



TYPE APPROVAL CERTIFICATE
No. ELE065217XG/002

This is to certify that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

<i>Description</i>	Flow Measuring system
<i>Type</i>	Flowphant T - DTT31
<i>Applicant</i>	Endress + Hauser Wetzer GmbH + Co. KG Oberer Wang 1 87484 Nesselwang GERMANY
<i>Manufacturer</i>	Endress + Hauser Wetzer GmbH + Co. KG
<i>Place of manufacture</i>	Oberer Wang 1 87484 Nesselwang GERMANY
<i>Reference standards</i>	Rules for the classification of ships.- Part C - Machinery, systems and fire protection. - Ch.3, Sect. 6, Table 1.

Issued in **HAMBURG** on **December 7, 2017.** *This Certificate is valid until* **December 6, 2022**

RINA Services S.p.A.
Giuseppe Russo

This certificate consists of this page and 1 enclosure



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Flowphant T - DTT31

Product description:

The Flowphant T DTT31 is a flow switch for monitoring and displaying of relative mass flow rates of liquids.

Main characteristics:

Flow rates: 0.03 to 3m/s

Process connection: threads

Material: stainless steel (housing, sensor)

Power supply: 24V DC

Outputs: 1 x switch PNP, 2 x switch PNP or switch PNP + 4 to 20mA

HMI: LC-display; status LEDs (red, green, yellow), 3 control keys

Communication: PC interface for configuration

Sensor length: 100mm

Degree of protection: IP65, IP66 (M12x1 connector)

Software version: 01.00.xx

Order code: DTT31 - 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

10 - Approvals: A

20 - Electrical connection: 1; 2; 3

30 - Power supply, output: A; B; C

40 - Display: 1

50 - Measuring range: 1

60 - Adjustment: 1

70 - Process connection: AA; AB; AE; DA; DE

80 - Insert length L; diameter D: 2A; 2C

90 - Additional equipment; material certificate: A; B; C

100 - Model: A; B; C; D

110 - Marking (option): A; B; C; D; F

Documents:

- TI00125R/09/EN/02.14

Test reports:

Paconsult GmbH: - 0722B-05 dated 06.06.05; 1016-06 dated 04.04.06

SENTON: - 50515-050791 Ed. 1 dated 20.12.05

Endress+Hauser: - DTT31_ECB_002, DTT31_ECH_002, DTT31_ECS_002, DTT31_EEV_002 dated 2006-10-20;

- DTT31_EPR_003, DTT31_ESD_002 dated 2006-10-20;

Intertek Deutschland GmbH: - 2218859KAU-001B dated 2013-03-27;

Senton: - 50515-050791 Ed 1 dated 20 Dezember 2005;

Remarks:

- The products fulfill EC-Code: EC31/41. SN

HAMBURG December 07, 2017



Handwritten signature in blue ink.