



MARINE DIVISION

Certificate number: 36313/A0 BV

File number: AP4482

Product code: 3843H

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

TRAFAG AG

Bubikon - SWITZERLAND

for the type of product

PRESSURE SWITCH

Type: Picostat PST4K 9K4

Picostat PST4M 9M4

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships

This certificate is issued to attest that BUREAU VERITAS 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: 27 Feb 2019

For BUREAU VERITAS,

At BV HAMBURG, on 27 Feb 2014,

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. 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 Division 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 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 SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Picostat PST4K is a piston-type and **Picostat PST4M** is a membrane-type pressure switch.

1.1 - Main characteristics:

Pressure range: 1 ... 10 to 40 ... 400bar (for PST4K);
1 ... 10 to 10 ... 100bar (for PST4M)

Output: change-over contact (silver or gold plated contacts)

Electrical connection: male electrical plug (DIN 43650-A), EN175301-803-A

Pressure connection: G1/8" female, G1/4" female, M10x1" female

Sensor material: 1.4035 (for PST4K);
FKM Membrane (for PST4M)

Housing material: aluminium alloy

Degree of protection: IP65

1.2 - Variants:

Sensor Type: **9K4 aa.bb.ccc.dd.ee** (acc. to H72369a)

aa= Microswitch:

42, 84

bb= Pressure range:

78, 79, 80, 81, 82, 83, 84, 85, 86,

G8, G9, H0, H1, H2, H3, H4, H5

ccc= Material:

756, 757, 758, 759

dd= Pressure connection:

02, 03, 04

ee= Accessories:

11, 46, 74, V3, 16, 88

Sensor Type: **9M4 aa.bb.ccc.dd.ee** (acc. to H72368a)

aa= Microswitch:

42, 84

bb= Pressure range:

78, 79, 80, 81, 82, 83, G8, G9, H0, H1, H2, H3

ccc= Material:

761, 762, 763

dd= Pressure connection:

02, 03, 04

ee= Accessories:

11, 46, 74, V3, 16, 88

1.3 - Rating:

Features of the Electrical Connection	AC	DC
Silver contacts	250V / 6(1)A	220V / 0.25(0.1)A 110V / 0.5(0.2)A 60V / 1(0.5)A 24V / 3(2)A 12V / 6(6)A
Gold plated contacts	max. 30V / 0.1(0.1)A min. 5V / 5mA	

2. DOCUMENTS AND DRAWINGS:

- C22667 Rev b dated 23.05.2013; C22668 Rev b dated 23.05.2013

- H72368a dated 08/2013; H72369a dated 08/2013

3. TEST REPORTS:

Trafag AG:

- V-12072 dated 21.05.2013; V-13078 dated 2013-09-20; V-13092 dated 2014-01-10

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: 33.**

4.4 - Bureau Veritas Rules: Part C, Ch 1, Sec 10 apply for pressurized parts made of aluminium or aluminium alloys if they are used in piping systems for flammable liquids or fire-extinguishing systems.