

# WDG-IV UOP/RP

## OXYGEN ANALYZER FOR UOP CCR PLATFORMING PROCESS

### SENSOR

**Principle of Operation:** Close-coupled nitrogen-aspirated oxygen analyzer using zirconium oxide for net oxygen measurement.

**Output Range:** From 0-1% to 0-100%

**Accuracy:**  $\pm 0.75\%$  of measured value or  $\pm 0.05\%$  oxygen, whichever is greater.

**Response Time:** 63% of a step change <12 sec; 90% of a step change <16 sec.

**Drift:** < 0.1% of cell output per month (<0.005% O<sub>2</sub> per month with 2% O<sub>2</sub> applied)

**Aspirator Requirements:** 10 to 25 scfh (4.72 to 9.4 L/min) @ 15 to 100 psig (1.05 to 7.04 kg/cm<sup>2</sup>)

**Probe Length/Type:** 27" / Hastelloy C - standard

**Max. Sample Dewpoint:** 392°F (200°C)

**Sample Pressure:** -14.69 to 60 psig (-101.31 to 413.7 kPa)

#### Environment:

Ambient Temp.: -5°F to 140°F (-20°C to 60°C) with the Div. 2 enclosure

Relative Humidity: 10% to 90%, non-condensing

**Enclosure:** Weatherproof, purged, stainless steel - wall or panel mount NEMA 4X. Bolted explosion-proof optional.

**Power Requirements:** 115 VAC,  $\pm 10\%$ , 47-63 Hz, 600 VA max.; 230 VAC,  $\pm 10\%$ , 47-63 Hz; 1850 VA max.

#### Calibration Gas Requirements:

Use calibration gases @ 45 psig (3.16 kg/cm<sup>2</sup>)

O<sub>2</sub> Span Gas: Air

O<sub>2</sub> Zero gas: 1% O<sub>2</sub>, balance N<sub>2</sub>

**Hazardous Area:** UL Listed for NEC Class I, Division 2 with the Division 2 option.

### SERIES 2000 CONTROL UNIT

**Display:** Four-line x 20-character vacuum fluorescent. Displays oxygen, time and date, cell temperature, user-programmable text, thermocouple mV or cell mV. Password protection, programmable pressure compensation and context-sensitive help are also provided.

**Analog Output:** Two isolated linear current outputs for oxygen. Select O<sub>2</sub>, cell temperature, thermocouple mV or cell mV. Each output can be 4-20 mA, 0-20 mA, 20-4 mA or 20-0 mA and is fully scalable. Hold or track during calibration and select degree of damping. Maximum load 1200 ohms.

**Alarms:** Two independent oxygen alarms, each high or low selectable. One alarm can be allocated to % oxygen, calibrate or verify. Set relays to energize or de-energize on alarm.

**Contact Rating:** 1A, 30V max. noninductive load, AC or DC

**Diagnostics:** Watchdog timer and service alarms. System test for A/D, RAM, EEPROM and keypad. Display Line 4 reserved for full text error and diagnostic messages. Twenty-entry event log.

**Communications:** RS-485, 2-way addressable.

#### Environment:

Ambient Temp: 14°F to 122°F (-10°C to 50°C)

Relative Humidity: 0% to 80%, non-condensing

**Hazardous Area:** UL Listed for NEC Class I, Division 2 areas.



**Enclosure:** GP (General Purpose) wall mount, GP 19" rack mount, GP panel mount, weatherproof UL Type 4 (NEMA 4) wall/panel mount, and stainless steel weatherproof UL Type 4X (NEMA 4X) wall/panel mount. All are UL Listed for NEC Class I, Division 2 areas. Purged and explosion-proof versions also available.

**Calibration:** Oxygen cell lifetime extender. Calibrate or verify calibration. Store last calibration and verification data. Selectable calibration gas run time and process recovery time. Timed automatic calibration with optional remote calibration unit.

