FEATURES AND SPECIFICATIONS

Fibre Cable Distribution Grade OM2 50/125µm

Features and Benefits

Molex Premise Networks 50 fibre cable is a graded index multimode fibre with dual acrylate coating and has good transmission qualities at both 850 and 1300Nm windows. It also complies with the OM2 standard for mutlimode fibre.

- OM2 Standard
- Secondary Coated Fibres - Tight Buffered
- Internal or dry/free draining duct installation
- E-Glass Yarn Strength Member

Commercial Standards

IEC 60793-2-10 Category A1a
EN 60793-2-10 type A1a
ITU Recommendation G.651
TIA/EIA-492 AAAB

Fire Propagation Tests

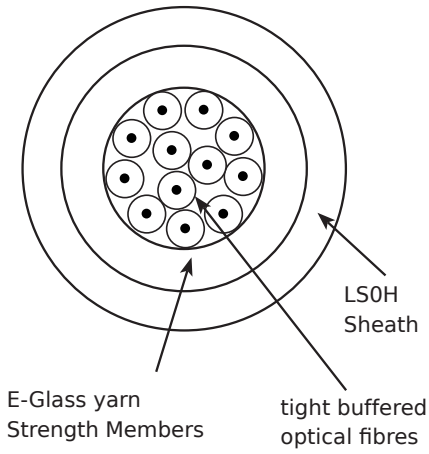
IEC 60332-1-2
IEC 60754-1
IEC 60754-2
IEC 61034-2

Technical Information

Mechanical Characteristics

Standard multipurpose LS0H:
Our standard Low Smoke Zero Halogen material is produced from polyolefin's and is filled with flame retardants in the form of aluminium or magnesium hydroxide. This sheathing compound is used for indoor as well as multipurpose cables. Standard sheath colour is green and nominal thickness is 1.1 mm.

Non-metallic protection and reinforcement of the cables:
Glass yarns in the form of rovings are used as the strength member for tight buffered cables.



Fibre colour code

1	Red	13	Yellow w/mark every 70 mm
2	Green	14	White w/mark every 70 mm
3	Blue	15	Grey w/mark every 70 mm
4	Yellow	16	Turquoise w/mark every 70 mm
5	White	17	Orange w/mark every 70 mm
6	Grey	18	Pink w/mark every 70 mm
7	Brown	19	Yellow w/mark every 35 mm
8	Violet	20	White w/mark every 35 mm
9	Turquoise	21	Grey w/mark every 35 mm
10	Black	22	Turquoise w/mark every 35 mm
11	Orange	23	Orange w/mark every 35 mm
12	Pink	24	Pink w/mark every 35 mm

Mechanical Properties

Fibre count	Nominal diameter	Nominal cable weight	Minimum bend radius Long term/short term
2	6mm	40 kg/km	100/50mm
4	6mm	40 kg/km	100/50mm
6	6mm	45 kg/km	100/50mm
8	6.5mm	50 kg/km	100/50mm
12	7mm	55 kg/km	130/75mm
16	7.5mm	65 kg/km	130/75mm
24	8.5mm	85 kg/km	230/115mm

MOLEX PREMISE NETWORKS

Americas
Tel: 630 969 4550
www.molexpn.com

EMEA
Tel: 44 (0)2392 205800
www.molexpn.co.uk

APAC
Tel: 61 3 9971 7111
www.molexpn.com.au

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molex

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Mechanical Characteristics

Physical Properties

Permanent tensile strength	2, 4, 6, 8 and 12 fibres	500N
	16 fibres	1000N
	24 fibres	1500N
Short term tensile strength (some days)	2, 4, 6, 8 and 12 fibres	1000N
	16 fibres	1400N
	24 fibres	1600N
Maximum installation load (a few hours)	2, 4, 6, 8 and 12 fibres	1500N
	16 fibres	2100N
	24 fibres	2400N
Impact	20J	
Crush (compressive strength)	3000N/ 100 mm	
Torsion	5 cycles ± 1 turn	
Temperature range	Operation and Installation	-20°C to 70°C
	Storage	-40°C to 70°C

Geometrical properties:
Core Diameter: 50µm ± 2.5µm
Cladding diameter: 125µm ± 1µm
Cladding non-circularity: <=1%
Coating diameter (coloured); 250µm ± 15µm

Electrical/Optical Characteristics

Attenuation (of cable with fibres):
At 850 nm: <= 2.7 dB/km
At 1300 nm: <= 0.8 dB/km
Minimum bandwidth:
At 850 nm: 600MHz · km
At 1300 nm: 1200MHz · km
Inhomogenity of OTDR trace for any two 1000m lengths: Max 0.2 dB/km

ORDERING INFORMATION

Order No.	SAP No.	Description
CFR-00372	Consult Molex	Internal Distribution Grade, 2 Core, Tight Buffered, 50/125µm OM2
CFR-00373	Consult Molex	Internal Distribution Grade, 4 Core, Tight Buffered, 50/125µm OM2
CFR-00374	Consult Molex	Internal Distribution Grade, 6 Core, Tight Buffered, 50/125µm OM2
CFR-00375	Consult Molex	Internal Distribution Grade, 8 Core, Tight Buffered, 50/125µm OM2
CFR-00376	Consult Molex	Internal Distribution Grade, 12 Core, Tight Buffered, 50/125µm OM2
CFR-00377	Consult Molex	Internal Distribution Grade, 16 Core, Tight Buffered, 50/125µm OM2
CFR-00378	Consult Molex	Internal Distribution Grade, 24 Core, Tight Buffered, 50/125µm OM2

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