

Characteristics of cabled optical fibres

Fibre coating:

L = 250 $\mu\text{m} \pm 10 \mu\text{m}$ T = 900 $\mu\text{m} \pm 50 \mu\text{m}$

Single mode fibre	10/125 μm	SM / OS2 (ITU-T G.652.D)
Mode field diameter (MFD)	1310 nm	9,3 +/- 0,5 μm
Mode field eccentricity		$\leq 1,0 \mu\text{m}$
- Installation cables		$\leq 0,5 \mu\text{m}$
Cladding diameter		125 +/- 2 μm
- Installation cables		125 +/- 1 μm
Cladding ellipticity		$\leq 2 \%$
Fibre attenuation	1310 nm	$\leq 0,40 \text{ dB/km}$
	1550 nm	$\leq 0,25 \text{ dB/km}$
Zero dispersion range		1300...1324 nm
Dispersion coefficient		$\leq 0,093 \text{ ps/nm}^2/\text{km}$
- Dispersion at	1550 nm	$\leq 18 \text{ ps/nm/km}$
Cut-off wavelength		$\leq 1260 \text{ nm}$
- Installation cables		1180...1250 nm
Polarization mode dispersion		$\leq 0,5 \text{ ps}/\sqrt{\text{km}}$
Proof test		1 % / 1 sec
Fibre identification		6 colour system according to SFS 5648

Multi mode fibre	50/125 μm	OM3
Core diameter		50 +/- 3 μm
Core ellipticity		$\leq 6 \%$
Core eccentricity		$\leq 3 \mu\text{m}$
Cladding diameter		125 +/- 2 μm
Cladding ellipticity		$\leq 2 \%$
Fibre attenuation	850 nm	$\leq 2,7 \text{ dB/km}$
	1300 nm	$\leq 0,8 \text{ dB/km}$
Bandwidth	850 nm	$\geq 1500 \text{ MHz x km (LED)}$
	1300 nm	$\geq 500 \text{ MHz x km (LED)}$
	850 nm	$\geq 2000 \text{ MHz x km (Laser)}$
Numerical aperture, NA		0,200 +/- 0,015
Fibre identification		6 colour system according to SFS 5648

Multi mode fibre	62,5/125 μm	GK / OM1
Core diameter		62,5 +/- 3 μm
Core ellipticity		$\leq 6 \%$
Core eccentricity		$\leq 3 \mu\text{m}$
Cladding diameter		125 +/- 2 μm
Cladding ellipticity		$\leq 2 \%$
Fibre attenuation	850 nm	$\leq 3,5 \text{ dB/km}$
	1300 nm	$\leq 1,0 \text{ dB/km}$
Bandwidth	850 nm	$\geq 200 \text{ MHz x km}$
	1300 nm	$\geq 500 \text{ MHz x km}$
Numerical aperture, NA		0,275 +/- 0,015
Fibre identification		6 colour system according to SFS 5648