

# TYPE EXAMINATION CERTIFICATE

## This is to certify:

**That the Quick Connecting Coupling for LNG / LPG**

with type designation(s)

**ERC - Emergency Release Coupling for cryogenic applications, called ARTA NTS-MPC**

Manufactured by

**ARTA GmbH & Co. KG**  
**Diez a.d. Lahn, Germany**

is found to comply with

**EN 1474-1**

**EN 1474-3**

## Application :

**Max. working temp.:** -230°C to +100°C

**Max. working press.:** 4": 25 bar, 6": 25 bar, 8": 16 bar, 10" to 16": 10 bar

**Sizes:** 4" to 16"

This Certificate is valid until **2018-06-30**.

Issued at **Høvik** on **2015-06-22**

for **DNV GL**

DNV GL local station: **Rotterdam, Product  
Certification /Verification**

Approval Engineer: **Tom Berg-Nielsen**

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**Marianne Spæren Marveng**  
**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 Examination Certificate and not to the approval of equipment/systems installed.

## **Product description**

Quick connecting coupling for LNG/LPG and other liquefied gases, self-sealing type. Suitable for pipes and hoses

## **Application/Limitation**

May be used for transfer of LNG/LPG into fuel oil tanks on gas fired vessels within the limits mentioned on the front page.

The couplings shall always be installed according to the manufacturer's instructions.

The couplings shall always be assembled with tubing of correct temper and tolerance as recommended by the manufacturer.

Before delivery each coupling is to be hydraulically pressure tested to 1.5 times the max working pressure, zero leak low pressure tested and function tested incl. separation.

## **Type Approval documentation** **Tests carried out**

Fire test according to ISO 10497 (2010),  
Cryogenic thermo shock test,  
Full scale fall test  
Zero leak and functionality test with maximum working load test,

## **Marking of product**

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

- Manufacturers name or trade mark
- Type designation

## **Periodical assessment**

For retention of the Type Approval a DNV Surveyor shall perform a survey, - every second year and before the expiry of this certificate to verify that the conditions for the type approval are complied with. The Surveyor shall witness burst testing of samples of couplings selected at random from stock or from the running production as part of the survey.

END OF CERTIFICATE