

# TYPE APPROVAL CERTIFICATE

**This is to certify:**

**That the Press fittings**

with type designation(s)

**MegaPress Stainless 316L / 304 with EPDM, MegaPress Stainless 316L / 304 with FKM**

Issued to

**Viega Technology GmbH & Co. KG**  
**Attendorn, Nordrhein-Westfalen, Germany**

is found to comply with

**DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems**

**DNV GL class programme DNVGL-CP-0185 – Type approval – Mechanical joints**

**Application :**

**Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.**

Type:	Temperature range:	Max. working press.:	Sizes:
MegaPress Stainless 316L / 304 with EPDM	14°F to 230°F (-10°C to 110°C)	1,6 MPa (232 psi) 1,25 MPa (181 psi) 1,00 MPa (145 psi)	½" to 2½" 3" 4"
MegaPress Stainless 316L / 304 with FKM	23°F to 284°F (-5°C to 140°C)	1,6 MPa (232 psi) 1,25 MPa (181 psi)	½" to 2½" 3" 4"

Issued at **Hamburg** on **2019-10-01**

for **DNV GL**

This Certificate is valid until **2024-04-24**.

DNV GL local station: **Essen**

Approval Engineer: **Christian Kaemmer**

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**Olaf Drews**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-026806-3**  
Certificate No: **TAP000015D**  
Revision No: **4**

## Product description

### MegaPress Stainless:

Megapress fittings consisting of a sleeve (basic component), grip ring, separator ring, sealing element. The grip ring with bidirectional teeth grip the outer surface of the pipe and locks the fitting to the pipe. The constant compression produces a positive, nondetachable mechanical joint. The fittings are to be assembled by a pressing tool. "XL" indicates sizes 2 ½", 3" and 4".

Pipe Outer Diameter [mm]	Pipe Outer Diameter [inch]	Minimum wall thickness of pipe [mm]
21,3	½"	2,11
26,7	¾"	2,11
33,4	1"	2,77
42,2	1 ¼"	2,77
48,3	1 ½"	2,77
60,3	2"	2,77
73,0	2 ½"	3,05
88,9	3"	3,05
114,3	4"	3,05

### Technical data:

Sleeve (basic component): Stainless Steel AISI 304 /1.4301  
Stainless Steel AISI 316L/1.4404  
Grip-ring: Stainless Steel AISI 420  
Separator ring: AISI 304, / 1.4301  
XL-Separator ring: PBT  
Sealing: EPDM, FKM  
Pressing tool / XL-Pressing tool: Pressgun 5 / Pressgun 5 with Pressgun-Press Booster and Ridgid RP340/Ridgid RP340 with Booster  
Pipes: Stainless Steel pipes as per ASTM A312/A312M-17  
Schedule 10 to 40.

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## Application/ Limitations

The MegaPress stainless fittings are approved for class III-piping systems for applications:

- Fire extinguishing systems
- Bilge lines
- Ballast Systems
- Tank cleaning systems
- Cargo oil lines
- Fuel- hydraulic- and lubricating oil lines
- Domestic heating & cooling
- Compressed air
- Condensate return lines
- Vacuum lines
- Inert Gas
- Non-essential systems

Restrictions for above mentioned applications for compression couplings "press type" acc. to DNVGL-Rules Part 4 Chapter 6 Section 9 Table 11 are to be observed.

Approved for fire resistance, not approved for sea water applications.

## Type Approval documentation

Size ½" to 2":

MPA Test Report 120004999, dated: 2017-04-06

MPA Test Report 122000041, dated: 2019-04-09

MPA Test Report 122000077, dated: 2019-08-29

IHA Fire Resistance Test 021-17,022-17, 024-17, 025-17; dated: 2017-05-23

IHA Fire Resistance Test 127-19; 128-19; 132-19; 134-19 dated: 2019-08-06

Data-Sheet "Systempresswerkzeuge Rohrleitungstechnik" P1\_DE\_de20171005\_121928\_15

Techn.Catalogue phb7\_9\_werkzeuge, chapter 9"Werkzeugsysteme".

Drawing No: . 497705, 497406, 484273, 296910, 536671, 101994, 497710, 497416, 497468, 296912, 536673, 101995, 497714, 497418, 497470, 296914, 536138, 101996, 497717, 497422, 497474, 296918, 536675, 101998, 497720, 497424, 497476, 268237, 536677, 101999, 497872, 497445, 484273, 296910, 539153, 101638, 497875, 497447, 497468, 296912, 539161, 101639, 497878, 497449, 497470, 296914, 539163, 101640, 497881, 497451, 497474, 296918, 539167, 101642, 497886, 497453, 497476, 268237, 539171, 101643.

Installation Manual IM-MP (Stainless Steel) 591324 1017; Product instructions PI-MP 590042 0416;

Technical Datasheet Megapress Stainless 304 & 316: SD-MP 1217.

Pressing tools for sample preparation: Pressgun 5 / RIGID RP 340-B; Pressset PT2 / V2 Actuator with MegaPress Jaws.

Size 2 ½" to 4":

Drawing No: 101776, 101777, 101775, 102025, 102023, 102024, 496921, 497607, 496887, 501239, 501241, 501237, 101949, 101950, 522440, 522454, 1026387, 1026387, 1026558, 521653, 521726, 1025730, 515129, 515131, 493279, 493280, 492877,

IHA Fire Resistance Test 053-18, 054-18 dated 2018-09-10

MPA Test Report 120005268-2, dated: 2018-07-17

Prüfplan Megapress Stainless XL 316 and XL 304.

Type Approval Assessment Report dated 2019-02-18

Product Instructions PI-MP 591334 0417 & PI-MP 591334 0818

Technical Datsheet 00798\_EN\_1118, Techn. Information Leaflet 00567\_EN\_1118.

Test Plan Megapress Stainless 316 FKM ½" – 4" dated 2019-10-01.

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## Tests carried out

Burst-test, Fire-test, Vibration-test, Pressure Impulse-test, Tightness-test, Vacuum-test, Pull-out test.

## Production place

Viega Supply Chain GmbH & Co KG  
Viegastrasse 1  
D-99518 Großheringen / Germany

## Marking of product

Marking	Example
Manufacturer's name	Viega
Nominal Diameter	15x1/2

## Periodical assessment

For retention of the Type Approval, a DNV GL Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the Type Approval are complied with. Refer to DNVGL-CP-0338, Sec.4.