

HIGH PERFORMANCE TEXTILE CABLES FOR OCEANOLOGY





Lightweight, highly versatile, boasting high-tenacity and reparability.

CONSTRUCTION

Dyneema® 12-strand single or double braid or HMPE (high modulus polyethylene fiber).

Ø mm	3	4	5	6	8	10	12	14	16	18	20	22	24	26
breaking load daN	1 050	1 500	2 400	4 000	6 200	10 500	14 500	18 000	21 500	27 000	31 000	35 000	40 000	48 000
g/m	5	7	13	22	34	61	85	110	133	173	205	236	276	345



Compact, stable, waterproof, highly resistant to abrasion.

CONSTRUCTION

Technora® Marine Finish aramid long-pitch braided core. Polyamide braided interface sheath. Black polyester elastomer sheath.

Ø mm	6	7	8	9	9,5	11	12	12,7	13,5	15,8	17,3	19,4	25	29
breaking load Kg	1 800	2 700	3 600	5 000	6 200	8 000	9 200	10 000	12 000	16 000	20 000	25 000	40 000	50 000
g/m in air	34	45	60	74	85	124	127	150	161	220	264	325	532	713
g/m in sea water	7	9	12	16	18	25	27	30	34	46	56	69	113	150

DYNALIGHT®

ADVANTAGES

- Exceptional tensile strength, boasting the best Ø/breaking strength ratio
- Highly stable when loaded, especially once the cable has been "broken in"
- Incomparably lightweight, DYNALIGHT® cables can float
- Amazing bending resistance
- Insensitive to many chemicals, UV rays and corrosion
- Easy to splice, making it functional in all circumstances

USE

Highly versatile, used on the most demanding of winches as well as lifting or towing cables. Hoist cables, lifting slings, towing bridles, warp cables, etc.

COSA®

ADVANTAGES

- High resistance to abrasion and cuts thanks to an extruded sheath
- Dimensional consistency even over great lengths
- High breaking strength
- Fully withstands atmospheric agents and chemicals
- Barely any load elongation
- Extremely lightweight, 4 to 5 times lighter than steel
- Exceptional resistance to fatigue caused by bending
- Total insensitivity to corrosion
- Non-rotating construction, with perfect balance
- Non-magnetic, it does not cause interference with transmission systems

USE

A lightweight, compact cable, round enough to be wound properly onto grooved winch drums.



Compact, stable, easy to use.

CONSTRUCTION

Technora® aramid long-pitch braided core. Polyurethane inter-face film. Fine braided sheath in high-tenacity polyester.

USE

Hoist cables, given its excellent resistance to bending. Used in oceanology for mooring and recovery lines. In yachting it is used for applications in runners, luff of the sail on the hoist, backstays and standing rigging in general.

Ø mm	3,9	6,3	7,7	8,7	10,8	12,5	16	17,5	22	25				
breaking load daN	1 250	3 100	4 800	6 400	9 200	12 000	17 400	19 400	29 400	39 200				
g/m	12	30	45	60	90	124	180	235	345	473				

KING ROPE®

ADVANTAGES

- High breaking strength for a diameter similar to that of cable steel
- Barely any load elongation
- Extremely lightweight, 4 to 5 times lighter than steel
- Exceptional resistance to fatigue caused by bending, even when alternately bending and unbending
- Total insensitivity to corrosion
- Non-magnetic, it does not cause interference with transmission systems
- Fully non rotating
- Chemically neutral, it does not contaminate water samples.



Maneuverability, durability, excellent resistance to friction.

CONSTRUCTION

Technora® aramid long-pitch braided core. Polyurethane inter-face film. Thick braided sheath in polyester multifilament.

ARAMCABL'

ADVANTAGES

- Lightweight, easy to handle and flexible
- High breaking strength and high resistance to elongation
- Does not whip about if ever it breaks
- Easy to splice

USE

Perfectly suitable for moorings and ropes used during manoeuvring. It can be used in ports where cable steel was previously required by regulations.

Ø mm	8	10	11,5	13,5
breaking load Kg	2 600	3 500	5 100	7 000
g/m in air	48	70	95	235
g/m in sea water	12	18	25	35

Ø mm	16	18	20	23	25	28	30	32	36	40	44	52	58	63
breaking load Kg	10 500	14 000	17 500	22 500	28 000	34 000	39 000	45 000	55 000	65 000	80 000	105 000	128 000	150 000
g/m in air	203	262	310	410	509	625	710	830	1040	1200	1530	2090	2610	3090
g/m in sea water	52	66	79	104	130	160	180	210	270	310	410	530	660	780

TEXTILE SOLUTIONS for OCEANOLOGY

With its range of powerful textile cables, including COSA®, KING ROPE® and DYNALIGHT® cables, Cousin Trestec has forged a reputation as the benchmark in the highly specialized field of oceanology.

Many companies and organizations involved in deep-sea research have opted for these truly high-tech synthetic cables.

As pioneers in the field, the French manufacturer Cousin Trestec supplies scientists with top-rate cables boasting indisputable qualities, with a solid global reputation in the fields of coring, dredging and trawling.

These ropes are often made of pieces over 8,000 meters' long (this is necessary for deep-sea operations) made of the best fibers like Technora® and Dyneema®.

They have become the textile solution, preferred over steel cables which are too heavy for use in these extreme conditions, have a dynamic behaviour in handicapping steepness and are little flexible in use (splicing, lashing, etc.).

UNIQUE QUALITIES FOR DEEP-SEA APPLICATIONS

Even when subjected to the tides, swell and pressure at great depths, COSA®, KING ROPE® and DYNALIGHT® cables maintain all their mechanical properties.

These textile cables enjoy great stability when loaded, making for high levels of accuracy in manoeuvring and effective core recovery of sediment.

As the product of collaboration with ocean research institutes, these textile cables withstand the great stress placed on them by winches and corrosion. Some of our ropes are extremely round, making them easy to wind on grooved drums on naval winches.

COSA® cables are unique: they may be equipped with optical fibres and electrical conductors and boast all necessary qualities to establish market leadership.

After winning the "Blue Ribbon" distinction few years ago for coring depth records Cousin Trestec cables may once more be set to carry off some other distinctions.

Photos: Helène LEAU / IPEV, Pierre Sangiardi, François Blazquez, Cousin Trestec



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