



# NIPPON KAIJI KYOKAI

# TYPE APPROVAL CERTIFICATE

Certificate No. TA21249M

This is to certify that the undernoted products have been approved in accordance with the requirements 12.3.3, Chapt.12, Part D of "Rules for the Survey and Construction of Steel Ships" and Chapt.9, Part 6"Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use".

This certificate is issued to

Manufacturer:

**VOSS Fluid GmbH** 

Place of manufacturer:

Lüdenscheider Str. 52-54, 51688

Wipperfürth GERMANY

Product description

**Compression Couplings** 

Type designation(s):

VOSSRing<sup>M</sup> Cutting Ring Couplings

Approval No.:

16FV106

Valid until:

15 December 2026

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 16 September 2021.

T. Shimada
General Manager
Machinery Department

#### NIPPON KAIJI KYOKAI

Attached sheet to the Certificate No.TA21249M

## · Particulars and conditions:

|          | Nominal | Pressure | Temperature range for   | Temperature range for carbon steel male |
|----------|---------|----------|---|---|
| Туре     | Dia.    | Nominal  | tube couplings with   | stud couplings of type PEFLEX, UN/UNF,  |
|          | (φ)     | (bar)    | metallic seal (°C)  | ISO 6149 with soft seal (°C)            |
| Series L | 6       | 500      | Carbon steel: -20 up to +120  -20 up to +100 (NBR)  Lowest ambient temperature: -40  -20 up to +200 (FKM) |   |
|          | 8       |          |   |   |
|          | 10      |          |   |   |
|          | 12      | 400      |   |   |
|          | 15      |          |   |   |
|          | 18      |          |   |   |
|          | 22      | 250      |   |   |
|          | 28      |          |   | -20 up to +100 (NBR)                    |
|          | 35      |          |   |   |
|          | 42      |          |   |   |
| Series S | 6       | 800      |   | -20 up to +200 (FKM)                    |
|          | 8       |          |   |   |
|          | 10      |          |   |   |
|          | 12      | 630      |   |   |
|          | 14      |          |   |   |
|          | 16      |          |   |   |
|          | 20      | 420      |   |   |
|          | 25      |          |   |   |
|          | 30      |          |   |   |
|          | 38      |          |   |   |

## · Documents:

Drawings: Cutting ring 1S and VOSSRing<sup>M</sup> (MSR4) L/S6, L18, L42, S16, S38

 ${\it Test Report: Test reports of fire \ resistance \ tests \ issued \ by \ Dr. \ B\"{a}umer, \ Herford \ laboratory}$ 

IMA Dresden test report K057/14, Order No.: 304224011

VOSS Fluid test report 2014\_466

## Type Approval Test:

Gas Pressure, Tightness, Burst, Vacuum, Pull-out, Combined Vibration and Pressure pulsation, Fire resistance according to ISO 19921/22, Repeated assembly

#### · Notice:

Any significant changes in design or construction of the above items may render this certificate invalid.

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