

VisiPro DO - Optical DO Sensor

First Optical DO Sensor with ATEX Approval

VisiPro DO optical technology improves the measuring performance and simplifies maintenance. Improvements compared to conventional electrochemical (amperometric) sensors include flow independence, rapid startup with no polarization time, and simplified maintenance.

With their integrated transmitter, VisiPro DO sensors enable direct communication to the process control system via 2 wire 4-20 mA standard signal or digital HART. All relevant sensor data including calibration and diagnostic information are stored in the sensor head, simplifying calibration and maintenance. Additional wireless communication directly from the sensor to your computer simplify laboratory calibration, configuration, and maintenance.

The VisiPro DO is the only optical dissolved oxygen (DO) sensor for use in explosive environment.

Features

ATEX / IECEx certification

Reliable and robust optical measurement

Easy installation with 2-wire connection

Laboratory calibration possible with HDM

Direct analog or digital HART communication to the process control system via 4-20 mA signal with integrated transmitter and suitable for use in chemical or pharmaceutical industry

Applications

Blanketing (Nitrogen)

Inerting

Sparging

Purging



Product Specifications

Measurement principle	Oxygen dependent luminescence quenching
Measuring range	4 ppb to 25 ppm (DO) or 0.1 to 600 mbar (pO ₂)
Oxygen consumption	None
Required flow	None
Response time t98%	< 30 s at 25°C, from air to nitrogen
Temperature sensor	NTC 22 kOhm
Configurable values	DO: mbar; %-sat; %-vol; µg/l; mg/l; ppb/ppm (gas); ppb/ppm (dissolved oxygen); Temperature: °C
Process temperature	-20 to 140°C; the sensor provides no DO reading above 85°C
Pressure range	0 to 12 bar
Protection rating	IP 68
a-length	120 mm
Process connection	PG13,5
Electrical connector	M12
Analog interface 1	4-20 mA for DO, programmable
4 - 20 mA accuracy	< 0.3% current value + 0.05 mA
4 - 20 mA current range	3.5 to 22 mA
Operating voltage	18 to 30 VDC
Wetted parts	Stainless steel 1.4435, Silicone (FDA approved), EPDM
Electrolyte	None
Digital HART interface	HART Version 7.0
Accuracy at 25 °C	1 ± 0.05%-vol; 21± 0.2%-vol; 50 ± 0.5%-vol
Analog interface type	Two wire sink needs to be powered by external power supply

Ordering Information

Part Number	Description	Remarks / Certification
HT 243400	VisiPro DO Ex 120 without ODO Cap	ATEX, IECEx
HT 243401	VisiPro DO Ex 225 without ODO Cap	ATEX, IECEx
HT 243420	VisiPro DO 120 without ODO Cap	NA
HT 243421	VisiPro DO 225 without ODO Cap	NA
HT 243515	ODO cap HO	Hygenic application
HT 243505	ODO cap H2	Chemical application

Note : select sensor with suitable cap

Accessories

Part Number	Description
HT 355283	Sensor Cable M12 3m
HT 355284	Sensor Cable M12 5m
HT 355285	Sensor Cable M12 10m
HT 355288	Sensor Power Cable M12
HT 243499	Wireless Converter BT



Forbes Marshall
Krohne Marshall
Forbes Marshall Arca
Codel International
Forbes Solar
Forbes Vyncke
Forbes Marshall Steam Systems

Opp 106th Milestone
Bombay Poona Road
Kasarwadi, Pune - 411 034, INDIA
Tel : 91(0)20-27145595, 39858555
Fax : 91(0)20-27147413

Email : pasales@forbesmarshall.com, ccmidc@forbesmarshall.com

© All rights reserved. Any reproduction or distribution in part or as a whole without written permission of Forbes Marshall Pvt Ltd, its associate companies or its subsidiaries ("FM Group") is prohibited.

Information, designs or specifications in this document are subject to change without notice. Responsibility for suitability, selection, installation, use, operation or maintenance of the product(s) rests solely with the purchaser and/or user. The contents of this document are presented for informational purposes only. FM Group disclaims liabilities or losses that may be incurred as a consequence of the use of this information.

B-85, Phase II, Chakan Indl Area
Sawardari, Chakan, Tal. Khed
Dist. Pune - 410 501, INDIA
Tel : 91(0)2135-393400

A-34/35, MIDC H Block
Pimpri, Pune - 411 018, INDIA.
Tel : 91(0)20-27442020, 39851199
Fax : 91(0)20-27442040

CIN No.: U28996PN1985PTC037806
www.forbesmarshall.com