

Product Specification of:

Medical Oxygen Sensor

Type: M-16PT

Part Number: 470016

Nuova ID: E-16/PT

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

Long-life gas sensor that show high signal stability as well as low

Measurement Range:	0 to 100 Vol.%
Expected Operating Life:	~ 1,200.000 Vol.%h
Sensor Lifetime:	< 6 years @ ambient air, depending on application
Electrical Connector:	3 Pin mini spox plug
Initial Output Signal:	9.5 to 16.0 mV @ dry ambient air
Response Time t90:	< 12 s
Signal Drift (long-term):	≤ 1 Vol.%O ₂ /month @ air, averaged across 12 months
Operating Temperature:	10 to 40 °C
Pressure Range:	700 to 1250 hPa
Linearity Error:	≤ 3% @ 100% O ₂ , applied for 5 min
Zero Offset:	≤ 0.3 Vol.%O ₂ @ 100 Vol.%N ₂ , applied for 5 min
Repeatability:	± 1 % full scale
Influence of Humidity:	- 0.03 % rel. O ₂ reading per % RH
Temperature Compensation:	NTC
Interferences:	according to DIN EN ISO 80601-2-55
Weight:	approximately 24g
Material in Contact with Media:	PA, PPS, PTFE, stainless steel

STORAGE CONDITIONS IN UNOPENED ORIGINAL PACKAGE

Temperature Range:	Recommended: 5 to 30 °C Maximum: -20 to 50 °C (≤10h)
Humidity:	up to 100 % RH, non-condensing
Shelf Life:	< 6 months recommended

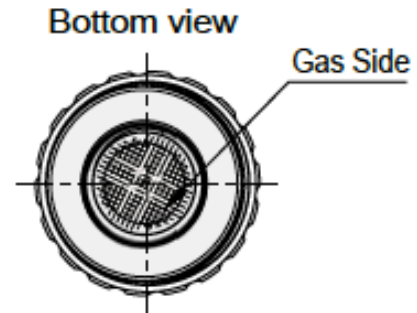
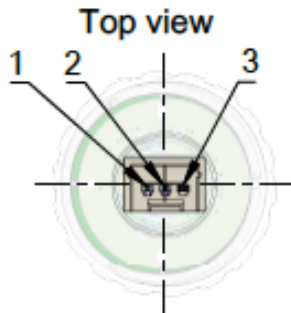
RELATED PRODUCTS

Product	Part-No.	Housing Colour	Other Specifics
O ₂ - Sensor M-16	47 00 16	white	—
O ₂ - Sensor M-16T	47 01 16	translucent	—
O ₂ - Sensor M-16HT	47 06 16	white	designed for high temperature range
O ₂ - Sensor M-16HTT	47 02 16	translucent	designed for high temperature range
O ₂ - Sensor M-16PT	47 12 16	translucent	3 Pin mini spox plug connector

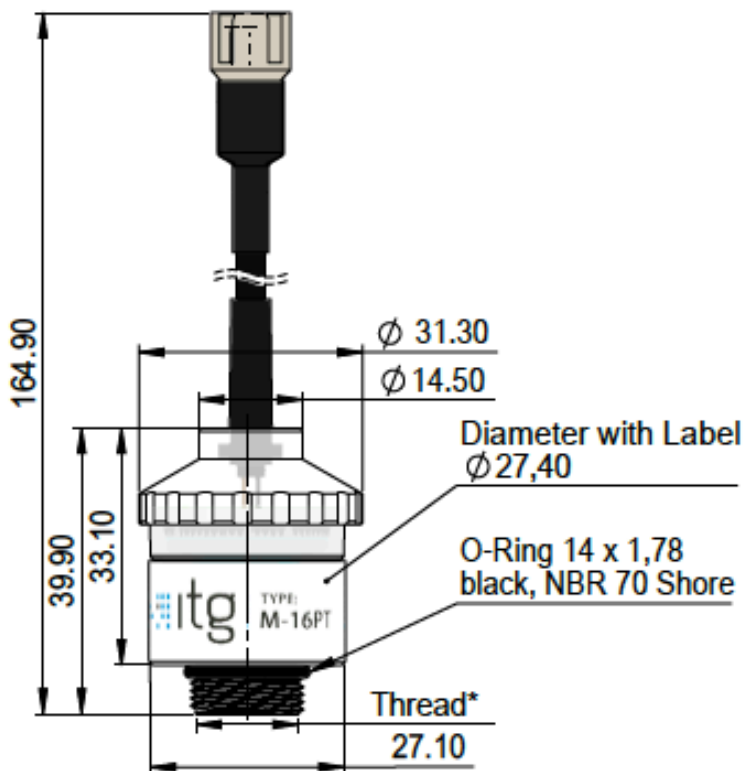
Important Note: All characteristics are based on conditions at 25 °C, 50 %rH, 1013 hPa and a gas flow of > 2.5 L_g/min. For sensor performance data under other conditions, contact ITG.

TECHNICAL DRAWING

Sensor	ITG Part number	Color			Electrical pin assignment		
		Cap	Housing	Threaded ring	Pin 1	Pin 2	Pin 3
M-16PT	471216	translucent	translucent	translucent	plus (+)	minus (-)	-



Front view



[* thread is compatible with DIN 13 M16x1 and UNEF 5/8-24]
Dimension unit: mm
Dimension tolerances: linear ± 0.5 mm , diameter ± 0.3 mm
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Valid from: 26.03.2019

This datasheet is subject to change without prior notice.

	Freigabe	Unterschrift	Datum
Konstruktion	M. Dahmani		
Entwicklung	Dr. I. Knepper		
Vertrieb	R. Böttcher		
QM	D. Gambert		