



Lloyd's
Register

European Union Recognised Organisation (EU RO) Mutual Recognition Type Approval Certificate in accordance with Article 10.1 of EU Regulation 391/2009.

This is to certify to the Manufacturer named below, that the Product referred to herein has been inspected for the Manufacturer, pursuant to the relevant requirements of the European Union Recognised Organisation Mutual Recognition procedure, required by Article 10.1 of EU Regulation 391/2009, and has been found in accordance with those requirements.

This certificate is issued to:

PRODUCER	Kistler Instrumente AG
PLACE OF PRODUCTION	Eulachstrasse 22 8408 Winterthur Kanton Zürich Switzerland
DESCRIPTION AND/OR NAME OF PRODUCT	Piezoelectric pressure sensor, inseparably linked to a charge amplifier providing a galvanic isolated 4 ... 20 mA output signal, for continuous dynamic cylinder pressure measurement for medium and low speed combustion engines.

Certificate No.	18/00061
Issue Date	13 August 2018
Expiry Date	12 August 2023
Sheet	1 of 3

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



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Hamburg Technical Support Office
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TYPE DESIGNATION

6613CG1, 6613CG2, 6613CG1Qxx, 6613CG2Qxx
7614CG1, 7614CG1Q05, 7614CG1Q06, 7614CG1Qxx, 7614CG2Qxx

6613 : process connection M10x1
7614 : process connection M14x1.25
CG1 : time constant 10..30 s
CG2 : time constant 100..150 s
Qxx : defines a customized version of any cable length between sensor and charge amplifier from 0.1 to 5 meters (standard 1 m) equipped with either an M12-connector (8 poles, standard) or a connector according to MIL-DTL-26482 (6 poles), e.g.:

7614CG1Q05 = 7614CG1 sensor, cable length 1.7 m, MIL-connector
7614CG1Q06 = 7614CG1 sensor, cable length 0.5 m, MIL-connector

APPLICATION

Applicable for ships as defined in Mutual Recognition provisions Article 10 Regulation on Common Rules and Standards for Ship Inspection and Survey Organisations.
Not applicable for mobile offshore drilling unit (MODU).
Not applicable for fishing vessel.

STANDARD(S)

EU RO Mutual Recognition Technical Requirements, Tier 1- Sensors (Version 0.3 / 01.04.2016)

RATINGS

Power supply: 18 ... 32 VDC

Certificate No.

18/00061

Issue Date

13 August 2018

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12 August 2023

Sheet

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"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The Design Appraisal Document No. 18/00013MR and its supplementary Type Approval Terms and Conditions form part of this Certificate.

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.

Certificate No. 18/00061
Issue Date 13 August 2018
Expiry Date 12 August 2023
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Mutual Recognition 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 European Union Recognised Organisations Mutual Recognition procedure for Type Approval

This certificate is issued to:

PRODUCER	Kistler Instrumente AG
PLACE OF PRODUCTION	Eulachstrasse 22 8408 Winterthur Kanton Zürich Switzerland
DESCRIPTION AND/OR NAME OF PRODUCT	Piezoelectric pressure sensor, inseparably linked to a charge amplifier providing a galvanic isolated 4 ... 20 mA output signal, for continuous dynamic cylinder pressure measurement for medium and low speed combustion engines.
TYPE DESIGNATION	6635 x Q yy (process connection M10x1) 7635 x Q yy (process connection M14x1,25) x = A1: pressure range up to 350 bar, time constant 10 ... 30s x = A2: pressure range up to 350 bar, time constant 50 ... 200s Q yy : defines a customized version of any cable length from 0,5 to 5 meters (standard 1m) equipped with either an M12-connector (8 poles, standard) or a connector according to MIL standard
APPLICATION	Applicable for ships as defined in Mutual Recognition provisions Article 10 Regulation on Common Rules and Standards for Ship Inspection and Survey Organisations. Not applicable for mobile offshore drilling unit (MODU). Not applicable for fishing vessel.
Certificate No.	18/00013MR
Issue Date	30 January 2018
Expiry Date	29 January 2023
Sheet	1 of 2

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STANDARD(S) EU RO Mutual Recognition Technical Requirements, Tier 1- Sensors
(Version 0.3 / 01.04.2016)

RATINGS Power supply: 18 ... 32 VDC

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The Design Appraisal Document No. 18/00013MR and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 18/00013MR

Issue Date 30 January 2018

Expiry Date 29 January 2023

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