



Marine &amp; Offshore

Certificate number: 19393/D0 BV

File number: AP3808

Product code: 3891H

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

[www.veristar.com](http://www.veristar.com)

## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**TRAFAG AG**

Bubikon - SWITZERLAND

*for the type of product*

**PRESSURE TRANSMITTERS / TRANSDUCERS**

8264 PICOTRANS NPN series and 8298 EPN series

### Requirements:

Bureau Veritas Rules for the Classification of Steel Ships

EC Code: 33S/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: 01 Feb 2028**

**For Bureau Veritas Marine & Offshore,**

At BV HAMBURG, on 01 Feb 2023,

Dirk Hoepfner

***This certificate was created electronically and is valid without signature***



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](http://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.

The electronic version is available at: <http://www.veristarpn.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=7zm3cfi3hi>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION:

**8264 PICOTRANS NPN** series and **8298 EPN** series are thin film on steel pressure transmitters.

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

	<b>8264 series</b>	<b>8298 series</b>
Pressure Range [bar]:	0 - 2.5 to 0 - 250	0 - 2.5 to 0 - 2500
Supply Voltage [V] DC:	9 to 32, 24 Nominal	9 to 32, 24 Nominal
Output :	4 - 20mA / 2 wires	4 - 20mA / 2 wires 0.5 to 4.5V DC ratiometric
Operating Temperature:	-40 to 100°C	-40 to 125°C, media temp. 135°C
Electrical Connection:	Plug (DIN 43650)	Plug (DIN 43650)
Pressure Connection:	G1/4", G1/8", M10x1.0	G1/4", R1/4"
Sensor / Body Materials:	Stainless Steel	Stainless Steel
Degree of Protection:	IP 65 (without Plug-in) / IP69K	IP 65 (without Plug-in) / IP69K

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

Sensor Type: 8264 . **aa** . **bb cc** . **dd** . **19** . **ee**

**aa** = Pressure range:

74 to 85 (excluding 84)

**bb** = Sensor accuracy:

23, 25

**cc** = Pressure connection:

10, 17, 18

**dd** = Electrical connection:

04, 78

**ee** = Accessories:

40, 41, 43, 45, 55, 57, 58, 74, 92, V3,

1M, 3M, 5M, 6M, 7M, 8M, 9M

Sensor Type: 8298 . **aa** . **bb cc** . **dd** . **ee** . **ff**

**aa** = Pressure range:

74 to 86, 89 to 91

**bb** = Sensor accuracy:

23, 25, 33, 35

**cc** = Pressure connection:

11, 17, 19, 28, 29, 30, 51

**dd** = Electrical connection:

02, 04, 05, 25, 78

**ee** = Output signal:

19, 23

**ff** = Accessories:

40, 43, 45, 58, 92, 1M, 3M, 5M

### 2. DOCUMENTS AND DRAWINGS:

- B62300 Rev. e dated 22.06.16; B62440 Rev. d dated 22.05.15; B63590 Rev. e dated 03.07.15

For D0 version:

- Data sheets: H72312t dated 04/2022; H72313t dated 12/2022; H73311q dated 08/2019; H73313l dated 01/2023

- B62120 Rev. q dated 06.02.18; B62200 Rev. c dated 12.11.2018; B62250 Rev. u dated 12.04.2022

- C12890 Rev. m dated 12.11.2018; C15988 Rev. e dated 24.08.2021

### 3. TEST REPORTS:

- TRAFAG AG: V-0605 dated 12.04.2006; V-0554 dated 19.07.05; V-0647 dated 17.05.06; V-07109 dated 07.03.2008; V-08055 dated 01.04.2008; V-08101 dated 04.08.2008; V-08102 dated 13.08.2008; V-10015 dated 09.04.2010

- EMC-TEST CENTER ZÜRICH AG: EMCKP689A dated 10.01.2006

- ENL Testing Laboratory: 20051228.A02.03 dated 2005-December-19th; 20061027.A05.01 dated 2006-April-10th.

- SEV Association: 09-IK-0248.01 dated 27.08.2008

- SPEKTRA Schwingungstechnik und Akustik GmbH: 80430.A.1.1 dated 29.07.2008; 80430.C.1.1 dated 29.07.2008

For D0 version:

- EMC-Testcenter: EMCKP4827A dated 2021-08-20

### 4. APPLICATION / LIMITATION:

4.1 - Bureau Veritas Rules 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: 33S/43S**

4.4 - The equipment does not fulfil the EMC requirements for installation in Bridge Zone.

4.5 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev8.

**5. PRODUCTION SURVEY REQUIREMENTS:**

5.1 - The above mentioned pressure transmitter are to be supplied by **Trafag 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 - **Trafag 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 :

**TRAFAG AG  
Industriestrasse 11  
8606 Bubikon  
SWITZERLAND**

**6. MARKING OF PRODUCT:**

- Maker's name or trademark
- Equipment type or model identification
- Date of manufacture and/or serial number

**7. OTHERS:**

7.1 - It is in the responsibility of **TRAFAG 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° 19393/C0 BV issued on 15 Mar 2018 by the Society.

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