

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Cargo Securing Devices**with type designation(s)
Twistlock

Issued to

Kunshan Lucky Sea Industry Co., Ltd.
Kunshan 100, China

is found to comply with

GL Rules for Classification and Construction I - Ship Technology**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****MSL, tension (kN) 250****MSL, shear (kN) 210****MSL, compr. (kN)**This Certificate is valid until **2021-06-05**.Issued at **Hamburg** on **2016-06-06**DNV GL local station: **Shanghai CMC**Approval Engineer: **Mathias Bohn**for **DNV GL**-----
on behalf of Andree Orth
Head of Section

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.

Product description

Twistlock F7B-L(R)

Application/Limitation

Load	Tension [kN]	Shear [kN]
Test Load	313	263
Breaking Load	500	420

Tests to be carried out:

- Production testing: At least 2% of the items delivered are to be selected and subjected to the test load.
- Material tests are to be included energy testing at -20°C, with the impact energy requirements acc. to GL rule I-1-20. The material shall be according to the approved drawings. Material certificates shall be 3.1 acc. to DIN EN 10204.

Type Approval documentation

Drawing No.	Rev.	Title
K-F7B-L	-	Twistlock left
K-F7B-R	-	Twistlock right
K-F7-02B	-	Body
K-F7-03B	-	Body

Drawing approval No. DNVGL Ref.-No.: 15-063190 Date: 2015-10-13

Tests carried out

The prototype test was carried out in Kunshan, P.R. China, dated 2015-11-24 in accordance with the GL rule I-1-20.

Marking of product

Each item shall be marked by manufacturer for traceability.