

HITRONIC[®] PCF DUPLEX PNB PVC-PVC

DB28052702EN valid from: 01.11.2014

1. Product Description

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

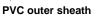
Splittable duplex polymer cladded glass optical fibre (PCF) indoor cable with non-metallic strain relief, PVC inner and outer sheath, flame retardant, for standard applications in industrial environment

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

LAPP KABEL STUTTGART HITRONIC® PCF DUPLEX PNB PVC-PVC



PVC single cable unit (ø2.2 mm)

| 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 @ 850 nm | dB/km dB/km | ≤ 10 ≤ 8 |
|--------------------|----------------------|----------------------|--------------|
| Bandwidth | @ 650 nm @850 nm | MHz x km MHz x km | ≥ 17 ≥ 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 | n 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 |

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