## Specifications:

## Fiber type 50/125

OPK code OM4
Rev. 006-21/41

| Fiber type | $50 / 125$ |
| :--- | :--- |
| OPK code | 0M4 |

Optical Characteristics
Attenuation coefficient Loose tube Cables (Typical / Maximum)
at 850 nm
at 1300 nm
Attenuation coefficient Tight Buffered Cables (Typical / Maximum)
at 850 nm
at 1300 nm
Point of discontinuity at 1300 nm
Zero dispersion wavelength
Zero dispersion slope $1295 \leq 10 \leq 1310 \mathrm{~nm}$
Zero dispersion slope $1310 \leq 10 \leq 1340 \mathrm{~nm}$
Numerical Aperture
Effective group index of refraction at 850 nm
Effective group index of refraction at 1300 nm

Performance Characteristics
Bandwidth (Overfilled launch)
at 850 nm
at 1300 nm
Effective Modal Bandwidth (EMB) at 850 nm
Transmission Link Lengths for $10 \mathrm{~Gb} / \mathrm{s} 1$
at 850 nm
550 m
at 1300 nm
2.2 / $3.5 \mathrm{~dB} / \mathrm{km}$
$0.5 / 1.5 \mathrm{~dB} / \mathrm{km}$
2.5 / $3.5 \mathrm{~dB} / \mathrm{km}$
$0.6 / 1.5 \mathrm{~dB} / \mathrm{km}$
$\leq 0.2 \mathrm{~dB}$
1295-1340 nm
$\leq 0.105 \mathrm{ps} /(\mathrm{nm} 2 \cdot \mathrm{~km})$
$\leq 0.000375 \cdot(1590-10) \mathrm{ps} /(\mathrm{nm} 2 \cdot \mathrm{~km})$
$0.200 \pm 0.015$
1.483
1.478

## Geometrical Characteristics

Core diameter
Core non-circularity
Core/Cladding concentricity error
Cladding diameter
Cladding non-circularity
Primary coating diameter (uncoloured fibre)
Primary coating diameter (coloured fibre)
Coating-Cladding concentricity

## Macrobending loss

| 100 turns, mandrel diameter 75 mm at 850 nm | $\leq 0.05 \mathrm{~dB}$ |
| :--- | :--- |
| 100 turns, mandrel diameter 75 mm at 1300 nm | $\leq 0.15 \mathrm{~dB}$ |
| 2 turns, mandrel diameter 30 mm at 850 nm | $\leq 0.1 \mathrm{~dB}$ |
| 2 turns, mandrel diameter 30 mm at 1300 nm | $\leq 0.3 \mathrm{~dB}$ |
| 2 turns, mandrel diameter 15 mm at 850 nm | $\leq 0.2 \mathrm{~dB}$ |
| 2 turns, mandrel diameter 15 mm at 1300 nm | $\leq 0.5 \mathrm{~dB}$ |

## Mechanical Characteristics

Proof test level
Coating strip force
Dynamic fatigue resistance parameter
$50 \pm 2.5 \mu \mathrm{~m}$
$\leq 5.0 \%$
$\leq 1 \mu \mathrm{~m}$
$125.0 \pm 1.0 \mu \mathrm{~m}$
$\leq 1.0 \%$
$242 \pm 7 \mu \mathrm{~m}$
$250 \pm 10 \mu \mathrm{~m}$
$\leq 10 \mu \mathrm{~m}$
$\leq 0.5 \mathrm{~dB}$
$\geq 0.69 \mathrm{Gpa}(\geq 8.8 \mathrm{~N})$
1.9 N
$\geq 23$

1850 nm operating wavelength with transmitters meeting encircled flux of $\leq 30 \%$ @ radius $4.5 \mu \mathrm{~m}$ and $\geq 86 \%$ @ radius $19.0 \mu \mathrm{~m}$. At 1300 nm link length using LX4.

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.

OPTOKON KABLE Co., Ltd., s.r.o. Kourimskeho 2500
MEMBER OF OPTOKON GROUP

