

# SureLIGHT® Multi Loose Tube (MLT) (4x2,3) max 48F LSZH FireFighter® IEC60332-3-22 Cat.A with improved rodent protection

## Cable Design

### Fibre Type

62.5/125 multi mode	50/125 multi mode	9/125 single mode
---------------------	-------------------	-------------------

### Fibre Colour Code

1 Red	7 Brown
2 Green	8 Violet
3 Blue	9 Turquoise
4 Yellow	10 Black
5 White	11 Orange
6 Grey	12 Pink

### Loose Tubes

Diameter

Gel filled loose tube with optical fibres (1 Red, 2 Green, 3-4 White)  
2,30 mm

### Central Strength Member

FRP dielectric (Ø 1,0mm)

### Water Blocking

Water blocking E-glass and water blocking yarn

### Outer Jacket

Thickness

Diameter

Colour

LSZH FireFighter®, UV-Stable  
1,5 mm  
Ø 9,20 ± 0,4 mm  
Black



## Fire Performance

Flammability	EN 60332-2-22 (Cat.A)
Acid Gases	EN 50267-1, EN 50267-2-2, EN 50267-2-3
Smoke Density	EN 61034-1, EN 61034-2

## Mechanical & Thermal Characteristics

Tensile strength (max.)	*E1	2600	N
Crush resistance	*E3	2000	N
Impact resistance	*E4	3	impacts
Bending Radius (min.)	*E11	15	x Ø
Moisture resistance	*F5	passed	
Temperature Range	*F5	Installation	-15 to +50 °C
	*F5	Operating	-40 to +70 °C
	*F5	Storage	-40 to +70 °C

\* EN 60794-1-2(22)

## Optical Characteristics

### 62.5/125 OM1 multi-mode graded-index optical fibres acc. to IEC 60793

Fibre Type	Mode-Field Diameter (µm)	Wavelength (nm)	Attenuation average/max. (dB/km)	Bandwidth (MHz·km)	Ethernet Performance (m)		Num. Aperture (µm)	Refr. Index
					1 GBE	10 GBE		
62.5/125 OM1	62.5 ± 2.5	850	2.7 / 3.2	≥ 200	275	33	0.275 ± 0.015	1.495
	125 ± 1	1300	0.6 / 1.1	≥ 600	550	n.a		1.490

### 50/125 OM2 / OM3 multi-mode graded-index optical fibres acc. to IEC 60793

Fibre Type	Mode-Field Diameter (µm)	Wavelength (nm)	Attenuation average/max. (dB/km)	Bandwidth (MHz·km)	Ethernet Performance (m)		Num. Aperture (µm)	Refr. Index
					1 GBE	10 GBE		
50/125 OM2	50 ± 2.5	850	2.3 / 2.8	≥ 600	600	82	0.20 ± 0.015	1.481
	125 ± 1	1300	0.6 / 0.9	≥ 1200	600	n.a		1.476
50/125 OM3	50 ± 2.5	850	2.6 / 2.8	≥ 1500	600	300	0.20 ± 0.015	1.481
	125 ± 1	1300	0.6 / 0.9	≤ 500	550	n.a		1.476

### 9/125 G652D Single-mode matched-cladded optical fibre acc. to ITU

Fibre Type	Mode-Field Diameter (µm)	Wavelength (nm)	Attenuation average/max. (dB/km)	Dispersion (ps/(nm·km))	PMD (ps/km)	Cable Cut-off Wavelength (nm)
9/125 G652D	9.2 ± 0.4	1310	0.32 / 0.40	≤ 3.5	≤ 0.2	≤ 1260
	125 ± 0.7	1550	0.21 / 0.30	≤ 18		