Certificate No: LR26243462TA
Issue Date: 30/06/2026
Expiry Date: 29/06/2031

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	**Dalian Jierui Fluid Control Co., Ltd.**
Address	No.51 Xinping Street, Ganjingzi District, Dalian, Liaoning, 116033, China
Type	Mechanical Pipe Joints
Description	Swage Type Coupling (JF&WF), Bite Type Coupling (Z) & Flared Type Compression Coupling (BO)
Trade Name	JF/WF/Z/BO
Application	Marine applications- water, sea water, steam, air, mineral oil.
Specified Standard	LR Rules and Regulations for the Classification of Ships, July 2025: Lloyd's Register Test Specification 2, October 2024; ISO 6162-1, ISO 6162-2, ISO 6164.
Ratings	Straight Fitting/ Elbow Fitting/ Tee Fitting/ Cross Fitting Swage Type coupling (L Type) / Bite Type Coupling (L Type) Nominal OD (mm): 6~42 Nominal Pressure Rating (MPa): 25~31.5 Design Temperature (˚C): -40~200 Material: 45#, Q355NE, 316L, 316Ti, S22053 Swage Type coupling (S Type) / Bite Type Coupling (S Type) Nominal OD (mm): 6~38 Nominal Pressure Rating (MPa): 31.5~42

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Prathamesh Pawshe

Engineering Piping - Specialist to Lloyd's Register Marine and Offshore India LLP
A member of the Lloyd's Register group

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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Design Temperature (˚C): -40~200
Material: 45#, Q355NE, 316L, 316Ti, S22053

Flared Type Compression Coupling (BO3000/6000/6164-ORF)
Nominal OD (mm): 13 ~76
Nominal Pressure Rating (MPa): 21~42
Design Temperature (˚C): -40~200
Material: Q355B, Q355NE, 316L, 316Ti, S22053

Other Conditions

1. Mechanical joints are to be used within their specified pressure and temperature rating for all normal operating conditions and are to be suitable for the intended purpose.
2. The product type selection and installation are to be in accordance with the manufacturer's instructions.
3. Where the tube fittings are intended to be installed on ship classed with LR, the application of the joints is to be in accordance with Part 5, Chapter 12, Table 12.2.8 Application of mechanical joints of LR Ship Rules.
4. In accordance with Clauses 8.2 and 8.3 of ISO 6162 Parts 1 and 2, carbon steel flange connections are suitable for the nominal pressure ratings specified above within a temperature range of −40°C to 120°C. For stainless steel flanges, the applicable temperature range is −40°C to 60°C.
   Where the operating temperature exceeds 50 °C, consideration shall be given to pressure derating. The allowable maximum working pressure at elevated temperatures shall be adjusted using the reduction factor as per ISO 6162 Parts 1 & 2, and ISO 6164 standards.

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 LR26243462TA_DAD and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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