

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 supersedes certificate number 93/20049(E4) issued on 04.12.2013 which is hereby cancelled.

This certificate is issued to:

PRODUCER VOSS Fluid GmbH

Lüdenscheider Straße 52-54

51688 Wipperfürth

Germany

DESCRIPTION Steel or stainless welding nipples with O-ring seal used in lieu of

cutting ring connectors.

TYPE VOSS Welding Couplings

APPLICATION General use in marine, offshore and industrial piping systems.

Restrictions:

1. starting/control air and CO2 systems.

2. inside machinery spaces of category A or accommodation spaces

for inert gas main lines

3. fire extinguishing systems which are not always filled with water

STANDARD LR Rules and Regulations for the Classification of Ships, July 2018

Pipe outside Nominal pressure diameter (mm) (bar)
6 to 14 315 to 500
16 to 20 250 to 400
25 315 to 400
30 250 to 400
38 250 to 315

Certificate No. 93/20049 (E5)

Issue Date 26 February 2019

Expiry Date 31 July 2023

Sheet 1 of 2

Torsten Schröder

Hamburg Technical Support Office

Lloyd's Register EMEA

R031.1.2016.06

Torsten Schröder Hamburg Technical Support Office Lloyd's Register EMEA

Lloyd's Register EMEA 71 Fenchurch Street, London EC3M 4BS

> Lloyd's Register EMEA Is a subsidiary of 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 the '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.



PERFORMANCE TESTS Repeated assembly, leakage, burst pressure, hydraulic impulse and

vibration, flame resistance.

OTHER CONDITIONS The welding nipples are to be selected and installed as per producer's

recommendations and instructions.

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 13340-04, Issue No. 4, dated 26.02.2019 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 93/20049 (E5)

Issue Date 26 February 2019

Expiry Date 31 July 2023

Sheet 2 of 2

Lloyd's Register EMEA 71 Fenchurch Street, London EC3M 4BS



Torsten Schröder

Hamburg Technical Support Office

Lloyd's Register EMEA

LR031.1.2016.06

Torsten Schröder Hamburg Technical Support Office Lloyd's Register EMEA

> Lloyd's Register EMEA Is a subsidiary of 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 the '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.