2-6fu Revolink3 Microcable
Singlemode G657A1 and G657A2

Application

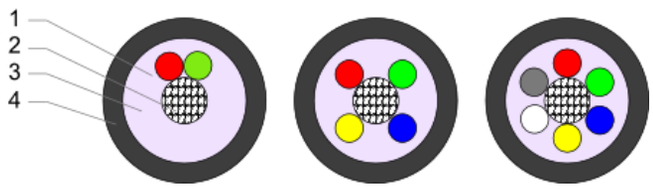
Optical fibre microcable with up to six fibres set in an encapsulating layer providing excellent dimensional and thermal stability. An outer thermoplastic layer provides a high level of protection and excellent installation properties. The microcable incorporates a central FRP rod and is specifically designed for pushing into fibreflow™ microducts and tube bundles. The fibres are dry, not coated with gel, thus permitting fast and contamination –free connections.

Features

- Designed to be installed by blowing, pulling or pushing
- Low weight
- Small diameter
- All dielectric design
- Ultra low friction sheath
- Low coil set

Properties

Construction
1: Optical fibre
2: FRP rod
3: Encapsulation
4: Low friction sheath



Number of fibres	2	4	6
Outer diameter (nominal)	1.85 mm	1.85	1.85
Mass (nominal)	3.62 g/m	3.65	3.70
Min bend radius	37 mm		
Maximum installation tension	245 N		
Fibre types available	Singlemode compliant with G657A1 and G657A2 (ITU-T)		
Temperatures Storage Installation Operational	-20°C to +40°C -20°C to +50°C -40°C to +60°C		
Attenuation at 20ºC (dB/km)	0.40 dB/km max at 1310nm to 1625nm 0.25 dB/km max at 1550nm 0.34 dB/km max at 1383nm waterpeak		
PMD_Q (M= 20, Q=0.01%)	≤0.2 ps / $(km)^{0.5}$		

Fibre identification

DIN colouring (other colouring schemes available)
Red, green, blue, yellow, white and grey

Sheath Marking

Marked every 1m with:
Emtelle – Year – Fibre Count – Fibre Type – Product Code – Batch ID – Meter Mark

Properties for G657 Fibre (Individual stripped out fibres)

Parameter	Type A1		Type A2		
Radius	15	10	15	10	7.5
Number of turns	10	1	10	1	1
Max. at 1550 nm (dB)	0.25	0.75	0.03	0.1	0.5
Max at 1625 nm (dB)	1.0	1.5	0.1	0.2	1.0
Mode Field Diameter Nominal Value (at 1310nm)	8.6 to 9.5μm (0.4μm tolerance)				

Mechanical Performance (all optical measurements at 1550 nm)

Test	Test Method	Test Parameters	Product Specification
Tensile Performance	EN 187000 A1/ 501 IEC60 794-1-21-E1	Load is 245N Duration 10 min	Fibre strain ≤0.6% at max. force Attenuation increment ≤0.05dB and fibre strain ≤0.05% after test.
Crush	IEC 60794-1-21-E3 Change @ 1550nm	100 mm plate, 500N, 1 min	Attenuation ≤0.05dB increment after test.
Repeated Bend	IEC 60794-1-21-E6	Bend diameter 40 x d Number of cycles 25	Attenuation ≤0.05dB increment after test.
Torsion	IEC 60794-1-21-E7	Length under test 2m	Attenuation ≤0.05dB increment after test.
Kink	IEC 60794-1-21-E10	Minimum diameter 40 x d	Pass
Flexing	IEC 60794-1-21-E11A	Diameter 40 x d 3 turns 5 cycles at 20°C	Attenuation ≤0.05dB increment after test.

'd' is cable diameter

Environmental Performance (all optical measurements at 1310nm and 1550nm)

Test	Test Method	Test Parameters	Product Specification
Water Soak	IEC 60794-5	1000 hours in water, 18°C/22°C	Test after temp cycle ≤0.07 dB/km change during and after test
Temperature Cycle	IEC 60794-1-2-F1 (3 cycles)	+20°C, –40°C, +60°C	Attenuation to be ≤0.5dB/km during test ≤0.1dB/km change during and after test
Damp Heat Cycle	IEC 60068-2-38 (10 cycles)	25°C, 65°C, 25°C, 65°C, 25°C, -10°C, 25°C	Attenuation to be ≤0.5dB/km during test ≤0.1dB/km change during and after test

Installation and Handling

Store FUs in supplied containers under dry and damp free conditions, until time of deployment.

Designed for installation into microducts, internal diameter from 3.0mm upwards. Standard installation equipment may be used eg Emtelle DropDrive™

Breakout: remove outer sheath using a tool with pre-set blade depth to suit (eg. Microcable FU Stripper (code 9719). Remove a short length of inner sheath using a stripping tool (eg. 7562) to enable removal of fibres by peeling apart in groups.

Follow up-to-date installation and handling recommendations as defined in MHT2380 (a copy is provided with every reel of fibre).