Product Specification of:

O_2 - Industrial Sensor / Type P-41A

.: KEY FEATURE :.

Sensor designed to detect trace amounts of oxygen.

All characteristics are based on conditions at 25°C, 50% RH and 1013 hPa.

Measurement Range:	1 to 10,000 ppm O_2
Sensor Lifetime:	1 year, depending on humidity and O_2 concentration
Electrical Connector:	2 x slip-rings on PCB
Initial Output Signal:	460 µA ± 120 µA ambient air
Response Times (in operation):	< 180 s from 10,000 ppm down to 1,000 ppm < 10 min from 1,000 ppm down to 250 ppm < 5 h from 10 ppm down to <1 ppm
Linearity Error:	± 2 % of signal
Pressure Dependency:	partial pressure
Operating Temperature:	0 to 50 °C
Temperature Compensation:	none
Temperature Coefficients:	$P_{coe}(x)=Ax^3+Bx^2+Cx+D$ A= 2.01 E-06 B=-2.60 E-05 C= 1.70 E-02 D= 5.61 E-01 example: signal @ T[°C]=signal @ 25°C x Pcoe @ T[°C] signal @ (0°C)=signal @ 25°C x 0.561
Weight:	approximately 35 g
Material in Contact with Media:	PVDF, PTFE, stainless steel



.: STORAGE CONDITIONS :.

Packaging:	sealed nitrogen flushed coated plastic bag
Temperature Range:	recommended: 5 to 25 °C maximum: 0 to 45 °C
Ambient Pressure:	600 to 1,750 hPa
Humidity:	up to 100 % RH
Shelf Life:	< 3 months recommended

.: RELATED PRODUCTS :.

Product	Part-No.	Measurement Range	Output Signal	Other Specifics
O_2 - Sensor P-21	48 01 12	100 to 210.000 ppm	200 µA ± 60 µA	
O_2 - Sensor P-21A	48 02 12	100 to 210.000 ppm	200 µA ± 60 µA	resistance to acid gases, hydrocarbons, hydrogen
O_2 - Sensor P-31	48 04 12	100 to 210.000 ppm	315 µA ± 70 µA	high output
O_2 - Sensor P-41	48 01 13	1 to 10.000 ppm	460 µA ± 120 µA	
O_2 - Sensor P-41A	48 02 13	1 to 10.000 ppm	400 µA ± 60 µA	resistance to acid gases, hydrocarbons, hydrogen

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