

# Confirmation of Product Type Approval

Company Name: VIEGA LLC

Address: 2211 VIEGA AVE. KS 67460 United States

**Product: Piping System and Couplings** 

Model(s): MegaPress, MegaPress G, MegaPress FKM (formerly known as MegaPress XL)

**Endorsements:** 

Certificate Type	Certificate Number	Issue Date	<b>Expiry Date</b>
Product Design Assessment (PDA)	22-2284886-PDA-DUP	01-SEP-2022	31-AUG-2027
Manufacturing Assessment (MA)	19-HS3619635	10-APR-2019	09-APR-2024
Product Quality Assurance (PQA)	NA	NA	NA

#### Tier

3 - Type Approved, unit certification not required

# **Intended Service**

For use in Class III piping. –Flammable Fluids (flashpoint < 60° C)\*: cargo oil lines (1), crude oil washing lines (2), vent lines (3), Inert Gas: water seal effluent lines (4), scrubber effluent lines (5), main lines (6), distribution lines (7), Flammable Fluids (flashpoint > 60° C)\*: cargo oil lines (8), fuel oil lines (9), lubricating oil lines (10), hydraulic oil (11), thermal oil (12), Sea Water: bilge lines (13), water filled fire extinguishing systems (14), non-water filled extinguishing systems (15), fire main (not permanently filled)(16), ballast system (17), cooling water system (18), tank cleaning services (19), non-essential systems (20), Fresh Water: cooling water systems (21), condensate return (22), non-essential system (23), Sanitary/Drains/Scuppers: deck drains (internal)(24), sanitary drains (25), scuppers and discharge (overboard)(26), Sounding/Vent: water tanks/dry spaces (27), Oil Tanks (f.p.> 60°C)(28), Miscellaneous: starting/control air (29), service air (non-essential)(30), brine (31), CO² system (32), steam (33)
\*Flammable fluid applications require a HNBR or FKM sealing element.

Description

Carbon Steel Cold Press Compression Coupling fittings and pipe systems with SC-Contour for the US sizes 3/8" to 4" and also sizes as per DIN EN 10255:2007 / DIN EN 10216-1:2013 / DIN EN 10217-1:2019.

The SC feature enables quick identification of unpressed fittings. The fittings are offered with different sealing elements: EPDM, FKM and HNBR. The press connection is performed by a hydraulic press tool.

Integral with EPDM, FKM and HNBR sealing elements and SC - Feature. (\*Flammable fluid applications require a HNBR or FKM sealing element.) The fittings are an approved fire resistant type. Applications per 4-6-2/Tables 9 &10 of the MVR for compression couplings/IACS P2.7.4 Rev. 9, Mechanical Joints 4-6-2/Tables 6 & 7.

\*Flammable fluid applications require a HNBR or FKM sealing element.

# Ratings

Certificate Number: 22-2284886-PDA-DUP

M.A.W.P. 16 bar (232 psi), 1.6 MPa

Vacuum lines 170 mbar absolute (-12.04 psi/-24.5 in Hg/-0.083 MPa) acc. to the IACS test methods P2.11.5.5.7.

Maximum Operating Temperature

FKM: 23°F - 284°F (-5°C - 140°C)

EPDM: 14°F – 230°F (-10°C - 110°C)

HNBR: -40°F - 180°F (-40°C - 82°C)

The fittings are designed to be installed with ASTM A53, ASTM A106 either Grade A or B, ASTM A135, ASTM A795 pipe. The pipe wall thickness may be SCH 10 or SCH 40.

The fittings may also be used with SCH 80 pipe limited to the maximum pressure listed above.

- -The fittings are an approved fire resistant type.
- Slip on joint requirements shall not apply to MegaPress, MegaPress G or MegaPress FKM fittings.

