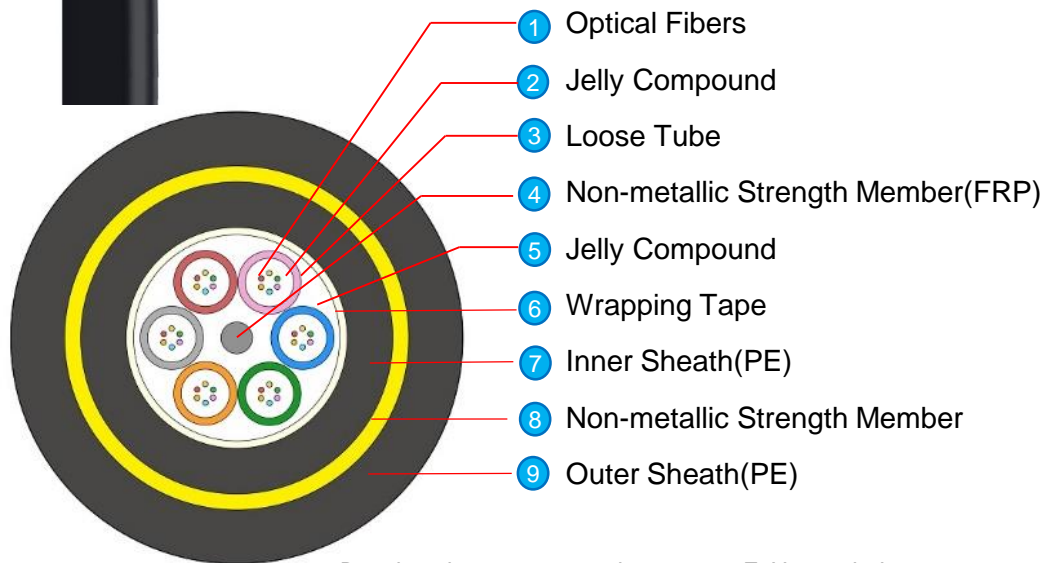




OVERVIEW

Zemecs F122-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. A transparent film is applied and jacketed with an inner PE sheath which is then wrapped over by a non metallic strength member. The cable is completed with an outer PE sheath.



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
- Double sheath construction enabling rodent protection and direct burial use
- Gel filled cable core for water tightness
- Electric field strength of 12kV/m. for PE sheath and 25kV/m. for AT sheath
- Constructed up to 144 fibers

APPLICATIONS

- Telecommunication backbone networks
- Long distance and interbuilding communication networks
- Cabling in medium and high voltage transmission lines
- Cabling in areas with frequent thunders and storms

MATERIAL AND PHYSICAL SPECIFICATIONS

Cable Outer Diameter	2-36F:12,6 38-72F:13,4 74-84F:14,1, 86-96F:14,9 98-108F:15,6 110-120F:16,3 120-132F:17,0 134-144F:17,9 ± 0,20	mm.
Inner Sheath Material	HDPE	
Inner Sheath Thickness	0,80 ± 0,10	mm.
Sheath Material	HDPE	
Sheath Thickness	1,80 ± 0,10	mm.
Loose Tube Outer Diameter	2,00 ± 0,07	mm.
Cable Weight	2-36F:160 38-72F:175 74-84F:195, 86-96F:210 98-108F:225 110-120F:238 120-132F:250 134-144F:260 ± %3	kg./km.
Sheath Colour	Black(standard)	

FIBER AND TUBE COUNT

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



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)			
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 G652.D	
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)	5.800 / 3.000	N./100mm.
Crush Strength (Installation/Operation)	2.200 / 1.000	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
F122-UF-1ESD-FFFL	Zemecs Singlemode Multi Loose Tube Double Sheath ADSS PE Fiber Optic Cable, 2000m. Reel

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

