



Certificate no.:
TAK00002J5

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Synthetic Fibre Ropes

with type designation(s)
ULTRAFLEX LITE 8 and ULTRAFLEX LITE 12 Mooring Lines,
ULTRAFLEX LITE 8 and ULTRAFLEX LITE 12 Mooring Tails

issued to

Maruti Ropes India Private Limited
Dist- Solapur, Maharashtra, India

is found to comply with

DNV class programme DNV-CP-0100 – Type approval – Synthetic fibre ropes for towing, mooring and anchoring
OCIMF Mooring Equipment Guidelines (MEG4), Fourth Edition 2018 [test requirements]
OCIMF Guidelines for the Purchasing and Testing of SPM Hawsers (2000)

Application:

Mooring and Towing of Ships and HSLCs.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Hamburg** on **2025-08-11**

This Certificate is valid until **2030-08-10**.

DNV local unit: **India CMC MES**

for **DNV**

Approval Engineer: **Gisle Hersvik**

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This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

ULTRAFLEX LITE 8: 8-strand plaited / braided synthetic fibre rope
ULTRAFLEX LITE 12: 12-strand plaited / braided synthetic fibre rope

-Fibre material: Polypropylene + Polyester

-Specific gravity: 0.97 (floats in seawater)

Compliance with OCIMF Mooring Equipment Guidelines (MEG4)

Mooring Line Base Design Certificate - For ULTRAFLEX LITE 8-strand 30 mm and 96 mm

Ref No.: - MRI/MEG4-UFL/LBDC/25/001

[Issue date: 2025-06-25]

Mooring Line Certificates will be issued with reference to Mooring Line Base Design Certificate.

Mooring Tail Base Design Certificate - For ULTRAFLEX LITE 8-strand 30 mm and 96 mm

Ref. No.: - MRI/MEG4-UFL/TBDC/25/001

[Issue date: 2025-06-25]

Mooring Tail Certificates will be issued with reference to Mooring Tail Base Design Certificate.

Maruti Ropes India Private Limited has performed the full test scenario as per OCIMF MEG4.

Compliance with OCIMF 2000, Guidelines for the Purchasing and Testing of SPM Hawsers

Size 6 (48 mm) to Size 12 (96 mm)

Rope Characteristics

The Rope characteristics are tabulated on the next page observing the following:

Fibre ropes are to be delivered with a linear mass $\pm 5\%$ of the nominal linear mass given in the table.

All breaking load values are given for both the un-spliced and spliced ropes.

All LDBF (Line Design Break Force) and TDBF (Line Design Break Force) values are given for the spliced ropes.

ULTRAFLEX LITE 8 and ULTRAFLEX LITE 12: 8- and 12-strand plaited / braided synthetic fibre ropes

Size		Linear Density [kg/m]	Weight of coil [kg/220m]	Breaking Load [kgf]		Breaking Load [KN]	
Diameter [mm]	Circ. [Inch]			Un-Spliced	Spliced (LDBF/TDBF)	Un-Spliced	Spliced (LDBF/TDBF)
30	3-3/4"	0.444	97.70	20300	18300	199	179
32	4"	0.503	110.60	22800	20500	224	201
34	4-1/4"	0.568	125.00	25250	22700	248	223
36	4-1/2"	0.639	140.60	27800	24900	273	244
38	4-3/4"	0.718	158.00	30000	27000	294	265
40	5"	0.790	173.80	32300	29100	317	285
42	5-1/4"	0.876	192.80	36500	32800	358	322
44	5-1/2"	0.963	211.86	40500	36500	397	358
46	5-3/4"	1.055	232.00	44100	39700	432	389
48	6"	1.145	251.90	47800	43000	469	422
50	6-1/4"	1.241	273.00	51700	46550	507	457
52	6-1/2"	1.340	294.80	56100	50500	550	495
54	6-3/4"	1.450	319.00	60200	54200	590	532
56	7"	1.560	343.20	64500	58000	633	569
58	7-1/4"	1.677	368.90	68900	62000	676	608
60	7-1/2"	1.795	394.90	73300	66000	719	647
62	7-3/4"	1.915	421.40	78200	70400	767	690
64	8"	2.036	447.92	83400	75000	818	736
66	8-1/4"	2.166	476.50	88300	79500	866	780
68	8-1/2"	2.295	504.90	94000	84600	922	830
70	8-3/4"	2.432	535.10	99400	89500	975	878
72	9"	2.570	565.40	105000	94500	1030	927
74	9-1/4"	2.720	598.30	109400	98500	1073	966
76	9-1/2"	2.870	631.40	114500	103000	1123	1010
78	9-3/4"	3.030	666.60	121100	109000	1188	1069
80	10"	3.190	701.80	128900	116000	1264	1138
82	10-1/4"	3.357	738.60	135000	121500	1324	1192
84	10-1/2"	3.525	775.50	141600	127500	1389	1250
86	10-3/4"	3.693	812.35	147800	133000	1449	1304
88	11"	3.860	849.20	154500	139000	1515	1363
90	11-1/4"	4.038	888.25	161500	145400	1584	1426
92	11-1/2"	4.215	927.30	169000	152100	1657	1492
94	11-3/4"	4.393	966.35	175900	158300	1725	1552
96	12"	4.570	1005.40	183300	165000	1798	1618

The data in the table is provided by Maruti Ropes India Private Limited.

Application/Limitation

The approval range covers ropes with diameter from 30 mm to and including 96 mm.

The OCIMF MEG4 approval range covers ropes with diameter from 30 mm to and including 96 mm.

The OCIMF 2000 approval range covers ropes with diameter from 30 mm to and including 96 mm.

Type Approval documentation

Tests carried out

Type Testing carried out in accordance with **Type Approval documentation**, and according to:

- OCIMF's Mooring Equipment Guidelines (MEG4) [requirements to testing].
- OCIMF 2000, Guidelines for the Purchasing and Testing of SPM Hawsers (1st Edition 2000) [testing].
- DNV-CP-0100.

The fibre ropes are manufactured in accordance with:

- Product Specification (ULTRAFLEX LITE), Form No. MRI/MEG4-UFL-04.

Marking of product

Product shall be marked with *manufacturer's name*: **Maruti Ropes India Private Limited, India**, *type designation* and *diameter*.

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV Type Approval Certificate.

Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical assessments (for Certificate Retention / Certificate Renewal) shall be performed according to DNV-CP-0338.

This certificate is only valid if required Periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

END OF CERTIFICATE