



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.

| | |
|---------------------------|--|
| Manufacturer | Viega Deutschland GmbH & Co.KG |
| Address | Viega Platz 1, Attendorn, 57439, Germany |
| Type | Pipe Press Fitting System |
| Description | stainless steel press fittings with soft sealings for pipe systems |
| Trade Name | Temponox |
| Application | As piping components in non-essential class III systems such as heating systems closed cooling water systems service air urea (except size 22 and 28) on ships classed or intended for Classification with Lloyd's Register. |
| Specified Standard | Lloyd's Register Type Approval Test Specification No. 2 Lloyd's Register Rules and Regulations for the Classification of Ships, July 2022 |
| Ratings | see Appendix |
| Additional Tests | DNVGW, IACS P 2.11 including wet fire endurance test |
| Other Conditions | For penetration of pipes through watertight bulkhead and decks and fire |

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Johannes Wiegel

Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Type Approval Certificate

divisions type approved penetrations are to be used.

Not approved for potable water.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document HPC 2261020/JW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.





Appendix

Type

Temponox

RATINGS

| Size [mm] | 15x1.0 | 18x1.0 | 22x1.2 | 28x1.2 | 35x1.5 | 42x1.5 | 54x1.5 | 76.1x1.5 | 88.9x1.5 | 108x1.5 |
|-------------------------|------------------|--------|--------|-----------------|--------|--------|-----------------|----------|----------|---------|
| Design pressure [bar g] | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Sealing material | EPDM | | | FKM | | | HNBR | | | |
| Service temperature | -10 °C / +110 °C | | | -5 °C / +140 °C | | | -40 °C / +82 °C | | | |

PLACE OF PRODUCTION

Viega GmbH & Co. KG,
Viegastrasse 1
D-99518 Grossheringen
Germany