

Overview



O2.sens

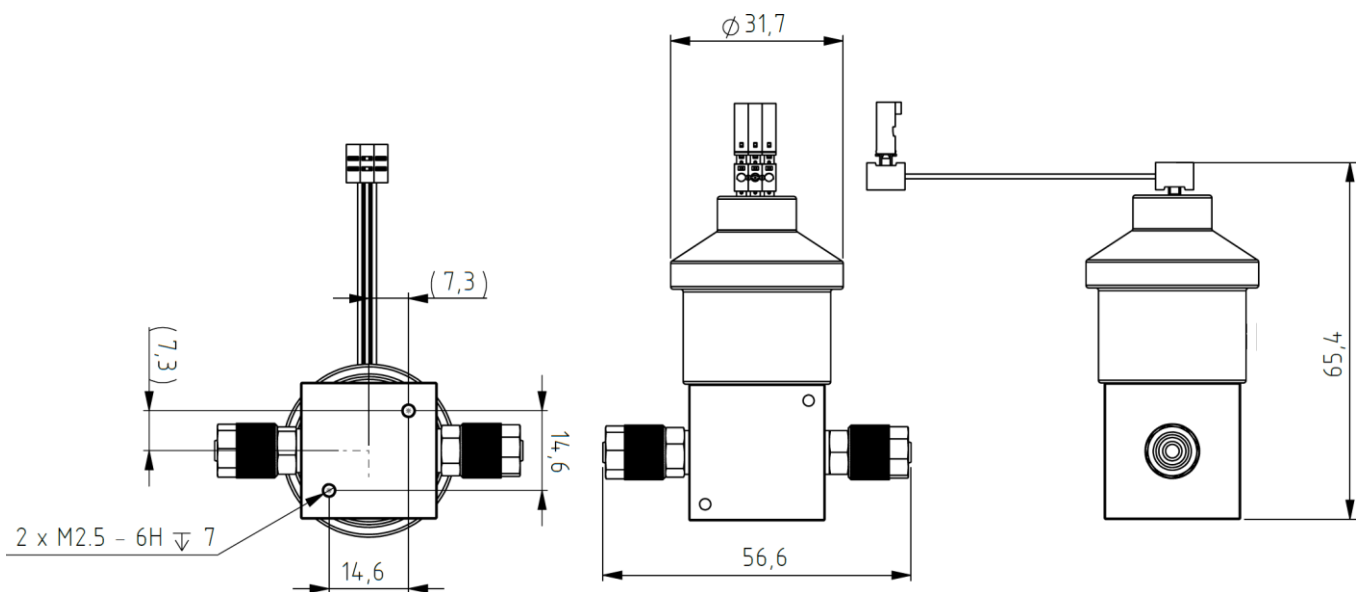
Applications

- > Compatible with **ULTRA.sens®** **INFRA.sens®** & **KOMBI.sens®** series
- > please check technical data table

Features & Benefits

- > 3 different types
- > high accuracy
- > small size
- > easy to replace (2-point calibration)

Dimensions



Subject to change without notice. // 2022-02 Rev.02

Technical Data

General features			
Dimensions [H x W x L]	65.4mm x 31.7mm x 56.6mm		
Weight	70g		
Tube connector	4/6mm tube		
Measurement range	0 – 25Vol.% O ₂	0 – 100Vol.% O ₂	0.5 – 35Vol.% O ₂
Application	Automotive exhaust gas analyzer	Industrial, fully CO ₂ resistant	Industrial, withstands high CO ₂ concentrations, shows high resistivity to acid gases
Medium contact materials	ABS, FKM, PPS, PTFE, stainless steel	ABS, PVC, PPS, PTFE, stainless steel	ABS, PVC, PPS, PTFE, stainless steel
Expected operating life	> 1,000,000Vol.% O ₂ h	~ 1,200,000Vol.% O ₂ h	~ 1,200,000Vol.% O ₂ h
Sensor lifetime	4 years, depending on application	6 years @ ambient air, depending on application	6 years @ ambient air
Measuring response ¹			
Resolution	0.1Vol.%	0.1Vol.%	0.1Vol.%
Response time(t ₉₀)	< 3.5s	< 10s	< 5s
Drift ²	< 1% per month	< 1% per month	< 3% per month
Linearity Error	-	0 to 2Vol.% O ₂ : ± 0.1 abs. 2.1 to 100Vol.%O ₂ : ± 0.05 rel.	0 to 2Vol.% O ₂ : ± 0.1 abs. 2.1 to 35Vol.% O ₂ : ± 0.05 rel.
Repeatability ³	-	± 1Vol.% O ₂	± 1Vol.% O ₂
Influence of Humidity	-0.03% rel.O ₂ reading/% RH	-0.03% rel.O ₂ reading/% RH	-0.03% rel.O ₂ reading/% RH
Interferences	-	<p>< 20ppm O₂ response to: 100Vol.% CO; 100Vol.% CO₂; 100Vol.% C₃H₈; 3000ppm NO in N₂; 1000ppm C₆H₆ in N₂; 500ppm SO₂ in N₂</p> <p>< 100ppm O₂ response to: 3000ppm C₂H₆O; 3000ppm C₄H₁₀S</p> <p>< 200ppm O₂ response to: 3000ppm C₂H₆S₂</p> <p>< 400ppm O₂ response to: 100Vol.% H₂</p> <p>< 500ppm O₂ response to: 2000ppm H₂S in N₂</p>	<p>< 20ppm O₂ response to: 100Vol.% CO; 100Vol.% CO₂; 100Vol.% C₃H₈; 1000ppm C₆H₆ in N₂; 2000ppm H₂S in N₂</p> <p><20000ppm O₂ response to: 3000ppm NO in N₂; 1000ppm H₂ in N₂; 500ppm SO₂ in N₂</p>
Climatic conditions			
Operating temperature	0 – 40 °C intermittent 40 – 50 °C	0 – 45°C	0 – 50°C
Storage temperature	-20 – 40 °C 5 – 25 °C recommended 40 – 50 °C max. 1 week		5 – 30 °C recommended -20 – 50 °C maximum
Air pressure	650 – 1250 hPa (mbar)	700 – 1250hPa (mbar)	600 – 1250 hPa (mbar)
Ambient humidity	0 – 95% rel. humidity (not condensing)		

F.S. full scale ¹ related to P_a = 1013hPa; T_a = 25°C ; RH = 50% ; flow = 2.5l/min ² averaged across 12 months ³ @ 100Vol.% O₂ applied for 5min