



TYPE APPROVAL CERTIFICATE

Certificate No:
TAA0000172
Revision No:
1

This is to certify:

That the Position Switch

with type designation(s)
TX, NX, TZ, NG, NZ, NZ VZ, N01, NB01, SN01, N1A, EGT

Issued to

Euchner GmbH + Co. KG
Leinfelden-Echterdingen, Baden-Württemberg, Germany

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application :

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

Type	Temperature	Humidity	Vibration	EMC	Enclosure ¹⁾
TX , NX , TZ , NG , NZ , NZ VZ , N01 , NB01 , SN01 , N1A , EGT	B	B	B	B	

1) Required protection according to DNV GL Rules shall be provided upon installation on board

Issued at **Hamburg** on **2023-02-01**

for **DNV**

This Certificate is valid until **2028-01-31**.

DNV local unit: **Augsburg**

Approval Engineer: **Didier Girardin**

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Joannis Papanuskas
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

TYPES:

Position Switches: NG...

Position Switches with safety function:NZ

Safety switches with separate actuator: TX..., NX..., TZ..., NZ..., NZ.VZ...

Precision single hole fixing limit switches:EGT

Single plunger limit switches: N01..., NB01..., N1A..., SN01...

Application/Limitation

The Type Approval covers hardware listed under Product description.

When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case.

Reference is made to DNV GL RU SHIP Pt.4 Ch.9 Sec. 1.

Type Approval documentation

Hidden

Test report:

TX 23.520.38/02-36-182

EP.520.38/02-36-182

NX 23.520.29/04-53-182/I

TZ 8804882.2

9002380

NZ 2001 20591

NZ.VZ 8201001.4

ÄM.520.38/13-031/I

IACS E10 rev.07/08 Compliancy

2023-103935-11081-REN

2022-103831-10958-REN

Tests carried out

Applicable tests according to Class Guideline DNVGL-CG-0339, Edition August 2021.

Production Places

- Position Switches: TX, NX, TZ, NG, NZ, VZ VZ, N01, NB01, SN01, N1A
Reichenbacherstrasse 34 - 73337 Bad Überkingen
- Position Switches: EGT
Kohlhammerstrasse 16 - 70771 Leinfelden-Echterdingen

Marking of product

The products to be marked with:

- Manufacturer name
- Device name and part no.

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 choice of systems, software versions, components and/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 systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE



Job Id: **262.1-025266-2**
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