

8. Specification

(All specification basis on environment of 25°C, 50 %RH and 1013 hPa)

Sensor for GMH 369x-Series: for GMH 569x-Series:		GOEL 381 GGO 381, GOO 381, GGA 381 GGO 581, GOO 581, GGA 581	GOEL 370 (Rev 2) GGO 370, GOO 370, GGA 370 GGO 570, GOO 570, GGA 570
application		Diving gas *1) precise measuring at low O₂ (e.g. <0.5 vol.-% O₂) or concentrations above 35 vol.-% O₂	Diving gas *1) Protection gases with CO₂ concentrations and O₂ concentrations below < 35 vol.-% O₂
Permanent operation with high CO ₂ -concentrations		-	+++
Short time exposition to CO ₂ *2)		+	+++
Use up to 100 vol.-% O ₂		+++	-
Use below 0.2 vol.-% O ₂		+++	+
Speed /t ₉₀		++ / <10s	++ / <10s
Lifetime hours per vol.-% O ₂ / at air		+/500 000 %h/ >2 years	++/1 200 000 %h/ max. 6 years
Diving gas application *1)		+++	+++
Meas. ranges	O ₂ partial pressure	0 ... 1100 hPa	0 ... 350 hPa
	O ₂ concentration	0.0 ... 100.0 vol. % O ₂	0.0 ... 35.0 vol. % O ₂ (lower accuracy above)
Accuracy:	< 35 vol. % O ₂	±0.25 vol. % O ₂	-0.2 ... +0.35 vol. % O ₂
	35 - 100 vol. % O ₂	±0.25 vol. % O ₂ *2)	not specified
Electrolyte:		basic	acidic
Connection:		approx. 1 m cable. Temperature sensor integrated	
Storage temperature:		-15 to +60 °C	
Operating ambient		0 ... +45 °C	
Ambient pressure:		0.6 ... 1.75 bar abs.	
Over-/under pressure:		max. 0.25 bar (pressure difference sensor membrane to ambient – sensor screwed-in)	
Material in contact media		PA, PPS, PTFE, stainless steel	ABS, PPS, PTFE, stainless steel, NBR
Cross sensitive		No to He, H ₂ und CO	<20 ppm O ₂ response to 100 % Vol. % CO , 100 % Vol. % CO ₂ 100 % Vol. % C ₃ H ₈ 1000 ppm Benzene balance N ₂ 3000 ppm NO ₂ balance to N ₂ 1000 ppm H ₂ balance to N ₂ 2000 ppm H ₂ S balance to N ₂ 1000 ppm SO ₂ balance to N ₂
Warranty period:		12 months (assuming appropriate usage according to the manual)	
Weight:		approx. 135 g (GGO...) or approx. 145 g (GOO, GGA...)	
Dimension:		GGO, GGA: approx. Ø 36 mm x 95 mm (150 mm incl. anti-buckling glanding), GOO: approx. Ø 40 mm x 105 mm (160 mm incl. anti-buckling glanding) Housing with M16 x 1-screw thread (sensor can be connected to line tubes by means of an additional adapter)	
Directives:		The product conform to the following Directives of the Council for the harmonisation of legal regulations of the Member States 2011/65/EU, incl. 2015/863 RoHS 2 and RoHS 3 Applied harmonised standards: EN IEC 63000:2018	

*1) Sensors are not allowed to use in „under-water-diving-application“ (e.g. Rebreather)

*2) please refer chapter 2.2