

MHT2811



United Kingdom Patent GB2409908C, GB2409909C, European Patent EP3270203B1 and corresponding patents in other countries. Patents applied for GB2600001A and WO2022/049057. All rights reserved.

Ultra-low Friction Sheath Microcable

Product Description

Microcable with fibres set in an encapsulating layer providing excellent dimensional and thermal stability. An outer layer provides a high level of protection and excellent installation properties. The microcable is designed for installation into FibreFlow™ duct products. The fibres are dry, not coated with gel, thus permitting fast and contamination –free connections.

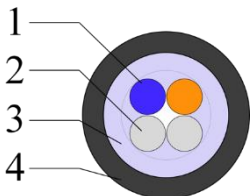
The microcable contain 'low water peak' single mode fibres meeting the ITU-T recommendation G.657A2, G.657.A1 fibre is also available. Fibre type should be specified at order placement.

Design Features

- ⊗ Designed to be installed by pulling and blowing into FibreFlow product
- ⊗ Low weight
- ⊗ Small diameter
- ⊗ All dielectric design
- ⊗ Ultra-low friction sheath
- ⊗ Best in class blowing performance
- ⊗ Low coil set

Specifications

Product Diameter: 1.00mm Min 1.05 mm Max
 Outer Sheath: Ultra low friction, black, 0.115mm thick

Construction		
1. Optical Fibre 2. Dummy Fibre 3. Encapsulation 4. Low Friction Sheath		
		2F + 2 dummies
Outer Diameter (nominal)		1.00mm
Mass (nominal)		1.047 g/m
Min Bend Radius		60mm
Max Installation Pull Force		16N
Fibre Type		Single mode compliant with G.657.A2 and G.657.A1 (ITU-T) and MHT2050
Temperature	Storage	-40°C to +60°C
	Installation	-10°C to +50°C
	Lifetime	-40°C to +60°C
Attenuation at 20°C (dB/km)		0.40 dB/km max at 1310nm to 1625nm 0.30 dB/km max at 1550nm 0.34 dB/km max at 1383nm water peak
PMD _Q (M=20 Q=0.01%)		≤0.2 ps/ (km) ^{0.5}
Macro bending Performance (Individual stripped out fibres)		50mm radius (100 turns) ≤0.1dB at 1550nm and 1625nm 32mm radius (1 turn) ≤0.5dB at 1550nm and 1625nm

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MHT2811 (CP4664)

Mechanical Performance

Test Name	Test Method	Test Parameters	Specification
Tensile Performance	IEC 60794-1-21-E1	T = 35.3N Duration 1min	Fibre strain <0.6% at maximum applied force, 100% recovery after test.
Crush resistance	IEC 60794-1-21-E3	W = 100N for 1 minute	No visual damage, no attenuations change after test <0.05dB
Repeated Bending	IEC 60794-1-21-E6	60 mm diameter	No visual damage, no attenuations change after test <0.05dB
Torsion	IEC 60794-1-21-E7	300mm length	No visual damage, no attenuations change after test <0.05dB
Kink test	IEC 60794-1-21-E10	60mm diameter,	No visual damage, no attenuations change after test <0.05dB
Bend	IEC 60794-1-21-E11	60 mm mandrel diameter, Four turns Three cycles	No visual damage, no attenuations change after test <0.05dB

Environmental Performance

Test Name	Test Method	Test Parameters	Specification
Temperature Cycle	IEC 60794-1-2-F1	+23°C, -40°C, +60°C	Attenuation to be ≤0.15dB/km change during and after test

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