



CERTIFICATE NUMBER 19-HS1935149-2-PDA-EUMR-DE
EFFECTIVE DATE 25-FEB-2021
EXPIRATION DATE 04-DEC-2024
ABS TECHNICAL OFFICE Houston ESD - Piping

CERTIFICATE OF

European Union Recognized Organization (EU RO) Mutual Recognition Design Evaluation (in accordance with Article 10.1 of EU Regulation 391/2009)

This is to certify to the Manufacturer named below, that the Product referred to herein has been inspected for the Manufacturer, pursuant to the relevant requirements of the European Union Recognized Organization Mutual Recognition procedure, required by Article 10.1 of EU Regulation 391/2009, and has been found in accordance with those requirements.

ROBERT H. WAGER CO.

who maintains a plant at

570 Montroyal Road, Rural Hall, NC, United States 27045

Product Valve, Vertical Vent Check

Model 1500-1

This certificate, by itself does not reflect that the product is Type Approved. The scope and limitations of this evaluation are detailed on the pages attached to this certificate.

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.

In accordance with Article 10 of Regulation (EC) No 391/2009 of the European Parliament and of the Council of 23 April 2009 "on common rules and standards for ship inspection and survey organizations", the following organizations, recognized by the EU on this date, have agreed on the technical and procedural conditions under which they will mutually recognize this certificate:

- American Bureau of Shipping (ABS);
- Bureau Veritas (BV);
- China Classification Society (CCS);
- Croatian Register of Shipping (CRS);
- DNV GL;

NOTE: This certificate evidences compliance with one or more of the ABS Rules and the EU Regulations 391/2009. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product or manufacturing process without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules and Conditions of the request for EU Product Type Approval and Agreement.



- Indian Register of Shipping (IRS);
- Korean Register (KR);
- Lloyd's Register Group Ltd. (LR);
- Nippon Kaiji Kyokai General Incorporated Foundation (ClassNK);
- Polish Register of Shipping (PRS);
- RINA Services S.p.A. (RINA);
- Russian Maritime Register of Shipping (RS).

The scheme for the mutual recognition of class certificates for materials, equipment and components laid down by Article 10(1) of Regulation (EC) No 391/2009 is only enforceable within the Union in respect of ships flying the flag of a Member State. As far as foreign vessels are concerned, the acceptance of relevant certificates remains at the discretion of relevant non-EU flag States in the exercise of their exclusive jurisdiction, notably under the United Nations Convention on the Law of the Sea (UNCLOS). (In accordance with COMMISSION IMPLEMENTING REGULATION (EU) No 1355/2014 amending Regulation (EC) No 391/2009 - recital (25)).

This EU RO Mutual Recognition Design Evaluation Certificate remains valid until 04-DEC-2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

American Bureau of Shipping

A handwritten signature in black ink, reading "Yongjin Lee".

Yongjin Lee, Sr. Managing Principal Engineer

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Product: Valve, Vertical Vent Check

Model: 1500-1

Intended Service: Marine & Offshore Application - Automatic Closing Tank Vent Valves

Description: Vertical Vent Check Valves & Ball Float Valves for Tanks

Rating: Sizes 1.5", 2", 2.5", 3", 4", 5", 6", 8", 10", 12", 14" & 16"

Service Restrictions:

- Onboard ships with exceptions as per Article 5 of International Convention on Load Lines (ICLL).
- EU RO Mutual Recognition Technical Requirements for Air Pipe Automatic Closing Device apply to automatic closing devices of air pipes intended for the water tank or oil tank except cargo tank extending above the freeboard or superstructure decks", as per Reg.20 of ICLL. Flame arresting function is excluded from the scope of this requirements. If the device is fitted with a flame screen, the flame screen is subject to separate approval by the individual RO classing the vessel.
- If the device is fitted with a flame screen, the flame screen is subject to separate approval by the individual RO classing the vessel.
- Manufacturers of the approved equipment are, in principle, to mark the product before shipment for identification of approved equipment as per referenced standard. In addition, and as a minimum, the following items to be marked at the suitable place:
 - a) Manufacturer's name or logo
 - b) Type designation;
 - c) Nominal Diameter;
 - d) Resistance coefficient;
 - e) Intended for the water tank or oil tank.