**Power Requirements:** Nominal 115-230 VAC  $\pm 10\%$ , 47-63 Hz. max., 75 VA max.

#### System Compliance:

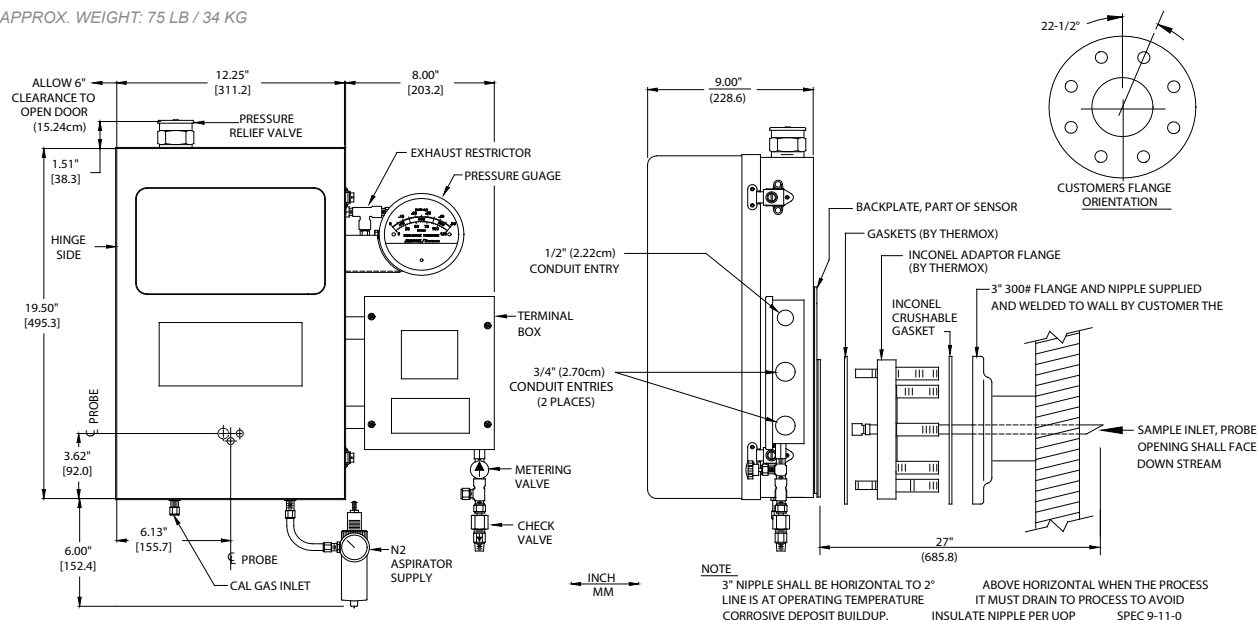
EMC Directive 89/336/EEC

Low Voltage Directive 73-23/EEC

# WDG-IV UOP/RP ANALYZER

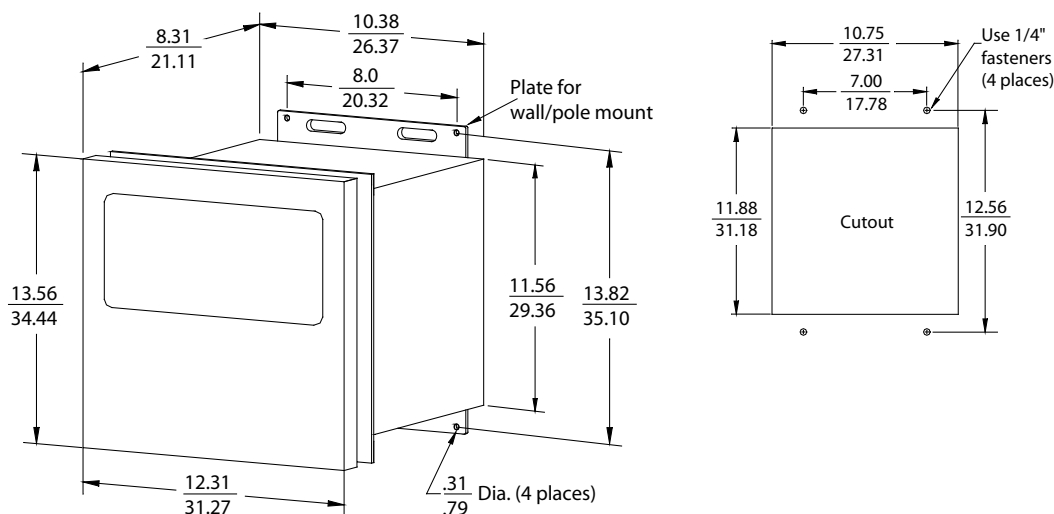
## SENSOR

APPROX. WEIGHT: 75 LB / 34 KG



## CONTROL UNIT

APPROX. WEIGHT: 28 LB / 12.7 KG



### NOTES:

1. All static performance characteristics are with operating variables constant.
2. System accuracy referenced to 0.1 to 10% calibrated range.
3. Response is to calibration gas.

**AMETEK**  
PROCESS INSTRUMENTS

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