Underwater Fiber Optic Cable

Part Number: **F90240263B**

Applications:	Backbone cabling, General purpose armored Outdoor, Long Distance OSP, Rugged environments, Installed in soft bedded trenches or suitably anchored and protected on the sea-floor , Shallow Water Installations, Shallow Water Applications to 100 m. Depths
General Construction:	The cable contains 24 Singlemode color-coded optical fibers contained in 2 color-coded loose tubes. These tubes are filled with a thixotropic gel to prevent the ingress of water and SZ stranded around a dielectric central strength member. A specially formulated gel is applied between all the interstices in the cable core to block water passage. Fillers are used as needed to preserve cable geometry. Fiber-glass strength yarns reinforce the cable core beneath an inner jacket. A layer of galvanized steel wires is stranded around the inner jacket to serve as an armor. An outer jacket completes the cable structure.
Outer Jacket Material:	PE
Outer Diameter:	13.5 mm nom.
Weight:	292 kg/km

Design & Materials

Buffer Material:	PBT
Tube Diameter:	2.1 mm nom.
Central Strength Member:	FRP
Cabling:	SZ
Strength Elements:	E-Glass Yarns
Armoring:	Served Galvanized Steel Wire
Fiber Containing Tubes:	2
Total Number of Elements:	5
Number of fibers:	24
Waterblocking:	Dry Waterblocking, Gel between tubes
Rip-Cord:	Yes
Outer Jacket Color:	Black
Marking:	Per request

Standards

Applicable Standards:	IEC 60794, IEC 60794-1-21/22, TIA/EIA-568
Flammability Rating:	IEC 60754
Installation:	Guidelines as per IEC TR 62691

Performance

Max. Installation Tensile Load :	6000 N max.
Max. Residual Tension (MRS) :	3600 N max.
Impact Resistance:	10 N*m
Impact Resistance:	3 cycles
Max. Crush Resistance:	500 N/cm
Min. Bend Radius for Installation:	20xD mm
Min. Bend Radius for Operation:	20xD mm
Repeated Bending:	25 cycles
Torsion (L=125 x d):	10 cycles
Drip Test:	80 °C
Max. Operating Temperature:	+70 °C
Min. Operating Temperature:	-40 °C
Max. Installation Temperature:	+55 °C
Min. Installation Temperature:	-20 °C
Max. Storage Temperature:	+70 °C
Min. Storage Temperature:	-40 °C
UV Resistance:	Yes
Waterblocking:	Yes