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Singlemode G.657.A&B

Fibre type	G.657.A1	G.657.A2	G.657.B3
OPK code	A1	A2	B3
Core	Germanium doped silica		
Cladding	Silica, step index and matched clad type		
Coating	Dual layers of UV-cured acrylate		
Optical Characteristics			
Attenuation coefficient Loose tube Cables (typical / max.) (1,2)			
at 1310 nm	0.32 / 0.36 dB/km		
at 1550 nm	0.19 / 0.24 dB/km		
at 1625 nm	0.22 / 0.26 dB/km		
Attenuation coefficient Tight Buffered Cables (typical / max.) (1,2)			
at 1310 nm	0.35 / 0.40 dB/km		
at 1550 nm	0.25 / 0.40 dB/km		
Attenuation discontinuity (2)	≤ 0.1 dB		
Cable cut-off wavelength [λcc]	≤ 1260 nm		
Zero dispersion wavelength	1302–1324 nm	1300–1324 nm	
Zero dispersion slope [ps/(nm2/km)]	≤ 0.090 ps/(nm.km)	≤ 0.092 ps/(nm.km)	
Chromatic dispersion at 1285 ~ 1330 nm	≤ 3.5 ps/(nm.km)		
Chromatic dispersion at 1550 nm	≤ 18.0 ps/(nm.km)		
Maximum individual fiber PMD	≤ 0.15 ps/√km	≤ 0.1 ps/√km	≤ 0.2 ps/√km
Fiber PMD link value	≤ 0.1 ps/√km	≤ 0.06 ps/√km	≤ 0.1 ps/√km
Effective group index of refraction at 1310 nm	1.467		
Effective group index of refraction at 1550 nm	1.468		
Effective group index of refraction at 1625 nm	1.468		
Backscatter coefficient at 1310 nm	-79.2 dB		
Backscatter coefficient at 1550 nm	-81.7 dB		
Backscatter coefficient at 1625 nm	-82.5 dB		
Geometrical Characteristics			
Mode field diameter at 1310 nm	8.9 ± 0.4 µm	8.6 ± 0.4 µm	
Core/Cladding concentricity error	≤ 0.5 µm		
Cladding diameter	125.0 ± 0.7 µm		
Cladding non-circularity	≤ 0.7 %		
Primary coating diameter (uncoloured fibre)	242 ±5 µm		
Primary coating diameter (coloured fibre)	250 ±10 µm		
Fibre curl radius	≥ 4.0 m		
Coating-Cladding concentricity	≤ 12 µm		
Macrobending loss			
10 turns, mandrel radius 15 mm at 1550 nm	≤ 0.25 dB	≤ 0.03 dB	
10 turns, mandrel radius 15 mm at 1625 nm	≤ 1.0 dB	≤ 0.1 dB	
1 turn, mandrel radius 5 mm at 1550 nm			≤ 0.15 dB
1 turn, mandrel radius 5 mm at 1625 nm			≤ 0.45 dB
1 turn, mandrel radius 7.5 mm at 1550 nm		≤ 0.5 dB	≤ 0.08 dB
1 turn, mandrel radius 7.5 mm at 1625 nm		≤ 1.0 dB	≤ 0.25 dB
1 turn, mandrel radius 10 mm at 1550 nm	≤ 0.75 dB	≤ 0.1 dB	≤ 0.03 dB
1 turn, mandrel radius 10 mm at 1625 nm	≤ 1.5 dB	≤ 0.2 dB	≤ 0.1 dB
Mechanical Characteristics			
Proof test level	≥ 100 kpsi (1.0% strain)		
Coating strip force	1.3 ~ 8.9 N		
Dynamic fatigue resistance parameter	≥ 20		

(1) Unless stated otherwise directly in the cable specification
(2) Cabled fibre

- Typical attenuation is the value measured for at least 90% of the fibers in the cable.
- OTDR measurement values can only be guaranteed for cable lengths of 1000 m and more.
- Cable on the reel may show a discontinuity of the OTDR curve caused by winding of the cable on the reel.
- The above values apply, unless otherwise stated directly in the cable specification