

Underwater Fiber Optic Cable



Part Number: F90960819B

Applications: Backbone cabling, Direct burial, 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 Applications to 100 m. Depths,

Underwater/Sea Port

General Construction: The cable contains 96 Singlemode G652D color-coded optical fibers contained in 8 color-coded loose tubes.

optical fibers contained in 8 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 and tape blocking water. An aluminum moisture barrier is applied over the cable core beneath an inner jacket. Iayer of galvanized steel wires are helically stranded around the inner jacket to serve as an armor. An outer jacket completes the

cable structure.

Outer Jacket Material: PE

Outer Diameter: 17 mm nom. Weight: 510 kg/km

Design & Materials

Buffer Material:	PBT
Tube Diameter:	2.1 mm nom.
Central Strength Member:	FRP
Cabling:	SZ
Armor:	Yes
Armoring:	Served Galvanized Steel Wire
Armoring Wire Diameter:	1.25 mm
Aluminum Moisture Barrier:	Yes
Foil Thickness:	80 μm
Total Number of Tubes:	8
Number of fibers:	96
Waterblocking:	Gel between tubes, Waterblocking Tape
Rip-Cord:	Yes
Outer Jacket Color:	Black
Marking:	Per request



Standards

Applicable Standards:	IEC 60794, TIA/EIA-568, EIA/TIA-455, ASTM G154
Flamability Rating:	IEC 60754
Installation:	Guidelines as per IEC 60794-1-1 Annex A

Performance

Tensile Strength - Short Term:	9000 N max.
Tensile Strength - Long Term:	5400 N max.
Impact Resistance:	4.4 N•m
Impact Resistance:	3 cycles
Max. Crush Resistance:	800 N/cm
Min. Bend Radius for Installation:	20xD mm
Min. Bend Radius for Operation:	20xD mm
Repeated Bending:	25 cycles
Max. Operating Temperature:	+80 °C
Min. Operating Temperature:	-40 °C
Max. Installation Temperature:	+55 °C
Min. Installation Temperature:	-20 °C
Max. Storage Temperature:	+80 °C
Min. Storage Temperature:	-40 °C
UV resistance:	Yes
Waterblocking:	Yes