Certificate No: LR2552762TA
Issue Date: 29/10/2024
Expiry Date: 28/10/2029

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	**Taizhou City Xinghai Pipe Co.,Ltd**
Address	No. 233 Bailong Road, Louzhuang Town, Jiangyan District, Taizhou, 225507, China
Type	Expansion Bellows
Description	Rubber Expansion Bellows
Trade Name	XH
Application	Marine and offshore piping systems for fresh water, sea water, sanitary water, cooling system, lubricating oil system, air conditioning system and service air system.
Specified Standard	LR Rules and Regulations for the Classification of Ships, July 2024 GB/T 26121-2010 ISO 15540-2001 ISO 15541-2001
Ratings	Nominal Diameter (mm): DN15~DN1000 Design Pressure Rating (MPa): 1.0 (DN600~DN1000) 1.6 (DN250~DN500) 2.5 (DN15~DN200) Design Temperature (˚C): -20~+170 (NBR) -20~+200 (EPDM) -20~+300 (FPM)

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Johannes Wiegel

Engineering Piping/Decarbon - Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

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Material:
Rubber: NBR/EPDM/FPM
Flange: Q235/304/316/316L/2205

Other Conditions

1. The production selection and installation of rubber expansion bellows are to be in accordance to the manufacturer's instructions and to the attending surveyor's satisfaction.
2. The rubber expansion bellows are to be installed in clearly visible and readily accessible locations.
3. The rubber expansion bellows are not to be used to compensate for misalignment between sections of pipes and are not to be used on heavy vibration locations.
4. The end connections are to be manufactured in accordance with recognised National or International standards and are to be suitable for the pressure, temperature and service.
5. In the case of sea water systems, where failure of the rubber expansion bellows could give rise to the danger of flooding, they are to be provided with guards which will effectively enclose, but not interfere with, the action of the rubber expansion bellows and will reduce to the minimum practicable any flow of water into the machinery spaces in the event of failure of the rubber elements.

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 EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR2003584TA

The Design Appraisal Document LR2552762_DAD and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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