



F.O. CABLE 9/125 OS2 Out.PE-Metallic Armour

Optical Fiber



Fiber details	
Type	G.657A1
Mode field diameter	1310nm: 9,0 ±0.4µm / 1550nm: 10,1 ±0.5µm
Cladding diameter	124,8 ±0.7µm
Cladding non-circularity	≤0,7%
Core-Cladding concentricity error	≤ 0,5µm
Coating diameter	245 ±5µm
Coating non-circularity	≤6,0%
Cladding-Coating concentricity error	≤ 12µm
Cable Cutoff Wavelength	$\lambda_{cc} \leq 1260\text{nm}$
Attenuation coefficient (max.)	1130nm ≤0,40 dB/km – 1550nm ≤0,30 dB/km
Macro-Bending Loss	1 turn x 10mm radius @1550nm: ≤0,75dB 1 turn x 10mm radius @1625nm: ≤1,50dB

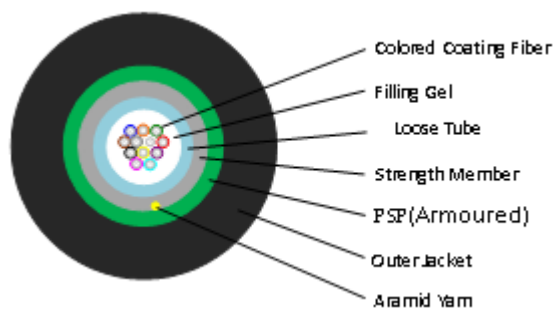
Construction characteristics	
Tubes	1
Diameter of tube	2,80mm ±0.15mm
Loose tube material	PBT
Loose tube color	Natural
Colored Coating Fiber	dimension: 250µm±15µm color: blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, aqua green
Strength member	Glass Yarn
PSP (Armoured)	17mm (model number)
Diameter	7,70mm ±0.3mm

Environmental and mechanical Performances	
Long term tension	240N
Short term tension	700N
Long term crush	300N/10cm
Short term crush	1000N/10cm
Min. bending radius (static lay)	15 x Diam. ex.
Min. bending radius (dynamic lay)	20 x Diam. ex.
Operating temperature/storage	-30°C ~ +70°C
Laying temperature/installation	-10°C ~ +50°C

Outer sheath	
Type	PE Black
Printing	ECS – Number FO OS2 9/125 G657 OUTDOOR Pe Fca ORDER NR. METER MARKING

Tests	Rules	Value	Approval parameters
Traction	IEC 60794-1-21-E1	480N	$\Delta\alpha \leq 0,25$ dB/km – Fiber draw ratio $\leq 0,45\%$
Crush	IEC 60794-1-21-E3	1000N/100mm (maximum 15 minutes)	$\Delta\alpha \leq 0,05$ dB – No damage
Crash	IEC 60794-1-21-E4	4.5 Nm, 3 impacts, R= 300mm	$\Delta\alpha \leq 0,05$ dB
Torque	IEC 60794-1-21-E7	100N, $\pm 180^\circ$ 10 cycles	$\Delta\alpha \leq 0,05$ dB – No damage
Repeated bending	IEC 60794-1-21-E11	20xD., 1Kg, 3 cycles	$\Delta\alpha \leq 0,05$ dB – No damage
Bending radius	IEC 60794-1-21-E6	R=20xD., 4 turns, 3 cycles	$\Delta\alpha \leq 0,05$ dB – No damage
Temperature cycling	IEC 60794-1-22-F1	-20°C ~ +70°C	Maximum value 0,05 dB/km

Smart Code	Item Number	Nr Fiber	Packaging	Diameter mm.	Weight Kg/Km	Min.bending radius
AR-FOS2-04 /B4000	AR-FOPEFM04EXS2NEB40	4	Drum 4000m	7,7mm	60.00	15xExt.Diam.
AR-FOS2-08 /B4000	AR-FOPEFM08EXS2NEB40	8	Drum 4000m	7,7mm	60.00	15xExt.Diam.
AR-FOS2-12 /B4000	AR-FOPEFM12EXS2NEB40	12	Drum 4000m	7,7mm	60.00	15xExt.Diam.
AR-FOS2-24 /B4000	AR-FOPEFM24EXS2NEB40	24	Drum 4000m	7,7mm	60.00	15xExt.Diam.



} The details expressed above have to be considered as an indication.

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