

Wide Range and Standard Function

Zirconia Oxygen Analyzer

Model : LC-750H·L

The Toray Oxygen Analyzer, Model LC-750 series, is the standard oxygen analyzer, based on Toray's long experience with the unique zirconium oxide sensing technology. It enables measurement in a very wide range; LC-750H is for medium and high concentration, and LC-750L is for low. It can perform for years with stable, reliable and precise measurement. It is suitable for controlling and monitoring of semiconductors, researches, air treating or burning process managements in combination with various options, such as simplified sampling device, filters and etc.

Features

Medium and High concentration Type

LC-750H: more details of % range

Low concentration Type

LC-750L: accurately from ppm to % order

Simple Operation Only power on and range selection

Various Option

There is a option with simplified sampling device.

(LC-750H:PC-110, 111 type, LC-750L:PC-120 type)

We can prepare for the various option of filters for many purposes.

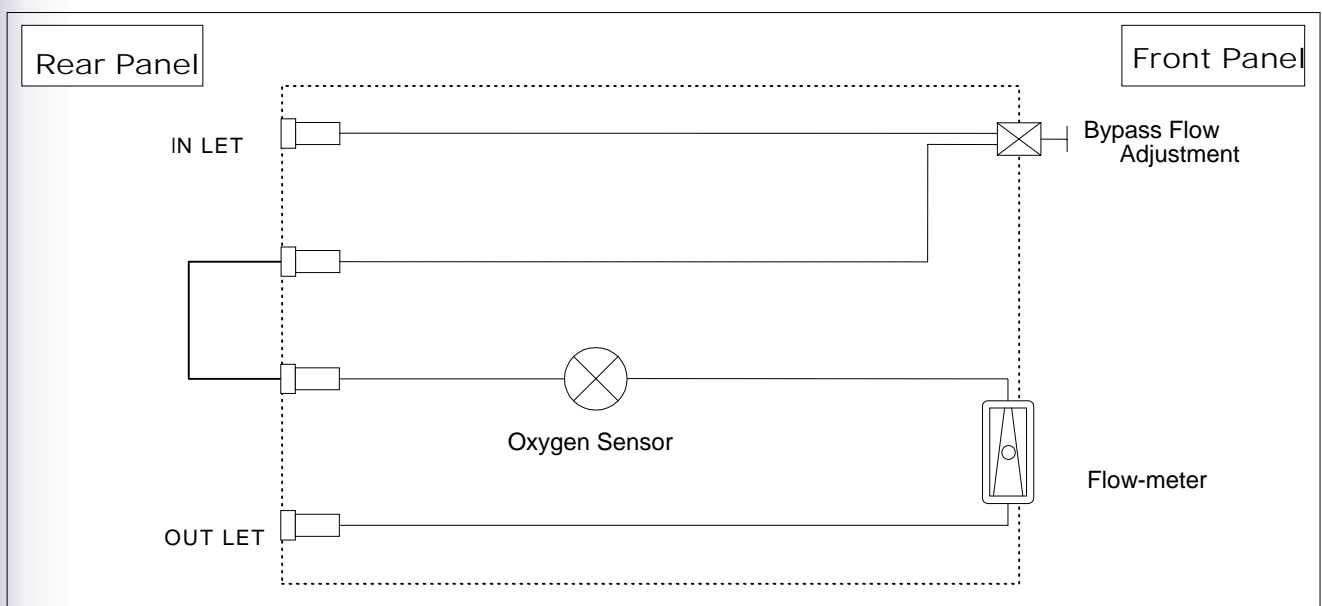
2-Type of Alarm for O₂ concentration Higher and lower limit alarm



*LC-750L/FCV (with Flow-meter and Bypass Flow Adjustment)

Measurement Principles

Toray's Zirconia Oxygen analyzers determine oxygen concentration using the conductivity of a zirconia ceramic cell. Zirconia ceramic cells only allow oxygen ions to pass through at high temperatures. With reference gas on one side and sample gas on the other, oxygen ions move from the side with the highest concentration of oxygen to that with the lowest concentration. The movement of ions generates an Electro Motive Force, which can be measured to determine the oxygen content. This is in accordance with the so-called Nernst Equation.



