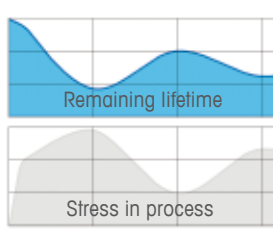


Intelligent Transmitter Series For Hazardous Area Applications



DLI, TTM, ACT



Outstanding Reliability and Process Safety

- ISM technology with sensor diagnostics
- Approvals for hazardous area applications
- Dependable usage in harsh environments thanks to rugged design

Predictive Maintenance

- Advanced ISM functionality provides predictive maintenance
- Online diagnostics
- Remote access to sensor diagnostic tools

Easy Handling of Measuring Loops

- Fast commissioning and error-free start-up due to Plug and Measure feature
- Pre-calibration of sensors with iSense Asset Suite software

Versatility

- Multi-parameter transmitter
- Mixed-mode input for use with analog or innovative digital ISM sensors
- Compatible with major asset management tools
- Remote and on-site access to sensor diagnostic tools



Reliable Solution with Remote Access to Sensor Diagnostics

The M400 2-wire multi-parameter transmitter, equipped with Intelligent Sensor Management (ISM) technology, provides highest reliability and process safety. Its rugged design and global hazardous area approvals allow use of the transmitter across the chemical and chempharma industries. Easiest handling and local or remote access via standard communication protocols to advanced sensor diagnostic tools leads to reduced operating costs and increased productivity.

The M400 transmitter is a single-channel unit for pH/ORP, oxygen, conductivity, dissolved carbon dioxide, inductive conductivity and ozone (M400PA only) measurement. Its mixed-mode input allows the use of analog or ISM sensors. This unique feature means the M400 offers a smooth technology transition from analog to digital sensors and provides a future oriented investment in the plant.

Technical data of the M400 2-wire transmitter series

| | |
|---------------------------|--|
| Measurement parameters | pH/ORP, pH/pNa, dissolved oxygen, gas phase oxygen, conductivity (2e/4e), dissolved carbon dioxide, inductive conductivity |
| ISM features | Plug and Measure, Dynamic Lifetime Indicator (DLI), Adaptive Calibration Timer (ACT), Time to Maintenance (TTM) |
| Housing material | Die cast aluminum |
| Enclosure | IP66, NEMA 4X |
| Hazardous area approvals | NEPSI, ATEX/IECEx Zone1, cFMus ClI Div1 |
| Ambient temperature range | -20 to 60 °C (-4 to 140 °F) |
| Display | Backlit LCD, 4 lines |

4 to 20 mA with HART®

| | |
|-------------------------------------|--|
| Supply voltage | 14 to 30 VDC |
| Current outputs | 2 × 4 to 20 mA (loop powered), galvanically isolated |
| Digital inputs | 2*, galvanically isolated |
| Digital outputs | 2 × open collectors |
| Analog inputs | 1 × 4 to 20 mA (for pressure compensation) |
| Asset management tool compatibility | AMS versions 10 and 11, Simatic PDM version 6 |

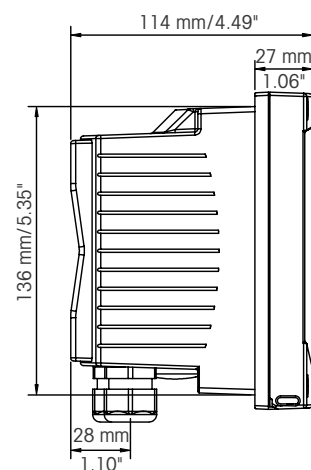
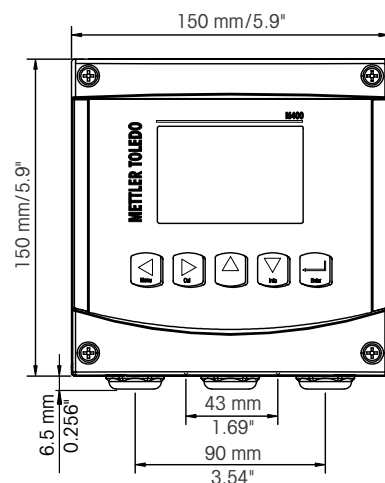
| | FOUNDATION fieldbus™ | PROFIBUS® PA |
|---------------------|---|--------------------------|
| Physical interface | According to IEC 61158-2 | According to IEC 61158-2 |
| Profile | FF_H1 | PA |
| ITK version/profile | 6.0.1 | 3.02 PA |
| Supply voltage | Non hazardous area (Non-IS): 9 to 32 VDC Linear Barrier: 9 to 24 VDC FISCO: 9 to 17.5 VDC | |
| Current | 22 mA | 22 mA |

* Model dependent

Ordering information

| Designation | Order No. |
|--------------------------------------|------------|
| M400/2H, 1-channel multi-parameter | 30 025 514 |
| M400/2XH, 1-channel multi-parameter | 30 025 515 |
| M400G/2XH, 1-channel multi-parameter | 30 025 516 |
| M400 2XH Cond Ind | 30 256 307 |
| M400FF, 1-channel multi-parameter | 30 026 616 |
| M400PA, 1-channel multi-parameter | 30 026 617 |

► www.mt.com/m400-2wire



www.mt.com/pro

For more information

Sales and service:



Management System
certified according to
ISO 9001 / ISO 14001

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Subject to technical changes.
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Printed in Switzerland. 30 038 634