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| 28052007 | DATASHEET |  |
| Valid from: 21.06.2021 | HITRONIC® GOF DUPLEX PNC PROFINET Cable | |

1. Product Description

Cable designation: J-V(ZN)HH

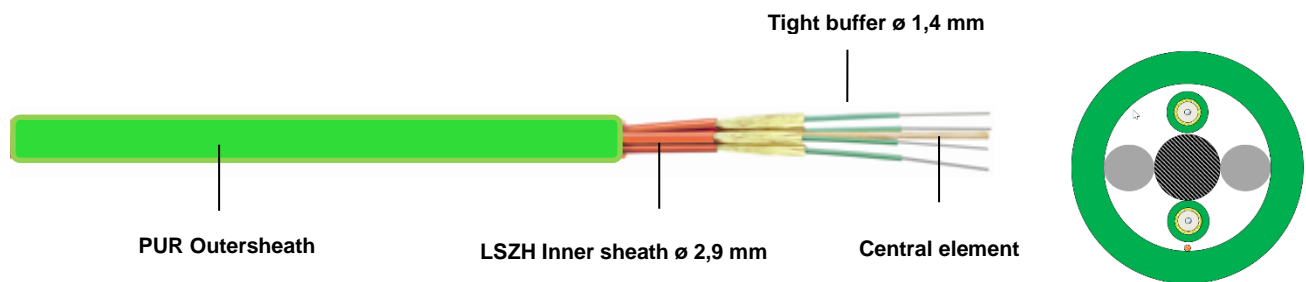
PROFINET type C suitable indoor breakout cable for direct connector assembly, 2 tight-buffered simplex units, halogen-free outer sheaths,

2. Application

For use in indoor, universal cable for tertiary and premise cabling


Methods of deployment: laying in trunking, ducts, trays, building riser, empty plastic pipes, raised floors and plenums for short distances

3. Product Design



| | |
|---------------------------------|--|
| Cable core | 2 tight-buffered simplex units enclosed by individual aramid fibres and LSZH sheaths (Ø 2.9 mm), a central element and an overall PUR outer sheath |
| Cable inner sheath | LSZH, halogen-free, flame-retardant, low smoke |
| Cable outer sheath | PUR, halogen-free |
| Colour of inner sheath | Orange (With printed arrows pointing at the direction of data stream) and Black |
| Colour of outer sheath | Green (RAL 6018) |
| Identification of simplex units | Numbers on inner sheath |
| Strain relief | Aramid yarns |
| Type of armouring | - |

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4. Optical and Physical Properties of Cabled Fibre (and Bare Fibre)

| Multimode fibre | | 50/125 µm | 50/125 µm | 50/125 µm | 62.5/125 µm |
|----------------------------|----------------------|-----------------|-------------|-------------|---------------|
| | | OM4 | OM3 | OM2 | OM1 |
| Attenuation | @ 850 nm dB/km | ≤ 3.5 (2.5) | ≤ 3.5 (2.5) | ≤ 3.5 (2.5) | ≤ 3.5 (3.0) |
| | @ 1300 nm dB/km | ≤ 1.5 (0.7) | ≤ 1.5 (0.7) | ≤ 1.5 (0.7) | ≤ 1.5 (0.7) |
| Bandwidth | @ 850 nm MHz-km | ≥ 3500 | ≥ 1500 | ≥ 500 | ≥ 200 |
| | @ 1300 nm MHz-km | ≥ 500 | ≥ 500 | ≥ 500 | ≥ 500 |
| Numerical aperture | | 0.2 ± 0.015 | 0.2 ± 0.015 | 0.2 ± 0.015 | 0.275 ± 0.015 |
| Core diameter | µm | 50 ± 2.0 | 50 ± 2.0 | 50 ± 2.0 | 62.5 ± 2.5 |
| Cladding diameter | µm | 125 ± 1.0 | 125 ± 1.0 | 125 ± 1.0 | 125 ± 2 |
| Primary coating diameter | µm | 242 ± 5 | 242 ± 5 | 242 ± 5 | 245 ± 10 |
| Single-mode fibre | | 9/125 µm | | | |
| | | (ITU-T G.652.D) | | | |
| Attenuation | @ 1310 nm dB/km | | | | ≤ 0.4 (0.35) |
| | @ 1550 nm dB/km | | | | ≤ 0.4 (0.21) |
| Chromatic dispersion | @ 1310 nm ps/(nm-km) | | | | ≤ 3.0 |
| | @ 1550 nm ps/(nm-km) | | | | ≤ 18 |
| Zero dispersion wavelength | nm | | | | 1300 – 1322 |
| Cut-off wavelength | nm | | | | ≤ 1260 |
| PMD | ps/km | | | | ≤ 0.1 |
| Mode field diameter | µm | | | | 9.0 ± 0.4 |
| Cladding diameter | µm | | | | 125 ± 1 |
| Primary coating diameter | µm | | | | 242 ± 7 |


5. Thermal Properties

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|--------------------------|------------------|
| Operating temperature | -40 °C to +70 °C |
| Installation temperature | -5 °C to +50 °C |
| Storage temperature | -40 °C to +70 °C |

6. Mechanical Properties

| | | |
|------------------------------|---|---------------------|
| Max. number of fibres | 2 | |
| Cable outer diameter (mm) | 8.8 ± 0.5 | |
| Cable weight (kg/km) | 65 | |
| Min. bending radius (mm) | without tensile load | 15 x outer diameter |
| | with tensile load | 20 x outer diameter |
| Max. tensile strength (N) | long-term | 1500 |
| | short-term | 4000 |
| Max. crush resistance (N/dm) | 1200 | |
| Torsion | +/- 180 deg | |
| Repeated Bending cycles | 1,5 Million (Pulley-diameter: 20 cm) | |

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| Drag chains | 1,5 Million Cycles |
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7. Chemical Properties

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|------------|---|
| PUR sheath | halogen-free acc. to IEC 60754-1 resp. EN 60754-1 |
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8. EU Directives

This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

9. Approvals

- Environmental and mechanical tests comply to EN 187000 and IEC 60794

10. Product Range Overview

| Article number | Article designation | Fibre type | No. of Fibres | Outer ϕ (mm) |
|--------------------|---|--------------|---------------|-------------------|
| Multimode | | | | |
| 28052007 | HITRONIC GOF DUPLEX PNC 2G 62,5/125 OM1 | 62,5/125 OM1 | 2 | 8.8 ± 0.5 |
| 28052008 | HITRONIC GOF DUPLEX PNC 2G 50/125 OM2 | 50/125 OM2 | 2 | 8.8 ± 0.5 |
| 28052009 | HITRONIC GOF DUPLEX PNC 2G 50/125 OM3 | 50/125 OM3 | 2 | 8.8 ± 0.5 |
| Single-mode | | | | |
| 28052010 | HITRONIC GOF DUPLEX PNC 2E 9/125 OS2 | 9/125 OS2 | 2 | 8.8 ± 0.5 |

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