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Certificate No: LR22252932TA 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

Type Transmitters/Transducers

Description Hydrostatic pressure transmitter Deltapilot M

Refer to the Appendix for details.

Trade Name FMB50, FMB52, FMB53

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 Measuring range: 0.1 - 10 bar

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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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: 12/20027 (E1)

The Design Appraisal Document HPC1762086-22/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

TYPES

FMB50 [10][20][30][40][50][70][80][90][110][170][180][190][590] FMB52 [10][20][30][40][50][70][80][90][100][110][170][180][190][590] FMB53 [10][20][30][40][50][70][80][90][100][110][170][180][190][590]

[10] Approval: AA, BA, BB, BD, BE, BG, B1, 8C, IA, IC, ID, IE, I1, CA, CC, CD, FA, FC, FD, FE, NA, 99

[20] Output: 2

[30] Display, operation: 1, 2

[40] Housing: I, J, Q, R, S

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

[70] Sensor range: 1C, 1F, 1H, 1M, 1P, 99

[80] Reference accuracy: D, G, Y

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

[100] Probe connection: 15, 25, 35, 45, 99

[110] Process connection: GGC, GGJ, RGJ, AEJ, AFJ, AGJ, AHJ, CEJ, CFJ, CGJ, CHJ, KEJ, KFJ, KGJ, KHJ, MRJ, MZJ, NDJ, S4J, TXJ, TIJ, TRJ, UNJ, UOJ, UPJ, UQJ, USJ, UTJ, TDJ, YYY

[170] Material of the process isolating diaphragm: B, L, N, Y

[180] Fill fluid: 2, 3, 9

[190] Seal: A, J, L, U, Y

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

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R R

<u>| [2</u>

K R

L L

R

R R

R

15