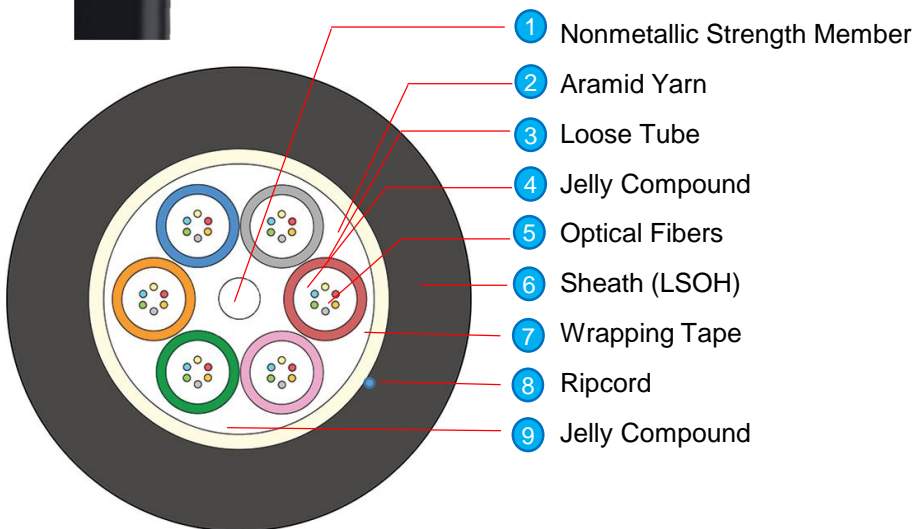




OVERVIEW

Zemecs F112-UF series fiber optic cables are used to establish a long distance data transmission backbone in places exposed to high EMI. They are designed and manufactured to exceed performances specified by ITU-T G652.D, IEC 60793, IEC 60974, ISO/IEC 11801, TIA 568.3-D and IEEE P-1222. The fibers 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 film is applied and jacketed with a LSOH sheath.

Constructed up to 192 fibers and delivered in 2.000m. reels, the cable can be laid down on trays, ducts or pipes.



Drawing shows cross section up to 72F. Not scaled.

FEATURES

- Exceeds requirements of ITU-T G652.D, IEC 60793, IEC 60974, ISO/IEC 11801 and TIA 568.3-D standards
- LSOH (low smoke zero halogen) sheath
- Small outer diameter 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
- Duct, pipe or tray installations
- Interbuilding cable crossings
- Cabling in places with high electromagnetic interference

MATERIAL AND PHYSICAL SPECIFICATIONS

Cable Outer Diameter	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	mm.
Sheath Material	LSOH (Low Smoke Zero Halogen)	
Sheath Thickness	2,30 ± 0,20	mm.
Loose Tube Outer Diameter	2,00 ± 0,07	mm.
Cable Weight	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: 230 ± %3	kg./km.
Sheath Colour	Black(standard)	

FIBER AND TUBE COUNT

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	6
Dummy Tubes	4	3	0	0	0	0	1	0	0	0	2



COMPLIANCE

Standards For Generic Cabling And Cabling Components

- ITU-T G652.D • ISO/IEC 11801 Ed.2.1
- IEC 60793-2 • EN 50173
- IEC 60794-2-20 • 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)

Standards For Flammability, Halogen Acidity And Smoke Performance

- IEC 60332-1-1:2004 • IEC 61034-2:2005+A1:2013 • EN 50399:2011+A1:2016
- IEC 60754-2:2011 • EN 50575: 2014 + A1: 2016

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 | • Temp.Cycling | IEC 60794-1-F1 |
| • Repeated Bending | IEC 60794-1-2E6 | | |

OPTICAL SPECIFICATIONS

Fiber Type	Singlemode ITU-T G.652D	
Attenuation (@1.310 nm./1.550nm.)	0,34 / 0,20	dB/km., Max.
Chromatic Dispersion (@1.310 nm./1.550nm.)	3,5 / 18	ps/nm.km., Max.
Zero Dispersion Wavelength (λ _o)	1.300 ≤ λ _o ≤ 1.324	Nm.
Zero Dispersion Slope (S _o)	0,092	ps/(nm ² .km.) Max.
Cable Cutoff Wavelength (λ _{cc})	1.260	nm., Max.

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

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

GEOMETRICAL SPECIFICATIONS

Mode Field Diameter (@1.310nm./1.550nm.)	9,20 / 10,40	µm.
Cladding Diameter	125,0±1,0	µm.
Core/Coating Concentricity Error	1	%, Max.
Coating Diameter	245±7	µm.
Coating/Cladding Concentricity Error	12	µm., Max.
Core/Cladding Concentricity Error	0,6	µm., Max.

PART NUMBER CODING

Part Number	Product Description
F112-UF-1ZSD-FFFL	Zemecs Singlemode Multi Loose Tube Unarmoured Single Sheath LSOH Fiber Optic Cable, 2000m. Reel

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

