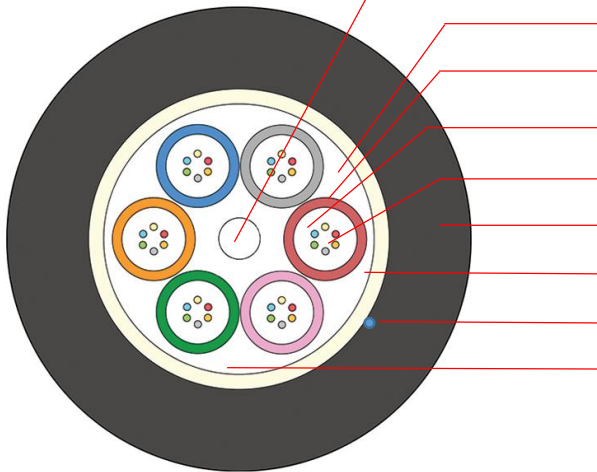




**OVERVIEW**

Zemecs F112-UF series fiber optic cables are designed and manufactured to exceed performances specified by ITU-T G651.1, IEC 60793, IEC 60974, ISO/IEC 11801 and TIA 568.3-D enabling high speed transmission to long distances in indoor and outdoor applications. The fibres are equally distributed into jelly filled loose tubes and unused space is filled with dummy ones to maintain cable circularity. A non-metallic material is located centrally as strength member and filling compound is injected to prevent penetration of water. Finally, a transparent tape is wrapped overall and cable is completed with a jacket. LSOH sheathed products are manufactured up to 192 fibers and delivered in wooden drums of 2.000 m. They can be laid down on trays, ducts or pipes.



- 1 Central Strength Member(FRP)
- 2 Aramid Yarn
- 3 Loose Tube
- 4 Jelly Filling Compound
- 5 Optical Fibres
- 6 Sheath (LSOH)
- 7 Core Wrapping
- 8 Ripcord
- 9 Cable Filling Compound

**FEATURES**

- Exceeds requirements of ITU-T G651.1, IEC 60793, IEC 60974, ISO/IEC 11801 and TIA 568.3-D
- LSOH (low smoke zero halogen) sheath
- Small outer diameter single tube construction saving space inside ducts
- Gel filled cable core for water tightness
- Low friction sheath enabling easy pulling through ducts
- Constructed up to 192 fibers

**APPLICATIONS**

- Indoor and outdoor network backbones
- Aerial or high density duct, pipe and tray installations
- Interbuilding cable crossings
- Cabling in places with high electromagnetic interference

**MATERIAL AND PHYSICAL SPECIFICATIONS**

Cable Outer Diameter	<b>2-36F:10,7 38-72F:11,5 74-84F:12,3, 86-96F:13,0, 98-108F:13,8 110-120F:14,5 120-132F:15,3 134-144F:16,1 146-192F: 17,0± 0,20</b>	mm.
Sheath Material	LSOH (Low Smoke Zero Halogen)	
Sheath Thickness $\delta$	2,30 ± 0,20	mm.
Loose Tube Outer Diameter	2,00 ± 0,07	mm.
Cable Weight	<b>2-36F:95 38-72F:105 74-84F:120, 86-96F:135 98-108F:150 110-120F:165 120-132F:180 134-144F:200 146-192F ± %3</b>	kg./km.
Sheath Colour	Black(standard)	

**COLOUR CODING OF FIBER AND LOOSE TUBES**

FIBER COUNT	4	6	12	24	36	48	60	72	96	144	192
Tube/Fiber	2	2	2	4	6	8	12	12	12	12	12
Filled Tubes	2	3	6	6	6	6	5	6	8	12	16
Dummy Tubes	4	3	0	0	0	0	1	0	0	0	2



**COMPLIANCE**

**Standards For Generic Cabling And Cabling Components**

- ITU-T G.651.1
- ISO/IEC 11801 Ed.2.1
- IEC 60793-2
- EN 50173
- IEC 60794-1-2
- ANSI/TIA/EIA-568.3-D

**Standards For The Restriction Of Use Of Hazardous Substances In Electrical And Electronic Equipments**

- 2011/65/EU (RoHS-2)

**Test Standards**

- Tension IEC 60794-1-2E1
- Twist IEC 60794-1-2E7
- Crush IEC 60794-1-2E3
- Cable Bending IEC 60794-1-E11
- Impact IEC 60794-1-2E4
- Temperature Cycling IEC 60794-1-F1
- Repeated Bending IEC 60794-1-2E6

**OPTICAL SPECIFICATIONS**

Fibre Type	Multimode OM3 ITU-T G651.1	
Numerical Aperture	0,20±0,015	
Attenuation (@850nm./1.300nm.)	2,5 / 0,70	dB/km., Max.
OFL Bandwidth ('@850nm. / 1.300nm.)	1.500 / 500	Mhz.km., Min.
Supported Distances		
10 Gigabit Ethernet SX @850nm.	300	m.
Gigabit Ethernet SX @850nm.	1.000	
Gigabit Ethernet LX @1.300nm.	600	
40&100 Gigabit Ethernet @850nm.	100	

**ENVIRONMENTAL SPECIFICATIONS**

Transportation And Storage Temperature	-40 / +80	°C
Installation Temperature	-30 / +60	°C
Operation Temperature	-40 / +80	°C
Relative Humidity	10 – 90, non-condensing	%

**MECHANICAL SPECIFICATIONS**

Short/Long Term Tensile Strength	1.500 / 600	N./100mm.
Short/Long Term Crush Strength	1.000 / 300	N./100mm.
Bending Radius (Installation / Operation)	20xO.D. / 10xO.D.	

**GEOMETRICAL SPECIFICATIONS**

Core Diameter	50±2,5	µm.
Cladding Diameter	125,0±1,0	µm.
Cladding Noncircularity Error	1	%, Max.
Coating Diameter	245±7	µm.
Coating/Cladding Concentricity Error	12	µm., Max.
Core/Cladding Concentricity Error	1,5	µm., Max.

**PART NUMBER CODING**

Part Number	Product Description
F112-UF-1ZM3-FFFY	Zemecs Multimode OM3 Multi Loose Tube Steel Single Sheath Non-metallic LSOH Fibre Optic Cable

FFF: Fiber Count			
12:	12	96:	96
24:	24	120:	120
36:	36	144:	144
48:	48	168:	168
72:	72	192:	192

