



Certificate no.:
TAP00002UZ

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Slip-on Couplings**

with type designation(s)
Style 38 Coupling

issued to

Natural Gas Solutions North America, LLC - Dresser Pipeline Solutions
Bradford, PA, USA

is found to comply with

DNV rules for classification – Ships Pt.4 Ch.6 Piping systems

DNV class programme DNV-CP-0185 – Type approval – Mechanical joints

Application:

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

Temperature range: see certificate

Max. working press.: see certificate

Sizes: 2"~ 36"

Issued at **Hamburg** on **2024-04-25**

This Certificate is valid until **2029-04-24**.

for **DNV**

DNV local unit: **Houston Offshore Services**

Approval Engineer: **Ana Cristina Do Carmo Insfran**

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

Slip on coupling, with removable centre pin pipe stops.

Sizes: 2" through 36" with 5/8 tie bolts (3-44 bolt pattern)

Materials¹:

Component	Material	Standard
Middle ring	Carbon steel Stainless steel	AISI 1020 or equivalent ASTM A240
Follower ring	Carbon Steel Stainless steel	A 283 Gr. C or equivalent ASTM A240
Tie bolts	Carbon steel Stainless steel	ASTM 307 or equivalent ASTM A593
Nuts	Carbon steel	ASTM A563 or ASTM A 563M or equivalent

* and comply with ANSI/ASME B18.2.1 or B18.2.4.5M or equivalent

** and comply with ANSI/ASME B18.2.2 or B18.2.4.6M or equivalent

Notes:

¹ Tube wall thickness acc. to DNV Ship Rules Pt.4, Ch.6 - Section 9.

Application/Limitation

Natural Gas Solutions North America, LLC - Dresser Pipeline Solutions Mechanical joints, Slip on coupling, with removable centre pin pipe stops are type approved for class I, II and III-piping systems for application: mechanical connecting for marine piping, as specified in the DNV Rules Pt. 4, Ch. 6, Sec. 9 Table 9 and 10 – pipe union, bite type, fire resistant type.

Selection of materials

It shall be noted that the selection of the materials considers the applicable service condition with respect to type of media, flow velocity, media temperature etc. and installation area of the piping system. In particular, the resistance to corrosion, erosion, oxidation and other deterioration during projected service life are to be taken into account.

Reference is made to DNV Rules Pt.4, Ch.6 – Section 2 – Materials.

Temperature range

-20°F to + 212°F

Pressure range

300 psi for Non-Fire Resistant
275 psi for Fire Resistant -200°F

Type Approval documentation

Tests carried out

Tightness test, repeated assembly test, burst pressure test, pull-out test, vibration test, pressure pulsation test, fire resistance test.

Marking of product

For traceability to this type approval each mechanical joint is to be marked with:

Component	Scope	Example
Middle ring	Manufacturer trademark, size, identification number	
Follower ring		
Tie bolts		
Nut		

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment as per DNV-CP-0338, Sec.4 to verify that the conditions for the Type Approval are complied with.

To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

Ende of Certificate