



Lloyd's
Register

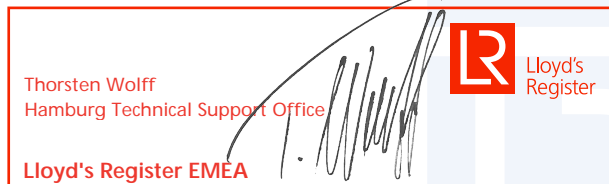
Type Approval Certificate

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 88/70215 (E6) issued on 04 January 2013 which is hereby cancelled.

This certificate is issued to:

PRODUCER	Senmatic A/S Industrivej 8 5471 Søndersø Denmark
DESCRIPTION	Platinum Resistance Thermometer Sensor
TYPES	NS: for measurements in pipeline and tank systems PTL: for measurements in cold and wet areas, directly in basins or tanks PTR: for measurements in gases, vapours and fluids, e.g. in sealed pipelines and containers PTV: for measurements in rooms, e.g. refrigerated holds, cargo and freeze compartments
APPLICATION	Marine, industrial and offshore applications for use in environmental categories ENV1, ENV2, ENV3, ENV4 and ENV5 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1, 1996.
ADDITIONAL TESTS	Dry heat: 120 °C for PTR and PTV Low temperature: -40 °C
STANDARD	Manufacturer's specification IEC 60751:2008
Certificate No.	17/20071
Issue Date	30 June 2017
Expiry Date	01 June 2022
Sheet	1 of 2



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RATINGS

Type	Sensing element	Tolerance class	Temperature range:
NS	1x Pt100	Cl. B	-50 to 150 °C -50 to 250 °C -200 to 100 °C
PTL	1x Pt100	Cl. B 1/6 Cl. B	-40 to 60 °C
PTR	1x Pt100	1/3 Cl. B 1/6 Cl. B	-40 to 120 °C
PTV	1x or 2x Pt100/500/1000	Cl. A Cl. B 1/3 Cl. B	-40 to 80 °C

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. HTS/ETS 35492-17 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 17/20071
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Sheet 2 of 2

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LR031:1.2013.12

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