

# Figaro Oxygen Sensor SK-25F

### Features:

- \* Virtually no influence from CO<sub>2</sub>, CO, H<sub>2</sub>S, NO, H<sub>2</sub>
- \* Temperature compensation circuit included
- \* Good linearity
- \* No position dependency
- \* Stable output signal
- \* No external power supply required for sensor operation
- \* No warmup time is required

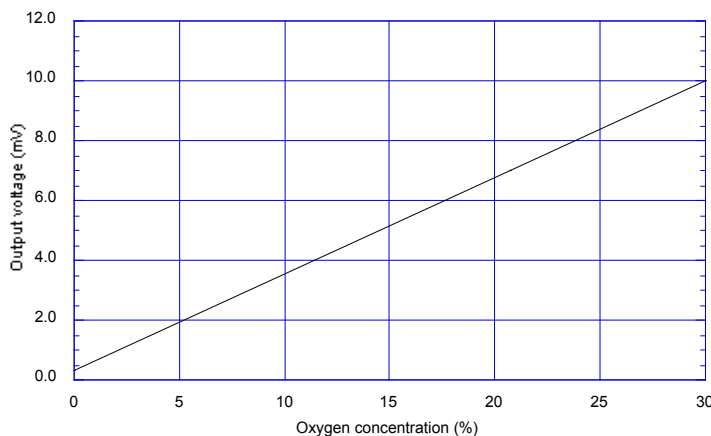
### Applications:

- \* Safety - Air conditioners, oxygen detectors, fire detectors, fuel cell systems
- \* Measurement - Oxygen monitors in flue gas
- \* Biotechnology - Oxygen incubators, anaerobic cultivators
- \* Food industry - Refrigeration, greenhouses

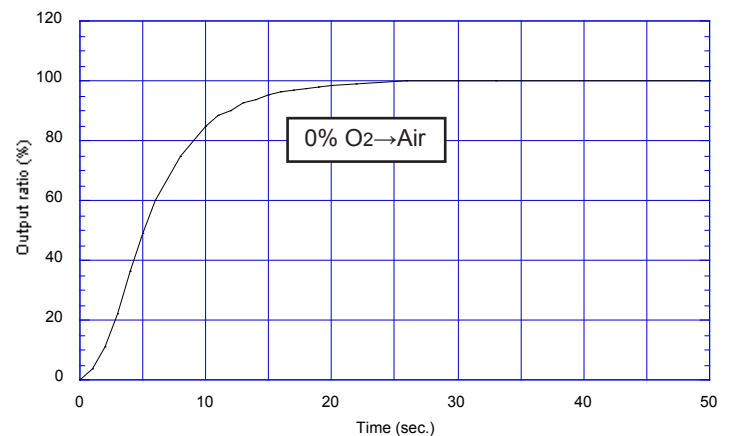
The Figaro Oxygen Sensor SK-25F is a unique galvanic cell type oxygen sensor. Its most notable features are no influence from CO<sub>2</sub>, good linearity up to 30% oxygen, and excellent chemical durability. This feature makes the sensor ideal for oxygen monitoring in various applications such as the biochemical field, food industry, and domestic safety applications.



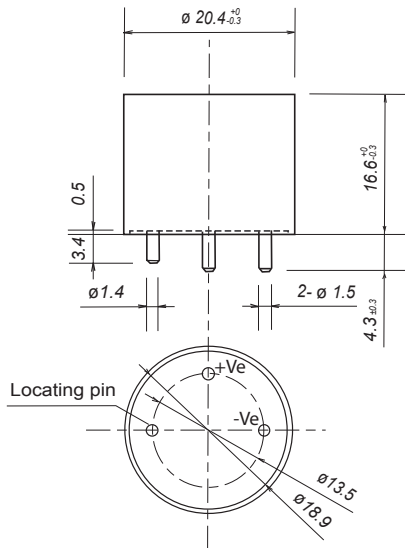
**Sensitivity characteristics** (typical values under std. test conditions)



**Response time** (typical)



## Dimensions



u/m: mm

If not specified, all tolerances are  $\pm 0.2$  mm

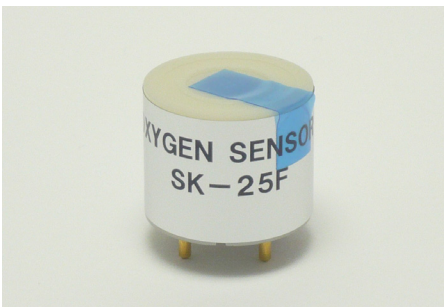
## Specifications

Item		Model
		SK-25F
Measurement range		0~30% O <sub>2</sub>
Accuracy (Note 1)		$\pm 1\%$ full scale
Operating conditions	Atmospheric pressure	1013hPa $\pm 20\%$
	Temperature	-10 $^{\circ}$ ~50 $^{\circ}$ C
	Relative humidity	0~99%RH (no condensation)
Response time (90%) (Note 2)		$\leq 15$ seconds
Initial output voltage under factory test conditions		5.5~8.5mV
Factory test conditions	Atmospheric pressure	1013hPa
	Temperature	25 $^{\circ}$ $\pm 5^{\circ}$ C
Life expectancy at 20 $^{\circ}$ C in normal air (Note 3)		approx. 3 years

### Notes:

- 1) When calibrated at both 0% and 30% of O<sub>2</sub>, accuracy in the range from 0-30% O<sub>2</sub> shall be within  $\pm 1\%$  full scale.
- 2) Sensors should be used under conditions where the air exchange is greater than 200~300ml/minute in order to obtain the response speed as specified in Table 1.
- 3) Life expectancy at 20 $^{\circ}$ C in normal air (1013hPa / 20.7% O<sub>2</sub>) is defined as the period until sensor output drops to 60% of original value.

**NOTE:** When the sensor is shipped, blue tape covers the gas diffusion holes to minimize consumption of the sensor life during storage. Before measuring sensor output, the tape should be removed.



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