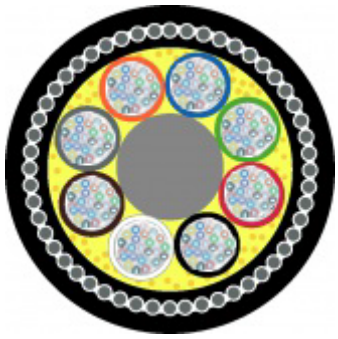
Underwater Fiber Optic Cable



Part Number: **F91920826B**

Applications: Direct Burial Campus Backbone, General purpose armored Outdoor, Rugged environments, Shallow Water Applications to 100 m. Depths

General Construction: The cable contains 192 SM G652D color-coded optical fibers contained in 8 color-coded loose tubes. The individually coloured fibres are tubed in groups of 24. These tubes are filled with a thixotropic gel to prevent the ingress of water and are 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 a water blocking tape is wrapped around the cable core. An aluminum moisture barrier is applied over the cable core beneath an inner jacket. A layer of galvanized steel wires is helically stranded around the inner jacket to serve as an armor. An outer jacket completes the cable structure.

Outer Jacket Material: HDPE

Outer Diameter: 18.5 mm nom.

Weight: 560 kg/km

Design & Materials

Buffer Material:	PBT
Tube Diameter:	2.6 mm nom.
Color Code:	Per TIA/EIA 598-C
Central Strength Member:	FRP
Cabling:	SZ
Inner Jacket Material:	PE
Armor:	Yes
Armoring:	Served Galvanized Steel Wire
Armoring Wire Diameter:	1.25 mm
Aluminum Moisture Barrier:	Yes
Foil Thickness:	80 µm
Fiber Containing Tubes:	8
Number of fibers:	192
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, ISO/IEC 11801-1, TIA/EIA-568
Installation:	Guidelines as per IEC TR 62691

Performance

Max. Installation Tensile Load :	10000 N max.
Max. fiber strain at MIT:	0.6 %
Max. Residual Tension (MRS) :	3000 N max.
Max. Fiber Strain at MRS.:	0.2 %
Impact Resistance:	10 N*m
Impact Resistance:	3 cycles
Max. Crush Resistance:	400 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:	+45 °C
Min. Installation Temperature:	-20 °C
Max. Storage Temperature:	+70 °C
Min. Storage Temperature:	-40 °C
UV Resistance:	Yes
Waterblocking:	Yes