

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Swivel Type 231-M5

with type designation(s)
10-2850 (MBL 8420 kN)

Issued to

MoorLink Solutions AB
GÖTEBORG, Sweden

is found to comply with
DNV-OS-E302 "Offshore mooring chain" October 2013

Application :

To be used for Temporary and Mobile Mooring
as defined in DNV-OS-E301, Position Mooring, October 2013

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

This Certificate is valid until **2019-09-30**.

Issued at **Høvik** on **2015-08-18**

DNV GL local station: **Stockholm**

Approval Engineer: **Pierre-Eric Moulia**

for **DNV GL**

Inger-Helene Hals
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.

Job Id: **262.1-011992-2**
Certificate No: **TAS0000039**

This certificate replaces S-6730

Product description

Material grade NV R4 swivel to be used as torque built up absorber in mooring chain up to 8420 kN MBL.

Application/Limitation

The approval is conditional that the manufacturer is approved by DNVGL for R4 grade material.

The swivel is to be used in connection with chains for Temporary and Mobile Mooring as defined in Offshore Standard DNV-OS-E301 "Position Mooring" October 2013.

The swivel shall be manufactured and tested in accordance with Offshore Standard DNV-OS-E302 "Offshore Mooring Chain" October 2013.

Individual Product Certificate is to be issued for each delivery.

Type Approval documentation

Tests carried out

For every order testing shall be carried out according to DNV-OS-E302 October 2013.

Marking of product

Each swivel shall be marked according to Offshore Standard DNV-OS-E302 "Mooring Chain" October 2013 Ch2 Sec2 §1.4.1 & §3.9.

Periodical assessment

For retention of the Type Approval, DNVGL surveyor shall perform a survey every second year and before the expiry date of this Certificate to verify that the conditions of the type approval are complied with.