

FEATURES AND SPECIFICATIONS

molex

Fibre Optic Distribution Cable SM, OS2, Indoor/Outdoor, Tight Buffered, LSOH B2ca-s1a,d1,a1

Features and Benefits

Molex LSOH OS2 9/125µm tight buffered fibre cable can be used for LAN and WAN applications. The cable is suitable for indoor applications on trays and outdoors in ducts and features e-glass strength members and a UV stabilised LSOH Euroclass B2ca-s1a,d1,a1 sheath. This single mode fibre provides improved performance across the entire 1260nm to 1625nm wavelength spectrum due to its low attenuation in 1383nm water-peak region.

Commercial Standards

Fibre:

IEC 60793-2-50 Category B.1.3
ISO/IEC 11801:2002, cat. OS2 and OS1
ISO/IEC 24702: 2006, cat. OS2 and OS1
ITU Recommendation G.652.D and C, B, A
IEEE 802.3 – 2012
EN 50173-1:2007, cat. OS2 and OS1

Cable:

ISO 11801-1, EN 187 000, IEC 60794-2, EN 50 173-1, IEC 60794-2-20

RoHS Compliant

Fire Propagation Tests

EU Regulation 305/2011 (CPR)
EN 50575:2014+A:2016
EuroClass: B2ca-s1a,d1,a1
DoP No: MLXCES-2018-F-061
located on web
<http://www.molexces.co.uk/about-us/our-compliance/cpr/dop-certificates/>

Technical Information

Cable Attenuation IEC 60793-1-40

1310 nm – 1625 nm: ≤ 0.39 dB/km
1550 nm: ≤ 0.25 dB/km

Group index of refraction IEC 60793-1-22

1310 nm: 1.467
1550 nm: 1.468
1625 nm: 1.468

Mechanical Characteristics

Fibre: 4 - 24 tightly buffered fibres
900µm +/- 50µm
Strength member: Glass yarns
Water blocking: Swellable thread
Sheath: LSOH, UV stabilized
Sheath Colour: Yellow RAL 1018



Physical Properties IEC 60794-1-21/22

Attribute	Method	Limits				
Fibre Count	N/A	4	6	8	12	24
Nominal Diameter (mm)	N/A	7.5	7.5	8	8.3	9.4
Nominal Weight (Kg/km)	N/A	43	44	49	57	81
Maximum Installation Load (a few hours) N	N/A	1500				2400
Short Term Tensile Strength (some days) N	E1	750				1200
Permanent Tensile Strength (N)	E1	750				1200
Impact (J)	E4	15J				
Crush (compressive strength) (N/100mm)	E3	2000				1000
Torsion	E7	5 cycles ± 1 turn				
Minimum Bending Radius	E11	75	80	83	94	
Minimum Bending Radius Under Tension	E18A	150	160	170	190	
Temperature Range: Operation and Installation	F1	-20°C to 60°C				
Temperature Range: Storage	F1	-40°C to 70°C				

ORDERING INFORMATION

Order No.	SAP No.	Description
CFR-00697	183280014	Fibre Optic Cable OS2 9/125µm SM TB LSOH B2ca-s1a,d1,a1 4F
CFR-00698	183280015	Fibre Optic Cable OS2 9/125µm SM TB LSOH B2ca-s1a,d1,a1 6F
CFR-00699	183280016	Fibre Optic Cable OS2 9/125µm SM TB LSOH B2ca-s1a,d1,a1 8F
CFR-00700	183280017	Fibre Optic Cable OS2 9/125µm SM TB LSOH B2ca-s1a,d1,a1 12F
CFR-00701	183280018	Fibre Optic Cable OS2 9/125µm SM TB LSOH B2ca-s1a,d1,a1 24F

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