



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	Free space radar level measurement device for liquids refer to the Appendix for details
Trade Name	Micropilot FMR60, FMR62, FMR67
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 - 2018.
Specified Standard	Manufacturer's specification IACS unified requirements E10 (Rev.8 Feb 2021)
Ratings	Power supply: 24VDC Output: 4-20mA HART 4-20mA open collector switch
Additional Tests	Low temperature (-40°C/16hrs)

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Other Conditions

Ratings for application in hazardous areas are to be obtained from the applicable Ex Certificates.

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 number LR2001896TA-01 issued on 09 June 2022 which is hereby cancelled.

The Design Appraisal Document HPC1862071-23/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

TYPES

Micropilot FMR60, FMR62, FMR67

FMR60[10][20][30][40][50][70][90][100][540][550][580][590][610][850]

[10] = Approval: Any double letter and/or number combination

[20] = Power Supply; Output: A, B, C

[30] = Display: A, C, E, L, M

[40] = Housing: A, C

[50] = Electrical Connection: A, B, C, D, I, M

[70] = Antenna: GA

[90] = Sealing: A3, A4

[100] = Process Connection: GGJ, RGJ, XJG, XJJ, XKG, XKJ, XLG, XLJ

[540] = Application package: EH, EJ, E9

[550] = Calibration: Any double letter/number combination

[580] = Test, certificate: Any double letter/number combination

[590] = Additional Approval: Any double letter/number combination

[610] = Accessory mounted: NA, NC, NF

[850] = Firmware Version: 72

FMR62[10][20][30][40][50][70][90][100][540][550][580][590][610][850]

[10] = Approval: Any double letter and/or number combination

[20] = Power Supply; Output: A, B, C

[30] = Display: A, C, E, L, M

[40] = Housing: A, C

[50] = Electrical Connection: A, B, C, D, I, M

[70] = Antenna: GE, GF, GM, GN, GP

[90] = Sealing: A5, C1, F5

[100] = Process Connection: AFK, AGK, AHK, AJK, ATK, CFK, CGK,
 CHK, CJK, GDJ, GGJ, KFK, KGK, KHK, KJK, RDJ, RGJ

[540] = Application package: EH, EJ, E9

[550] = Calibration: Any double letter/number combination

[580] = Test, certificate: Any double letter/number combination

[590] = Additional Approval: Any double letter/number combination

[610] = Accessory mounted: NA, NC, NF

[850] = Firmware Version: 72

FMR67[10][20][30][40][50][70][90][100][540][550][580][590][610][850]

[10] = Approval: Any double letter and/or number combination

[20] = Power Supply; Output: A, B, C

[30] = Display: A, C, E, L, M

[40] = Housing: A, C

[50] = Electrical Connection: A, B, C, D, I, M

[70] = Antenna: GA, GP

[90] = Sealing: A3, A5

[100] = Process Connection: AGJ, AHJ, CGJ, CHJ, GGJ, KGJ, RGJ, XJG,
XJJ, XKG, XKJ, KLG, XLJ, X3J, X5J

[110] = Flushing air connection: A, 1, 2, 3, 4

[540] = Application package: EH, EJ, E9

[550] = Calibration: Any double letter/number combination

[580] = Test, certificate: Any double letter/number combination

[590] = Additional Approval: Any double letter/number combination

[610] = Accessory mounted: NA, NF

[850] = Firmware Version: 72