

28052003	DATASHEET	
Valid from: 21.06.2021	HITRONIC® GOF DUPLEX PNB PROFINET Cable	

1. Product Description

Cable designation: J-V(ZN)HH

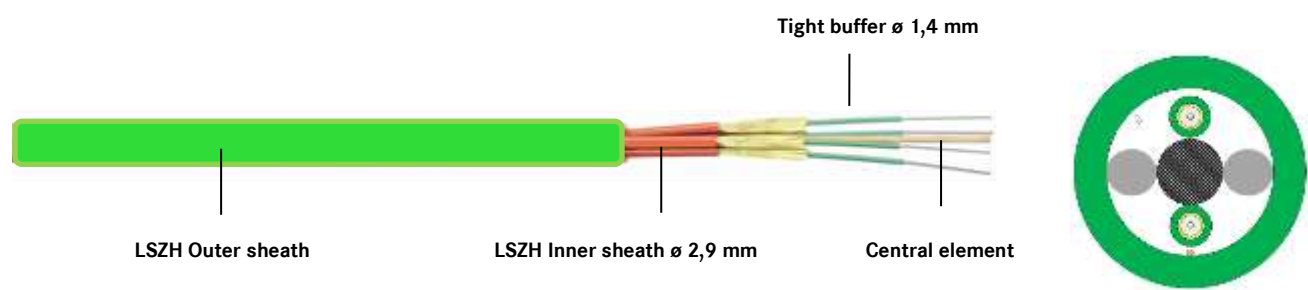
PROFINET type B suitable indoor breakout cable for direct connector assembly, 2 tight-buffered simplex units, flame-retardant and halogen-free inner and outer sheaths, CPR classified (Dca, s2, d2, a1).

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 LSZH outer sheath
Cable inner sheath	LSZH, halogen-free, flame-retardant, low smoke
Cable outer sheath	LSZH, halogen-free, flame-retardant, low smoke
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		1300 – 1322 nm			
Cut-off wavelength		≤ 1260 nm			
PMD		≤ 0.1 ps/km			
Mode field diameter		9.0 ± 0.4 µm			
Cladding diameter		125 ± 1 µm			
Primary coating diameter		242 ± 7 µm			

5. Thermal Properties

Operating temperature	-20 °C to +70 °C
Installation temperature	-5 °C to +50 °C
Storage temperature	-20 °C to +70 °C

6. Mechanical Properties

Max. number of fibres		2
Cable outer diameter (mm)		9.2 ± 0.5
Cable weight (kg/km)		72
Min. bending radius (mm)	without tensile load	15 x outer diameter
	with tensile load	20 x outer diameter
Max. tensile strength (N)	long-term	600
	short-term	1000
Max. crush resistance (N/dm)		2000

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7. Chemical Properties

LSZH sheath	flame-retardant acc. to	IEC 60332-1-2 resp. EN 60332-1-2
	halogen-free acc to	IEC 60754-1 & IEC 60754-2 resp. EN 60754-1 & EN 60754-2
	low smoke density acc. to	IEC 61034-1 & IEC 61034-2 resp. EN 61034-1 & EN 61034-2

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 $\varnothing$ (mm)
Multimode				
28052003	HITRONIC GOF DUPLEX PNB 2G 62,5/125 OM1	62,5/125 OM1	2	9.2 $\pm$ 0.5
28052004	HITRONIC GOF DUPLEX PNB 2G 50/125 OM2	50/125 OM2	2	9.2 $\pm$ 0.5
28052005	HITRONIC GOF DUPLEX PNB 2G 50/125 OM3	50/125 OM3	2	9.2 $\pm$ 0.5
Single-mode				
28052006	HITRONIC GOF DUPLEX PNB 2E 9/125 OS2	9/125 OS2	2	9.2 $\pm$ 0.5

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