



Confirmation of Product Type Approval

Company Name: GARLOCK SEALING TECHNOLOGIES

Address: 1666 DIVISION STREET NY 14522 United States

Product: Gasket

Model(s): THERMa-PUR Style 4122 Gaskets

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	17-HS1632493-PDA	08-JUN-2017	07-JUN-2022
Manufacturing Assessment (MA)	19-C3613740	16-JAN-2019	10-FEB-2024
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3

Intended Service

Marine and Offshore Applications - For Marine Exhaust, General High Temperature Sealing and Extreme Sealing.

Description

THERMa-PUR Gasket Family - Kammprofile (4122-KAMM), Corrugated Metal Gasket (4122-CMG), Spiral (4122-Spiral), Faced Extreme Spiral Wound (4122-Spiral Faced), and Cut Gaskets (4122-FC);

Ratings

Continuous Max. Temperature: 1832 °F (1000 °C);

Pressure Rating:

- Kammprofile & all Spiral Wounds are rated to Flange or Valve Rating;
- Products conform to International Quality and Rating Standards (ASME B16.5, B16.47, etc)
- Corrugated Metal Gasket rated to the 300# Class or 1000 psig;
- 4122-FC, suffix FC (Fiber Core): Pressure 500psig (34.5 bar);

Standard and Custom Sizes Available:

- Common Standard sizing includes, among others:
- ASME B.16.20 and B16.21
- BS EN 1514

* Consult Garlock Engineering for more information

See attached "pdf" for details;

Service Restrictions

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

4122-Spiral, 4122-Spiral Faced, and 4122-KAMM are acceptable where "Fire Safe" requirements are specified by ABS Rules requirements

The Corrugated Metal Gasket (4122-CMG) and Cut Gaskets (4122-FC) have not been Fire-Tested and therefore are not to be used in fire mains.

Comments

Duplicate PDA resides with Garlock Metallic Gaskets - HOUSTON;

The Manufacturer has provided a declaration about the lack of Asbestos in this product.

Notes, Drawings and Documentation

Declaration of Conformity THERMa-PUR 2017, Revision: -, Pages: -;

Brochure Garlock Style 4122 & 4122-FC THERMa-PUR Extreme Temperature Gasket;

Brochure Garlock's Family of High Temperature Metallic Gaskets Garlock THERMa-PUR;

List of Chemical Resistance of THERMa-PUR Gasket Material, Pages: 4;

Brochure Garlock's Family of High Temperature Metallic Gaskets Garlock;

Material Safety Data Sheets, THERMa-PUR Style 4122, dated 7 December 2011;

Specifications-Garlock Metallic Gaskets-Spiral Wound Gaskets, Pages: 4;

Yarmouth Research & Technology, LLC, API 6FB Fire Test Report dated 8/28/2012 for Unfaced High Temperature Spiral Wound Gasket, Project No 212145, Pages: 15;

Yarmouth Research & Technology, LLC, API 6FB Fire Test Report dated 6/14/2012 for Flexseal Gasket, Project No 212145, Pages: 16;

Yarmouth Research & Technology, LLC, API 607 Fire Test Report dated July 2008 for Kammprofile Gasket, Project No 20861

Brochure THERMa-PUR Style 4122, Pages: 2;

Garlock Test Procedure PL No. 4029P-49-033, dated 9-30-91, Dielectric Strength Test;

High Temp Test - Leakage Summary TR-10099, 1dated 9-30-91, 0127 & 10140, Pages: 2;

Chemical Resistance of THERMa-PUR Gasket Material, Pages: 4;

J10308 TGA Results, Pages: 3;

Test Request No 2810, FC-1/16-208 Engineering High Pressure Sheet, dated 7/15/2011.

Term of Validity

This Product Design Assessment (PDA) Certificate 17-HS1632493-PDA, dated 08/Jun/2017 remains valid until 07/Jun/2022 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

ABS Rules

2017 Steel Vessels Rules 1-1-4/7.7, 1-1-Appendix 3, 1-1-Appendix 4, 4-6-1, 4-6-2, 4-7-3/1.11.1;

International Standards

NA

EU-MED Standards

NA

National Standards

API Std 6FB, 3rd Ed - Corrugated Metal Gasket and Spiral Wound;

API 607 - Kammprofile, 7th Edition, June 1, 2016

Government Standards

NA

Other Standards

NA



A handwritten signature in blue ink, appearing to read 'Joseph W. ...'.

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 15-May-2020 10:27

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

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 prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations

regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.