

# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAM00000JO**  
Revision No:  
**1**

## This is to certify:

**That the Elastic Couplings**

with type designation(s)  
**ROTEX**

Issued to

**KTR Systems GmbH**  
**Rheine, Germany**

is found to comply with

**DNV rules for classification – Ships**  
**DNV rules for classification – High speed and light craft**  
**DNV-OS-D101 – Marine and machinery systems and equipment, Edition July 2021**

## Application :

**Products approved by this certificate are accepted for installation on all vessels classed by DNV. The couplings are approved for auxiliary purpose not including reciprocating machinery as diesel engine or piston compressor, and with rating/technical data according to ROTEX company catalogue edition 04/2022 chapter ROTEX.**

Issued at **Hamburg** on **2022-09-21**

for **DNV**

This Certificate is valid until **2027-06-11**.

DNV local station: **Essen**

Approval Engineer: **Wolfgang Schütz**

\_\_\_\_\_  
**Oddvar Deinboll**  
**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

Flexible rubber coupling.

## Application/Limitation

The couplings are approved for auxiliary purpose not including reciprocating machinery as diesel engine or piston compressor, and with rating/technical data according to ROTEX company catalogue edition 04/2022 chapter ROTEX.

Production tolerance on torsional stiffness:  $\pm 20\%$ .

Technical data according to "Technical Data", page 33 of catalogue edition 04/2022.

Permissible power loss  $P_{KW}$  given in the catalogue is valid for ambient temperature 30°C.

At higher ambient temperature a linear decrease to 0 at 100°C should be used.

Coupling hub material to be either nodular cast iron or steel.

## Type Approval documentation

### Tests carried out

Tests for coupling size 125:

Versuch Nr. 90200017-027, -024, -004, -005, -011, and -014

Tests for coupling size 160:

Versuch Nr. 90200017-051, -061 and -062

## Marking of product

The product to be marked with manufacturer's name or trademark and type number identification.

## Periodical assessment

A condition for retention of the Type Approval Certificate in its validity period is that periodical assessments are successfully carried out.

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the Type Approval are complied with. Refer to the Class Programme DNV-CP-0338, Sec.4.

## Other conditions

DNV product certificate is not required for couplings according DNV Rules for auxiliary duty with rating up to 500 kW and rated torque less than 5 kNm, where torsional vibration calculations are not required.

The type approval does not cover connection to external shaft.

END OF CERTIFICATE