



Marine & Offshore

Certificate number: 33487/B0 BV

File number: AP4392

Product code: 3891H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**Huba Control AG**  
Würenlos - SWITZERLAND

*for the type of product*

**PRESSURE TRANSMITTERS / TRANSDUCERS**

Type: 522 and 527

**Requirements:**

Bureau Veritas Rules for the Classification of Steel Ships

EC Code: 43S

*This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 21 Jun 2023**

**For Bureau Veritas Marine & Offshore,**

At BV HAMBURG, on 21 Jun 2018,

Dirk Hoepfner



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION:

The series **522...** and **527...** are pressure transmitter for absolute and relative pressure of gases and liquids.

#### **1.1 - Main characteristics:**

Rated Voltage: 24V DC  
Output: 4-20mA, 0-10V  
Degree of protection: IP65

#### **1.2 - Variants:**

Type: 522. 9 **aa S0 b c ddd**; (0-2.5bar up to 0-600bar)

**aa** = Measuring range (bar, psi, MPA)  
14, 15, 17, 30, 31, 32, 33, 40, 41, 42, 43, 54, 55  
B4, B5, B7, C1, C2, C3, D0, D1, D2, D3, E4, E5  
G4, G5, G7, H0, H1, H2, H3, K0, K1, K2, K3, L4, L5  
**b** = Output signal  
2, 3, 4  
**c** = Electrical connection  
1, 3, M, L  
**ddd** = process connection  
K01, 201, 301, 401, 801, 901, D01, E01

Type: 527. **a bb c 0 d e fff**; (0-1bar up to 0-60bar)

**a** = Measuring methode  
8, 9  
**bb** = Measuring range (bar, psi, MPA)  
11, 12, 14, 15, 17, 30, 31, 32, 33, 40  
B1, B2, B4, B5, B7, C0, C1, C2, C3, D0  
G1, G2, G4, G5, G7, H0, H1, H2, H3, K0  
**c** = Sealing material  
0, 1, 2  
**d** = Output signal  
2, 3, 4  
**e** = Electrical connection  
1, 3, M, L  
**fff** = process connection  
D11, E11, K11, 211, 311, 411, 811, 911

### 2. DOCUMENTS AND DRAWINGS:

- Data sheets: Huba Control type 522 dated 09/2016 Rev. B; Huba Control type 527 dated 12/2017 Rev. A
- Drawings: 304356, 304521, 304523, 304553, 304557, 304672, 304789, 304806, 304809, 304855, 304856, 304857, 304865
- Electrosuisse: SEV 10 ATEX 0145 dated 20.10.2015

### 3. TEST REPORTS:

- Brodarski Institute: YQ01-02-260 dated 2011-06-10
- HUBA Control: Prüfbericht EMV Qualifikationsprüfungen 0-10V, 4-20mA, ATEX dated 27.05.2011
- SGS Germany GmbH: E0UG0001 dated Jun 29, 2011
- SIEMENS AG: A5E03643148A dated 17.06.2011; A5E03643148D dated 29.06.2011; GL\_P2XY\_3 dated 28.06.2011; K004150\_01\_2012\_E\_B01 dated 02/28/12; K004150\_01\_2012\_E\_C01 dated 02/29/12
- VDE: FG43-1-151466 dated 2011-06-28

### 4. APPLICATION/LIMITATION:

- 4.1 - Bureau Veritas Rules and Regulations for the Classification of Steel Ships
- 4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.3 - Bureau Veritas Environmental Category, **EC Code: 43S**
- 4.4 - The equipment fulfils the EMC requirements for installation on the Power distribution zone.
- 4.5 - The installation shall comply with the Manufacturer's recommendation described in the above-referenced documentation.

### 5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The above mentioned products are to be supplied by **HUBA Control AG** in compliance with the type described in this certificate.
- 5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 - **HUBA Control AG** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products:

**HUBA CONTROL AG**  
**Industriestr. 17**  
**5436 Würenlos**  
**SWITZERLAND**

- 5.4 - Equipment is to be supplied with manual(s) for installation, use and maintenance.

**6. MARKING OF PRODUCT:**

- Maker's name or trademark
- Equipment type or model identification
- Date of manufacture and/or serial number
- Ex marking, as relevant

**7. OTHERS:**

7.1 - It is the responsibility of **HUBA Control AG - SWITZERLAND** to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate N° 33487/A0 BV issued on 11 Apr 2013 by the Society.

**\*\*\* END OF CERTIFICATE \*\*\***