HITRONIC® PCF DUPLEX PNB PVC-PVC

DB28052702EN
valid from: 01.11.2014

1. Product Description

Cable designation: J-V(ZN)YY 2K200/230

Splittable duplex polymer cladded glass optical fibre (PCF) indoor cable with non-metallic strain relief, PVC inner and outer sheath, flame retardant, for standard applications in industrial environment

2. Application

PCF bus cable for PROFINET applications; Type B for fixed laying in cable ducts and pipes
Applications with cable lengths up to 100m at 100Mbit/s data rate
For direct connector assembly (single cable diameter 2.2 mm)

3. Cable Design

Cable construction	2x PCF fibre (polymer cladded fibre with ETFE buffer), non-metallic strain relief elements, PVC single cable sheath, stranded with two filler elements, fleece wrapping, PVC outer sheath
Cable inner sheath	PVC (special PVC-based compound)
Cable outer sheath	PVC (special PVC-based compound)
Colour of inner sheath	See colour coding
Colour of outer sheath	Green (similar to RAL 6018)
Colour coding	Black, orange (with arrow printing)
Strain relief	Aramid yarns (in single cable construction)
Type of armouring	-

4. Optical and Physical Properties of Fibre

Attenuation	@ 650 nm	dB/km	≤ 10
	@ 850 nm	dB/km	≤ 8
Bandwidth	@ 650 nm	MHz x km	≥ 17
	@850 nm	MHz x km	≥ 20
Numerical Aperture			0.37
Core diameter		µm	200
Cladding diameter		µm	230

5. Thermal Properties

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

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6. Mechanical Properties

Max. number of fibres			2
Fibre outer diameter (with buffer)			500 µm
Sub cable outer diameter			2.2 mm
Cable outer diameter			7.2 ± 0.2 mm
Cable weight			55 kg/km
Min. bending radius		once several times	70 mm 105 mm
Max. tensile strength	fixed installation short term		500 N 1.000 N
Max. lateral pressure	fixed installation short term		3.000 N/10 cm 5.000 N/ 10 cm

7. Chemical Properties

PVC sub unit sheath	Non-aging, flame retardant, abrasion resistant
PVC outer sheath	Flame retardant, oil resistant, UV resistant, non-aging, abrasion resistant

8. Features

- Flame retardant according to IEC 60332-1-2 (optical fibre cables under fire conditions)
- Oil resistance - Oil resistant I according to UL 1581 section 480
- UV resistance – Sunlight resistant according to UL 1581 section 1200
- PROFINET Optical Fibre Cable Type B according to guideline "PROFINET Cabling and Interconnection Technology" Version 3.1 March 2014
- EC-Directive: This cable is conform to the 2011/65/EU (RoHS, Restriction of the use of hazardous substances)

9. Product Range Overview

Part number	Article designation	No. Of Fibres	Outer ∅(mm)
28052702	HITRONIC® PCF DUPLEX PNB PVC-PVC	2	7.2