Portable oxygen analyzer TB-F I series

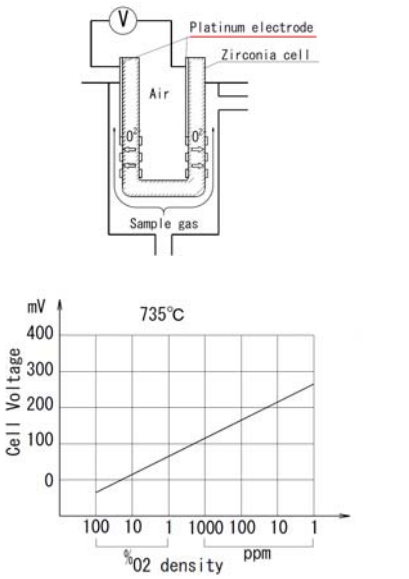
Feature

- Built-in multi-filter protects detector from dirt and corrosion
- Long sensor life (2 years warranty)
- Wide range application, from 1ppm to 100%O_2
- Serial communication function
- Simple structure, easy maintenance

Application

- Portable application
- Semiconductor application
- Reflow furnace
- Exhaust gas etc.

What's TB-F I series



Sensing cell is a closed end, 90mm length and 7mm diameter. Tube made of Zirconium oxide. When it is red hot, it becomes a oxygen measuring cell because of movement of oxygen ions in its crystal structure.

If there are two different oxygen gases on both side of the cell, a voltage is produced.

For the oxygen in combustible gases, the oxygen value is calculated from following formula:

$$E = 0.0496 \cdot T \log \frac{\text{Air (20.6\%=206,000ppm=0.206atm)}}{\text{Sample=O}_2\text{\%, O}_2\text{ppm, O}_2\text{atm}} + C$$

E: cell voltage(mV) T: absolute cell temperature

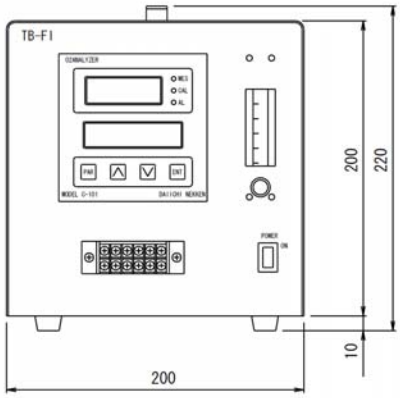
C: cell constant(mV)

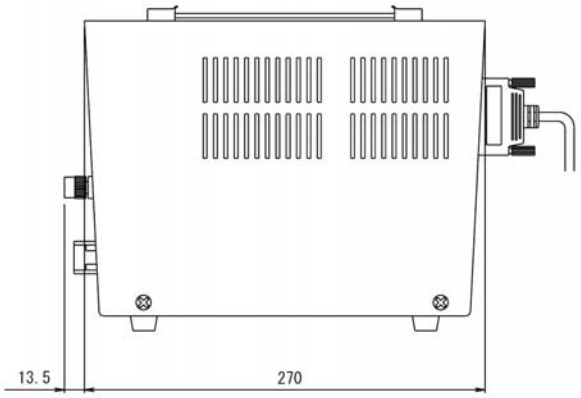
O_2atm: vol% of oxygen of the sample gas (atomic pressure)

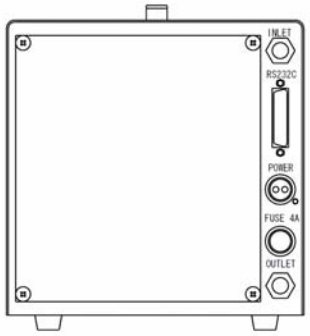
※About 2 years warranty •It is limited our original instrument only. •Consumption parts such as filter, O-ring are except .•In case of the sampling gas contains strong acidity, strong alkaline, or corrosiveness, it may be out of warranty.

