

ECO 410

O₂ analyzer / oxygen measuring device



- Modern and functional housing
- Waterproof (IP65 / IP67)
- Convenient air adjustment at the touch of a button
- Sport diver version „T“: with MOD calculation for Nitrox
- Long-life and maintenance-free sensor 3-line display / overhead display at the push of a button
- Backlight
- Robust, long battery life
- Hold-function to freeze measured values
- Min/Max-function for minimum and maximum recorded measured values
- Made in Germany

DESCRIPTION

The ECO410 deliberately focuses on the essential functions of measurement technology for reliable measurement of the O₂ concentration in gases. The sensors used, GOEL 370 and GOEL 381, which are especially suitable for wet environments, are essential for reliability and durability.

The devices also impress with their ergonomics, water protection and display lighting.

This makes the ECO410 an inexpensive and precise immersion gas detector, but it is also an inexpensive yet high-quality entry-level device for many other oxygen measurements - for example inert gas measurements.

Family Datasheet

ECO 410

O₂ analyzer / oxygen measuring device

ATTENTION:

The device is used for additional control. It does not replace an approved measuring device or safe methods for creating gas mixtures!

Display

Thanks to the backlight, the three-line LCD display offers ergonomic wide-angle visibility - by day and by night.

The HOLD function enables the display values to be frozen.

Power supply

2 powerful AA batteries, the energy-saving design and the configurable automatic switch-off function ensure long operation.

Configurable LCD backlight for further energy saving options.



ECO 410 GOEL Sensor

TECHNICAL DATA

Measurement specifications

	ECO420(T)-35 (GOEL370)	ECO420(T)-MAX (GOEL381)
Measuring range	0,0 ... 100,0 % by volume O ₂ recommended for 0.2 ... 35.0 % vol. O ₂ (outside reduced accuracy)	0,0 ... 100,0 % by volume O ₂ (also for values ≤0.2 and over 36 vol.% O ₂)
Application area	Standard for diving gas for recreational diving, protective gases with increased CO ₂ content and much more.	for shielding gases with the lowest O ₂ content or high-percentage oxygen mixtures with a low CO ₂ content
Sensor cable	0.95 m, audio plug, elastic sensor protector	
Accuracy (nominal temperature)	< 35 Vol.-% O ₂ : -0,2 ... +0,35 Vol.-% O ₂ Not specified beyond this	< 35 Vol.-% O ₂ : ±0,25 Vol.-% O ₂ 35...100 vol.-%O ₂ : ±2%*(measured value 20.9 vol.-%O ₂)
Sensor service life	at 20.9% O ₂ by volume approx. 2 years	at 20.9% O ₂ by volume > 3 years
Sport diver version	MOD calculation for nitrox up to 36%	
	0 bis + 169 ft. MOD	Resolution 1ft.
	0 bis + 60m MOD	Resolution 1m

Family Datasheet

ECO 410

O₂ analyzer / oxygen measuring device

General specifications

Display	3-line with battery status indicator, Backlight, protected by shatterproof screen, overhead display at the push of a button
Power supply	2 x AA-Alkaline batteries (scope of delivery)
Power consumption	< 1 mA
Battery life	> 3000 h typ. continuous operation (without backlight)
Automatic Power-Off	Yes, configurable by the user
Operating conditions	-20 ... +50 °C (recommended 5..30 °C); 0 ... 95 % r.h. (short-term condensation possible)
Storage temperature	-20 to 50 °C (without batteries)
Protection class	IP65 / IP67, sensor IP54
Dimensions	108 x 54 x 28 mm
Weight	approx 175 g (including sensor)
Housing	break-proof ABS, polyester (front panel)

Scope of delivery

- Hand-held measuring device with sensor (Not for -GL)
- Flow-Diverter ESA 369, T-Piece ZOT 369
- 2xAA batteries
- Manual
- Additional accessories depending on Set-Option



Flowdiverter
ESA369



T-Piece ZOT 369
for connection to
Ø 22mm hoses

Family Datasheet

ECO 410

O₂ analyzer / oxygen measuring device

ORDERING CODES

ECO410		
O ₂ analyzer / oxygen measuring device (earlier G 1690)		
1	Version	
	-	Device with permanently connected Cable and sensor protection cover, replaceable sensor
	-T	Device with permanently connected Cable and sensor protection cover, exchangeable sensor, MOD calculation NITROX
2	Sensor	
	-35	GOEL 370: 0 ... 100 vol.-% O ₂ , recommended 0.2 ... 35 % vol. O ₂₂ (outside reduced accuracy)
	-MAX	GOEL 381: 0 ... 100 vol.-% O ₂ (also for values ≤0.2 and > 35 vol.-% O ₂)
	-GL	Without sensor
3	Set-Option	
	-00	Device, battery, manual, ESA 369 + ZOT 369 (not -GL)
	-SET	Device, battery, manual, ESA 369 + ZOT 369, case GKK 252 (not -GL)
	-DIVE	Device, battery, instructions, case GKK 252, scuba tank adapter ESA 369 + ZOT 369 + GZ 5826 (not -GL)
	-00	Device, battery, manual (-GL only)
	-SET	Device, battery, manual, case GKK 252 (only -GL)
4	Delivery state	
	-00	Mounted ready for operation
	-CAN	Sensor packed in can, not mounted

Standard-Articles

ECO410-35	O ₂ -Analyser / air oxygen meter Set-Option: Instrument, battery, manual, ESA 369 + ZOT 369	Art.Nr. 486766
ECO410T-35	O ₂ -Analyser / air oxygen meter Set-Option: Instrument, battery, manual, ESA 369 + ZOT 369	Art.Nr. 487082
ECO410-MAX	O ₂ -Analyser / air oxygen meter Set-Option: Instrument, battery, manual, ESA 369 + ZOT 369	Art.Nr. 486767
ECO410T-MAX	O ₂ -Analyser / air oxygen meter Set-Option: Instrument, battery, manual, ESA 369 + ZOT 369	Art.Nr. 487092
ECO410-GL	O ₂ -Analyser / air oxygen meter Set-Option: Set-Option: Instrument, battery, manual	Art.Nr. 487074
ECO410T-GL	O ₂ -Analyser / air oxygen meter Set-Option: Set-Option: Instrument, battery, manual	Art.Nr. 487088

Family Datasheet

ECO 410

O₂ analyzer / oxygen measuring device

Accessories

Replacement parts:

GB-AA-2	Replacement batteries 2x AA	Art.-Nr. 600704
---------	-----------------------------	-----------------

Further accessories:

G1000-Cover	Rubber protection case, incl. 2 magnets	Art.-Nr. 483958
ST-G1000	Protection case, leather	Art.-Nr. 611373
GCLIP1000	Metal belt clip, adhesive	Art.-Nr. 475820
G1000-BASE	G 1000 table stand and wall suspension	Art.-Nr. 481885
GKK1000	Case	Art.-Nr. 611603

For further articles, please visit Senseca website.

