



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	Victaulic
Address	4901 Kessersville Road, Easton, Pennsylvania, 18040, United States
Place of Production	Quality Castings 1200 North Main Street, Orrville, Ohio, 44667, United States
Place of Production	Bingshan Refrigeration & Heat Transfer Technologies Co., Ltd. No. 106 Liaohe East Road, Economic and Technological Development Zone, Dalian, Liaoning Province, China 116630.
Place of Production	Victaulic De Mexico, S. de R.L. de C.V. Avenida Aeroespacial No. 12601,, Parque Industrial Chihuahua Sur, Col., Tabalaopa, C.P., 31385, Mexico
Type	Bolted Clamp Connectors
Description	Victaulic Style W07 AGS Rigid Coupling & W77 AGS Flexible Coupling
Trade Name	Advanced Grooved System (AGS) mechanical pipe couplings Style W07 - AGS, Rigid Coupling
Application	Marine and Offshore applications as per Part 5 Chapter 12 table 12.2.7 for 1. Fresh and Sea Water Cooling 2. Ballast Systems

Gopal Nair

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

1330 Enclave Parkway, Houston, Texas, 77077,
United States

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3. Permanent water filled -Fire Mains, Water Spray and Sprinkler Applications
4. Sanitary, Potable Water Systems
5. Scrubber effluent lines (Wet systems)

Specified Standard Lloyd's Register Rules and Regulations for Classification of Ships - 2021
Lloyd's Register Rules and Regulations for Classification of Offshore Units-2022
IACS UR P2.11 Jan 2021

Ratings Rated Working Pressure: 232 psi (16 bar)
Temperature Range: Minus 30°F to 230°F (Minus 34 °C to 110 °C)
EPDM E Gasket

Additional Tests IACS UR P2.11 tests except pressure pulsation

Other Conditions

- a) The EPDM E gaskets have passed the 30 minutes wet fire tests in accordance with IACS UR P.2.11.
- b) The above fittings are to be installed in accordance with manufacturer's instructions to the satisfaction of the attending Surveyor.
- c) Material -Ductile Iron ASTM A 536 Grade 65-45-12.
- d) Couplings are not to be used in systems where pressure pulsation is expected.
- e) All fittings on the class I systems are to be grooved type.
- f) Where fire testing is required, application is limited to permanent water filled - wet systems which requires 30 minutes wet fire test.

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: 16/60001(E2)

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The Design Appraisal Document PRJ11100410269 -Q/ATSO/23-0129 – 16/60001(E2) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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