

HITRONIC® POF DUPLEX PNB PA-PVC

DB28052002EN

valid from: 13.06.2016

1. Product Description

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

2. Application

HITRONIC® POF DUPLEX PNB PA-PVC are polymer optical fibre cables with PVC outer sheath for intermediate mechanical stress. They are suitable for fixed installation in cable ducts and pipes within Industrial Ethernet/PROFINET® applications in industrial environment. Applications with cable length of up to 50 m at data rate of 100 Mbit/s. Suitable for direct connector assembly.

3. Cable Design


Fibre type	Polymer Optical Fibre (POF)
Fibre construction	Polymethyl methacrylate cores with fluoropolymer claddings
Buffer	Polyamide (PA)
Strain relief	Viscose filament yarns
Cable sheath	Polyvinyl chloride (PVC)
Colour of buffered fibre	Black/Orange, with arrow printing
Colour of cable sheath	Green, similar to RAL 6018

4. Optical and Physical Properties of Fibre at 20°C

Attenuation coefficient	@ 650 nm	dB/km	≤ 160
	@ 660 nm	dB/km	≤ 230
Bandwidth	@ 650 nm	MHz · 100m	≥ 40
Numerical aperture			0.5 ± 0.05
Core diameter		µm	980 ± 2
Cladding diameter		µm	1000 ± 2

5. Thermal Properties

Operating temperature	-30°C up to +70°C
Installation temperature	-10°C up to +50°C
Storage temperature	-30°C up to +70°C



HITRONIC® POF DUPLEX PNB PA-PVC

DB28052002EN

valid from: 13.06.2016

6. Mechanical Properties

Max. number of fibres		2
Buffered fibre diameter		2.2 mm
Cable outer diameter		7.8 mm
Cable weight		59 kg/km
Min. bending radius		10x cable Ø
Max. tensile strength	long term	100 N
	short term	200 N
Max. crush resistance	long term	500 N/10 cm
	short term	1.000 N/10 cm

7. Chemical Properties

Flame retardant	acc. to IEC 60332-1-2
-----------------	-----------------------

8. Features

- PROFINET® Optical Fibre Cable Type B 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 Overview

Part number	Article designation	No. of Fibres	Outer Ø (mm)
28052002	HITRONIC® POF DUPLEX PNB PA-PVC	2	7.8