



Marine & Offshore

Certificate number: 61047/A0 BV

File number: ACM135/2210/10

Product code: 2170H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**Viega Technology GmbH & Co. KG**

Attendorn - GERMANY

*for the type of product*

**MECHANICAL JOINTS - COMPRESSION COUPLINGS - PRESS TYPE**

MegaPress Press-in Branch Connector

**Requirements:**

Bureau Veritas Rules for the Classification of Steel Ships

*This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 15 May 2025**

**For Bureau Veritas Marine & Offshore,**

At BV HAMBURG, on 15 May 2020,

Adama Diene



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site [www.veristar.com](http://www.veristar.com). Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 5 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION

#### MegaPress Press-in Branch Connector

##### 1.1 Design:

The MegaPress Press-in Branch Connector is an innovative way to create branches from main runs or install instrumentation onto existing piping. The branch connector installs onto 1 1/2" - 6", carbon steel pipe and has a 3/4" Rp/FPT outlet. It is available for European standard (EN), schedule 10 and schedule 40 carbon steel pipe. The fitting is offered with either an EPDM, FKM or HNBR sealing element, depending on application. A hydraulic press tool is used to install the branch connector.

##### 1.2 Technical data:

Models with RP-outlet: 4212.2 / 4312.2

<b>Outside diameter [mm]</b>	48.3 (1 1/2")	60.3 (2")	76.1 (2 1/2")	88.9 (3")	114.3 (4")	139.7 (5")	168.3 (6")
<b>Wall thickness according to EN 10255, EN10220/10216-1 and EN 10220/10217-1 [mm]</b>	2.3-4.0	2.3-4.5	2.6-4.5	2.6-5.0	2.6-5.4	2.9-5.4	2.9-5.4
<b>Maximum working pressure [MPa]</b>	1.6	1.6	1.6	1.6	1.6	1.6*	1.6*

Models with FPT-outlet for schedule 10: 4812.2 / 4812.3

<b>Outside diameter [mm]</b>	48.26 (1 1/2")	60.33 (2")	73.03 (2 1/2")	88.9 (3")	114.3 (4")	139.7 (5")	168.28 (6")
<b>Wall thickness acc. to ASTM A53/A53M, schedule 10 [mm]</b>	2.77	2.77	3.05	3.05	3.05	-	3.4
<b>Maximum working pressure [psi]</b>	200	200	200	200	200	-	200**

Models with FPT-outlet for schedule 40: 4812.25 / 4812.35

<b>Outside diameter [mm]</b>	48.26 (1 1/2")	60.33 (2")	73.03 (2 1/2")	88.9 (3")	114.3 (4")	139.7 (5")	168.28 (6")
<b>Wall thickness acc. to ASTM A53/A53M, schedule 40 [mm]</b>	3.68	3.91	5.16	5.49	6.02	-	7.11
<b>Maximum working pressure [psi]</b>	200	200	200	200	200	-	200**

- Temperature range with EPDM: -10°C – +110°C (14°F – 230°F)

- Temperature range with FKM: -5°C – +140°C (23°F – 284°F)

- Temperature range with HNBR: - 40°C – +82°C (40°F – 180°F)

\* applications with compressed air: 1.0 MPa

\*\* applications with compressed air: 145 psi

##### 1.3 Material specification:

<b>Fittings</b>	Carbon steel C15E (1.1141) (Exterior zinc-nickel coating )
<b>Pipes</b>	Black, complete galvanized, industrially coated, powder-coated-pipes
<b>Sealing element</b>	EPDM, FKM or HNBR

## 2. DOCUMENTS AND DRAWINGS

Document-No.	Revision	Description
1006357	B	Force fit adapter MegaPress
1007039	B	Force fit adapter MegaPress
1007030	B	Force fit adapter MegaPress
1007050	B	Force fit adapter MegaPress
1007070	B	Force fit adapter MegaPress
1007075	B	Force fit adapter MegaPress
1007016	B	Force fit adapter MegaPress
1007038	B	Force fit adapter MegaPress
1007024	B	Force fit adapter MegaPress
1007046	B	Force fit adapter MegaPress
1007051	B	Force fit adapter MegaPress
1007074	B	Force fit adapter MegaPress
1012714	A	Force fit adapter MegaPress
1012733	A	Force fit adapter MegaPress
1012723	A	Force fit adapter MegaPress
1012735	A	Force fit adapter MegaPress
1012737	A	Force fit adapter MegaPress
1012746	A	Force fit adapter MegaPress
1012705	A	Force fit adapter MegaPress
1012725	A	Force fit adapter MegaPress
1012721	A	Force fit adapter MegaPress
1012734	A	Force fit adapter MegaPress
1012736	A	Force fit adapter MegaPress
1012740	A	Force fit adapter MegaPress

