



SE740 Optical Oxygen Sensor

Optical oxygen measurement based on fluorescence quenching technology

Flow-independent optical oxygen sensor with fast response. Ideal for measurements in demanding hygienic environments. Steam-sterilizable, autoclavable, and CIP-capable.

Applications

Food, pharmaceuticals, fermentation, and process

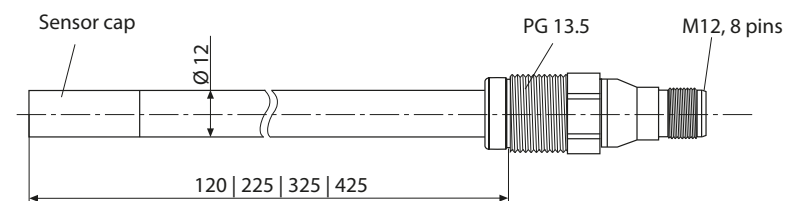
Facts and Features

- Flow-independent measuring principle
- No polarization required
- Replaceable sensor cap
- Integrated wear monitoring
- Stainless steel 1.4435
Inspection Certificate 3.1,
Ra < 0.4 µm
- FDA compliant materials
- Digital communication

Specifications

Measuring range:	DO: 4 ppb ... 25 ppm pO ₂ : 0.1 ... 600 mbar
Response time at 25 °C (air → N ₂):	98 % full scale < 30 s
Drift at 25 °C and constant conditions:	< 1 % per week
Pressure range P _{rel} :	-1 ... +12 bar
Max. CO ₂ partial pressure:	12 bar
Temperature range:	-10 ... +140 °C (steam sterilization) Oxygen measurements: 0 ... +85 °C
Process-wetted sensor parts:	stainless steel 1.4435, silicone FDA, EPDM FDA
Surface roughness of steel body:	Ra < 0.4 µm (N5)
Temperature detector:	yes, for temperature compensation
Process adaptation:	PG 13.5
Sensor connector:	M12 (8 pins)

Dimension Drawing



All dimensions in mm

Oxygen Measurement

Product Range

Sensor	Length	Order No.
SE740 optical oxygen sensor	120 mm	SE740/1
	215 mm	SE740/2
	325 mm	SE740/3
	425 mm	SE740/4

Cable	Length	Order No.	
M12 cable*	8 pins	5 m	CA/M12-005N485
		10 m	CA/M12-010N485
M12 extension cord	8 pins	10 m	CA/M12-010M12-8

Accessories	Order No.	
Sensor cap, silicone	ZU0914	
Sensor cap, PTFE	ZU0914/PTFE	
Zero oxygen solution	6 ampoules	ZU0919

* Greater lengths on request