



EUROPEAN UNION RECOGNISED ORGANISATION (EU RO) MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE

Certificate No:
MRA000003G

In accordance with Article 10.1 of EU Regulation 391/2009

This Certificate is issued to

IFM Electronic GmbH
Essen, Nordrhein-Westfalen, Germany

for

Pressure Gauges/Transmitters

with type designation(s)

PT50xx

The product is found to comply with

EU RO Mutual Recognition Technical Requirements for Pressure Gauges – Transmitters

Intended service

Applicable for a ship as defined in Mutual Recognition Provisions Article 10 Regulation on Common Rules and standards For Ship Inspection and Survey Organizations.

Temperature [°C]: -25°C / +70°C

Vibration: ±1.6mm / 4.0g

EMC: All locations including bridge and open deck

IP Code: IP66

This is to certify:

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 valid until **2026-09-09**.

Issued at **Hamburg** on **2021-09-10**

DNV local station: **Augsburg**

for **DNV**

Approval Engineer: **Marco Rinkel**

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Joannis Papanuskas
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: MRTA 201

Revision: 2021-03

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Product description

According to maker:

Typ	Measuring range		max. permissible pressure		Bursting pressure	
	bar	psi	bar	psi		
PT5015	0...6	0...87	15	215	200	2900
PT5004	0...10	0...145	25	360	300	4350
PT5014	0...16	0...232	40	580	450	6525
PT5003	0...25	0...360	65	940	600	8700
PT5043	0...40	0...580	100	1450	800	11600
PT5023	0...60	0...870	150	2175	900	13050
PT5002	0...100	0...1450	250	3625	1000	14500
PT5012	0...160	0...2320	400	5800	1100	15950
PT5001	0...250	0...3625	625	9060	1200	17400
PT5000	0...400	0...5800	1000	14500	1700	24655
PT5060	0...600	0...8700	1500	21755	2500	36255

Manufactured by

Ifm prover gmbh
88069 Tettnang

Application/Limitation

Applicable for a ship as defined in Mutual Recognition Provisions Article 10 Regulation on Common Rules and standards For Ship Inspection and Survey Organizations.

Type Approval documentation

Name	Number	Date
PT5001	EN-GB — PT5001-00	19.06.2019
PT5000	EN-GB — PT5000-00	19.06.2019
PT5004	EN-GB — PT5004-00	18.06.2019
PT5012	EN-GB — PT5012-00	19.06.2019
PT5003	EN-GB — PT5003-00	18.06.2019
PT5002	EN-GB — PT5002-00	19.06.2019
PT5060	EN-GB — PT5060-00	19.06.2019
PT5014	EN-GB — PT5014-00	18.06.2019
PT5023	EN-GB — PT5023-00	18.06.2019
PT5015	EN-GB — PT5015-00	03.12.2018
PT5043	EN-GB — PT5043-00	18.06.2019
BOM PT5003	-	06.09.2018
BOM PT5000	-	06.09.2018
BOM PT5023	-	06.09.2018
BOM PT5015	-	06.09.2018
BOM PT5004	-	06.09.2018
BOM PT5060	-	06.09.2018
BOM PT5002	-	06.09.2018
BOM PT5014	-	06.09.2018
BOM PT5043	-	06.09.2018
BOM PT 5012	-	06.09.2018
BOM PT5001	-	06.09.2018
Pressure Transmitter PT5-0/5/6/7/PC55	BLOCK DIAGRAM	17.10.2019
SLP PT mobil 4-20mA VSt	11255884	22.11.2017
GER KPL PT50XX G1/4 VS CPA	11346447	04.09.2020
Operating instructions PT50xx	80277252 / 00	03/2020
AUCOTEAM IP, Salt Mist, Glow Wire	20-15393.01	17.03.2020
AUCOTEAM IP, Salt Mist, Glow Wire	20-15393.02	17.03.2020
TREO Mechanic, Climatic, EMC	029-21	2021-07-08
Witnessed functional test	151897 PT M12 mit GL	19.06.2017

Marking of product

- manufacturer name
- production code
- type designation
- range
- power supply ratings

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed annually and at renewal of this certificate.

END OF CERTIFICATE

Generic Statement for EU RO MR Type Approval 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.

In accordance with Article 10 of Regulation (EC) No 391/2009 of the European Parliament and of the Council of 23 April 2009 "on common rules and standards for ship inspection and survey organizations", the following organizations, recognized by the EU on this date, have agreed on the technical and procedural conditions under which they will mutually recognize this certificate:

- American Bureau of Shipping (ABS);
- Bureau Veritas (BV);
- China Classification Society (CCS);
- Croatian Register of Shipping (CRS);
- DNV;
- Indian Register of Shipping (IRS);
- Korean Register (KR);
- Lloyd's Register Group Ltd. (LR);
- Nippon Kaiji Kyokai General Incorporated Foundation (ClassNK);
- Polish Register of Shipping (PRS);
- RINA Services S.p.A. (RINA);
- Russian Maritime Register of Shipping (RS).

The scheme for the mutual recognition of class certificates for materials, equipment and components laid down by Article 10(1) of Regulation (EC) No 391/2009 is only enforceable within the Union in respect of ships flying the flag of a Member State. As far as foreign vessels are concerned, the acceptance of relevant certificates remains at the discretion of relevant non-EU flag States in the exercise of their exclusive jurisdiction, notably under the United Nations Convention on the Law of the Sea (UNCLOS). (In accordance with COMMISSION IMPLEMENTING REGULATION (EU) No 1355/2014 amending Regulation (EC) No 391/2009 - recital (25)).