



"World Quality"

HES HACILAR ELEKTRİK SANAYİ VE TİC.A.Ş.

<http://www.hes.com.tr>

FOSMXXXMLT9902

Technical Specification

Revision/Date: 01/05.12	By İ. Karadağ	Date : 15 May 2012
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Cable Type : Loose Tube, Outdoor Armored F/O Cable
HES Cable Product Number :FOSMXXXMLT9902 (XXX: Number of fiber)

PHYSICAL DESCRIPTION

- 24-48 fibers armored outdoor fiber optic cable,
- Thixotropic jelly filled loose tubes,
- Loose tubes and filler (if any) are SZ stranded around the non- metallic central strength member (FRP),
- Jelly filled core,
- Polyester tape as core wrap,
- Corrugated steel armor,
- Outer jacket is made of medium density polyethylene,
- Ripcord is inserted for easy jackets removal.

Fiber type	SM G652 D
Central strength member	All-dielectric FRP
Tube material	PBT (Polybutylene Terephthalate)
Color of loose tubes	Blue, Orange, Green, Brown, Slate, White
Color of fibers in per tube	Blue, Orange, Green, Brown, Slate, White, Red, Black
Tube filling compound	Thixotropic jelly
Core filling compound	Jelly
Tape wrap	Polyester tape
Ripcord	Aramid cord
Strength elements	-
Identification tape marking	As a customer request
Inner jacket	No inner jacket
Armor	Corrugated steel tape
Outer jacket	Black MDPE, thickness nominal 1.5±0.1 mm.
Surface marking	As a customer request

Fiber Count	Number of Tube	Number of Filler	Number of fiber in per tube	Central Strength Member OD (mm)	Central strength member coated OD (mm)	Tube Outer/Inner Diameter (mm)	Cable Diameter (mm)	Cable Weigth (kg/km)
24	6	-	4	2.2	N/A	2.1/1.3*	11.8*	140*
48	6	-	8	2.5	N/A	2.4/1.7*	13*	165*

*:Tolerance is ±10%



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Mechanical and Environmental Properties		
Physical tests	Conditions	Standard
Tensile Strength	1900 N (during Installation) 950 N (during Operation)	IEC 60794-1-E1
Impact Resistance	10J, 3 impacts	IEC 60794-1-E4
Crush Resistance	220 N/cm	IEC 60794-1-E3
Temperature Cycling	-30 to +70 °C	IEC 60794-1-F1
Bend Radius (during installation)	20x cable diameter	IEC 60794-1-E11
Bend Radius (during Service)	10x cable diameter	IEC 60794-1-E11
Repeating Bending	20xcable diameter between	IEC 60794-1-E6
Operation Temperature	-30 to +70 °C	
Storage and Transportation Temperature	-40 to +80 °C	
Installation Temperature	-0 to +60 °C	
Reel Marking	As a customer request	

STANDARD SM FIBER ITU-T G 652 D	
PROPERTIES	SPECIFIED VALUES
Attenuation (max)	0.40 dB/km (1310 nm) 0.25 dB/km (1550 nm)
MFD	9.2±0.5 µm
Chromatic Dispersion (max)	3.5 ps/(nmxkm)(1310 nm) 18 ps/(nmxkm)(1550 nm)
Cladding diameter	125±1 µm
Core/Clad Concentricity error (max)	1 µm
Zero dispersion wavelength	1300nm≤ ≤1324nm
Cladding non-circularity (max)	%2
Coating diameter	250±15 µm
Cut Off Wavelength	≤1260nm
Proof Test	8.4 N
Proof Test strain	%1.00

NOTE (If any):



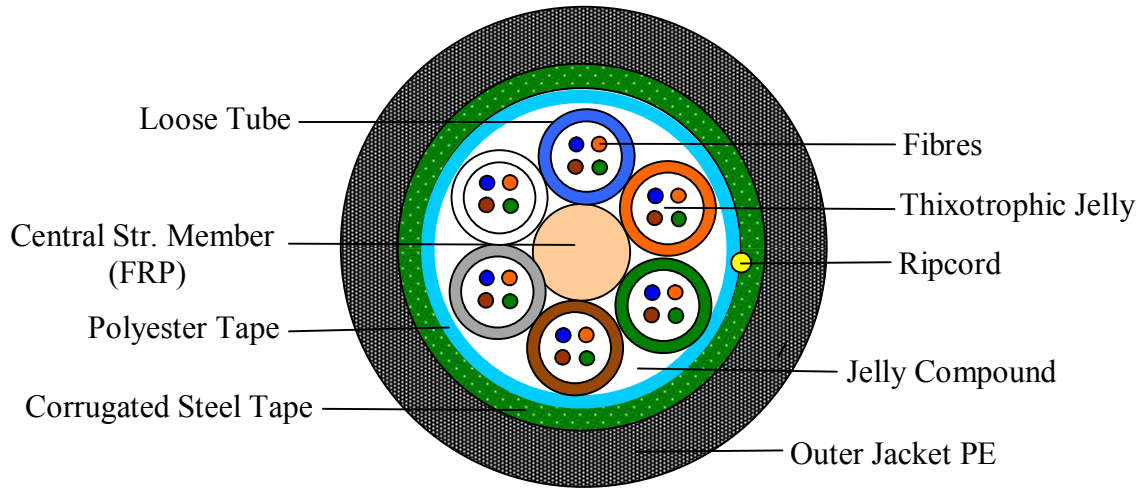
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24 fibers Cable Cross Section



48 fibers Cable Cross Section