Notes/Drawing/Documentation:

TEST REPORT NO. FLT-18P-D-001 - Compression Test Report, dated 18 February 2020,
TEST REPORT NO. FLT-18P-D-001 - ct Test Report - Non-Metallic Floats, dated 18th February 2020,
TEST REPORT NO. 16-1500FSG-1 - Tightness Test Report, dated 18th February 2020,
TEST REPORT NO. 16-1500-FSG-1 - Vacuum Test Report, Dated 18th February 2020,.
16-1500 PRESSURE DROP,
Drwg No. 1500-1, Vertical Vent Check Valve, Automatic Closing Model 1500-1,
Dwg. No. 1.5-1500FSG-1, Rev.-, Vent Outlet Closing Device - 1.5" Flanged;
Test Report No. 1.5-1500-D-001 Pressure Drop & Tightness dated 12 Feb. & 18 Jan. 2008;
Dwg. No. 2-1500FSG-1, Rev.-, Vent Outlet Closing Device - 2" Flanged;
Test Report No. 2-1500-D-001 Pressure Drop & Tightness dated 12 Feb. & 18 Jan. 2008;
Dwg. No. 2.5-1500FSG-1, Rev.-, Vent Outlet Closing Device - 2.5" Flanged;
Test Report No. 2.5-1500-D-001 Pressure Drop & Tightness dated 12 Feb. & 18 Jan. 2008;
Test Report No. Non-Metallic Floats FLT-3.5P-D-001, Compression & Impact dated 3 Feb.2008; Inc.
Dwg. No. 10-1500FSG-1, Rev.-, Vent Outlet Closing Device - 10" Flanged;
Test Report No. 10-1500-D-001 Pressure Drop & Tightness dated 7 & 14 Feb. 2008;

