



SE 740 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

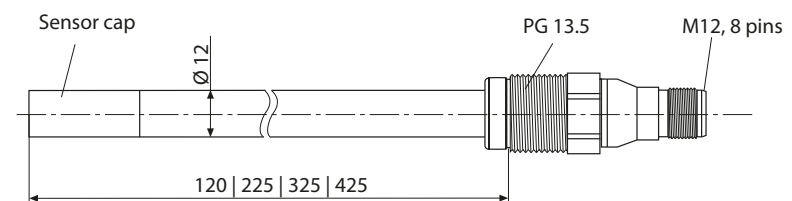
Facts and Features

- 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

	Length	Order No.
SE 740 optical oxygen sensor	120 mm	SE 740/1
	215 mm	SE 740/2
	325 mm	SE 740/3
	425 mm	SE 740/4

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		ZU 0914
Sensor cap, PTFE		ZU 0914/PTFE
Zero oxygen solution	6 ampoules	ZU 0919

* Greater lengths on request