

# VisiPro DO Ex 160 H2 (discontinued)

Specification Sheet (Part/REF # 243667-122)



VisiPro is ideal for production with a simple 2-wire 4 - 20mA (HART) installation.

## Product Specifications

|                           |                                                                                                                                                              |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sensor Family             | VisiPro                                                                                                                                                      |
| Parameter                 | DO (Optical)                                                                                                                                                 |
| Sensor Output             | 4 to 20 mA / HART                                                                                                                                            |
| a-length                  | 160 mm                                                                                                                                                       |
| Electrical Connector      | M12                                                                                                                                                          |
| Measurement Principle     | Oxygen dependent luminescence quenching, temperature compensation                                                                                            |
| Measuring Range           | 4 ppb to 25 ppm (DO) 0 to 62.85 %-vol or 0 to 300 %-sat                                                                                                      |
| Accuracy at 25 °C         | 1 ± 0.05 %-vol: 21 ± 0.2 %-vol; 50 ± 0.5 %-vol                                                                                                               |
| Drift at Room Temperature | < 1 % per week                                                                                                                                               |
| Sensor Cap                | ODO Cap H2                                                                                                                                                   |
| Electrolyte               | None                                                                                                                                                         |
| Oxygen Consumption        | None                                                                                                                                                         |
| Temperature Sensor        | NTC 22 kOhm                                                                                                                                                  |
| Configurable Values       | DO: mbar; %-sat; %-vol; µg/l; mg/l; ppb/ppm (gas); ppb/ppm (dissolved oxygen); Temperature: °C                                                               |
| Diameter                  | 12 mm                                                                                                                                                        |
| Process Connection        | PG13,5                                                                                                                                                       |
| Wetted Parts              | Stainless Steel 1.4435<br>PTFE (Polytetrafluoroethylene)<br>EPDM (Ethylene propylene elastomer)<br>See compliance details in Material Specification document |
| Surface Quality of Steel  | Ra < 0.4 µm (N5)                                                                                                                                             |
| 4 to 20 mA Current Range  | 3.5 to 22 mA                                                                                                                                                 |
| Analog Interface 1        | Two wire sink 4 to 20 mA for DO, programmable                                                                                                                |
| 4 to 20 mA Accuracy       | < 0.3 % current value + 0.05 mA                                                                                                                              |
| Transmitting Power        | Max. 4 dBm                                                                                                                                                   |
| Digital Interface         | Bluetooth 4.0<br>HART Version 7.0                                                                                                                            |
| Operating Voltage         | 18 to 30 VDC                                                                                                                                                 |
| Serial Number             | Yes                                                                                                                                                          |
| Response Time             | t98% < 60 s at 25 °C                                                                                                                                         |
| Certificate               | Yes, with measured current in air                                                                                                                            |
| ATEX Approval             | II 1G Ex ia IIC T6/T5/T4/T3 Ga; II 1D Ex ia IIIC T135°C Da                                                                                                   |

|                                    |                                                              |
|------------------------------------|--------------------------------------------------------------|
| <b>IECEx Approval</b>              | II 1G Ex ia IIC T6/T5/T4/T3 Ga; II 1D Ex ia IIIC T135°C Da   |
| <b>Autoclavable</b>                | No                                                           |
| <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 D**

<https://www.hamiltoncompany.com/sensors/243667-122>