Certificate No:
TAM00001A1

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Bending Compliant Couplings

with type designation(s)
HSFA/0096/KA/GA-253607

Issued to
John Crane France SAS
Deville les Rouen, Seine Maritime, France

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 :

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

Issued at **Høvik** on **2022-11-22**
This Certificate is valid until **2027-11-21**.
DNV local station: **France CMC**

Approval Engineer: **Stanislav Avanesov**

for **DNV**

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

Torsional stiff, axial and angular flexible shaft coupling.

Application/Limitation

Bending compliant coupling

Nominal torque 608 Nm

Maximal torque 1064Nm

Type Approval documentation

Tests carried out

Factory tests

Marking of product

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

Periodical assessment

For retention of the Type Approval, a DNV surveyor shall perform a survey after 2 and 3,5 years after issue date of this certificate to verify that the conditions of the type approval are complied with.

The objective of the Periodical Assessment is to verify that the conditions for the Type Approval are not altered since the Type Approval Certificate was issued. The main scope of the Periodical Assessment will normally include:

- Verification of the Type Approval applicant's production and quality system w.r.t. ensuring continued consistent production of the Type Approved products at the Type Approval applicant's own premises and at other companies that are given the responsibility for manufacturing of the products.
- Review of the Type Approval documentation and that this is still used as basis for the production
- Review of possible changes to the design, the material and the performance of the product
- Verification of the product marking.

END OF CERTIFICATE