DNV·GL

EUROPEAN UNION RECOGNISED ORGANISATION (EU RO) MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE

Certificate No:
MRE000000U

In accordance with Article 10.1 of EU Regulation 391/2009

This Certificate is issued to
Øglænd System AS
KLEPPE, Norway

for
Cable Trays and Ducts (Metallic)

with type designation(s)
Cable clamp

The product is found to comply with
EU RO Mutual Recognition Technical Requirements for Cable Trays and Ducts (Metallic)

Intended service
Cable clamps intended to be used in ship's cabling systems necessary for the applications mentioned in 1.b in the TA program.

This is to certify:

that the Product referred to herein has been inspected for the Manufacturer, pursuant to the relevant requirements of the European Union Recognised Organisation Mutual Recognition procedure, required by Article 10.1 of EU Regulation 391/2009, and has been found in accordance with those requirements.

This Certificate is valid until **2024-10-17**.

Issued at **Høvik** on **2019-10-18**
DNV GL local station: **Stavanger** for **DNV GL**

Approval Engineer: **Ivar Bull**

Trond Sjåvåg
Head of Section

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.
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.

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Product description

Product name: SmartCleat.
Cable cleats made of stainless steel, EN 1.4404, for fixing trefoil and single cables.

Classification	According to IEC 61914
Material	Metallic
Max temperature Min temperature	+120°C -60°C
Resistance to impact	Very heavy
Resistance to electromechanical forces	Lateral and axial retention, withstanding more than one short circuit.
Resistance to corrosion	High

Art. No.	Type	Cable Size (outer diameter)
13034XX*	SmartCleat Trefoil	3x25 mm to 3x99 mm
898XX*	SmartCleat Single	1x37 mm to 1x99 mm

*) XX = outer cable diameter

Application/Limitation

Maximum tested peak current for cleat size 3x36 and 300 mm spacing: 174 kA.

For distance between cable cleats please refer to manufactures spread sheet "Calculation of distance between SmartCleats".

For fixing single core AC current cables on board Mobile Offshore Units and Ships then each cable cleat shall include all phases.

Type Approval documentation

Marking of product

Marked with Øglænd logo and product identification

Other Conditions

Manufacturers installation instructions to be followed.
For information on collaborating parties in EU RO Mutual recognition, please see www.euromr.org

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or materials.

The main elements of the assessment are:
- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that design and materials used comply with type approved documents
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed annually and at renewal of this certificate.

END OF CERTIFICATE