

TYPE APPROVAL CERTIFICATE

Certificate no.:
TAP000007B
Revision No:
3

This is to certify:

that the **Swage type couplings**

with type designation(s)
Marinepress

issued to

RACCORDERIE METALLICHE S.p.A.
Campitello di Marcaria, MN, Italy

is found to comply with

DNV rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV-OS-D101 – Marine and machinery systems and equipment, Edition July 2021
DNV class programme DNV-CP-0185 – Type approval – Mechanical joints

Application:

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

Temperature range: Dependent on rubber sealings, see certificate
Max. working press.: 16 bar (max 7 bar for flammable fluids and steam service)
Sizes: Ø15 - Ø108

Issued at **Høvik** on **2025-07-09**

This Certificate is valid until **2030-07-21**.

DNV local unit: **Italy/Malta CMC**

Approval Engineer: **Marc Avice**

for **DNV**



Digitally Signed By:
Bosman van der Merwe
Location: DNV Høvik, Norway

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 USD 300 000.

Product description

Cupronickel press fit tube fittings, with internal elastomer sealing rings.

Sizes: D15, D18, D22, D28, DN35, DN42, DN54, DN76.1, D88.9, D108

Materials:

Fitting and Pipe:

Cupronickel: WL 2.1972 – CuNi10Fe1.6Mn according to DIN86019

Sealing rings: EPDM/ NBR-HNBR/ FKM/ MVQ

Fire tested type: With MVQ (red) and FKM sealing ring.

Application/Limitation

Approved for Class III piping systems in the following systems:

- Flammable fluids (flash point $\leq 60^{\circ}\text{C}$)
 - Cargo oil lines ⁽³⁾
 - Crude oil washing lines ⁽³⁾
 - Vent lines ⁽²⁾
- Inert gas
 - Water seal effluent lines
 - Scrubber effluent lines
 - Main Lines ⁽³⁾
 - Distribution lines ⁽³⁾
- Flammable fluids (flash point $> 60^{\circ}\text{C}$)
 - Cargo Oil lines ⁽³⁾
 - Fuel oil lines ⁽²⁾
 - Lubricating oil lines ⁽²⁾
 - Hydraulic oil ⁽²⁾
 - Thermal oil ⁽²⁾
- Sea water
 - Cooling water system ⁽¹⁾
 - Tank cleaning services
 - Ballast system ⁽¹⁾
 - Bilge lines ⁽¹⁾
 - Fire mains and water spray
 - Foam system ⁽²⁾
 - Sprinkler system ⁽²⁾ (wet and dry)
 - Non-essential systems
- Fresh water
 - Cooling water system ⁽¹⁾
 - Condensate return ⁽¹⁾
 - Non-essential system
- Sanitary/drains/scuppers
 - Deck drains (internal) ⁽⁴⁾
 - Sanitary drains
 - Scuppers and discharge (overboard)
- Sounding/vent
 - Water tanks/Dry spaces
 - Oil tanks (f.p. $> 60^{\circ}\text{C}$) ⁽²⁾
- Miscellaneous
 - Starting/Control air ⁽¹⁾
 - Service air (non-essential)
 - Brine
 - CO2 system ⁽¹⁾
 - Steam

¹⁾ Inside machinery spaces of category, A - only approved fire-resistant types.

²⁾ Approved fire-resistant types except in cases where such mechanical joints are installed on exposed open decks, as defined in SOLAS II-2/Reg. 9.2.3.3.2.2(10) and not used for fuel oil lines.

³⁾ Only in pump rooms and open decks - only approved fire-resistant types.

⁴⁾ Only above bulkhead deck of passenger ships and freeboard deck of cargo ships.

Temperature limitation for elastomer sealing rings:

Type of Elastomer	Temperature range
EPDM Black	-20 to +120 °C
NBR/HNBR yellow	-20 to +70 °C
FKM green	-20 to +220 °C
MVQ red	-55 to +180 °C

Maximum design temperature for fuel oil, lubricating oil and flammable hydraulic oil is +60°C

Maximum working pressure 7 bar for flammable fluids and steam.

The components are to be mounted according to manufacturer's instructions.

The approval is only valid when the couplings are assembled with tubing of correct temper and tolerances as recommended by the manufacturer.

Type Approval documentation

The approval is based on the following documentation :

Brochure "MarinePres Cupro"

Brochure "Materials"

Brochure "Application of mechanical joint"

Drawing index (Ref. 262.1-009860-1 J.No.13)

Technical spec. ccmp027-01-CuNi-EM1 REVA

Fire test report 2020CS01679-1 to 8 GBR ECB

Fire test report 1420.21S0182/13 dated 24.10.2013

Drawing no: 683015000CN, dated: 02/03/2010

Drawing no: 683035000CN, dated: 02/03/2010

Drawing no: 683076000CN, dated: 02/03/2010

Drawing no: 683108000CN, dated: 02/03/2010

Drawing no: 11501525VS, dated: 28/08/2018

Drawing no: 11503530VS, dated: 28/08/2018

Drawing no: 11507770VM, dated: 30/07/2013

Drawing no: 11510909VM, dated: 30/07/2013

Marinepres vibration pulsation pressure PN16, report no. 1102526 (001/002) to 1102528 (001/002)

Renewal burst test report RP 016-20, witnessed by DNV surveyor dated 28/04/2020

Renewal burst test report RP 006-25, witnessed by DNV surveyor dated 29/05/2025

Tests carried out

Leakage test, vibration test, burst pressure test, pull-out test and fire test

Marking of product

For traceability to this type approval the products are to be marked with:

- Manufacturer's name or trademark
- Type designation and dimension

Periodical assessment

This certificate is only valid if required periodical assessments are carried out with satisfactory results.

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 approval are complied with. Reference is made to DNV-CP-0338.

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