Certificate No: LR2557155TA
Issue Date: 07/05/2025
Expiry Date: 06/05/2030

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	**KmsEmec Co., Ltd.**
Address	293, Yongjeonsaneopdanji-gil, Samnangjin-eup, Miryang-si, Gyeongnam, 50465, South Korea
Type	Plastic Pipes
Description	GRP Dresser (slip) Type Expansion Joints for GRP pipes. These expansion joints are not fire tested type.
Trade Name	Nocorflex
Application	Ballast lines only in locations H & I and non-essential systems as per Part 5 Chapter 12 Table 12.5.1 of Ship Rules
Specified Standard	LLoyd's Register Rules and Regulations for Classification of Ships - 2024 Lloyd's Register Rules and Regulations for Classification of Offshore Units 2024. IACS UR P2.7 and P.2.11 - 2023
Ratings	8 bars for pipe size 200 to 600 NB. 65 degree C
Additional Tests	IACS UR P2.7 and P.2.11 tests applicable to slip on couplings. - Tightness Test, - Burst Test and - Vacuum tests

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Gopal Nair

Piping & Pressure System Principal Specialist
to Lloyd's Register North America, Inc.
A member of the Lloyd's Register group

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77024, United States

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Other Conditions

1. Expansion joints have not passed any fire tests and should not be installed where fire test is required by Part 5 Chapter 12 Table 12.5.1 of Ship Rules.

2. Expansion joints are categorized as slip on couplings as per Part 5 Chapter 12 Table 12.2.8 of Ship Rule and should not be installed in machinery spaces or where fire endurance test is required.

3. The expansion joints are to be installed in accessible locations and considering the large pipe sizes adequate bilge drainage arrangement should be available to counteract expansion joints failure and flooding.

4. Expansion joints are to be installed with GRP piping and not metallic piping.

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 North America, Inc. of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: New

The Design Appraisal Document TSO/25-028269/PRJ11100473324/001/GN and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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