Nexans

SPECIFICATION FOR SINGLEMODE FIBER G.657A

Primary coating of acrylate.

I. FIBER GEOMETRY

Coating diameter, coloured		250 ± 15	µm
Cladding diameter		125 ± 0.7	µm
Cladding non-circularity		≤1	%
Concentricity error, modefield	max	0.5	µm

II. MECHANICAL CHARACTERISTICS

Minimum bending radius		15	mm
Proof-test level		1	%
Proof-test time		1	s
Fiber curl		>4	m

III. TRANSMISSION DATA

Attenuation 1310 nm	avg.	0.37	dB/km
	max	0.40	dB/km
Attenuation 1383 nm*	avg.	0.37	dB/km
	max	0.40	dB/km
Attenuation 1550 nm	avg.	0.25	dB/km
	max	0.30	dB/km
Attenuation 1625 nm	avg.	0.30	dB/km
	max	0.40	dB/km
Attenuation discontinuities	max	0.10	dB
Attenuation linearity	max	0.10	dB/km
Cut-off wavelength cable		≤1260	nm
Modefield diameter at 1310 nm		8.6 ± 0.4	µm
Chromatic dispersion zero crossing		1300 - 1324	nm
Chromatic dispersion slope		≤0.092	ps/nm²/km
Chromatic dispersion at 1550 nm		≤18.0	ps/nm/km
Chromatic dispersion at 1285 - 1340 nm		≤3.5	ps/nm/km
PMD at 1550 nm		≤0.2	ps/√km
Macrobending loss (15mm radii, 10 turns) at 1550 nm	max	0.25	dB
Macrobending loss (15mm radii, 10 turns) at 1625 nm	max	1.0	dB
Macrobending loss (10mm radii, 1 turn) at 1550 nm	max	0.75	dB
Macrobending loss (10mm radii, 1 turn) at 1625 nm	max	1.5	dB

IV. REFERENCES

European standard: EN 188000
Generic specification: Optical Fibres ITU-T G.657 class A
International standard: IEC 60793-1 and IEC 60793-2

* Aged in 1% hydrogen gas and 1 atm, according to IEC 60793-2.