Certificate No: LR25360285TA
Issue Date: 12/11/2025
Expiry Date: 11/11/2030

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**Heinzmann GmbH & Co. KG**
Address	Am Haselbach 1, Schoenau, 79677, Germany
Place of Production	Heinzmann GmbH & Co. KG Am Haselbach 1, Schoenau, 79677, Germany
Type	Fuel Systems
Description	Solenoid driven double wall methanol fuel injection valve material number 561-00-021-00 with flow limiter.
Trade Name	Methanol-Injector
Application	Marine and Offshore applications for use in environmental categories ENV1, ENV2, ENV3 and ENV4, as defined in Lloyd's Register Type Approval System, Test Specification Number 1 – July 2024
Specified Standard	Lloyd's Register Type Approval System Test Specification Number 1 – July 2024 Manufacturer's Specification
Ratings	Working pressure up to 16 bar Design pressure: 20 bar Cable length: 1000mm

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Ashwinikumar Mhamal

Electrical & Control Technical Manager - Africa, Middle East & India to Lloyd's Register Marine and Offshore India LLP

Units 1702-1704, 17th Floor (Level-13), Building Q2, Aurum Q Parc; Gen 4/1 TTC, Thane-Belapur Road, Ghansoli, Navi Mumbai, 400710, India

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Additional Tests	High pressure/ Tightness test
Other Conditions	Cold test has been verified at -25 °C for 16 hours without function test for storage. The manufacturer's recommendation for the installation and maintenance of this component is to be followed. The suitability of injector needs to be tested and confirmed on the respective combustion engine. Specific Conditions of Use as stated in applicable Ex-certificates shall be observed when installed in hazardous areas. The Ex-certification does not form part of this certificate. The metallic materials to be used in methanol systems shall be suitable for the medium and service for which service is intended. The stainless steel 1.4034 shall be coated to ensure corrosion protection for the respective parts of injector and flow limiter. Type Approval does not eliminate the need (as required by LR Rules) the requirements for further review or for the product to be further inspected and/ or surveyed to be installed in ships classed or intended to be classed with LR. If the specified standards are amended during the validity of this certificate, the product is to be reapproved prior to it being supplied to vessels to which the amended standards apply.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Marine and Offshore India LLP of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document TSO-25-037245-E-M-01 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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