

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Cargo Securing Devices**

with type designation(s)

U-Frame Twistlock BF-11-55L, U-Frame Twistlock BF-11-55R, U-Frame Twistlock BF-11-L, U-Frame Twistlock BF-11-R, U-Frame Twistlock BF-11-55LL, U-Frame Twistlock BF-11LL

Issued to

International Lashing Systems NV
Antwerpen, Belgium

is found to comply with

DNV GL rules for classification – Ships**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**

Type	SWL, tension (kN)	SWL, shear (kN)
U-Frame Twistlock BF-11-55L	250	210
U-Frame Twistlock BF-11-55R	250	210
U-Frame Twistlock BF-11-L	250	210
U-Frame Twistlock BF-11-R	250	210
U-Frame Twistlock BF-11-55LL	250	210
U-Frame Twistlock BF-11LL	250	210

Issued at **Hamburg** on **2020-08-17**This Certificate is valid until **2025-08-16**.for **DNV GL**DNV GL local station: **Belgium CMC**Approval Engineer: **Mark-Oliver Wobig**

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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 300,000 USD.



Product description

Twistlock

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 DNVGL-CP-0068. The material shall be according to the approved drawings. Material certificates shall be 3.1 acc. to ISO 10474:2013.

Type Approval documentation

Drawing No.	Rev.	Title
BF-11-55L	1	U-Frame Twistlock (pg. 1+2)
BF-11-55L-B	1	U-Frame Twistlock (Housing)
BF-11-55L-C	1	U-Frame Twistlock (Cone)
BF-Ball	1	Ball for BF-11-55L
BF-S	1	Spring for BF-11-55L
BF-11-55R	1	U-Frame Twistlock (pg. 1+2)
BF-11-55R-B	1	U-Frame Twistlock (Housing)
BF-11-55R-C	1	U-Frame Twistlock (Cone)
BF-Ball	1	Ball for BF-11-55R
BF-S	1	Spring for BF-11-55R
BF-11L	1	U-Frame Twistlock (pg. 1+2)
BF-11L-B	1	U-Frame Twistlock
BF-11L-C	1	U-Frame Twistlock
BF-Ball	1	Ball for BF-11L
BF-S	1	Spring for BF-11L
BF-11-R	1	U-Frame Twistlock (pg. 1+2)
BF-11R-B	1	U-Frame Twistlock
BF-11R-C	1	U-Frame Twistlock
BF-Ball	1	Ball for BF-11R
BF-S	1	Spring for BF-11R
BF-11-55LL	1	U-Frame Twistlock Line Load (pg. 1+2)
BF-11-55LL-B	1	U-Frame Twistlock Line Load
BF-11-55LL-C	1	U-Frame Twistlock Line Load
BF-Ball	1	Ball for BF-11-55LL
BF-S	1	Spring for BF-11-55LL
BF-11LL	1	U-Frame Twistlock Line Load (pg. 1+2)
BF-11LL-B	1	U-Frame Twistlock Line Load
BF-11LL-C	1	U-Frame Twistlock Line Load
BF-Ball	1	Ball for BF-11LL

Job Id: **262.1-033220-1**
Certificate No: **TAS00002K2**

BF-S 1 Spring for BF-11LL

Test report of ILS Jiangsu, dated 2020-05-13

Tests carried out

The prototype test was carried out in Yixing, P.R. China, dated 2020-05-13 in accordance with the DNVGL-CP-0068.

Marking of product

Each item shall be marked by manufacturer for traceability.

Periodical Assessment

For retention of the Type Approval, a DNVGL surveyor shall perform a survey after 2 and 3.5 years, to verify that the Type Approval is complied with.