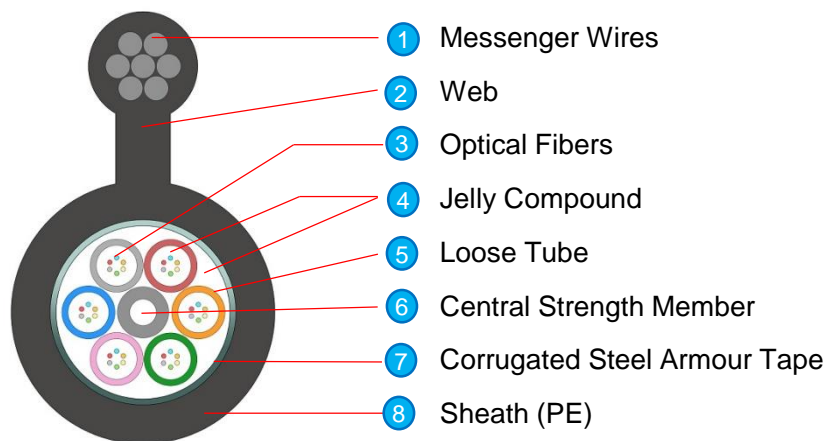




OVERVIEW

Zemecs F132-DS series Fig.-8 type 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 data transmission. 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 compound is injected to prevent penetration of water. Corrugated steel armour tape is applied overall and finally the cable is jacketed with supporting steel wires. Delivered in 2.000m. wooden drums, the PE sheathed cables are used to provide aerial communications backbone in rural areas as well as in areas under harsh environmental conditions.



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
- Moisture and crush resistant
- Gel filled cable core for water tightness
- Constructed up to 144 fibers

APPLICATIONS

- Telecommunications backbone networks in rural areas
- Long distance data communications via aerial lines
- CATV, railway and military transmission networks
- Interbuilding cable crossings
- Cabling in areas under harsh environmental conditions

MATERIAL AND PHYSICAL SPECIFICATIONS

Cable Outer Diameter	2-36F :11,2x20,2 38-60F : 11,4x20,4 62-72F :12,1x21,1 74-84F : 12,9x21,9 86-96F :13,6x22,6 98-108F :14,4x23,4 110-120F : 15,1x24,1 122-132F : 15,9x24,9 134-144F : 16,7x25,7 ± 0,20	mm.
Sheath Material	PE	
Sheath Thickness	1,80 ± 0,10	mm.
Loose Tube Outer Diameter	2,00 ± 0,07	mm.
Cable Weight	2-36F :200 38-60F : 200 62-72F :215 74-84F : 235 86-96F :255 98-108F :275 110-120F : 300 122-132F : 325 134-144F : 355 ± %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 V.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_0)	$1.300 \leq \lambda_0 \leq 1.324$	Nm.
Zero Dispersion Slope (So)	0,092	ps/(nm ² .km.) Max.
Cable Cutoff Wavelength (λ_{cc})	1.260	nm., Max.

ENVIRONMENTAL SPECIFICATIONS

Transportation and Storage Temperature	-50 / +70	°C
Installation Temperature	-30 / +60	°C
Operation Temperature	-40 / +70	°C
Relative Humidity	10 - 90, non-condensing	%

MECHANICAL SPECIFICATIONS

Tensile Strength (Installation/Operation)	7.000 / 3.500	N./100mm.
Crush Strength (Installation/Operation)	1.500 / 800	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
F132-DS-1ESD-FFFL	Zemecs Singlemode Multi Loose Tube Steel Armour Aerial PE Fiber Optic Cable, 2.000m. Reel

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

