

HITRONIC® POF DUPLEX FD PNC PA-PUR

DB2835 1002EN

valid from: 13.06.2016

1. Product Description

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

2. Application

HITRONIC® POF DUPLEX FD PNC PA-PUR are highly flexible polymer optical fibre cables with a reinforced PUR outer sheath for high mechanical stress. They are suitable for power chains and installation in highly flexible Industrial Ethernet/PROFINET® applications in industrial environment. Applications with cable length of up to 50 meters at data rate of 100 Mbit/s. The cables are suitable for direct connector assembly.

3. Cable Design

Fibre type	Polymer Optical Fibre (POF)
Fibre construction	Step index fibre with Polymethylmethacrylate cores and optical fluoropolymer claddings (P980/1000)
Buffer coating	Polyamide (PA)
Strain relief	Viscose filament yarns
Core covering	Synthetic fleece
Outer sheath	Polyurethane (PUR)
Colour of buffer	Black/Orange, with arrow printing
Colour of outer sheath	Green, similar to RAL 6018

4. Optical Properties at 20°C

Attenuation coefficient	@ 650 nm	dB/km	≤ 180
	@ 660 nm	dB/km	≤ 275
Bandwidth	@ 650 nm	MHz · 100m	≥ 40
Numerical aperture			0.5 ± 0.05
Core diameter		µm	980 ± 2
Cladding diameter		µm	1000 ± 2

5. Temperature Range

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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6. Mechanical Properties

Number of fibres		2
Buffered fibre outer diameter		2.2 mm
Cable outer diameter		8.0 mm
Cable weight		55 kg/km
Min. bending radius		10x cable Ø
Max. tensile strength	long term	200 N
	short term	500 N
Max. crush resistance	long term	2.000 N/10 cm
	short term	4.000 N/10 cm
For use in drag chains*	bending cycles	≥ 3.000.000
	chain length	4.5 m
	speed	3 m/s
	acceleration	3 m/s ²

* Please note assembly guideline table T3,
LAPP main catalogue

7. Material Properties

Oil resistance	acc. to IEC 60811-2-1 and DIN EN 50363-10-2
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8. Approvals

- PROFINET® Optical Fibre Cable Type C 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

Part number	Article designation	No. of Fibres	Outer Ø (mm)
2835 1002	HITRONIC® POF DUPLEX FD PNC PA-PUR	2	8.0