



## 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

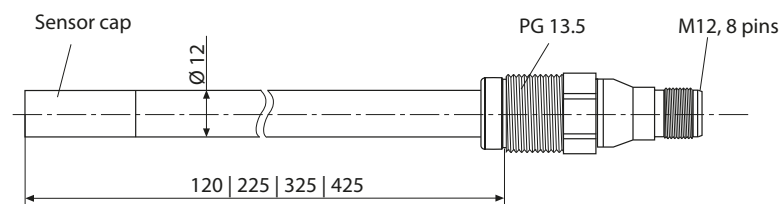
### Facts and Features

- 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 <sub>2</sub> : 0.1 ... 600 mbar
Response time at 25 °C (air → N <sub>2</sub> ):	98 % full scale < 30 s
Drift at 25 °C and constant conditions:	< 1 % per week
Pressure range P <sub>rel</sub> :	-1 ... +12 bar
Max. CO <sub>2</sub> 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	<b>SE 740/1</b>
	215 mm	<b>SE 740/2</b>
	325 mm	<b>SE 740/3</b>
	425 mm	<b>SE 740/4</b>

## Cable

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

## Accessories

		Order No.
Sensor cap, silicone		<b>ZU 0914</b>
Sensor cap, PTFE		<b>ZU 0914/PTFE</b>
Zero oxygen solution	6 ampoules	<b>ZU 0919</b>

\* Greater lengths on request