Dimensions

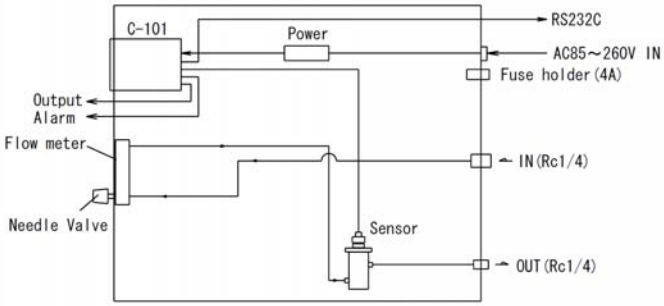
TB-FI Dimensions



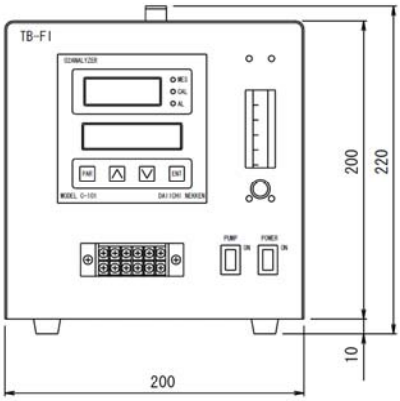


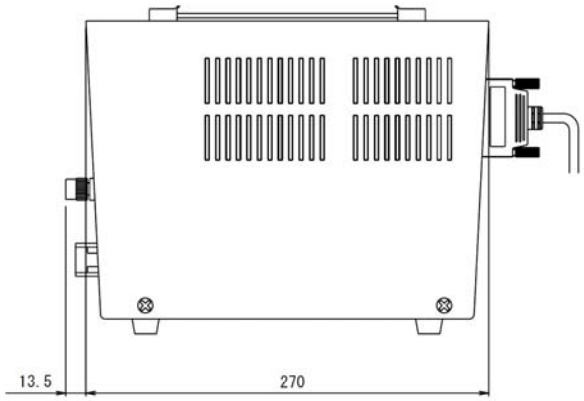


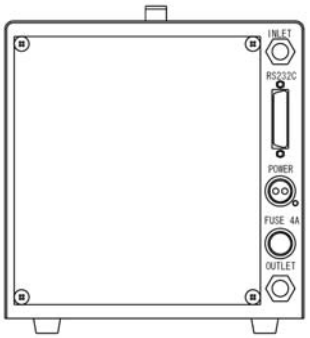
Flow Diagram



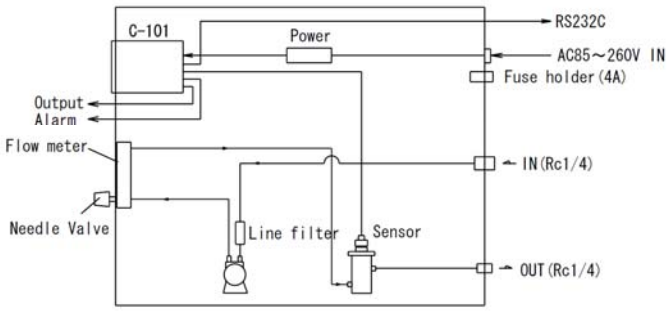
TB-FI-P Dimensions





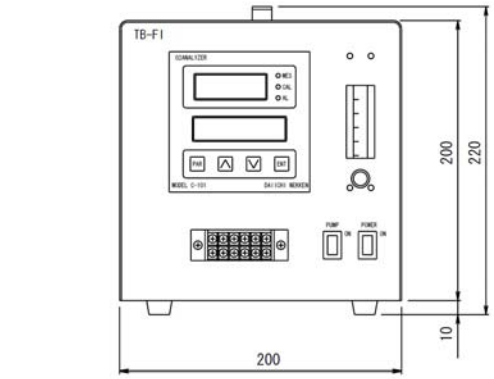


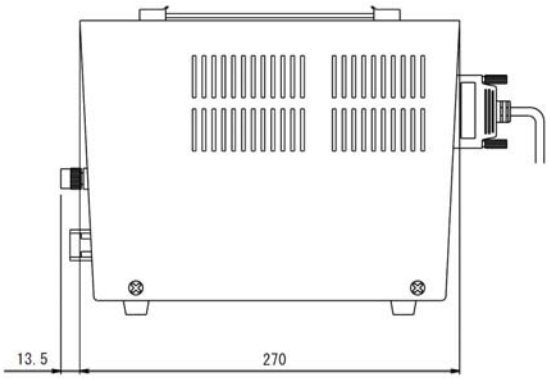
Flow Diagram

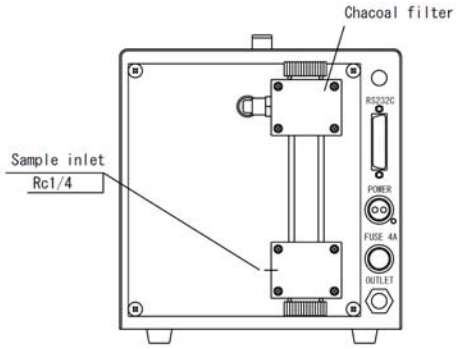


Dimensions

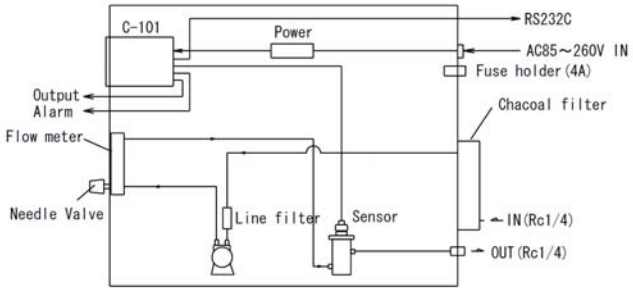
TB-FI-PC Dimensions



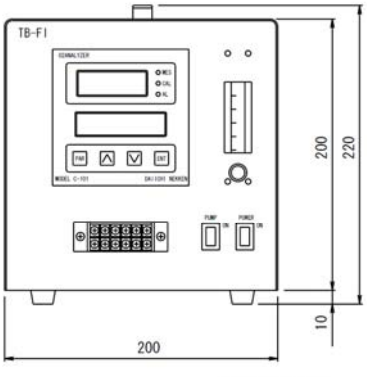


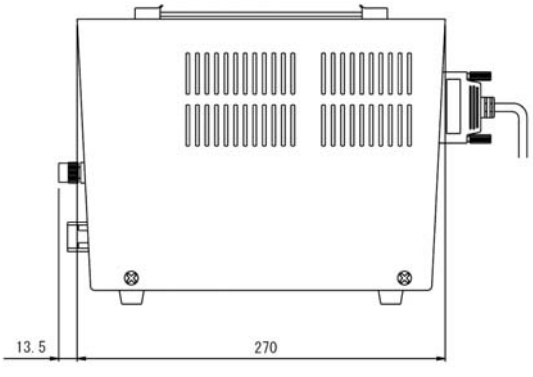


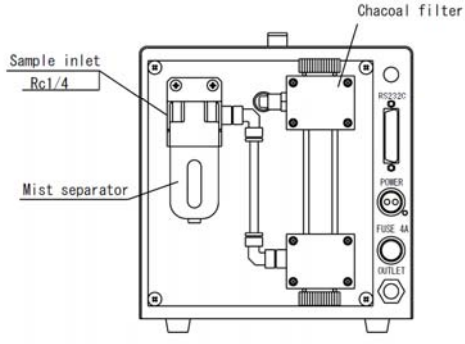
Flow Diagram



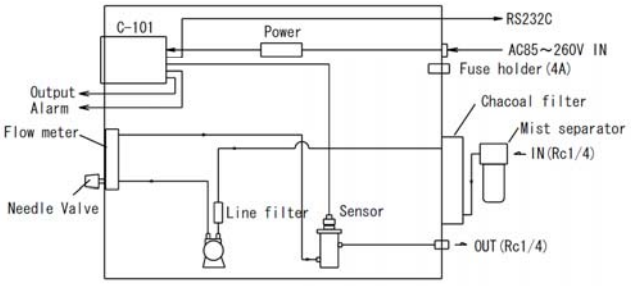
TB-FI-PR Dimensions







Flow Diagram



Specification

Principle	Zirconia electro-chemical cell	
Structure	SS box, TB-ⅡP sensor, C-101 control unit, needle valve, flow meter etc.	
Model	TB－FI	TB－FI
	TB－FI－P	TB－FI－P
	TB－FI－PC	TB－FI－PC
	TB－FI－PR	TB－FI－PR
Measuring range	1ppm～100%O_2	
Display	%：0～99.99%O_2 ppm：0～9999ppmO_2	
Output	D.C.4～20mA、0～1V or 0～10V（isolated） F.S. can be set within the range of the above-mentioned display freely. RS-232C	
Principle	Auto/Manual	
Range change	0～25%O_2／0～1000ppmO_2	
Initial setting	Output ：Hi/Lo、HHi/Hi or Lo/LLo（each A Point of contact・LCD Display） Failure：Disconnection of Heater, RTD（LCD Display）	
Alarm	1ppm～100%O_2	
Linearity Repeatability Response Drift Piping Sample Flow Rate Sample Temp. Warm up time AC Power Accessory	Large one either of less than ±1%FS or±1ppm Large one either of less than ±1%FS or±1ppm 90% reading 10sec.（Swinging to a high density side） Less than ±2%FS/week Rc1/4 0.2～2L/min. 80℃ MAX. About 20 min. 85～264VAC 3 meters of Power supply code	

※For the improvement, the specification and design may be changed without prior notice.

Inquiry

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