

# Submarine Cable Single Armored Heavy

GJLTM 12-192 fibers 15-ton SAH / GJZLTM 12-192 fibers 15-ton SAH

#### Features

- Unrepeaterered
- Water depth 3000 m
- Compact design, only 23 mm in diameter
- 12-192 optical fibers
- With or without electroding conductor
- Single layer steel wire reinforcement
- Hydrogen protected
- Outer protection polypropylene yarns

#### Application

The 15-ton SAH is a high protected single layer armored, loose tube cable for submarine installation where high protection is required.

This submarine cable is based on a hermetically sealed stainless steel tube. Inside the tube the fibers are free to move in thixotropic water blocking compound. The steel tube is protected by a polyethylene sheath. Outside the sheath there is one layer of galvanized steel wires.

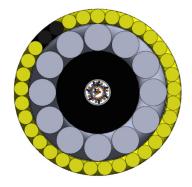
The steel wires are flooded in bitumen. The complete cable is wrapped with a layer of polypropylene yarns.

The steel wire reinforcement provides reliable mechanical protection, enabling installation and operation during rough conditions.

High packing density of the fibers is provided by the loose tube technique. This permits a small outer diameter and easy handling of the cable.

The fibers are colored for easy identification.

### **Product Information**



- 1 Primary coated fiber: Silica, acrylate
- 2 Filling compound: Thixotropic compound, hydrogen absorbing
- 3 Tube: Stainless steel
- **4** Sheath: Polyethylene, black
- 5 Armoring: Galvanized steel wires, single layer 12 x ø3.8 mm
- 6 Filling compound: Bitumen
- 7 Wrapping: Plastic tape
- 8 Wrapping: Polypropylene yarns

## **Technical Information**

Product Color	Yellow with black contrast yarns.
Temperature, Operation [°C]	-30 to +60
Temperature, Storage [°C]	-40 to +70
Temperature, Installation [°C]	-15 to +40
Diameter Ø [mm]	23
Max. Water Depth [m]	3000
Bend Radius, No Load [mm]	500
Bend Radius With Tensile Load [mm]	1500
Bend Radius Coiling [mm]	1500
Weight [kg/km]	1400
Weight in Seawater [kg/km]	1000
Tensile Force UTS [kN]	190
Tensile Force FBL [kN]	190
Tensile Force NTTS [kN]	150
Tensile Force NOTS [kN]	90
Tensile Force NTPS [kN]	70
Marking	The submarine cable is marked with kilometer markers and factory joint markers.
Technical Notes	Mechanical and environmental test in accordance with IEC 60794-1-21 and IEC 60794-1-22
Ordering Information	<ul> <li>Fiber specification</li> <li>Fiber count</li> <li>With or without electroding conductor</li> <li>Fiber color code</li> </ul>
	The cable is supplied in coil, on drum or in container.