

PRESSURE ALARM SYSTEM

TYPE OPS

TANK AND SINGLE VAPOUR PRESSURE



- **OMICRON** alarm system OPS monitors the over- or under-pressure in the cargo tanks. Any number of tanks can be monitored.
- **OMICRON** alarm system OVS 2.1 P monitors the pressure in the waste vapour line(s) during loading of tank vessels. Different models cover all configurations of vapour lines.

The electrical signals from the pressure sensor assemblies on deck are connected to zener barriers in the electronic cabinet mounted in the cargo control room. The alarm panel has individual LED display and alarm status LEDs.

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

**OMICRON**
Solutions you can trust

PRESSURE ALARM SYSTEM

TYPE OPS

TANK AND SINGLE VAPOUR PRESSURE

Pressure System OPS, and Vapour System for Pressure OVS 2.1 P are alarm and monitoring systems based on the same micro controller cards and pressure sensor assemblies. The OPS system is intended for cargo tank pressure monitoring for any number of tanks, while the OVS 2.1 P is a smaller system intended for pressure monitoring of waste vapour return line(s). The Omicron pressure sensor is a high quality capacitive ceramic type especially suited for the low pressures to be measured. This sensor type has exceptionally good repeatability and low hysteresis. These sensors are mounted in a sensor housing and come complete with ball valve, bracket and fittings. The sensor assemblies are mounted on deck with electrical signals to zener barriers mounted in the electronic cabinet. The electronic cabinet is intended for mounting in the cargo control room, and also contains the alarm panel, power supply and output relays. Each channel has two adjustable processor controlled alarm settings with pressure LED display and alarm status LEDs.

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

Standard features:

- Stainless steel sensor(s)*/shut-off valves and Zener barriers
- Individual pressure displays.
- Individual adjustable alarm levels for high and low pressure.
- Alarm for sensor/system failure for each sensor/electronic board.
- Potential free change-over contacts for external alarms.

Options:

- Bridge remote panel.
- Combined tank pressure and vapour pressure monitoring system.
- Analogue 4 - 20 mA output from each channel for slave display.
- RS 485/422 serial line output.

Specifications:

| | |
|-------------------------------------------|----------------------------|
| Number of measuring points | No limit |
| Power supply | 230/115V AC Nom. |
| Alarm for loop fail | Yes |
| Individual pressure displays | Yes |
| Serial line communication | RS 485/422 |
| Sensor range (mBar) | -100 to +250/ 0 to 200 |
| Sensor signal | 4 - 20 mA |
| Sensor type | Capacitive ceramic element |
| Non-linearity, hysteresis & repeatability | <0,20 % Fs. (End calib.) |
| Compensated sensor temperature range | -20° C to +80° C |
| Operating temperature range | -40° C to +125° C |
| Sensor Ex certification | Eex ia IICT6 |
| Maximum overpressure | 6 Bar |
| Long term stability | <0,1% Fs./ 12 months |

 **OMICRON**
Solutions you can trust

Stalsbergveien, 9. Nøtterøy • P.O.Box 113 Teie, N-3106 Nøtterøy, Norway
Telephone +47 33 38 25 00 • Telefax +47 33 38 25 25 • omicron@omicron.no • www.omicron.no

