



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

23-2380911-PDA
17-Apr-2023
16-Apr-2028
Houston ESD - Piping

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

WARREN RUPP, INC.

located at

**800 NORTH MAIN ST., P.O. BOX 1568, , MANSFIELD, OH, United
States, 44901**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Pump, Natural Gas Powered Diaphragm
Model: Sandpiper Models: G05(1/2"), G1F (1"), G10F (1"), G15(1-1/2"), G20F(2"), G20(2"), G30 (3")
Endorsements:
Tier: 3 - Type Approved, unit certification not required

This Product Design Assessment (PDA) Certificate remains valid until 16/Apr/2028 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).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

John Vincent Bog-Acon Ulep, Senior Principal Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

WARREN RUPP, INC.

800 NORTH MAIN ST.

P.O. BOX 1568

MANSFIELD OH

United States 44901

Telephone: 419-524-8388

Fax: 419-524-2068

Email: asexton@idexcorp.comWeb: www.warrenruppinc.com**Tier: 3 - Type Approved, unit certification not required**

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Model: Sandpiper Models: G05(1/2"), G1F (1"), G10F (1"), G15(1-1/2"), G20F(2"), G20(2"), G30 (3")
Endorsements:

Intended Service:

Marine & Offshore Applications - Sanitary System, Seawater and General Purpose Non-Essential Applications, & Bilge Application as a Secondary Non-Required Pump.

Description:

G Series Natural Gas Operated Horizontal Mounted Double Diaphragm Pump.

Rating:

Maximum Operating Pressure G Series Models: 100 psi (7 barg);

Operating Temperature Range: -10°F to 180°F;

Capacity:

G05 (0-15 GPM);

G1F (0-45 GPM).

G10F (0-70 GPM).

G15 (0-106 GPM).

G20 (0-150 GPM).

G20F (0-140 GPM).

G30 (0-235 GPM).

Service Restriction:

- i) Unit Certification is not required for this product. If the manufacturer or purchase request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
- ii) These pumps are not to be used for pumping Fluids with a Flash Point of less than 100 °F (37.78 °C).
- iii) Each installation is to be reviewed by ABS Technical Office.

Comments:

- i) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- ii) Manufacturer recommendations are to be followed for pumping hazardous liquids and piping of gas exhaust/muffler.
- iii) This approval does not include the Flexible Conductive Connections or Pipe Connections of the Pumps.
- iv) These Pumps are not approved for essential service or main bilge service as listed in Marine Vessel Rules 4-6-1/7.3.1

Notes/Drawing/Documentation:

CSA Certificate of Compliance, CSA Certificate No. 1392353 (Project 2609590) dated 5 April 2013.

Canadian Technical Information Letter No. R-14 dated 6 June 2003, Certification and Testing Division, Natural Gas Operated Diaphragm Pumps.

Warren Rupp, Inc. Hydrostatic Pressure Test Certifications dated 3 Feb. 2012 for pump models: G05, G1F, G15, G20, G30;

Technical Documentation for Models G10F and G20F.

Drawing Package No. G10F Certificate 210481-1392353 Project 70030875.

Drawing Package No. G20F Certificate 210481-1392553, Project 70013128

Drawing No. WR_DofC_ATEX_V_Rev1022, Sandpiper EU Declaration of Conformity, Revision: 1022, 03 Oct 2022

Drawing No. WR_DofC_CE-Machine_Rev1022, Sandpiper EC Declaration of Conformity, Revision: 1022, 03 Oct 2022

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Drawing No. g05mdl1sm-Rev1222, Service and Operating Manual for G05., Revision: 1222,
Drawing No. g15mdl1sm-Rev1222, Service and Operating Manual for G15, Revision: 1222,
Drawing No. g1fmdl1sm-Rev1222, Service and Operating Manual for G1F., Revision: 1222,
Drawing No. g20mdl1sm-Rev1222, Service and Operating Manual for G20, Revision: 1222,
Drawing No. g30mdl1sm-Rev1222, Service and Operating Manual for G30, Revision: 1222,

Terms of Validity:

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Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

STANDARDS**ABS Rules:**

2023 Rules for Condition of Classification, 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:
2023 Rules for Building and Classing Marine Vessels: 4-6-1/7.3.1, 7.5.3 iii).

2023 Rules for Condition of Classification, Offshore Units and Structures, 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

Rules for Building and Classing Mobile Offshore Units: 4-2-2/3, 6-1-6/7.3.2.

National:

ANSI LC 6-2008, 1st Ed Natural Gas Operated Diaphragm Pumps

International:

EN 809:2012,
EN ISO 80079-36:2016,
EN ISO 80079-37:2016;

Government:

NA

EUMED:

NA

OTHERS:

NA