCRJ-SET | 2901560 | 1 |

3 Technical data

| General data | |
|--------------------------|---------------------------------|
| Cable type | Polymer fiber, 980/1000 µm |
| Cable abbreviation | J-V11Y 4Y2P 980/1000 160A 10 |
| Cable length | Free input (0.4 ... 100.0 m) |
| Weight | 54 kg/km |
| Temperature range | |
| Installation | -5°C ... +50°C |
| Operation | -20°C ... +70°C |
| Storage | -40°C ... +80°C |
| Altitude | 5000 m |
| Fibers | |
| Type | 980/1000 µm, step index profile |
| Material | PMMA |
| Attenuation | |
| At 650 nm | ≤ 170 dB/km (monochromatic) |
| At 660 nm | ≤ 230 dB/km (LED) |
| Bandwidth length product | |
| At 650 nm | ≥ 10 MHz x 100 m |
| Numerical aperture | 0.50 |

Single wires

| | |
|---------------|---|
| Material | Polyamide (PA) |
| Color | Black and orange |
| Wire diameter | 2.2 mm ±0.07 mm |
| Stranding | Two single elements and two blind elements stranded and wrapped in fleece |

Outer sheath

| | |
|------------------------|---|
| Material | Polyurethane (PUR) |
| Color | Red |
| Diameter | 8 mm ±0.5 mm |
| Strain relief elements | Non-metallic, aramide yarn |
| Imprint | PHOENIX CONTACT FIBER OPTIC CABLE J-V11Y 4Y2P 980/1000 160A 10 RUGGED and running length specification in m, date of manufacture |
| Tearing wire | Two tearing wires beneath outer sheath |

Mechanical properties according to IEC 60794-1-2

| | | Cables | Single wires |
|----------------------------|-------------------------|--|---------------------|
| Bending radius | Method E11, test type A | Temporary | At least 65 mm |
| | | Permanent | At least 65 mm |
| Tensile strength | Method E1 | Temporary | Maximum 1000 N |
| | | Permanent | Maximum 100 N |
| Lateral strength | Method E3 | Temporary | Maximum 200 N/cm |
| | | Permanent | Maximum 20 N/cm |
| Impact strength | Method E4 | At least 2 Nm, 10 impacts | |
| Resistance to abrasion | Method E2, test type A | At least 5000 cycles, 0.45 mm radius of the steel point, 7 N | |
| Roller change bending test | Method E8 | At least 50,000 cycles, r = 20 mm | |

Material properties

| | |
|--------------------------|--|
| Resistance to oil | IRM 902 100°C according to DIN VDE 0473-811-2-1 |
| Paint or varnish coating | Free from substances that would ruin a paint or varnish coating according to central standard P-VW 3.10.757 65 0 of VW, Audi, Seat |
| Halogen-free | According to IEC 60754-2 A1 |
| Resistance to ozone | According to DIN VDE 0472-805, test type B |
| UV resistance | According to DIN EN ISO 4892-2, method A |
| Fire load | 1.62 MJ/m (0.39 kWh/m) |
| RoHS conformance | Cable meets EU directive 2002/95/EC |



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- Консультации по применению компонента;
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- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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