

GAS DETECTION

Automatic gas detection systems for the marine environment



Reliable gas detection is essential for saving lives and protecting the marine environment. The Vimex Gas Detection System is a complete solution for detecting flammable and toxic gases in demanding marine applications.

Designed to comply with IMO SOLAS Chapter II-2, "Fire Protection, Fire Detection and Fire Extinction", it is particularly suited for monitoring enclosed spaces such as cargo pump rooms, ballast tanks, air ducts and void spaces.

The Vimex Gas Detection System is highly configurable to meet shipowner, vessel and classification requirements. It can be supplied as an aspirating system with sensors integrated into the central alarm cabinet, as fixed sensors installed throughout the vessel, or as a combination of both. The standard system uses catalytic combustible gas sensors or infrared detectors.

- Detection in Zone 1 or Zone 2
- Custom made system according to current rules and regulations
- Measures all types of toxic gases and oxygen
- Catalytic combustible or IR sensors
- Support 24/7 with service facilities in major ports
- Annual on-board calibration and service available
- Worldwide supply of calibration gases
- Safe and easy operation
- Local and remote monitoring
- Limited maintenance costs
- Simple replacement of modules
- High quality components
- Wall or floor mounted design

Gas measurements

- Hydrocarbons (HC)
- Hydrogen sulphide (H₂S)
- Oxygen (O₂)
- Carbon monoxide (CO)
- Hydrogen (H₂)
- Refrigerant gases
- Other gases on request

Sampling system

- 1 to 50 sample points
- Sample cycle < 45 minutes

Alarms

- Low- and high-level gas alarm
- Low flow alarm

Communication

- Hard wired
- Serial interface RS-485 / TCP
- Fieldbus

Power supply

- 110/230 VAC, 50/60 Hz @ 10 A
- 600 VA (max)

Air supply

- 6 to 8 barg

Environmental specifications:

- Humidity relative up to 100 %
- Vibration 0.7 g

Type approval

- DNV

VIMEX
measurably better



The Vimex Gas Detection System comprises an alarm cabinet with a control panel, gas detectors and an optional remote alarm panel.

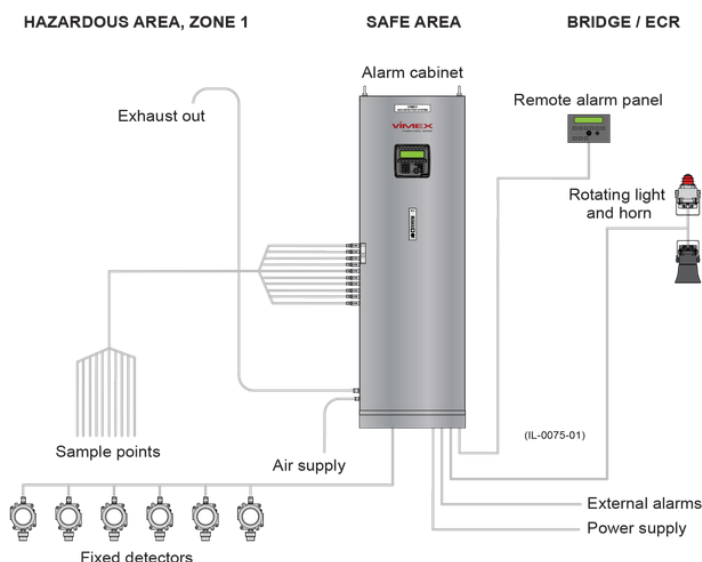
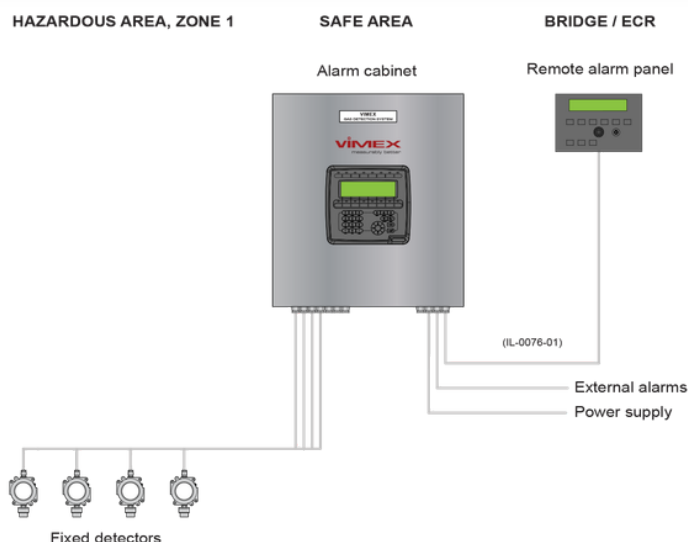
A typical system includes internal and external detectors, a sample pump, flow meters, flame arrestors, sample lines and all required fittings.

Solenoid valves control the sample points. Each line is purged before sampling to remove moisture and contaminants, and automatically if low flow is detected, which also activates a flow alarm.

The control panel features intuitive menus and can be installed as a stand-alone unit in the Cargo or Engine Control Room (CCR/ECR) or mounted in the cabinet front. Remote panels are optional.

Using sequential scanning, the system monitors each sample point individually in a repeating cycle and supports up to 50 sample points. A fail-safe PLC manages system processes, alarms and peripheral interfaces.

The system operates independently, while alarms can also be integrated with the vessel's main control systems via fieldbus or hard-wired connections.



Specifications are subject to change without notice.