## 3. TEST REPORTS

- 3.1 Test report no. 013-16, fire resistance of pipeline components according ISO 19921 carried out at “Internationale Hydraulik Akademie GmbH” in Dresden - Weixdorf / GERMANY on 11/03/2016.
- 3.2 Test report no. 004-19, fire resistance of pipeline components according ISO 19921 carried out at “Internationale Hydraulik Akademie GmbH” in Dresden - Weixdorf / GERMANY on 15/01/2019.
- 3.3 Test report no. 005-19, fire resistance of pipeline components according ISO 19921 carried out at “Internationale Hydraulik Akademie GmbH” in Dresden - Weixdorf / GERMANY on 15/01/2019.
- 3.4 Test report no. 049-18, fire resistance of pipeline components according ISO 19921 carried out at “Internationale Hydraulik Akademie GmbH” in Dresden - Weixdorf / GERMANY on 07/08/2018.
- 3.5 Test report no. 050-18, fire resistance of pipeline components according ISO 19921 carried out at “Internationale Hydraulik Akademie GmbH” in Dresden - Weixdorf / GERMANY on 07/08/2018.
- 3.6 Test report no. 120005269, pressure pulsation and pull-out test in accordance with ASTM A53/A53M in connection with longitudinal welded steel tubes, carried out at “Materialprüfungsamt Nordrhein-Westfalen” in Dortmund / GERMANY on 12/03/2019.
- 3.7 Test report no. 120005091, hydraulic tightness-, pneumatic tightness-, pressure impulse-, burst pressure, pull-out and vacuum test in accordance with IACS Test Rule P2.11.5:2016-03, carried out at “Materialprüfungsamt Nordrhein-Westfalen” in Dortmund / GERMANY on 09/02/2018.

#### 4. APPLICATION / LIMITATION

4.1 These couplings are used as compression type couplings only.

4.2 The couplings may be used for class III piping systems. The application of the couplings and their acceptable use for each service is indicated in the table below.

Application:

<b>Flammable fluids ( flash point &gt; 60°C)</b>	
- Fuel oil lines	(2)(3)
- Lubricating oil lines	(2)(3)
- Hydraulic oil	(2)(3)

<b>Sea water</b>	
- Bilge lines	(1)
- Ballast system	(1)
- Cooling water system	(1)
- Water filled fire extinguishing systems	(3)
- Non water filled fire extinguishing systems	(3)
- Fire main (not permanently filled)	(3)

<b>Fresh water</b>	
- Cooling water system	(1)

<b>Sanitary/Drains/Scuppers</b>	
- Scuppers and discharge (overboard)	

<b>Miscellaneous</b>	
- Starting/Control air	(1)
- Service air (non-essential)	
- Steam	

*Footnotes:*

- (1): Inside machinery spaces of category A - only approved fire resistant types.  
 (2): Slip on joints are not accepted inside machinery spaces of category A or accommodation spaces. May be accepted in other machinery spaces provided the joints are located in easily visible and accessible positions.  
 (3): Approved fire resistant types except in cases where such mechanical joints are installed on exposed open decks, as defined in SOLAS II-2/Reg. 9.2.3.3.2.2(10) and not used for fuel oil lines.  
 (4): In pump rooms and open decks - only approved fire resistant types.

4.3 The sealing material is to be compatible with the fluid to be conveyed and the maximum working temperature.

4.4 Assembly instructions given by the manufacturer are to be complied with.

4.5 In all cases, the associated pipes are to be suitably supported and anchored. The joints are to be at any time accessible, excepting inside tanks where permitted by the BUREAU VERITAS Rules.

4.6 The approval does not cover any pipes penetration through watertight bulkheads and fire divisions.

#### 5. PRODUCTION SURVEY REQUIREMENTS

5.1 The products are to be supplied by **Viega Technology GmbH & Co. KG** in compliance with the type described in this certificate.

5.2 This type of product is within the category HBV of BUREAU VERITAS Rule Note NR320 and as such does not require a BUREAU VERITAS product certificate.

5.3 **Viega Technology GmbH & Co. KG** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 For information, **Viega Technology GmbH & Co. KG** has declared to BUREAU VERITAS the following production site:  
**Viega Supply Chain GmbH & Co. KG, Grossheringen / GERMANY**

## **6. MARKING OF PRODUCT**

Pipe coupling is to be clearly marked with at least:

- Manufacturer's name or logo
- Type designation
- Size
- Batch information

## **7. OTHERS**

7.1 It is **Viega Technology GmbH & Co. KG's** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

**\*\*\* END OF CERTIFICATE \*\*\***