P-LASER DATASHEET | Submarine



CONDUCTOR

Bare aluminium wires filled with sea-grade water blocking compound, with nominal cross-section area up to 3500 mm². Copper is also available.

INSULATION

P-Laser, based on HPTE insulation material which is fully recyclable and compatible with existing cable accessories.

METALLIC SHEATH

The insulated core has a lead alloy sheath applied over the longitudinal water barrier.

ARMOUR

Single or double layer of galvanized steel round wires, flushed with bitumen as further anti-corrosion protection. Double steel layer or Composite armour designs for high depth applications are also available.

SERVING Two layers of polypropylene strings, to protect against abrasion and reduce cable friction.

OUTER SEMI-CONDUCTIVE LAYER Water-swellable tapes and

extruded semi-conducting screen layer, to have a smooth electrical interface with insulation.

ANTI-CORROSION SHEATH

An extruded layer of insulating polyethylene compound; to avoid any electrical breakdown by induced over-voltages, the metallic sheath is short-circuited with the armour wires at intermediate distances. Semiconductive polyethylene is also available.

INTEGRATED FO CABLE

Up to 4 integrated fiber optic elements for monitoring purposes, able to accommodate both multi-mode and single-mode fibers.



Dimensional data for 2500 mm² aluminum

$\overline{}$	Indicative	diameter

Indicative cable weight

50 kg/m

160 mm

Electrical data for 2500 mm² aluminum

M	Ohmic resistance	0.0119 Ω/km
\bigcirc	Coaxial inductance	0.15 mH/km
	Capacitance	0.22 µF/km

INNER SEMI-CONDUCTIVE LAYER

Water-swellable tapes and extruded semi-

conducting screen layer, to have a smooth electrical interface with insulation.