

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

| | |
|--------------------|--|
| PRODUCER | Viega Technology GmbH & Co. KG Viega Platz 1 57439 Attendorn Germany |
| DESCRIPTION | Stainless steel fittings (1.4401) and pipe system (1.4521 and 1.4401) with SC-Contur. The SC feature enables to quickly identify unpressed fittings. The fittings are offered with different sealing elements - EPDM, HNBR and FKM. The press connection is performed by a special press tool. |
| TYPE | Viega - Sanpress Inox - System, ProPress Inox & ProPress Inox XL |
| RATINGS | Pipe O.D: 15 mm to 108 mm and 1/2" to 4" MAWP: 1,6 MPa, MAWT: 120° C. |
| APPLICATION | As piping components in Class III piping systems on ships classed or intended for Classification with Lloyd's Register. <u>Restrictions:</u> <ol style="list-style-type: none"> 1. Starting/control air and CO2 systems. 2. Inside machinery spaces of category A or accommodation spaces for main lines of inert gas systems. 3. Fire main, water spray or sprinkler systems which are not always filled with water. 4. Bilge lines in high fire risk compartments 5. Scupper pipes below freeboard deck over board For deck and bulkhead penetrations see also the requirements of the National Authorities. |

| | |
|------------------------|-------------------|
| Certificate No. | 01/20042 (E3) |
| Issue Date | 26 July 2017 |
| Expiry Date | 30 September 2021 |
| Sheet | 1 of 2 |



Torsten Schröder
Hamburg Technical Support Office
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STANDARDS DVGW, IACS P 2.11 including wet fire endurance test,
LR Rules and Regulations for the Classification of Ships, 2017.

**PLACE OF
PRODUCER** Viega Supply Chain GmbH & Co. KG
Viega Strasse 1
99851 Großheringen
Germany

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HMD 6907-01; Issue No.3, dated 26.07.2017 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 01/20042 (E3)
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Sheet 2 of 2



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Design Appraisal Document

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Date
26 July 2017

Please quote this reference number on all future communications
HPC1661074/35404-17/TS

**THE LLOYD'S REGISTER'S TYPE APPROVAL SYSTEM, 2014
ISSUED TO: VIEGA TECHNOLOGY GMBH & CO. KG
FOR: VIEGA-Sanpress Inox- System, ProPress Inox & ProPress Inox XL
TYPE APPROVAL CERTIFICATE NO. 01/20042 (E3)**

Please note that DAD Issue Number 2 is superseded hereby

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register's Type Approval System Procedure TA14 and this Design Appraisal Document forms part of the Certificate.

COMMENTS

1. The manufacturer's list of the chemical resistance of piping components is to be observed.
2. For essential systems as required by the Rules the manufacturer's material certificate may be acceptable.

APPROVAL DOCUMENTATION

| | | |
|-----------------------|--|------------|
| - | Application Checklist – Appendix to Form 2502TA/2502 TA MR | 29.09.2016 |
| -- | Set of dimension drawings for ProPress Inox fittings | -- |
| 438531-00.918.0111/00 | Viega Brochure | -- |
| 438 524-12.919.-03/01 | Viega `sanpress INOX`-System Brochure | -- |
| -- | `sanpress INOX`mit SC- Conture Description (2 sheets) | -- |
| DW-8501BL0551 | Certificate for a DVGW test mark | 12.03.2001 |
| DW-8501AT2348 | Certificate for a DVGW test mark | 04.05.1998 |
| 13 7383 00 | Certificate DIN ISO 9001:1994 | 07.02.2001 |
| 00042 S | Crimp- SC (re-shaped Pressfittings) | -- |
| 00043 S | Crimp- SC (machined Pressfittings) | -- |
| 12 | Catalogue Systemtechnik `sanpress INOX` (19 pages) | -- |

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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TEST REPORTS

| | | |
|--------------|--|------------|
| HPC1661005/B | Production Quality Assessment at production facilities (Viega in Großheringen) | 08.06.2016 |
| HPC1661005 | Production Quality Assessment at production facilities (Viega in Attendorn) | 23.06.2016 |
| 120003967 | Test Report by MPA NRW (ProPress 304 stainless Pressfitting-system 1/2 - 4" in combination with stainless steel pipes) (acc. IACS P 2.11: tightness, vibration, pressure pulsation in combination, pull-out and vacuum test) | 27.03.2012 |
| 120002578-2 | Test Reports by MPA NRW (Sanpress Inox XL Pressfitting-system in combination with Copper Pipes and Stainless Steel Pipes) (acc. IACS P 2.11) | 17.02.2006 |
| 12000774 | Test Report by MPA NRW ('sanpress INOX' mit SC-Contur) | 07.02.2001 |
| 12 0587 5 97 | Test Report by MPA NRW ('sanpress-TIN-XL') | 09.04.1998 |



LR0311-1-2016-06
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Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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Part 1
 Subject: Pipe Fittings
 Product: Compression Fittings

| Producer/Licence No. | | Description of Product | | | Remarks | Cert. No. |
|---|--|--|--------------------------------|---------------|---------|-----------|
| Type | Details of Approval | Application | | | | |
| Viega - Sanpress Inox - System, ProPress Inox & ProPress Inox XL | Stainless steel fittings (1.4401) and pipe system (1.4521 and 1.4401) with SC-Contur. The SC feature enables to quickly identify unpressed fittings. The fittings are offered with different sealing elements - EPDM, HNBR and FKM. The press connection is performed by a special press tool. <u>Ratings:</u> Pipe O.D.: 15 mm to 108 mm and 1/2" to 4" MAWP: 1,6 MPa MAWT: 120°C | As piping components in Class III piping systems on ships classed or intended for Classification with Lloyd's Register. <u>Restrictions:</u> 1. Starting/control air and CO2 systems. 2. Inside machinery spaces of category A or accommodation spaces for main lines of inert gas systems. 3. Fire main, water spray or sprinkler systems which are not always filled with water. 4. Bilge lines in high fire risk compartments 5. Scupper pipes below freeboard deck over board For deck and bulkhead penetrations see also the requirements of the National Authorities. | Expiries: 30 September 2021 | 01/20042 (E3) | | |