JD AUTOMATION
Integrated Automation & Control Systems

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Product Brochure

Product Overview

The **JDASP1965** single or dual sensor systems are designed to monitor Gas atmospheres from extreme conditions with either Temperature, Moisture, or Pressure challenges. A powerful Air Aspirator can pull a sample from up to 100 feet away. The filtered and conditioned sample Gas is then passed across one or two different Detectors. This system has no moving parts removing the need for expensive downtime and maintenance.



All transmitters have a 4-20 mA signal for direct connection to the site DCS, PLC or site control system. If needed, a dedicated Gas Detection Control system to provide local Alarms, 4-20 mA output with a wide range of

dry contacts, making the system very sophisticated and user friendly.

Integral sample Filter included to remove Water and Dirt, Automatic Drain type models are also available.

How It Works

Aspirators are instrument air driven sampling protection systems predominantly used for safety purposes. The sample being measured is pulled under a vacuum created by “The Venturi Effect”. Flow rates are controlled by a flow regulator with the flow rate being viewed via a flow meter. The sample is passed across the sensor and exhausted, along with instrument air, via the exhaust port. If the aspirator is located in a “safe” area, it is advisable to pipe the exhaust back to the area it has come from. An air sample is drawn off from the tubing and sent to a remotely-mounted instrument analyzer mounted a safe distance away from the gas stream.

The **JDASP1965** operates by drawing a gas sample from the desired detection point to a remotely located detector. The sample is diluted with air after the gas sensor and then returned to a common exhaust reducing the danger of potential hazardous gases entering a safe work space.

System integrity is maintained at all times using a flow fail monitoring device which provides a NO contact that activates if the sample line becomes blocked or damaged or if the air supply is removed or interrupted.

Features

1. Simple to operate
2. Long life Air Aspirator
3. Extreme sample temperatures
4. One or two sensors
5. Corrosion resistant construction for extreme environments / samples
6. Uses proven technology
7. Modular design easy to maintain
8. Moisture trap

Specifications

Gas sensors: One or two

Gas sensor options: H2, CH4, HC's 0-100%LEL, CO, CO2, H2S, and O2. Other gases available.

Sensor type: Catalytic, Electrochemical, IR (Sold separately)

Sensor Outputs: 4-20 mA

Maximum sample line length: 100' (1/4" OD. tube)

Compressed air requirements: 50 to 120 PSI compressed air or N2

Operating temperature: See detector head specification

System enclosure : Fibreglass or Stainless Steel. IP65 NEMA 4/4X

Sample flow across the detector head: 3 SCFH (1.5 LPM)

Compressed air usage: Approximately 6 SCFH (3 LPM)

Transmitter has local display

Outputs: Low flow contact, normally open (NO) (Please specify if Explosionproof is required)

Purge / Calibration Valve

Filtration: In line coalescing filter, automatic drain, 5 micron particulate, with transparent bowl

Warranty 1 Year

Weatherproof enclosure for outside locations rainproof or as required for site secure installations. Note: Specifications subject to change without notice.

Applications

Flammable, oxygen, or toxic monitoring

Wastewater

Drinking water plants

Gas turbine monitoring flammable and CO

Tunnel monitoring

Landfill borehole analyses

Printing press exhaust solvent recovery

Winery CO2 / O2

Biogas Methane

Hydrogen Sulphide “H2S” scrubber break through

Any sample draw gas monitoring application