

**HITRONIC® POF DUPLEX PNB PA-PUR****DB2805 1002EN**  
valid from: 13.06.2016**1. Product Description**

Cable designation: J-V4Y(ZN) 11Y 2P980/1000

**2. Application**

HITRONIC® POF DUPLEX PNB PA-PUR are PROFINET® compliant polymer optical fiber cables with reinforced PUR outer sheath for use in industrial environments with high mechanical stress. They are designed for fixed installation in cable ducts and pipes in Industrial Ethernet/PROFINET® applications. Applications with cable length of up to 50m at data rate of 100 Mbit/s. Suitable for direct connector assembly.

**3. Cable Design**

Fibre type	Polymer optical fibre (POF)
Fibre construction	Polymethylmethacrylate fibre cores with fluoropolymer cladding
Buffer coating	Polyamide
Strain relief	Aramid yarns, longitudinal
Outer sheath	Polyurethane compound
Colour of buffer coating	Black/orange, with arrow printing
Colour of outer sheath	Green, similar to RAL 6018

**4. Optical and Physical Properties of Fibre**

Attenuation coefficient	@ 650 nm	dB/km	≤ 160
	@ 660 nm	dB/km	≤ 230
Bandwidth	@ 650 nm	MHz · 100m	≥ 40
Numerical aperture			0.5 ± 0.05
Core diameter		µm	980 ± 2
Cladding diameter		µm	1000 ± 2

**5. Thermal Properties**

Operating temperature	-20°C up to +70°C
Installation temperature	-10°C up to +50°C
Storage temperature	-40°C up to +80°C

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automation



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**6. Mechanical Properties**

Number of fibres	2
Buffered fiber outer diameter	2.2 mm
Cable outer diameter	8.0 mm
Cable weight	56 kg/km
Min. bending radius	65 mm
Max. tensile strength	long term 100 N short term 1.000 N
Max. crush resistance	long term 2.000 N/10 cm short term 4.000 N/10 cm

**7. Chemical Properties**

PA buffer coating	Halogen free, non-aging, low flue gas development, toxicologically safe
PUR outer sheath	Flame retardant, halogen free, oil resistant, low adhesion

**8. Features**

- Halogen free according to IEC 60754-1, DIN VDE 0472 Part 815 (except for fibre cladding)
- Oil resistance according to IEC 60811-2-1 and DIN EN 50363-10-2 (100°C, 168 h)
- PROFINET® Optical Fibre Cable Type B according to standard PROFINET® Cabling and Interconnection Technology
- This cable is conform to the EU-Directive 2011/65/EU: RoHS (Restriction of the use of hazardous substances)

**9. Product Range Overview**

Part number	Article designation	No. of Fibres	Outer $\varnothing$ (mm)
28051002	HITRONIC® POF DUPLEX PNB PA-PUR	2	8.0