

OPTICAL FIBER CABLE CHARACTERISTICS

SINGLE-MODE FIBER

Conditions		SM/OS2	Unit
Standards according to ITU-T		G.652.D	
Attenuation (max)	1310 nm	≤ 0.40	dB/km
	1550 nm	≤ 0.30	dB/km
Cut-off wavelength		≤ 1260	nm
Cut-off wavelength installation		1180 – 1250	nm
Zero dispersion wavelength		1300 – 1324	nm
Zero dispersion slope		≤ 0.092	ps/nm ² /km
Polarization mode dispersion		≤ 0.5	ps/√km
Mode field diameter (MFD)	1310 nm	9.1 ± 0.4	μm
	1550 nm	10.3 ± 0.4	μm
Mode field eccentricity		≤ 1.0	μm
Mode field eccentricity, installation		≤ 0.5	μm
Cladding diameter		125 ± 2	μm
Cladding diameter, installation		125 ± 1	μm
Cladding ellipticity		≤ 1	%



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MULTI MODE FIBER

Conditions					Unit
Fiber class		GK/OM1	OM3	OM4	
		GKL 250 ± 10	OM3L 250 ± 10	OM4L 250 ± 10	µm
Attenuation (max)		GKT 900 ± 50	OM3T 900 ± 50	OM4T 900 ± 50	µm
	850 nm	3.0	2.7	2.5	dB/km
Bandwidth	1300 nm	≤ 1.0	≤ 0.8	≤ 0.8	dB/km
	850 nm (LED)	≥ 200	≥ 1500	≥ 3500	MHz x km
	1300 nm (LED)	≥ 500	≥ 500	≥ 500	MHz x km
Numerical aperture (NA)	850 nm (Laser)		≥ 2000	≥ 4700	MHz x km
		0.275 ± 0.015	0.200 ± 0.015	0.200 ± 0.015	
Core diameter		62.5 ± 3	50 ± 2	50 ± 2.5	µm
Core ellipticity		≤ 6	≤ 6	≤ 6	%
Core eccentricity		≤ 3	≤ 3	≤ 2	µm
Cladding diameter		125 ± 2	125 ± 1	125 ± 1	µm
Cladding ellipticity		≤ 2	≤ 2	≤ 2	%



Fiber colouring

Colour codes:

6 colour system according to SFS 5648

Fibers

1*)	Blue	
2	White	
3	Yellow	
4	Green	
5	Grey	
6**)	Red	

Identification threads:

First and last slot marked with an identification thread

Slot

First	Blue	
Last	Red	