



Certificate no.:
TAK00002J3

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Synthetic Fibre Ropes

with type designation(s)
ULTRA 8 and ULTRA 12 Mooring Lines,
ULTRA 8 and ULTRA 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

ULTRA 8: 8-strand plaited / braided synthetic fibre rope

ULTRA 12: 12-strand plaited / braided synthetic fibre rope

-Fibre material: Polypropylene (Polyolefin)

-Specific gravity: 0.95 (floats in seawater)

Compliance with OCIMF Mooring Equipment Guidelines (MEG4)

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

Ref No.: - MRI/MEG4-ULTRA/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 ULTRA 8-strand 30 mm and 96 mm

Ref. No.: - MRI/MEG4-ULTRA/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 Hawfers

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.

ULTRA 8 and ULTRA 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"	0.407	89.50	16300	14670	160	144
32	4"	0.459	101.00	18500	16650	181	163
34	4-1/4"	0.523	115.00	20700	18630	203	183
36	4-1/2"	0.586	129.00	22900	20600	225	202
38	4-3/4"	0.657	144.50	26050	23450	255	230
40	5"	0.727	160.00	29200	26300	286	258
42	5-1/4"	0.804	176.80	32650	29400	320	288
44	5-1/2"	0.880	193.60	36100	32500	354	319
46	5-3/4"	0.960	211.20	38900	35000	381	343
48	6"	1.040	228.80	41650	37500	408	368
50	6-1/4"	1.130	248.60	44750	40275	439	395
52	6-1/2"	1.220	268.40	47900	43100	470	423
54	6-3/4"	1.324	291.20	53450	48100	524	472
56	7"	1.427	314.00	59000	53100	578	521
58	7-1/4"	1.532	337.00	63350	57000	621	559
60	7-1/2"	1.636	360.00	67670	60900	663	597
62	7-3/4"	1.743	383.50	72000	64800	706	635
64	8"	1.850	407.00	76350	68700	749	674
66	8-1/4"	1.973	433.95	81100	73000	795	716
68	8-1/2"	2.095	460.90	85950	77350	843	758
70	8-3/4"	2.218	487.85	90750	81675	890	801
72	9"	2.340	514.80	95550	86000	937	843
74	9-1/4"	2.480	545.60	101000	90900	990	891
76	9-1/2"	2.620	576.40	106500	95850	1044	940
78	9-3/4"	2.760	607.20	112000	100800	1098	988
80	10"	2.900	638.00	117550	105800	1152	1037
82	10-1/4"	3.052	671.50	122900	110600	1205	1084
84	10-1/2"	3.205	705.00	128200	115400	1257	1131
86	10-3/4"	3.357	738.50	133550	120200	1309	1178
88	11"	3.509	772.00	138900	125000	1362	1225
90	11-1/4"	3.674	808.35	145900	131300	1430	1287
92	11-1/2"	3.840	844.70	152900	137600	1499	1349
94	11-3/4"	4.005	881.05	160000	144000	1569	1412
96	12"	4.170	917.40	166900	150200	1636	1473

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 (ULTRA), Form No. MRI/MEG4-MU-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