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Test Report - No. Non-Metallic Floats FLT-12P-D-001, Compression & Impact dated 14 Feb.2008;
Dwg. No. 5-1500FSG-1, Rev.-, Vent Outlet Closing Device - 5" Flanged;
Test Report No. 5-1500-D-001 Pressure Drop & Tightness dated 13 & 14 Feb. 2008;
Test Report No. Non-Metallic Floats FLT-6.5P-D-001, Compression & Impact dated 3 & 14 Feb.2008;
Dwg. No. 6-1500FSG-1, Rev.-, Vent Outlet Closing Device -6" Flanged;
Test Report No. 6-1500-D-001 Pressure Drop & Tightness dated 14 Feb. 2008;
Test Report No. Non-Metallic Floats FLT-7.5P-D-001, Compression & Impact dated 14 Feb.2008;
Dwg. No. 8-1500FSG-1, Rev.-, Vent Outlet Closing Device -8" Flanged;
Test Report No. 8-1500-D-001 Pressure Drop & Tightness dated 9 Jan & 14 Feb. 2008;.
Test Report No. Non-Metallic Floats FLT-9.5P-D-001, Compression & Impact dated 3 Feb.2008;
Drawing No. 14-1500FSG-1, 14"-1500 Series Flanged Galvanized Vertical Vent Check Valve, Revision: C;
Drawing No. FLT-15P-D, Float - 14" 1500, Revision: C,
Test Report No. 14-1500FSG-1; Pressure Drop Test, Revision: 3/11/2015;.
Test Report No. WI-PD TEST-01; Pressure Drop Test Instruction; Rev B 11/20/2014;.
Test Report No. 14-1500FSG-1; Tightness Test, Revision: 3/10/2015,
Document No. WI-Tightness Test-01; Tightness Test Instruction; Rev C 11/20/2014;
Test Report No. FLT-15P-D-001; Compression Test - Non-Metallic Floats, Revision: 02/25/2015;
Document No. WI-Compression Test -01; Compression Test Instruction, Revision: A 04/24/2007;
Test Report No. 14-1500-FSG-1; Vacuum Test, Revision: 3/9/2015;
Document No. WI-V Test 01; Vacuum Test Instruction, Revision: B (10/06/2014);
Test Report No. FLT-15P-D-001; Impact Test - Non-Metallic Floats; Revision 04/09/2015;
Drawing No. WI-Impact Test -01; Impact Test Instruction; Rev B (03/01/2011);
Test Report No. 1.5 Tightness Test, Tightness Test 1.5, Revision: -, 8/11/15; Robert H Wager Co. Inc.
Test Report No. 1.5 Vacuum Test, Vacuum Test 1.5, Revision: -, 8/11/15; Robert H Wager Co. Inc.
Test Report No. 10-1500 Tightness Test, Tightness Test 10-1500, Revision: -, 8/12/14; Robert H Wager Co. Inc.
Test Report No. 10-1500 Vacuum Test, Vacuum Test 10-1500, Revision: -, 8/14/15; Robert H Wager Co. Inc.
Test Report No. 12-1500 Tightness Test, Tightness Test 12-1500, Revision: -, 8/10/15; Robert H Wager Co. Inc.
Test Report No. 12-1500 Vacuum Test, Vacuum Test 12-1500, Revision: -, 8/14/15; Robert H Wager Co. Inc.
Test Report No. 2-1500 Tightness Test, Tightness Test 2-1500, Revision: -, 8/11/15; Robert H Wager Co. Inc.
Test Report No. 2-1500 Vacuum Test, Vacuum Test 2-1500, Revision: -, 5/4/15; Robert H Wager Co. Inc.
Test Report No. 2.5 Tightness Test, Tightness Test 2.5, Revision: -, 8/11/15; Robert H Wager Co. Inc.
Test Report No. 2.5-1500 Vacuum Test, Vacuum Test, Revision: -, 5/4/15; Robert H Wager Co. Inc.
Test Report No. 3-1500 Tightness Test, Tightness Test 3-1500, Revision: -, 8/11/15; Robert H Wager Co. Inc.
Test Report No. 3-1500 Vacuum Test, Vacuum Test 3-1500, Revision: -, 5/4/15; Robert H Wager Co. Inc.
Test Report No. 4-1500 Tightness Test, Tightness Test 4-1500, Revision: -, 8/11/15; Robert H Wager Co. Inc.
Test Report No. 4-1500 Vacuum Test, Vacuum Test 4-1500, Revision: -, 5/4/15; Robert H Wager Co. Inc.
Test Report No. 5-1500 Tightness Test, Tightness Test 5-1500, Revision: -, 8/12/15; Robert H Wager Co. Inc.
Test Report No. 5-1500 Vacuum Test, Vacuum Test 5-1500, Revision: -, 5/6/15; Robert H Wager Co. Inc.
Test Report No. 6-1500 Tightness Test, Tightness Test 6-1500, Revision: -, 8/12/14; Robert H Wager Co. Inc.
Test Report No. 6-1500 Vacuum Test, Vacuum Test 6-1500, Revision: -, 5/6/15; Robert H Wager Co. Inc.
Test Report No. 8-1500 Tightness Test, Tightness Test 8-1500, Revision: -, 8/12/15; Robert H Wager Co. Inc.
Test Report No. 8-1500 Vacuum Test, Vacuum Test 8-1500, Revision: -, 8/14/15; Robert H Wager Co. Inc.

Rules and Standards

EU RO Mutual Recognition Technical Requirements for Air Pipe Automatic Closing Device, Version 0.4, dated 2018-07-01.

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