

SENTRY TM

Cargo Tank Pressure Monitoring System

The SENTRY™ is a cargo tank pressure monitoring system designed in compliance with IMO Regulation 59/SOLAS Regulation 11 6.3.2, providing early warning of under/over pressurisation in tankships. MM200TM intrinsically safe 316SS absolute pressure transducers continually monitor tank pressure and offer excellent durability and long-term stability.

The extremely compact MM3000 $^{\text{TM}}$ control and alarm system provides indication of the measured pressure in each tank, and generates audio and visual alarms.

- · Stainless steel/weatherproof sensors
- Extremely compact controller
- · Pre-calibrated sensors
- · Excellent long term stability
- Instant response
- Intrinsically safe
- Compliance with IMO Reg 59
- · Worldwide service back-up
- Cost effective solution
- CE approved





SENTRY TM

Specifications

MM200™ Pressure Sensors

Material	• 316SS
Pressure Range	• -1000 to +3000mm Wg
Max Working Pressure	• 20,400mm Wg (2 bar)
Operating Temperature	• -30°C to +105°C
Output	 4-20mA, linearity deviation • <± 0.25% of span
Long Term Stability	IP65, IP67 with Martek 'top hat' assembly
Connection Thread	1/2 inch BSP parallel male, optional adapters
Cable Type	2-core min 0.75mm 2 per conductor, screened
Certification	EEx i a IIC T6 with appropriate safety barrier

MM3000™ Control Panel

Enclosure Inputs • Up to 24No. analogue transmitters • 2 row 16 character alphanumeric backlit LCD • 24No. red alarm LEDs User Interface • 16 key membrane keypad Alarms • 48No. with programmable input reference Alarm Annunciation • Flashing LED for new alarm, steady on acknowledge Alarm Delay • Programmable - 300ms to 10 days Outputs • Up to 14No. DPCO relays rated 5A at 240V ac Power Supply • 24V dc Environmental • -20°C to +70°C, 0-95% RH Vibration Tested • ± 1 g according to IEC 68-2-6 Cable Entry • Rear Dimensions • 138mm x 138mm cut-out Fixing Detail • Fascia/console mounting with supplied fasteners		
Indicators • 2 row 16 character alphanumeric backlit LCD • 24No. red alarm LEDs User Interface • 16 key membrane keypad Alarms • 48No. with programmable input reference Alarm Annunciation • Flashing LED for new alarm, steady on acknowledge Alarm Delay • Programmable - 300ms to 10 days Outputs • Up to 14No. DPCO relays rated 5A at 240V ac Power Supply • 24V dc Environmental • -20°C to +70°C, 0-95% RH Vibration Tested • ± 1 g according to IEC 68-2-6 Cable Entry • Rear Dimensions • 138mm x 138mm cut-out	Enclosure	• IP54
Indicators • 24No. red alarm LEDs User Interface • 16 key membrane keypad Alarms • 48No. with programmable input reference Alarm Annunciation Alarm Delay • Programmable - 300ms to 10 days Outputs • Up to 14No. DPCO relays rated 5A at 240V ac Power Supply • 24V dc Environmental • -20°C to +70°C, 0-95% RH Vibration Tested • ± 1 g according to IEC 68-2-6 Cable Entry • Rear Dimensions • 138mm x 138mm cut-out	Inputs	Up to 24No. analogue transmitters
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Alarm Annunciation • Flashing LED for new alarm, steady on acknowledge Alarm Delay • Programmable - 300ms to 10 days Outputs • Up to 14No. DPCO relays rated 5A at 240V ac Power Supply • 24V dc Environmental • -20°C to +70°C, 0-95% RH Vibration Tested • ± 1 g according to IEC 68-2-6 Cable Entry • Rear Dimensions • 144mm (H) x 144mm (W) x 70mm (D) • • 138mm x 138mm cut-out	User Interface	16 key membrane keypad
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Power Supply • 24V dc Environmental • -20°C to +70°C, 0-95% RH Vibration Tested • ± 1 g according to IEC 68-2-6 Cable Entry • Rear Dimensions • 144mm (H) x 144mm (W) x 70mm (D) • • 138mm x 138mm cut-out	Alarm Delay	Programmable - 300ms to 10 days
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Vibration Tested • ± 1 g according to IEC 68-2-6 Cable Entry • Rear Dimensions • 144mm (H) x 144mm (W) x 70mm (D) • • 138mm x 138mm cut-out	Power Supply	• 24V dc
Cable Entry • Rear • Identification • 144mm (H) x 144mm (W) x 70mm (D) • • 138mm x 138mm cut-out	Environmental	• -20°C to +70°C, 0-95% RH
• 144mm (H) x 144mm (W) x 70mm (D) • • 138mm x 138mm cut-out	Vibration Tested	± 1 g according to IEC 68-2-6
• • 138mm x 138mm cut-out	Cable Entry	Rear
Fixing Detail • Fascia/console mounting with supplied fasteners	Dimensions	., ., .,
The state of the s	Fixing Detail	Fascia/console mounting with supplied fasteners
Weight • 0.8kg	Weight	• 0.8kg
Options • Battery back-up, remote alarms	Options	Battery back-up, remote alarms