



Conventional 50 µm OM2 multi mode fibre

Properties for cabled 500/500 MHz · km OM2 fibre

General and application

This fibre is a graded-index multimode fibre suitable for transmission speeds of up to 10 Gb/s (82m 10GBASE-SX). It has a 50 µm core diameter and a 125 µm cladding diameter. The fibre is designed for use at 850 and/or 1300 nm. This fibre fulfils all requirements for an OM2 fibre.

Standards and Norms

IEC 60793-2-10: type A1a.1	ITU G.651.1	TIA/EIA-492 AAAB
ISO/IEC 11801 category OM2	EN 60793-2-10: type A1a.1	ANSI/TIA/EIA-568.C
	EN 50173-1 category OM2	IEEE 802.3

Cable attenuation

IEC 60793-1-40

850 nm	≤ 2.7 dB/km
1300 nm	≤ 0.8 dB/km
Inhomogeneity of OTDR trace for any two 1000 metre fibre lengths	Max. 0.2 dB/km

Bandwidth

IEC 60793-1-41

850 nm	500 MHz · km
1300 nm	500 MHz · km

Other properties

IEC 60793-1-xx

Attribute	Measurement method	Units	Limits
Core diameter	IEC/EN 60793-1-20	µm	50 ± 2
Cladding diameter	IEC/EN 60793-1-20	µm	125.0 ± 1.0
Cladding non-circularity	IEC/EN 60793-1-20	%	≤ 0.7
Core non-circularity	IEC/EN 60793-1-20	%	≤ 5
Core-cladding concentricity error	IEC/EN 60793-1-20	µm	≤ 1
Primary coating diameter - uncoloured	IEC/EN 60793-1-21	µm	242 ± 5
Primary coating non-circularity	IEC/EN 60793-1-21	%	≤ 5
Primary coating-cladding concentricity error	IEC/EN 60793-1-21	µm	≤ 6
Group index of refraction at 850 nm	IEC/EN 60793-1-22	-	1.482
Group index of refraction at 1300 nm	IEC/EN 60793-1-22	-	1.477
Proof stress level	IEC/EN 60793-1-30	GPa	≥ 0.7 (≈ 1 %)
Typical average stripforce	IEC/EN 60793-1-32	N	1.7
Strip force (peak)	IEC/EN 60793-1-32	N	1.2 ≤ F _{peak.strip} ≤ 8.9
Numerical aperture	IEC/EN 60793-1-43		0.200 ± 0.015

Note: The Draka policy of continuous improvement may cause in changed specifications without prior notice