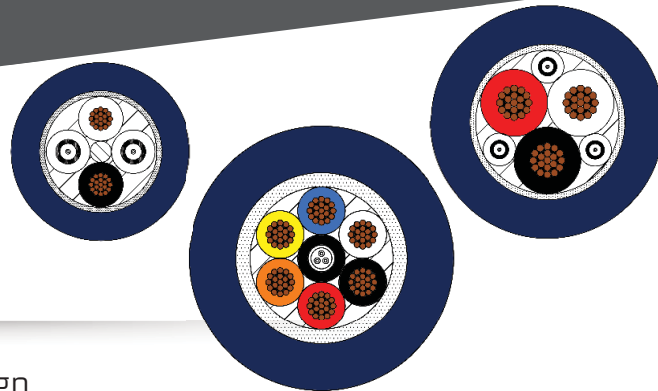


Xtreme-Marine® EO

Subsea Electro Fiber-Optic Cables



Application

Falmat's subsea fiber + power cable designs can be used for a multitude of underwater applications from shallow, rugged shorelines to deepwater installations (to depths of 6km). A sample offering of our more common designs below can also be modified with additional fibers, larger conductors, higher voltage, increased workloads or addition of steel armoring.

Design

Tried and proven materials are carefully chosen for long-term exposure and submergence in marine environments of sea or fresh water, polar to tropical, fully water-blocked with pressure resistant designs to 6km depths.

Cable Properties

Fiber Optics:	Single-mode type SMF28E 9/125 micron, multi-mode 62.5/125 micron and 50/125 micron. Fiber components: Xtreme-Light® PUR Simplex fiber, Xtreme-Light® PUR Multi-fiber (3, 4 or 6 fibers) or stainless steel tube (3 to 72 fibers).
Conductors:	Insulated with premium copolymer insulation with excellent long-term moisture resistance. -20C to 90C, 600VDC typical with 1kv, 1.5kv, 3kv, 4.5kv to 3.5kb also available. Higher temperature insulations are offered at 105C, 125C, 150C, 200C
Strength Members:	Synthetic fibers of Kevlar® or Vectran® in braid or torque-balance served layers. Typical BS values for marine instrumentation as listed. Higher strength designs up to 36k lbs can be ordered. Steel armor, GIPS dual-serve can also be added.
Jackets:	Xtreme-Marine® grade Polyurethane 90C is standard. Other available jackets of HDPE, light-weight TPE, foam jackets for buoyancy. Also available: High temperature jackets 105C, 125C, 150C, 200C

PART NUMBER	FIBER OPTIC	POWER COND.	VDC	STRENGTH (LBS.)	WALL	DIA.
FM021814-1	2x SMF Xtremelight	2x 18AWG	2.0 kv	1,400	0.055	0.360
FM021814-2	2x SMF Xtremelight	2x 16AWG	1.0 kv	1,400	0.065	0.380
FM021814-3	2x SMF Xtremelight	2x 14AWG	600 v	2,700	0.065	0.392
FM021814-4	3x SMF Xtremelight	3x 12AWG	4.0 kv	2,700	0.075	0.625
FM021814-5	3x SMF Xtremelight	3x 10AWG	3.6 kv	2,700	0.090	0.655
FM021814-6	3x SMF Xtremelight	3x 8AWG	3.6 kv	4,000	0.090	0.670
FM021814-7	3x SMF SS-Tube Core	6x 22AWG	600 v	2,700	0.052	0.292
FM021814-8	3x SMF SS-Tube Core	6x 20AWG	300 v	2,700	0.070	0.332
FM021814-9	3x SMF SS-Tube Core	6x 18AWG	1.0 kv	4,000	0.080	0.455
FM021814-10	3x SMF SS-Tube Core	6x 16AWG	1.0 kv	4,000	0.090	0.475

* This preliminary product data release is under engineering review and values are subject to change before official release.

Rev. 04.18.17