Certificate No:
TAS000035E

TYPE APPROVAL CERTIFICATE

This is to certify:

That the ETH swivel clamps (sizes Ø160 & Ø180)

with type designation(s)
11305035 and 11305036

Issued to
Egersund Herøy AS
Fosnavåg, **Norway**

is found to comply with
DNV-OS-E301 – Position mooring, Edition July 2021

Application :

Temporary, Mobile and Long Term Mooring, as defined in Offshore Standard DNV-OS-E301 "Position Mooring" July 2021

Issued at **Høvik** on **2021-09-13**
This Certificate is valid until **2026-09-12**.
DNV local station: **Norway CMC, Mid-North**

Approval Engineer: **Pierre-Eric Moulia**

for **DNV**

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.

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 300,000 USD.

Product description

The ETH Swivel Clamp is used in mooring operations, when there is a need to mount subsea buoyancies to the mooring lines fiber ropes, to keep them off the seabed or subsea infra structure. The ETH Swivel Clamp function is to avoid connecting the subsea buoyancies directly to the free length of the fiber ropes, for example using HMPE grommets as interface. The ETH Swivel Clamps protect the mooring line fiber rope in its interfaces against damages caused by the grommet.

The ETH Swivel Clamp consists of four main parts made of Polyurethane Elastomer. Two clamp halves are bolted on to the fiber rope. Then the two swivel halves are attached over the clamp.

Application/Limitation

The ETH Swivel Clamps are to be used on fiber ropes in Temporary, Mobile and Long Term Mooring, as defined in Offshore Standard DNV-OS-E301 “Position Mooring” July 2021.

The ETH Swivel Clamps are manufactured by PartnerPlast AS (Norway).

Type Approval documentation

Tests carried out

Field testing was performed at Echino South (Oct-Nov 2019), Peon (July 2020) and Stovegolvet (April 2021).

Prototype tests were performed at DNV Bergen lab (March 2021).

Periodical assessment

For retention of this Type Approval, a DNV surveyor shall perform a periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days). The objective of the periodical assessment is to verify that the conditions for the Type Approval have not been altered. (Ref DNVGL-CP-0338 Type approval scheme).
Validity of this certificate can be checked at https://approvalfinder.dnvgl.com/