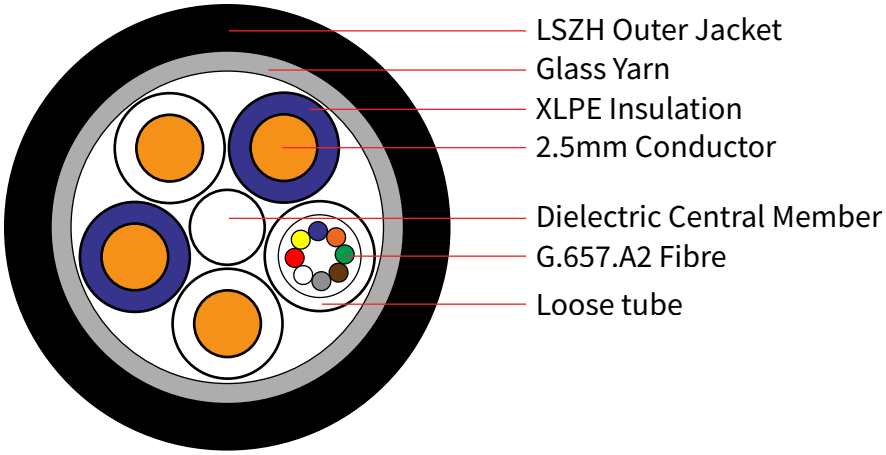
Product specification

Hughes Hybrid 8C + 4DC B2ca

8C SM G.657.A2 + 4x 2.5mm



Description

This indoor dielectric armoured hybrid cable combines 8 single-mode G.657.A2 optical fibres with four 2.5²mm tinned copper power conductors. It features glass yarn anti-rodent protection, a halogen-free LSZH outer jacket, and meets strict B2ca CPR fire safety standards. Engineered for high mechanical and tensile performance, it is ideal for demanding telecommunication and power distribution installations.

Specification

Cable construction	
LSZH outer jacket	Black, UV resistant
Loose tube	Contains optical fibres
Optical fibres	8 × G.657.A2 single-mode, bend-insensitive
Power conductors	4 × 2.5 mm² tinned copper
Insulation	XLPE, blue and white
Dielectric central member	Fibre-reinforced plastic (FRP)
Peripheral strength member	Glass yarns
Rodent protection	Glass yarns
Outer jacket	LSZH, UV resistant, black
General specifications	
Cable diameter	14.0 ± 0.5 mm
Weight	270 kg/km
Crush resistance — long term	1,000 N/10 cm
Crush resistance — short term	3,000 N/10 cm
Maximum tension — short term	3,000 N
Minimum bending radius	210 mm
CPR rating	B2ca, s1a, d1, a1

The facts and figures contained herein are carefully complied to the best of our knowledge, but they are intended for general informative purposes only and are subject to change

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Product specification

Hughes Hybrid 8C + 4DC B2ca

8C SM G.657.A2 + 4x 2.5mm

Electrical specifications	
Conductor size	4 × 2.5 mm²
Conductor	Tinned copper
Insulation	XLPE
Insulation resistance	≥ 1,000 MΩ·km
Conductor colours	1 – Blue; 2 – Blue; 3 – White; 4 – White
Operating voltage	0.6/1 kV
Test voltage	3,500 V
Conductor resistance	≤ 8.21 Ω/km
Fibre specifications	
Fibre type	G.657.A2 single-mode, bend-insensitive
Fibre cable	Loose tube, white/natural
Fibre colours	1 – Blue; 2 – Orange; 3 – Green; 4 – Brown; 5 – Slate; 6 – White; 7 – Red; 8 – Yellow
Mode field diameter	8.4–9.2 µm @ 1,310 nm; 9.3–10.3 µm @ 1,550 nm
Cladding diameter	125.0 ± 0.5 µm
Coating diameter	242 ± 5 µm
Core-cladding concentricity error	≤ 0.5 µm
Cable cut-off wavelength	≤ 1,260 nm
Optical attenuation	≤ 0.35 dB/km @ 1,310 nm; ≤ 0.25 dB/km @ 1,460 nm; ≤ 0.21 dB/km @ 1,550 nm; ≤ 0.23 dB/km @ 1,625 nm
Macro-bending loss	1 turn, 10 mm mandrel: ≤ 0.75 dB @ 1,550 nm; ≤ 1.5 dB @ 1,625 nm. 10 turns, 10 mm mandrel: ≤ 0.25 dB @ 1,550 nm; ≤ 1.0 dB @ 1,625 nm
Environmental specifications	
Installation temperature	−5 °C to +45 °C
Operating temperature	−15 °C to +60 °C
RoHS	Compliant

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