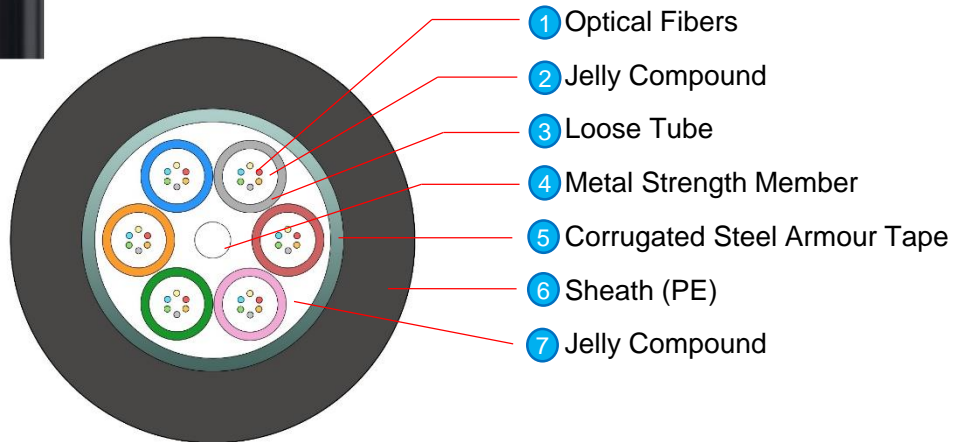




OVERVIEW

Zemecs F112-SS series fiber optic cables are designed and manufactured to exceed performances specified by ITU-T G652.D, 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 fibers are equally distributed into jelly filled loose tubes and unused space is filled with dummy ones to maintain cable circularity. A metallic material (generally steel which may be PE coated) is located centrally as strength member and filling jacket is injected to prevent penetration of water. Corrugated steel armour tape is applied overall and finally the cable is jacketed with a PE sheath. Delivered up to 288 fibers in wooden drums of 2.000m., 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
- UV resistant high density PE sheath
- Small outer diameter saving space inside ducts
- Increased crush strength through the use of corrugated steel armour tape
- Gel filled cable core for water tightness
- Low friction sheath enabling easy pulling through ducts
- Constructed up to 288 fibers

APPLICATIONS

- Indoor and outdoor network backbones
- Duct, pipe or tray installations
- Interbuilding cable crossings

MATERIAL AND PHYSICAL SPECIFICATIONS

Cable Outer Diameter	2-36F:10,0 38-72F:11,6 74-84F:12,4 86-96F:13,1 98-108F:13,8 110-120F:14,7 120-132F:15,5 134-144F:16,1 146-216F: 17,4 218 – 288F: 19,0 ± 0,20	mm.
Sheath Material	PE	
Sheath Thickness	1,80 ± 0,20	mm.
Loose Tube Outer Diameter	2,00 ± 0,07	mm.
Cable Weight	2-36F:120 38-72F:170 74-84F:180, 86-96F:195 98-108F:213 110-120F:231 120-132F:251 134-144F:271 146-216F: 346 218 – 288F: 330 ± %3	kg./km.
Sheath Colour	Black(standard)	

FIBER AND TUBE COUNT

FIBER COUNT	4	6	12	24	36	48	60	72	96	144	192	216	240	288
Tube/Fiber	2	2	2	4	6	8	12	12	12	12	12	12	12	12
Filled Tubes	2	3	6	6	6	6	5	6	8	12	16	18	20	24
Dummy Tubes	4	3	0	0	0	0	1	0	0	0	2	0	0	0



COMPLIANCE

Standards For Generic Cabling And Cabling Components

- ITU-T G.652.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)

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 (λo)	1.300 ≤ λo ≤ 1.324	Nm.
Zero Dispersion Slope (So)	0,092	ps/(nm ² .km.) Max.
Cable Cutoff Wavelength (λcc)	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)	2.000 / 1.000	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-SS-1ESD-FFFL	Zemecs Singlemode Multi Loose Tube Steel Armour Single Sheath Metallic Fiber Optic Cable, 2000m. Reel

FFF: Fiber Count

12:	12	120:	120
24:	24	144:	144
36:	36	192:	120
48:	48	216:	144
72:	72	240:	240
96:	96	288:	288

