

Product Specification of:

Medical Oxygen Sensor

Type: M-05

Part Number: 410007

Nuova ID: E-33/0

RoHS compliant and SVHC free

Meets the applicable requirements of ISO 80601-2-55

Comes with CE marking. further regulatory registrations available upon request

Produced under EN ISO 13485 Quality Management System

DOCUMENT PURPOSE

The purpose of this document is to present the performance specification and key features of the sensor.

This document should be used in conjunction with the Operating Manual of the instrument and the Product Safety Data Sheet of the sensor.

KEY FEATURE

Current output gas sensor that shows high signal stability at low cross interferences to anesthesia gases combined with a superior linearity over the entire range.

Measurement Range:	0 to 100 Vol.%
Expected Operating Life:	> 300.000 Vol.%h
Measurement Range:Electrical Connector:	gold-plated slip rings on PCB
Initial Output Signal:	200 μ A $\pm$ 40 μ A @ dry ambient air
Response Time t90:	< 20 s
Signal Drift (long-term):	$\leq$ 2 Vol.%O ₂ /month @ air, averaged across 12 month
Operating Temperature:	10 to 40 °C
Pressure Range:	700 to 1250 hPa
Linearity Error:	$\leq$ 3% @ 100% O ₂ , applied for 5 min
Zero Offset:	Less then 0.4% of oxygen equivalent @ 25 °C in 100% N ₂ applied for 3 min
Repeatability:	$\pm$ 1 % Vol. O ₂ @ 100 % O ₂ , applied for 5 min
Influence of Humidity:	- 0.03 % rel. O ₂ reading per % RH
Interferences:	according to DIN EN ISO 80601-2-55
Weight:	approximately 32g
Material in Contact with Media:	PVDF, PPS, PTFE, stainless steel

STORAGE CONDITIONS

Temperature Range:	Recommended: 5 to 30 °C Maximumm: -20 to 50 °C ($\leq$ 10h)
Humidity:	up to 100 % RH, non-condensing
Shelf Life:	< 3 months recommended

STORAGE CONDITIONS

Product	Part-No.	Housing Colour	Other Specifics
O2 - Sensor M-05	41 00 07	grey	flat base

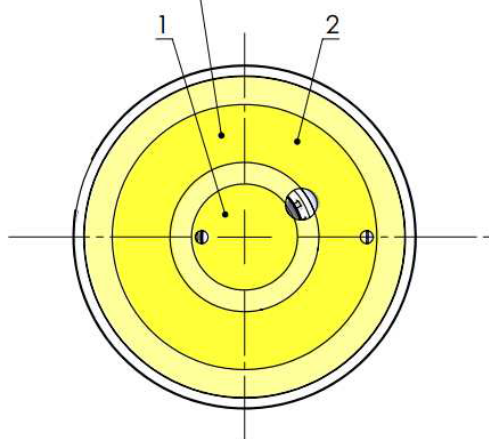
Important Note: All characteristics are based on conditions at 25 °C, 50 %rH, 1013 hPa and a gas flow of > 2.5 L_g/min. For sensor performance data under other conditions, contact ITG.

TECHNICAL DRAWING

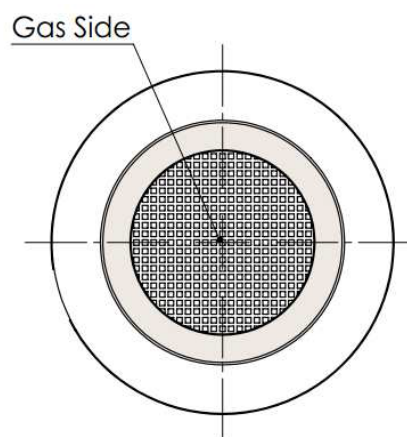
Sensor	Part Number	Colour Housing	Electrical Slip Ring Assignment	
			Slip Ring 1	Slip Ring 2
M-05	410007	white	minus (-)	plus (+)

Top View

Electrical Connector: Ring Circuit Board with two gold-plated Slip Rings



Bottom View



Front View