## **Service Restrictions**

- 1. 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.
- 2. The fittings are to be installed in accordance with the manufacturer's recommendation / limitations / requirements.
- 3. Only to be used in class III piping and not to be used in class I and class II piping per 4-6-2/Table 11 of the MVR.
- 4. Couplings with fittings on Schedule 10 pipes are not to be used on seawater systems.
- 5. EPDM should not be used in flammable fluid applications.
- 6. \*Flammable fluid applications require a HNBR or FKM sealing element.

#### Comments

- 1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- 2. For temperatures below -18 °C (0 °F) Charpy Impact test is required as per 2-3-13/15 of the MVR.

**Notes, Drawings and Documentation** 

Drawing No. CERTIFICATE OF COMPLIANCE 2492156, MEGAPRESSG, Revision:-, Pages: 6

Drawing No. CERTIFICATE OF COMPLIANCE EX6157, CERTIFICATE FOR MEGAPRESS AND MEGAPRESS FKM , Revision:-, Pages: 7

Drawing No. Drawing I, Drawing List, Revision: -, Pages: 10

Drawing No. Group 1, Drawing Group 1, Revision: -, Pages: 266

Drawing No. Group 2, Drawing Group 2, Revision: -, Pages: 232

Certificate Number: 22-2284886-PDA-DUP

Drawing No. Group 3, Drawing Group 3, Revision: -, Pages: 250

Drawing No. Group 4, Drawing Group 4, Revision: -, Pages: 269

Drawing No. Group 6, Drawing Group 6, Revision: -, Pages: 280

Drawing No. Group 7, Drawing Group 7, Revision: -, Pages: 280

Drawing No. Group 8, Drawing Group 8, Revision: -, Pages: 249

Drawing No. Group 5, Drawing Group 5, Revision: -, Pages: 199

Drawing No. IAPMO CERTIFICATE OF LISTING FILE NUMBER 5318 ,CERTIFICATE FOR MEGAPRESSG , Revision:-, Pages: 13

Drawing No. ICC-ES PMG PRODUCT CERTIFICATE PMG-1036, MEGAPRESSG SYSTEM HVAC FACILITY FUEL PIPING, Revision:-, Pages: 4

Drawing No. ICC-ES PMG PRODUCT CERTIFICATE PMG-1124, MEGAPRESS AND MEGAPRESS FKM SYSTEM HVAC HYDRONIC PIPING, Revision:-, Pages: 3

Drawing No. USCG MegaPress Acceptance Letter Oct 2018,USCG MegaPress Acceptance Letter Oct 2018, Revision:-, Pages: 2

Drawing No. MegaPress ABS Conformity 08-31-2022, MegaPress ABS Conformity 08-31-2022, Revision:-, Pages: 1

# **Term of Validity**

This Product Design Assessment (PDA) Certificate remains valid until 31/Aug/2027 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.

## **ABS Rules**

2022 Rules for Conditions of Classification, Part 1 - 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2022 Marine Vessel Rules: 4-6-1/5, 4-6-1/7, 4-6-2/3, 4-6-2/5.1, 4-6-2/5.9 and 4-6-2/Table 4/Table 10/Table 11/Table 12:

2022 Rules for Conditions of Classification, Part 1- 1-1-4/9.7,1-1-A2, 1-1-A3, which covers the following: 2022 Mobile Offshore Unit Rules: 4-2-1/5, 4-2-1/11.13, 4-2-2/5

#### **International Standards**

ISO 19921:2005 ISO 19922: 2005

### **EU-MED Standards**

NA

## **National Standards**

ASME B31.1: 2020 ASME B31.3: 2020

Certificate Number: 22-2284886-PDA-DUP

UL 213: 2022

ASTM A53: 2022

UL 852: 2018

ASTM A106M-19A: 2019 ANSI-CSA LC-4: 2022 DIN EN 10255: 2007 DIN EN 10216-1: 2013 DIN EN 10217-1: 2019

### **Government Standards**

USCG LTR 16714 / 46 CFR 56 2018-3613, Dated October 4, 2018

# Other Standards NA



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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.