



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 11/20041 issued on 15.11.2011 which is hereby cancelled.

This certificate is issued to:

PRODUCER	IMES GmbH Dr.-Herbert-Kittelstr. 2 87600 Kaufbeuren Germany
DESCRIPTION	Cylinder Pressure Sensor with integrated temperature compensation for continuous monitoring on Internal Combustion Engines.
TYPE	HTT-04 CA CPS-01 CA CPS-01
APPLICATION	Marine and offshore applications for use in environmental categories ENV1, ENV2 and ENV4 as defined in Lloyd's Register's Type Approval System Test Specification No. 1 - 2015.
ADDITIONAL TESTS	Dry Heat Test (+70°C/2hrs) Low Temperature Test (-40°C/2hrs) Ingress Protection rating: IP67 (IP69 for CPS-01)
STANDARD	Manufacturer's Specification
RATINGS	Power Supply: 5VDC / 24VDC Measuring Range: 0...300bar Overload Pressure: 400...1200bar Output Signal: 4...20mA / 0.5...4.5VDC
Certificate No.	11/20041 (E1)
Issue Date	04 April 2018
Expiry Date	14 November 2021
Sheet	1 of 2

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS



Martin Lange
Hamburg Technical Support Office
Lloyd's Register EMEA

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LIMITATION Screened connection cable to be used.

OTHER CONDITIONS Final functional arrangements are to comply with the appropriate Lloyd's Register Rules and Regulations.

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 36752-18 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 11/20041 (E1)
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Martin Lange
Hamburg Technical Support Office
Lloyd's Register EMEA
LR031.1.2016.06

Martin Lange
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