

HITRONIC® POF DUPLEX FD PE-PUR**DB28320002EN**
valid from: 13.06.2016**1. Product Description**

Cable designation: J-V2Y(ZN)11Y 2P980/1000

2. Application

HITRONIC® POF DUPLEX FD PE-PUR are highly flexible POF duplex core cables with reinforced PUR outer sheath for use in drag chains and moved installations in industrial environments. They are designed for optical signal transmission in dry rooms under increased mechanical stress. The cables are suitable for direct connector assembly.

3. Cable Design

Fibre type	Polymer optical fibre (POF)
Fibre construction	Polymethylmethacrylate cores with fluoropolymer cladding
Cable inner sheath	Polyethylene (PE)
Strain relief	Aramid yarns, longitudinal
Cable outer sheath	Polyurethane (PUR)
Colour of buffer coating	Black, Orange
Colour of outer sheath	Orange, similar to RAL 2003

4. Optical and Physical Properties of Fibre

Attenuation	@ 650 nm	dB/km	≤ 160
	@ 660 nm	dB/km	≤ 230
Bandwidth	@ 650 nm	MHz · 100m	≥ 10
Numerical aperture			0.5 ± 0.05
Core diameter		µm	980 ± 2
Cladding diameter		µm	1000 ± 2

5. Thermal Properties

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



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6. Mechanical Properties

Number of fibres	2
Fibre diameter	2.2 mm
Cable outer diameter	6.0 mm
Cable weight	30 kg/km
Min. bending radius	10x cable ø
Max. tensile strength	fixed installation 100 N short term 400 N
Max. lateral pressure	fixed installation 440 N/10cm short term 2.200 N/10cm
For use in drag chains*	bending cycles min 5.000.000 speed 3 m/s acceleration 3 m/s ²
* Please note assembly guidelines T3 (LAPP main catalogue)	

7. Chemical Properties

PE buffer coating	Non-aging, halogen free, good stability to acids and alkalis
PUR outer sheath	Flame retardant, halogen free, oil resistant

8. Approvals

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 ø (mm)
28320002	HITRONIC® POF DUPLEX FD PE-PUR	2	6.0