



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 02/20052(E3) issued on 14.06.2013 which is hereby cancelled.

This certificate is issued to:

| | |
|--------------------|---|
| PRODUCER | Walter Stauffenberg GmbH & Co. KG Im Ehrenfeld 4 58791 Werdohl Germany |
| DESCRIPTION | Pressure gauge connectors made from zinc-nickel coated steel or stainless steel, stainless steel ball and NBR or FPM seals. |
| TYPE | STAUFF TEST - Pressure Gauge and Test Coupling System Test 20 type SKK and SMK (connection thread M16x2,0), Test 15 type SKK and SMK (connection thread M16x2,0), Test 12 type SKK and SMK (connection thread S12,65x1,5), Adaptors SAD, SMA, SMD, Connection hoses SMS |
| APPLICATION | As pressure gauge connectors for hydraulic oils and other oils based on mineral oil, in accordance with Lloyd's Register Rules and Regulations for the Classification of Ships, July 2018. <u>Restrictions:</u> Connection hoses are not to be used permanently in Category A machinery spaces or similar for essential systems or systems containing flammable fluids. |

| | |
|------------------------|---------------------|
| Certificate No. | 02/20052(E4) |
| Issue Date | 09 November 2018 |
| Expiry Date | 10 November 2022 |
| Sheet | 1 of 2 |

Torsten Schröder
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RATINGS

Max W.P.: 630 bar
(Maximum working pressure may be less because of port size)

| <u>Seals:</u> | <u>Temperature:</u> |
|---------------|---------------------|
| NBR | -20°C to +100°C |
| FPM | -20°C to +200°C |

OTHER CONDITIONS

Adoption (joining) under pressure at 400 bar
except Test 15 type SMK + SKK at 630 bar.

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 9229-02, Issue No. 4, dated 09 November 2018 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Design Appraisal Document

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Date
09 November 2018

Please quote this reference number on all future communications
HPC1861047/38280-18/TS

**THE LLOYD'S REGISTER'S TYPE APPROVAL SYSTEM, 2017
ISSUED TO: WALTER STAUFFENBERG GMBH & CO. KG
FOR: STAUFF "TEST" PRESSURE GAUGE SYSTEM
TYPES: TEST 12 TO TEST 20**

TYPE APPROVAL CERTIFICATE NO.: 02/20052 (E4)

**This Marine Design Appraisal Document supersedes and cancels document number
HMD 9229-02, Issue 3, dated 14 June 2013**

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.

APPROVAL DOCUMENTATION

| | | |
|------------|---|------------|
| Form2502TA | Application for Type Approval | 18.10.2018 |
| - | Catalogue 7 - STAUFF Test | 10/2017 |
| - | Product Information Zinc-Nickel coating | 03/2009 |

TEST REPORTS

| | | |
|-------------|--|------------|
| HPC 1761065 | Production Quality Assessment | 17.07.2018 |
| DTM 0210214 | LR Visit Report incl. witnessing tests | 28.10.2002 |

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

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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 A
Subject: Measuring Systems
Product: Gauge Fittings (Part 1A)

| Producer/Licence No. | Description of Product | | | | Cert. No. |
|--|---|---|--|--|---------------|
| | Type | Details of Approval | Application | Remarks | |
| Walter Stauffenberg GmbH & Co. KG Im Ehrenfeld 4 58791 Werdohl Germany | STAUFF TEST - Pressure Gauge and Test Coupling System Test 20 type SKK and SMK (connection thread M16x2,0), Test 15 type SKK and SMK (connection thread M16x2,0), Test 12 type SKK and SMK (connection thread S12,65x1,5), Adaptors SAD, SMA, SMD, Connection hoses SMS | Pressure gauge connectors made from zinc-nickel coated steel or stainless steel, stainless steel ball and NBR or FPM seals. Max W.P.: 630 bar (Maximum working pressure may be less because of port size) <u>Seals:</u> <u>Temperature:</u> NBR -20°C to +100°C FPM -20°C to +200°C | As pressure gauge connectors for hydraulic oils and other oils based on mineral oil, in accordance with Lloyd's Register Rules and Regulations for the Classification of Ships, July 2018. <u>Restrictions:</u> Connection hoses are not to be used permanently in Category A machinery spaces or similar for essential systems or systems containing flammable fluids. | Expires: 10 November 2022 Adaption (joining) under pressure at 400 bar except Test 15 type SMK + SKK at 630 bar. | 02/20052 (E4) |