

HITRONIC® POF DUPLEX PE-PUR

DB28020002EN

valid from: 13.06.2016

1. Product Description

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

2. Application

HITRONIC® POF DUPLEX PE-PUR are POF duplex core cables with PE buffer and reinforced PUR outer sheath for use in industrial environments. They are designed for optical signal transmission in dry rooms under high mechanical stress and rough environmental impact. The cables are suitable for direct connector assembly.

3. Cable Design



Fibre type	Polymer optical Fibre (POF)
Fibre construction	Two Polymethylmethacrylate cores with fluoropolymer cladding (twin design)
Buffer coating	Polyethylene (PE)
Strain relief	Aramid yarns, longitudinal
Cable outer sheath	Polyurethane (PUR)
Colour of buffer coating	Black, Orange
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	-40°C to +70°C
Installation temperature	-10°C to +50°C
Storage temperature	-40°C to +70°C



HITRONIC® POF DUPLEX PE-PUR

DB28020002EN

valid from: 13.06.2016

6. Mechanical Properties

Number of fibres	2
Fibre diameter	2.2 mm
Cable outer diameter	5.5 mm
Cable weight	27 kg/km
Min. bending radius	10x cable ø
Max. tensile strength	fixed installation 100 N short term 400 N
Max. lateral pressure	fixed installation 100 N/10cm short term 1.000 N/10cm

7. Chemical Properties

PE inner sheath	Non-aging, halogen-free, good stability to acids and alkalis
PUR outer sheath	Flame-retardant, halogen-free

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)
28020002	HITRONIC® POF DUPLEX PE-PUR	2	5.5