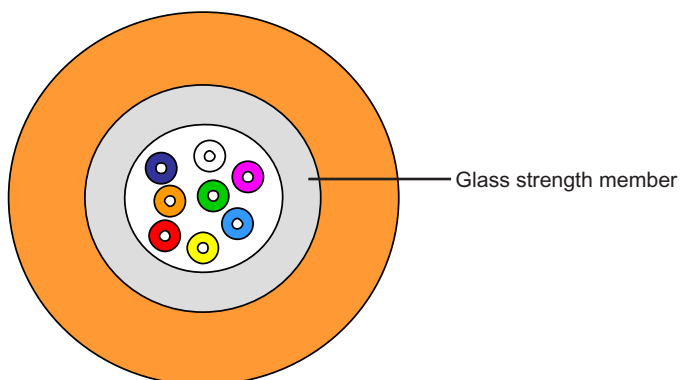


Optic fibre cable OM2 - 900 µm tight tube indoor/outdoor

- 2 fibres Cat. No(s): 0 325 54
- 4 fibres Cat. No(s): 0 325 55
- 6 fibres Cat. No(s): 0 325 08

- 12 fibres Cat. No(s): 0 325 09
- 24 fibres Cat. No(s): 0 325 58



1. USE

- As backbone in LAN's
- For premises wiring
- Indoor and outdoor in ducts

2. GENERAL

This fibre is a graded-index multimode fibre suitable for transmission speeds of up to 10 Gb/s. It has a 50 µm core diameter and a 125 µm cladding diameter. The fibre is designed for use at 850 and/or 1 300 nm. This fibre fulfils all requirements for an OM2 fibre.

3. CABLE TECHNICAL SPECIFICATIONS

3.1 Standards

EN 187 000
IEC 60794-2
IEC 60794-2-20
ISO 11801 2nd edition
EN 50173-1

3.2 Construction

Fibre	2 or 24 tightly buffered fibres 900 µm +/- 50 µm
Strength member	E-Glass rovings
Sheath	1.1 mm green FireBur® fire retardant, UV stabilised, EN 50290-2-27

3.3 Fire rating

IEC 60332-1-2	Single vertical wire test
IEC 60754-1	No halogens
IEC 60754-2	No acid matters
IEC 61034-2	No dense smoke

3.4 Heat of combustion

0 325 08	845 MJ/km	0.23 KWh/m
0 325 09	1180 MJ/km	0.33 KWh/m
0 325 54	660 MJ/km	0.18 KWh/m
0 325 55	760 MJ/km	0.21 KWh/m
0 325 58	1700 MJ/km	0.47 KWh/m

Optic fibre cable OM2 - 900 µm tight tube indoor/outdoor**- 2 fibres Cat. No(s): 0 325 54****- 4 fibres Cat. No(s): 0 325 55****- 6 fibres Cat. No(s): 0 325 08****- 12 fibres Cat. No(s): 0 325 09****- 24 fibres Cat. No(s): 0 325 58****3.5 Physical properties - IEC 60974-1-2**

Permanent tensile strength	E11	2, 4, 6, 12 fibres	500 N
		24 fibres	1500 N
Short term tensile strength (some days)	E11	2, 4, 6, 12 fibres	1000 N
		24 fibres	1600 N
Maximum installation load (a few hours)	-	2, 4, 6, 12 fibres	1500 N
		24 fibres	2400 N
Impact	E4	20 J	
Crush (compressive strength)	E3	3000 N/100 mm	
Torsion	E7	5 cycles +/- 1 turn	
Temperature range	F1	Operation and Installation	- 20°C to 70°C
		Storage	- 40°C to 70°C

3.6 Mechanical properties

Reference	Nominal diameter	Nominal cable weight	Minimum bending radius
0 325 08	6 mm	40 kg/km	100/50 mm
0 325 09	6.5 mm	55 kg/km	130/75 mm
0 325 54	6 mm	30 kg/km	100/50 mm
0 325 55	6 mm	35 kg/km	100/50 mm
0 325 58	8.5 mm	90 kg/km	230/115 mm

4. FIBRES TECHNICAL SPECIFICATIONS**4.1 Standards and norms**

IEC 60793-2-10 category A1a

EN 60793-2-10: type A1a

ITU Recommendation G.651

TIA/EIA-492 AAAB

EN 50 173:2002 category OM2

ISO/IEC 11801:2002 category OM2.

IEEE 802.3-2002. with amendment 802.3ae - 2002.

ANSI/TIA/EIA-568.B.3 - 2000

4.2 Attenuation (of cable with fibres) - IEC 60793-1-40

Maximum at 850 nm	≤ 2.7 dB/km
Maximum at 1300 nm	≤ 0.8 dB/km
Typical value at 850 nm	≤ 2.5 dB/km
Typical value at 1300 nm	≤ 0.6 dB/km
Inhomogeneity of OTDR trace for any two 1000 meter fibre lengths	Max. 0.2 dB/km

4.3 Bandwidth - IEC 60793-1-41

850 nm	600 MHz•km
1300 nm	1200 MHz•km
Group index of refraction at 850 nm	1.482
Group index of refraction at 1300 nm	1.477

Optic fibre cable OM2 - 900 µm tight tube indoor/outdoor**- 2 fibres** Cat. No(s).: 0 325 54**- 4 fibres** Cat. No(s).: 0 325 55**- 6 fibres** Cat. No(s).: 0 325 08**- 12 fibres** Cat. No(s).: 0 325 09**- 24 fibres** Cat. No(s).: 0 325 58**4.4 Fibre properties according to IEC - IEC 60793-1**

Attribute	Measurement method	Units	Limits
Core diameter	IEC/EN 60793-1-20	µm	50 ± 2.5
Cladding diameter	IEC/EN 60793-1-20	µm	125 ± 1
Cladding non-circularity	IEC/EN 60793-1-20	%	≤ 1.0
Core non-circularity	IEC/EN 60793-1-20	%	≤ 5
Core-cladding concentricity error	IEC/EN 60793-1-20	µm	≤ 1.5
Primary coating diameter - uncoloured	IEC/EN 60793-1-21	µm	242 ± 0.7
Primary coating diameter - coloured	IEC/EN 60793-1-21	µm	250 ± 15
Primary coating non-circularity	IEC/EN 60793-1-21	%	≤ 5
Primary coating-cladding concentricity error	IEC/EN 60793-1-21	µm	≤ 10
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	1.3 ≤ F _{peak.strip} ≤ 8.9
Numerical aperture	IEC/EN 60793-1-43		0.200 ± 0.015