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Certificate No: LR22254853TA Issue Date: 11/07/2022

Expiry Date: 10/07/2027

## **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.

> Manufacturer **Endress+Hauser SE + Co. KG**

**Address** Hauptstrasse 1, 79689 Maulburg, Germany

Transmitters/Transducers **Type** 

**Description** Pressure transmitter Cerabar M

Refer to the Appendix for details.

**Trade Name** PMC51, PMP51, PMP55

**Application** Marine, offshore and industrial applications for use in environmental

categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register's Type Approval

System, Test Specification Number 1 – 2002.

**Specified Standard** Manufacturer's specification

IACS unified requirements E10 (Rev.8 Feb 2021)

Ratings Power supply: **24 VDC** 

Output: 4-20mA Hart 0.1 - 400 bar Measuring range:

**Other Conditions** Ratings for application in hazardous areas are to be obtained from the

applicable Ex Certificates.

**Thorsten Wolff** 

Senior Specialist to Lloyd's Register EMEA A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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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:** 12/20029 (E1)

The Design Appraisal Document HPC1762087-22/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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## **Appendix**

**TYPES** 

PMC51 [10][20][30][40][50][70]a[80][90][110][190][590] PMP51 [10][20][30][40][50][70]b[80][90][110][170][180][590] PMP55 [10][20][30][40][50][70]b[80][90][110][170][180][200][590]

[10] Approval: AA, BA, BB, BC, BD, BE, BF, BG, B1, B2, IA, IB, ID, IE, IF, I1, CA, CB, CC, CD, C1, FA, FB, FC, FD, F1, 8A, 8B, 8C, NA, NB, 99

[20] Output: 2

[30] Display, operation: 1, 2[40] Housing: I, J, Q, R, S

[50] Electrical connection: A, B, C, D, I, M, P, S, V

[70] a Sensor range: 1C, 1E, 1F, 1H, 1K, 1M, 1P, 1S, 2C, 2E, 2F, 2H, 2K, 2M, 2P, 2S, 99 [70] b Sensor range: 1F, 1H, 1K, 1M, 1P, 1S, 1U, 1W, 2F, 2H, 2K, 2M, 2P, 2S, 2U, 2W, 99

[80] Reference accuracy: D, G, Y

[90] Calibration unit: A, B, C, D, E, F, J, K, Y

[110] Process connection: ACJ, AEJ, AFJ, AGJ, AHJ, ANJ, AQJ, ARJ, ASJ, ATJ, A0J, A1J, A2J, A3J,

A4J, A5J, CFF, CNJ, CPJ, CQJ, CRP, CSP, CXJ, CZJ, FDJ, FEJ, FMJ, FNJ, FOJ, FWJ, FXJ, GCC, GCF, GCJ, GLC, GLJ, GMC, GMJ, GNJ, GOJ, GVJ, GWJ, G1J, G4J, GRC, GRJ, GTC, GTJ, GVC, GVJ, GWC, GWJ, KCJ, KEJ, KFJ, KGJ, KHJ, MIJ, MRJ, MSJ, MTJ, MXJ, MZJ, NKJ, NLJ, NMJ, NCJ, NDJ, NFJ, NXJ, NZJ, PDJ, PPJ, PQJ, QIJ, QJJ, QMJ, QOJ, QSJ, QVJ, RJF, RKC, RKJ, RLC, RLJ, R1C, R1J, S1J, S4J, SIJ, SJJ, SBJ, SCJ, SDJ, SSJ, STJ, SUJ, SZJ, TBJ, TCJ, TJJ, TDJ, TFJ, TIJ, TQJ, TRJ, TMJ, TXJ, T0J, T1J, T2J, T3J, T4J, T5J, T6J, T7J, TXJ, UBJ, UCJ, UDJ, UEJ, UGJ, UHJ, UIJ, UJJ, UKJ, ULJ, UMJ, UNJ, UPJ, URJ, U5C, U4J, U5J,

U7C, U7J, U8C, U8J, XSJ, VAJ, VCJ, VDJ, YYY

[170] Material of the process isolating diaphragm: A, B, C, D, M, R, S, Y

[180] Fill fluid: 1, 2, 3, 4, 5, 6, 9

[190] Seal: A, B, F, G, H, J, K, L, M, N, P, S, Y

[200] Diaphragm seal connection: A, B, D, E, Y

[590] Additional approval: LA, LG, LR, LW

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