



Oxygen Probe Type RA-S/W

Special Features:

- Outer sheath (for probe ST) is made of special material Sandvik 253 MA. Schedule 40 thickness which can withstand both carburising and oxidising atmospheres. Even when exposed to high temperature and mounting horizontally, this does not cause bending.
- Using special catalyst, the internal probe resistance has been considerably reduced progressively providing accurate signal and faster response, over long periods.
- **MESA has provided an additional and much stronger, platinum catalyst surrounding of the zirconia pellet (inside & outside). The sensor with additional catalyst (in shape of a coil spring). Spring is made of 0.5 mm diameter pure platinum wire, approximate weight 1 gm. Similarly platinum wire spring (0.2 mm diameter) is also provided on 4 bore ceramic tube which is located inside the alumina sensor tube. There for, we expect to increase life time of catalyst.**

Advantages:

- Instantaneous response (<1 second) to the combustion reaction which results in tighter control and greater safety.
- Probes of Type "RA-..." do not require heating to 700°C, thus no heater is necessary. This means lower maintenance cost, a more reliable probe and a safer probe with no risk of explosion.
- Installation at the rear of the package boiler is easier. In many cases, the probe can be inserted through a sight glass port or refractory plug. Data evaluation and processing are possible via additional software which is included
- Probes of Type "RA-S/W" are characterised by robust construction and are designed to withstand aggressive furnace atmospheres and temperatures between 600-1000°C. Further these probes can be refurbished to increase service life and maintain operating efficiency. Oxygen Probes incorporate a TC as an option.
- MESA has been in this field for over 30 years and has got vast accumulated experience. This experience is used in engineering and supply of oxygen probe systems to achieve tighter process and quality control.

Technical Data

Weight:

1,5 kg

Immersion depth:

Approximately 80 - 100 mm minimum.

Output:

1.00 to 1.30 Vdc over operating range.

Readout:

% oxygen sensors should be used with controlling, recording and indicating instruments having an input impedance of 8 megohms or higher

Thermal and mechanical shock:

The special alloy outer protection tube protects against both thermal and mechanical shock. As with any precision instrument, take reasonable care when handling and installing.

Accuracy:

± 0.05 weight percent carbon in normal operating range

Response time:

Less than 1.0 second.

Reference air:

Uncontaminated air at maximum rate of 236 cc per minute=0.5 SCFH (standard cubic feet per hour).

Protection tube:

Special alloy is resistant to corrosion and oxidation up to 2012°F (1100°C).

Operating temperature:

1400°F (760°C) to 2012°F (1100°C)

Termocouple:

Type RA-S....: Thermocouple type S

Type RA-W....: Without thermocouple .

Mechanical dimension of oxygen probe type RA-S/W

