

**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 <sup>2</sup>
<i>* Please note assembly guidelines T3 (LAPP main catalogue)</i>		

**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