LC-750L/FCV(with Flow-meter and Bypass Flow Adjustment) Flow Diagram

Specifications

1. Instruments Specifications

Type	Portable / Panel Mounted *1
Display	Digital 3 Digits (Concentration Display)
Meas. Range (LC-750H)	Digital Display : 0-0.1/1//10/100vol%O ₂
Meas. Range (LC-750L)	Analog Display : 0-0.1/1//10/100vol%O ₂
Sampling Method	0-10/100/1000ppm/100%vol%O ₂
	Press-in(single)
Supply Gas	Continuos Suction(with sampling device*2)
	Press-in:100~300ml/min
	Continuos Suction:1000~2000ml/min*2
Gas Connection	INLET (Sample Gas); Rc 1/4
	OUTLET; Rc 1/4
Reference Gas	Atmospheric Gas
Weight	Approx.6kg (with sampling device:Approx. 10 kg)
Color	Munsell N3,Semi-Glossed (Black)

2. Performance

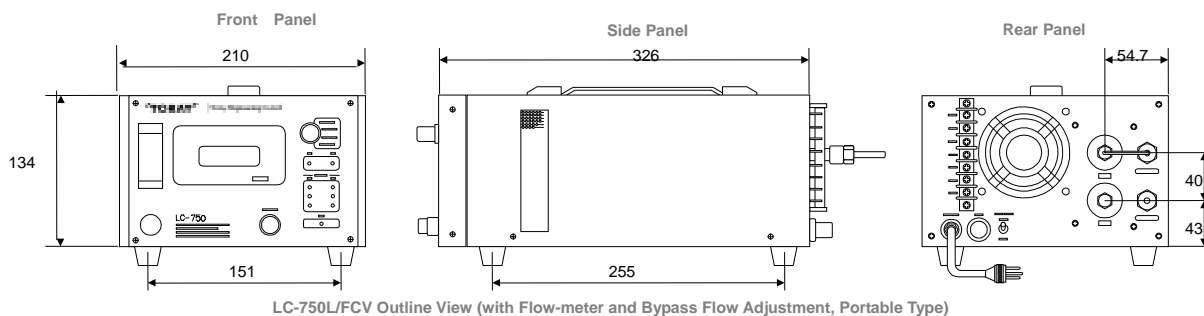
Repeatability	± 0.5% FS (at 1% Range)
	± 0.5% FS (1% Range or Lower)
	(out of guarantee for 0.1ppm or Lower)
Air Point Stability	± 1% FS/day

3. Engineering Specifications

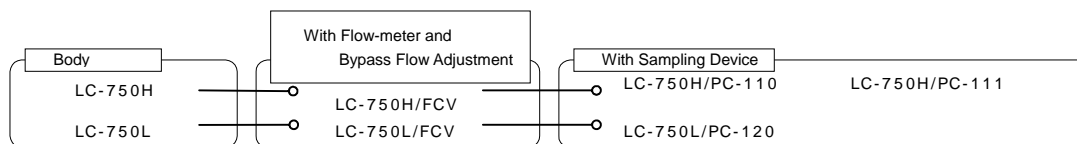
External Outputs	External Output: DC4 ~ 20mA DC0 ~ 10V
Limit Alarm	LED Display (H or L) Contact Output; 1 a, Independently Capacity; AC 110V, DC 24V, 3A
Sample Gas Conditions	No Flammable Gas, No Halogen Gas, Silica, Corrosive Gas nor Vapor shall be contained Pressure; Approx. 295 Pa required Flow Rate; 1000~2000 ml/min (With sampling device:1000~2000 ml/min*2)
Power Source	Humidity; Dew point shall be lower than ambient Temperature. Voltage; AC 100V Frequency; 50/60 Hz
Installed Location	Indoors, Non Expressive Area Ambient Temperature; 0~ 40deg.C Ambient Humidity; 45~75 %RH

*1 Please select when ordering.
2In case of selecting LC-750H/PC-110 111 or LC-750L/PC-120.

It is available for flowmeter with no needle valve or analog display option per the customers' request. Please inquire about the details to our sales staff.



LC-750H·L Composition



Cautions

For safe and correct operation, please read the instruction manual carefully before use.

The design and specification may be changed without notice for improvement.

Please contact us at the following address if you have any questions or requests.

TORAY

Toray Engineering Co.,Ltd.

Analytic Machine Sales Section (SETA)
1-45, Oe 1chome, Otsu shi, Shiga, 520-2141, Japan
Tel: +81-77-544-6224 Fax: +81-77-544-1679

Analytic Machine Sales Section (TOKYO)
Nihonbasi Muromachi Bldg. Chuo-ku,
3-chome Nihonbashi-Hongoku-cho, Tokyo, 103-0021 Japan
Tel: +81(3)3241-8461 Fax: +81(3)3241-1702
URL <http://www.toray-eng.net/sanso/>