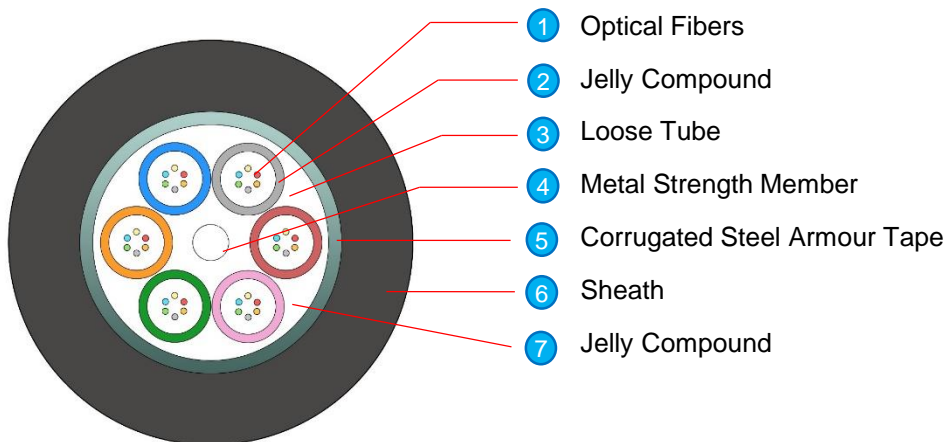




OVERVIEW

Zemecs F172-SS-1M series fiber optic cables incorporate different types of fibers used for the transmission of data to long distances in indoor and outdoor applications. They are designed and manufactured to exceed performances specified by ITU-T G652.D, ITU-T G651.1, IEC 60793, IEC 60974, ISO/IEC 11801 and TIA 568.3-D standards. 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 or LSOH compound. Delivered in wooden drums of 2.000m., the cable can be laid down on trays, ducts or pipes.



FEATURES

- Exceeds requirements of ITU-T G652.D, G651.1, 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
- Gel filled cable core for water tightness
- Low friction sheath enabling easy pulling through ducts
- Constructed up to 72 fibers

APPLICATIONS

- Indoor and outdoor network backbones
- Duct, pipe or tray installations
- Interbuilding cable crossings
- Applications requiring use of different fiber types

MATERIAL AND PHYSICAL SPECIFICATIONS

Cable Outer Diameter	2-36F:10,0 38-72F:11,6 ± 0,20	mm.
Sheath Material	PE or LSOH	
Sheath Thickness	1,80 ± 0,20	mm.
Loose Tube Outer Diameter	2,00 ± 0,07	mm.
Cable Weight	2-36F:120 38-72F:170 ± %3	kg./km.
Sheath Colour	Black(standard)	

FIBER AND TUBE COUNT

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



OPTICAL SPECIFICATIONS	SINGLEMODE (G652.D)	MULTIMODE OM1(G651.1)	MULTIMODE OM2 (G651.1)	MULTIMODE OM3 (G651.1)	MULTIMODE OM4 (G651.1)	UNIT
Attenuation	1.310 nm. ≤ 0,36 1.550 nm. ≤ 0,22	850 nm. ≤ 3,00 1.300 nm. ≤ 1,00	850 nm. ≤ 2,50 1.300 nm. ≤ 0,70	850 nm. ≤ 2,50 1.300 nm. ≤ 0,70	850 nm. ≤ 2,50 1.3100 nm. ≤ 0,60	dB./km.
Temperature Induced Attenuation, @ -60°C ~ +85°C	≤ 0,05	≤ 0,10	≤ 0,10	≤ 0,10	≤ 0,10	dB./km.
Cladding Diameter	125,0 ± 1,0	125,0 ± 1,0	125,0 ± 1,0	125,0 ± 1,0	125,0 ± 1,0	µm.
Coating Diameter	245,0 ± 7,0	245,0 ± 7,0	245,0 ± 7,0	245,0 ± 7,0	245,0 ± 7,0	µm.
Core/Coating Concentricity Error	≤ 0,60	≤ 0,50	≤ 0,50	≤ 0,50	≤ 0,50	µm.
Coating/Cladding Concentricity Error	≤ 12,00	≤ 12,00	≤ 12,00	≤ 12,00	≤ 12,00	µm.
Mode Field Diameter	1.310 nm. ≤ 9,20 1.550 nm. ≤ 10,40	-	-	-	-	µm.
Core Diameter	-	62,5 ± 2,5	50,0 ± 2,5	50,0 ± 2,5	50,0 ± 2,5	µm.
Numerical Aperture	-	0,275 ± 0,015	0,20 ± 0,015	0,20 ± 0,015	0,20 ± 0,015	
Bandwidth	-	850 nm. ≥ 200 1.300 nm. ≥ 600	850 nm. ≥ 600 1.300 nm. ≥ 1.200	850 nm. ≥ 1.500 1.300 nm. ≥ 500	850 nm. ≥ 4.000 1.300 nm. ≥ 1.500	Mhz.km.

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	%

COMPLIANCE

Standards For Generic Cabling And Cabling Components (depending on fiber type)			
• ITU-T G.65xx	• 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		

PART NUMBER CODING

Part Number	Product Description
F172-SS-1J-XXFFF-XXFFFL	Zemecs Multi Loose Tube Steel Armour Hybrid F/O Cable
XX: Fiber Type	J: Sheath Type FFF: Fiber Count
SD Singlemode G652.D	E PE 004 4
A2 Singlemode G657.A2	Z LSOH 008 8
M1 Multimode OM1	012 12
M2 Multimode OM2	
M3 Multimode OM3	
M4 Multimode OM4	

Standard reel length is 2.000m. with ±5% tolerance.

