

VAPOUR ALARM SYSTEM

TYPE OVS 2.1 OP

FOR VAPOUR RETURN LINES ON TANKERS



OMICRON alarm system **OVS 2.1 OP** monitors the oxygen content and the pressure in the waste vapour line(s) during loading of tank vessels. It consists of a detector cabinet mounted on deck with Eex ia approved oxygen and pressure sensors, flow fail initiator, manifold selector, test and purge facility. The electronic cabinet mounted in the cargo control room with alarm panel has individual LED displays and alarm status LEDs.

Different models cover all configurations of manifolds and vapour lines.

• The system fulfils IMO and classification societies' rules and regulations.

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Solutions you can trust



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OMICRON Vapour System for Oxygen and Pressure OVS 2.1 OP is a micro controller based alarm and monitoring system. The system can be configured with any number of pressure sensors and different types of oxygen manifold selector valve(s). The detector cabinet is connected by electrical signals to the zener barriers mounted in the electronic cabinet. The electronic cabinet also contains the alarm panel, power supply and output relays. The alarm panel has a LED display for oxygen content and measured pressure(s).

There are further alarm status LEDs for flow fail, high oxygen content, low and high pressure(s) and system failures.

Each pressure sensor channel has adjustable processor controlled LOW and HIGH pressure alarm settings. The oxygen channel has an adjustable processor controlled high content alarm setting.

As standard are potential free output relay contacts for power failure, system failure and common alarm. The system can drive a bridge remote alarm panel and can be connected to external computers via RS 485/422 serial line.

Standard features:

- Alarm cabinet with LED displays and alarm status LEDs.
- Alarm if low or no flow through oxygen sensor.
- Zener barriers included for all sensors.
- Potential free change-over output relay contacts for external alarms.
- Detector cabinet with sensors for deck mounting.
- Electro-chemical oxygen sensor, Eex ia approved.
- Capacitive ceramic pressure sensor(s) in stainless steel, Eex ia approved.
- Shut-off valve on all input tubes and all fittings included.

Options:

- Multiple pressure sensors.
- Special manifold selector valves (oxygen).
- Special function output relays.
- Bridge remote alarm panel.
- Serial line to external computer (RS 485/422).

Specifications:

- Power supply230/115 V AC Nom.
- Purge air supplyMax. 8 Bar
- Calibration gasIncluded
- Ex Approval O₂ sensorEex ia IIC T4
- Ex approval Pressure sensor.....Eex ia IIC T6
- Oxygen sensor range/type0-25% vol. O₂
- Pressure sensor range0-200 mbar
 - Optionally.....(-100 to +250 mbar)
- Non-linearity, hysteresis & repeatability<0,20% F.s. (Endpoint)
 - Compensated temperature range-20 to +80° C
 - Operating temperature range-40° C to +125° C
 - Maximum overpressure6 Bar
 - Long term stability<0,1% F.s./ 12 months

