

Technical info fiber cable MM and SM

Multimode fibres			MM 62.5 IEC 60793-2-10 Type A1b Telecordia GR-20-core	MM 62.5 OM1+ HiCap	MM50 ITU-T G651.1 IEC 60793-2-10 Type A1a.1 Telecordia GR-20-core	MM50-OM3 ISO/IEC 11801 IEC 60793-2-10 Type A1a.2 Telecordia GR-20-core	MM50-OM4 ISO/IEC 11801 IEC 60793-2-10 Type A1a.2 Telecordia GR-20-core
ITU-T type			-	-	G 651	-	
Core Diameter		µm	62.5 ± 2	62.5 ± 2	50 ± 2	50 ± 2	50 ± 2
Core non-circularity		%	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5
Cladding Diameter		µm	125 ± 1,0	125 ± 1,0	125 ± 1,0	125 ± 1,0	125 ± 1,0
Coating Diameter		µm	245 ± 5	245 ± 5	242 ± 5	242 ± 5	242 ± 5
Cladding non-circularity		%	0,7	0,7	0,7	0,7	0,7
Core/cladding concentricity error		µm	≤ 1,0	≤ 1,0	≤ 1,0	≤ 1,0	≤ 1,0
Coating/cladding concentricity error		µm	≤ 10	≤ 10	≤ 6	≤ 6	≤ 6
Numerical Aperture		µm	0.275 ± 0.015	0.275 ± 0.015	0.200 ± 0.015	0.200 ± 0.015	0.200 ± 0.015
Proof test		kpsi	≥ 100	≥ 100	≥ 100	≥ 100	≥ 100
Attenuation	at 850 nm	db/km (max)	≤ 3,5	≤ 2,8	≤ 2,8	≤ 2,8	≤ 2,8
	at 1300 nm	db/km (max)	≤ 1,0	≤ 0,7	≤ 0,8	≤ 0,8	≤ 0,8
Bandwith	at 850 nm	MHz x km	≥ 200	≥ 250	≥ 500	≥ 1500	≥ 3500
	at 1300 nm	MHz x km	≥ 500	≥ 1000	≥ 500	≥ 500	≥ 500
1 G BASE Ethernet	SX 850 nm	m	275	500	600	1000	1100
1 G BASE Ethernet	LX 1300 nm	m	550	1000	550	550	600
1 G BASE	SR 850nm	m	35	65	86	300	550
1 G BASE	LX4 1300 nm	m	300	450	300	300	300

Single mode fibres			Single mode SMR 9/125/250	Single mode SMR LWP 9/125/250	Non-zero Dispersion	Single mode
ITU-T type			G652.B	G652.D	G655	G654
Mode Field diameter (MDF)	at 1310 nm	µm	9.2 ± 0.4	9.2 ± 0.4	-	-
	at 1550 nm	µm	-	-	9.2 ± 0.5	12 ± 0.5
Cladding Diameter		µm	125 ± 1	125 ± 0.7	125 ± 1	125 ± 1
Coating Diameter		µm	245 ± 10	245 ± 5	245 ± 10	245 ± 10
Attenuation	at 1310 nm	db/km (max)	≤ 0.38	≤ 0.35	-	-
	at 1383 nm	db/km (max)	-	≤ 0.33	-	-
	at 1550 nm	db/km (max)	≤ 0.25	≤ 0.25	≤ 0.25	≤ 0.19
	at 1625 nm	db/km (max)	-	≤ 0.28	≤ 0.28	≤ 0.21
Zero dispersion wavelength		λ0	1302 - 1322	1302 - 1322	-	-
Chromatic Dispersion	at 1285 - 1330nm	ps/nm x km	≤ 0.35	≤ 0.35	-	-
	at 1550 nm	ps/nm x km	≤ 18.0	≤ 18.0	-	-
	at 1530 - 1565 nm	ps/nm x km	-	-	5.5 to 10.0	22
	at 1565 - 1625 nm	ps/nm x km	-	-	7.5 to 13.0	-
PDM	at 1550 nm	ps/vkm	-	-	≤ 0.20	≤ 0.20
1 G BASE Ethernet	SX 1310 nm	m	10000	10000		
1 G BASE Ethernet	LX 1550 nm	m	40000	40000		
1 G BASE	SR 1310nm	m	10000	10000		
1 G BASE	LX 1550 nm	m	40000	40000		