

• Description

This sensor is Lead-Free and designed for the measurement of O2 concentration in gas phase. It can be used as the pin-to-pin replacement of the standard 4-series electrochemical O2 sensors made by the other manufacturers.

• Performance Characteristics

Nominal Range:	0~25 %vol oxygen
Maximum Overload:	30 %vol oxygen
Sensitivity (20 °C):	100 ± 20 µA in air
Response Time (T90):	≤ 15 s
Baseline:	±0.5%vol oxygen @20 °C
Detections limit:	0.1 %vol oxygen
Linearity:	The error is < ± 5 %FS or <0.3 %vol, whichever is the less.
	Theoretical formula: $K \cdot \ln(1/(1-c))$
Bias Voltage:	-600 mV
Warm up time:	Reading returns to within 21 %vol in air after losing bias voltage for 15 mins
Repeatability:	< ± 5 %

• Environmental

Temperature Range:	-40°C ~ 50°C
Pressure Range:	1 ± 0.1 atm
Humidity Range:	15% ~ 90%RH non-condensing

• Life Time

Long Time Output Drift:	< 5 % /year
Recommended Storage Temp:	10°C ~ 30°C
Expected Operating Life:	5 years in clean air
Storage Life:	12 months in original packaging
Warranty:	36 months

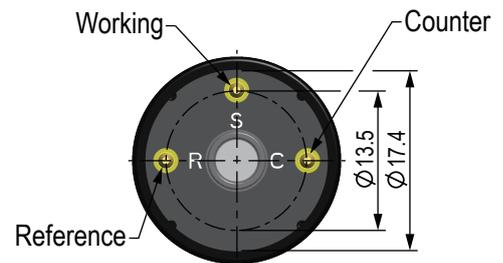
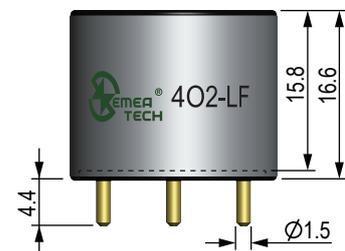
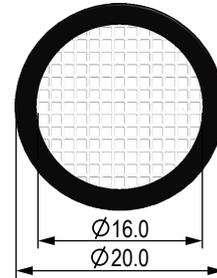
• Physical Characteristics

Housing Material:	ABS
Weight (Nominal):	5 g
Orientation:	Any
RoHS Compliance:	RoHS Compliant

• Installation

Output signals from the sensor pins are different. Inappropriate use of the pins in product design will affect the sensor functionality. Exposure to high concentrations of solvent vapors should be avoided under any condition. Mechanical overstress may cause deformation or cracks of the plastic enclosure of the sensor. If the sensor is used in extreme environmental conditions, please contact us for more details.

• Product Dimensions



All dimensions in mm
All tolerances ± 0.10 mm unless otherwise stated

• Note

The performance data in this document are conducted by using SemeaTech recommended test circuitry and test environment at 20°C, 50 %RH and 1 atm. Sensor performance varies under different environmental conditions. Please contact us if you need more details.

