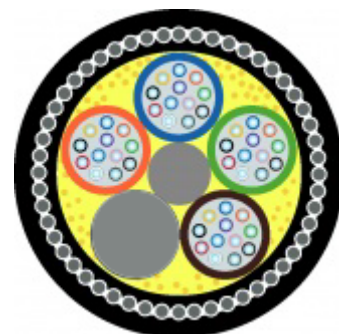


## Underwater Fiber Optic Cable

**Part Number:** **F904804U1B**

**Applications:** Direct Burial Campus Backbone, General purpose armored Outdoor, Rugged environments, Shallow Water Applications to 150 m. Depths

**General Construction:** The cable contains 48 Singlemode G652D color-coded optical fibers contained in 4 color-coded loose tubes and one filler. 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. An aluminum tape is longitudinally laid over the fiber-glass strength yarns which reinforce the cable core. An inner jacket is extruded over the aluminum tape. A layer of galvanized steel wires is stranded around the inner jacket to serve as armor. An outer jacket completes the cable structure.



**Outer Jacket Material:** HDPE  
**Outer Diameter:** 15 mm nom.  
**Weight:** 405 kg/km

## Design & Materials

<b>Buffer Material:</b>	PBT
<b>Tube Diameter:</b>	2.1 mm nom.
<b>Color Code:</b>	Per TIA/EIA 598-D
<b>Central Strength Member:</b>	FRP
<b>Cabling:</b>	SZ
<b>Strength Elements:</b>	E-Glass Yarns
<b>Inner Jacket Material:</b>	PE
<b>Intermediate Moisture Barrier:</b>	Yes
<b>Armor:</b>	Yes
<b>Armoring:</b>	Served Galvanized Steel Wire
<b>Armoring Wire Diameter:</b>	1.25 mm
<b>Aluminum Moisture Barrier:</b>	Yes
<b>Foil Thickness:</b>	80 µm
<b>Fiber Containing Tubes:</b>	12
<b>Total Number of Elements:</b>	4
<b>Number of fibers:</b>	48
<b>Waterblocking:</b>	Dry Waterblocking, Gel between tubes
<b>Rip-Cord:</b>	Yes
<b>Outer Jacket Color:</b>	Black
<b>Marking:</b>	Per request

## Standards

<b>Applicable Standards:</b>	IEC 60794, ISO/IEC 11801-1, TIA/EIA-568
<b>Installation:</b>	Guidelines as per IEC TR 62691

## Performance

<b>Max. Installation Tensile Load :</b>	8500 N max.
<b>Max. Residual Tension (MRS) :</b>	5100 N max.
<b>Impact Resistance:</b>	4.4 N*m
<b>Impact Resistance:</b>	3 cycles
<b>Max. Crush Resistance:</b>	400 N/cm
<b>Min. Bend Radius for Installation:</b>	20xD mm
<b>Min. Bend Radius for Operation:</b>	20xD mm
<b>Repeated Bending:</b>	25 cycles
<b>Max. Operating Temperature:</b>	+70 °C
<b>Min. Operating Temperature:</b>	-40 °C
<b>Max. Storage Temperature:</b>	+70 °C
<b>Min. Storage Temperature:</b>	-40 °C
<b>UV Resistance:</b>	Yes
<b>Waterblocking:</b>	Yes