Caution!

Please carefully read the followings before using the oxygen sensor products.

1.Applications for medical appliances, life-support equipment and low oxygen detectors

(1) Fujikura products are not designed, intended or approved for use as components of surgical or life support systems, or other applications that may cause injury or death as a result of failure. In unapproved applications or uses where the customer implies, directly or indirectly, resultant injuries or deaths are due to Fujikura, Fujikura affiliates and agencies (citing for example, a design or manufacture fault), Fujikura, Fujikura affiliates and agencies shall be free from responsibility relating to any claims, costs, losses, and compensation.

(2) When a Fujikura product is to be used in medical appliances and oxygen detectors other than those mentioned above, it is strongly advised that fail-safe designs are established. Fujikura should be consulted for the necessary information.

2.Service life and guarantee period

(1) The end of service life shall be defined as the time when the output no longer meets the specified precision.

(2) The guarantee period is for one year from the date of shipment. During the guarantee period, should defects occur under normal conditions of use as specified in the manual and within the service life, the product will be repaired or replaced without charge. However, a repair or replacement fee will be charged in the following cases.

Defect or damage due to inappropriate transportation or handling after delivery.
Defect or damage caused by misuse, abuse or careless handling.
Defect or damage due to unauthorized repairs or changes in configuration
Damage to the cosmetic appearance caused during use
Damage from fire, earthquake, flood or other natural disasters and abnormal voltage.

3.Operational precautions

3.1 Measurement of atmospheric gases

(1) Calibration gas

The sensor should be adjusted with a calibration gas that is a mixture of nitrogen, N_2 (or Argon, Ar) and oxygen, O_2. Other balance gases may result in incorrect measurements.

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(2) Combustible gases

An atmosphere continuing combustible gases such as methane, alcohol, hydrogen, carbon monoxide and nitrogen oxides (NOx) may cause errors in measurement. Since the sensor element functions at 450°C, gases that ignite below that temperature must not be used.

(3) Silicon gases

Never use silicon gases containing siloxane, as these gases react with the sensor and produce oxides, destroying the performance of the sensor over a very short period.

(4) Fluorocarbons

Do not use freons and others that contain halogens (F, Cl and Br), as these gasses react with materials inside the sensor and damage the performance.

(5) Sulfur oxides and hydrogen sulfide

Never use sulfur oxides (SOx) and hydrogen sulfide (H_2S), as they react with the sensor and destroy the performance of the sensor over a very short period.

3.2 Operating conditions

(1) Dust and oil mist

Employ a filter system to eliminate dust and oil mists that clog the sensor and analyzer filter, resulting in problems, measurement errors and incorrect responses.

(2) Water and condensation moisture

Contact of the sensor with water may destroy the sensor. Exclude water from the system.

3.3 Others

(1) Do not touch the sensor mesh while in operation, since the sensor mesh is heated to 50 - 80°C.

(2) Do not subject the sensor to a shock of 10G or greater which may cause breaks in the wiring and cracks in the sensor chip.

(3) The sensor element is made of a ceramic material. Never expose it to heat suddenly as this could destroy the element.

4. Others

Any product described in the catalogues may be altered without prior notice to improve reliability, function or design. Fujikura is not responsible for any incidents due to application of products and circuits described in the catalogues. No Fujikura patents or rights are licensed to a third party.

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