

## 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.

<b>Manufacturer</b>	<b>Endress+Hauser SE + Co. KG</b>
<b>Address</b>	Hauptstrasse 1, 79689 Maulburg, Germany
<b>Type</b>	Transmitters/Transducers
<b>Description</b>	Pressure transmitter for gas and liquids Refer to the Appendix for details.
<b>Trade Name</b>	PMC 21, PMP21
<b>Application</b>	Marine applications for use in environmental categories ENV1, ENV2, ENV3 and type PMP21 also ENV5 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 – July 2015.
<b>Specified Standard</b>	Manufacturer's specification IACS unified requirements E10 (Rev.8 Feb 2021)
<b>Ratings</b>	Power supply: 24 VDC Output: 4-20 mA Measuring ranges: -100 ... +100 mbar to 0 ... +40 bar (PMC21) -400 ... +400 mbar to -1 ... +400 bar (PMP21)
<b>Other Conditions</b>	Ratings for application in hazardous areas are to be obtained from the applicable Ex Certificates.

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## Type Approval Certificate

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.

**Previous Version:** This certificate supersedes certificate numbers 17/20079 issued on 20.07.2017 and 18/20048 issued on 28.07.2018 which are hereby cancelled.

The Design Appraisal Document HPC1662169-22/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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## Appendix

### **TYPES**

PMC21 [010][020][040][070][090][110][190][550][570][580][590][620][895]

[010] Approval: AA, BA, BB, BC, CA, CB, FA, GA; GR, IA, NA, TA  
[020] Output signal: 1 (4-20mA)  
[040] Electrical connection: A, B, M, U, V  
[070] Sensor range: 1C, 1E, 1F, 1H, 1K, 1M, 1N, 1P, 1Q, 1R, 1S, 2C, 2E, 2F, 2H, 2K, 2M, 2P, 2S  
[090] Calibration / Unit: A, B, C, F, J  
[110] Process connection: VUJ, VWJ, VXJ, WAJ, WBJ, WTJ, WWJ, X2J, X3J X4J, ZJJ  
[190] Seal: A, J  
[550] Calibration: F3  
[570] Service: HA, HB, IA, I7  
[580] Test, Certificate: JA  
[590] Additional approval: LG  
[620] Enclosed accessories: RM, RZ, R1  
[895] Marking: Z1

PMP21 [010][020][040][070][090][110][550][570][580][590][620][895]

[010] Approval: AA, BA, BB, BC, CA, CB, FA, GA, IA, NA, TA  
[020] Output signal: 4-20mA (2-wire)  
[040] Electrical connection: A, B, M, U, V  
[070] Measuring range: 1F, 1H, 1K, 1M, 1N, 1P, 1Q, 1R, 1S, 1U, 1W;2F, 2H, 2K, 2M, 2P, 2S, 2U, 2W  
[090] Calibration / Unit: A, B, C, F, J  
[110] Process connection: VUJ, VWJ, VXJ, WAJ, WBJ, WJJ, WTJ, WUJ, WWJ, X2J, X3J X4J, ZJJ  
[550] Calibration: F3  
[570] Service: HA, IA  
[580] Test, Certificate: JA, KH  
[590] Additional approval: LG  
[620] Enclosed accessories: QA, QB, QC, RM, RZ, R1  
[895] Marking: Z1