

# VisiFerm mA 225 H3

Specification Sheet (Part/REF # 10070760-1311)



Less frequent calibration and longer lifetime. 2 wire 4-20mA / HART for GMP production environments. Explosive rated environments.

## Product Specifications

|                                  |  |
|----------------------------------|--|
| <b>Sensor Family</b>             | VisiFerm mA  |
| <b>a-length</b>                  | 215 mm   |
| <b>Electrical Connector</b>      | M12  |
| <b>Measurement Principle</b>     | Oxygen dependent luminescence quenching, temperature compensation  |
| <b>Measuring Range</b>           | 4 ppb to 25 ppm (DO) 0 to 62.85 %-vol or 0 to 300 %-sat  |
| <b>Accuracy at 25 °C</b>         | 1 ± 0.05 %-vol; 21 ± 0.2 %-vol; 50 ± 0.5 %-vol   |
| <b>Drift at Room Temperature</b> | < 1 % per week   |
| <b>Sensor Cap</b>                | ODO Cap H3   |
| <b>Electrolyte</b>               | None   |
| <b>Oxygen Consumption</b>        | None   |
| <b>Temperature Sensor</b>        | NTC 22 kOhm  |
| <b>Configurable Values</b>       | DO: mbar; %-sat; %-vol; µg/l; mg/l; ppb/ppm (gas); ppb/ppm (dissolved oxygen); Temperature: °C   |
| <b>Diameter</b>                  | 12 mm  |
| <b>Process Connection</b>        | PG13,5   |
| <b>Wetted Parts</b>              | Stainless Steel 1.4435<br>EPDM (Ethylene propylene elastomer)<br>VMQ (Silicone elastomer)<br>See compliance details in Material Specification document |
| <b>Surface Quality of Steel</b>  | Ra < 0.4 µm (N5)   |
| <b>4 to 20 mA Current Range</b>  | 3.5 to 22 mA   |
| <b>Analog Interface 1</b>        | Two wire sink 4 to 20 mA for DO, programmable  |
| <b>4 to 20 mA Accuracy</b>       | < 0.3 % current value + 0.05 mA  |
| <b>Transmitting Power</b>        | Max. 4 dBm   |
| <b>Digital Interface</b>         | Bluetooth 5<br>HART Version 7.0  |
| <b>Operating Voltage</b>         | 18 to 30 VDC   |
| <b>Serial Number</b>             | Yes  |
| <b>Response Time</b>             | t98% < 30 s at 25 °C   |
| <b>Certificate</b>               | Yes, with measured current in air  |
| <b>ATEX Approval</b>             | II 1 G Ex ia IIC T3/T4/T5/T6 Ga; II 1 D Ex ia IIIC T135°C Da   |
| <b>IECEX Approval</b>            | II 1 G Ex ia IIC T3/T4/T5/T6 Ga; II 1 D Ex ia IIIC T135°C Da   |
| <b>Autoclavable</b>              | Yes  |

|                                    |  |
|------------------------------------|--|
| <b>CIP</b>                         | Yes  |
| <b>Steam Sterilizable</b>          | Yes, max. Temperature 140 °C                                 |
| <b>Operating Temperature Range</b> | -20 to 140 °C; the sensor provides no DO reading above 85 °C |
| <b>Pressure Range bar g</b>        | -1 to 12 bar   |
| <b>Protection Rating</b>           | IP 68  |
| <b>Required Flow</b>               | None   |

Specifications are subject to change without notice

**Spec. Version E**

<https://www.hamiltoncompany.com/process-analytics/sensors/10070760-1311>