OPTOKON KABLE Co., Ltd., s.r.o.
Kourimskeho 2500
393 01, Pelhrimov, Czech Republic
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Single Mode Fiber G.657.B3

Specifications:

Fiber type G.657.B3
OPK code B3

Rev. 013-20/26

Fiber type	G.657.B3
OPK code	B3
Core	Germanium doped silica
Cladding	Silica, step index and matched clad type
Coating	Dual layers of UV-cured acrylate

Optical Characteristics

Attenuation coefficient Tight Buffered Cables (typical / max.)	
at 1310 nm	0.35 / 0.40 dB/km
at 1550 nm	0.25 / 0.40 dB/km
Point of discontinuity at 1310 nm and 1550 nm	≤ 0.1 dB
Cable cut-off wavelength (λcc)	≤ 1260 nm
Zero dispersion wavelength	1300 – 1324 nm
Zero dispersion slope	≤ 0.092 (ps/(nm2/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/Ökm
Fiber PMD link value	≤ 0.1 ps/Ökm
Effective group index of refraction at 1310 nm	1.467
Effective group index of refraction at 1550 nm	1.468
Backscatter coefficient at 1310 nm	-79.2 dB
Backscatter coefficient at 1550 nm	-81.7 dB

Geometrical Characteristics

Mode field diameter at 1310 nm	8.4 ± 0.4 µm
Core/Cladding concentricity error	≤ 0.5 µm

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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

1 turn, mandrel radius 10 mm at 1550 nm	≤ 0.03 dB
1 turn, mandrel radius 10 mm at 1625 nm	≤ 0.1 dB
1 turn, mandrel radius 7.5 mm at 1550 nm	≤ 0.08 dB
1 turn, mandrel radius 7.5 mm at 1625 nm	≤ 0.25 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

Mechanical Characteristics

Coating strip force	1.3 ~ 8.9 N

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 an discontinuity of the OTDR curve caused by winding of the cable on the reel.