

HITRONIC® POF SIMPLEX FD PE-PUR

DB28320001EN

valid from: 13.06.2016

1. Product Description

Cable designation: J-V2Y(ZN)11Y 1P980/1000

2. Application

HITRONIC® POF SIMPLEX FD PE-PUR are highly flexible POF single core cables with reinforced PUR 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 use in power chain applications as well as direct connector assembly.

3. Cable Design



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

4. Optical and Physical Properties of Fibre

Attenuation coefficient	@ 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	1
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 600 N
Max. lateral pressure	fixed installation 100 N/10cm short term 1.500 N/10cm
For use in drag chains*	bending cycles min 5.000.000 travel length up to 10 m 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 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	Outerø (mm)
28320001	HITRONIC® POF SIMPLEX FD PE-PUR	1	6.0