

Seres



ODME - S 663 MK III

IMO RES A 586 (XIV) - MEPC 51 (32)

Oil Discharge Monitoring Equipment

IMO RES. A 586 (XIV) - MEPC 51 (32) ODME S 663 MKIII

THE NEW IMPROVEMENT

- Approved ballast monitor
- Microprocessor technology
- Multi cell system
- Trouble-shooting pages
- Self back-flushing system
- Intrinsically safe
- The easiest installation

Features

- Can be used as dirty and clean ballast, 15 ppm alarm, oil like substances and chemical annex II procedure monitor control system.
- Intrinsically safe, 4 optical fibres.
- Near and far infra-red detector.
- Self compensation device.
- Very short response time
- Automatic back-flushing sequence of the complete hydraulic circuit. Automatic zeroing and calibration
- Self-cleaning measuring cell
- Extra 20 l/m output alarm
- All information displayed in clear language
- Microprocessor technology with battery - maintained memories
- One single cable between operators console and oil content meter.
- Sturdy design
- Insensitive to ships motion and vibration.
- Patents - Approvals
- Accuracy better than IMO A 586 (XIV) requirements.
- Very easy installation requiring little work.
- Flowmeter working by differential pressure (or other), for control unit.
- Log input by electrical or dry contact impulses (100 to 900 per nautical mile)
- Automatic monitoring of up to 6 channels.

Measurement principle

The oil content meter includes the near and far infrared oil detector, the automatic self-cleaning system and the automatic self-calibration units. The principle of operation is to transmit a near and far infra-red beam, automatically self-compensated to avoid transmission losses due to the oil and solids concentration. The compensation is carried out by a compensation cell in front of the source.

- A multi cell detection system with computerized discrimination device detects the true value of oil content.
- The hydrocarbons (with minimal influence of solids contaminants) are measured by near infra-red scattered beam with automatic compensation.
- The solids (with minimal influence of hydrocarbons) are measured by far infra-red refracted beam with partial compensation
- Near and far infra-red measured values are computed to determine the true value of oil content.

The system is fully intrinsically safe using optical fibres. A pneumatic piston with strong wiping seal automatically cleans the measuring vessel. All wetted areas of the sensor are in glass, viton and brass, corrosion proof for long-life in harsh environments. The self-calibration system eliminates most maintenance and gives automatic verification of the oil content monitor.

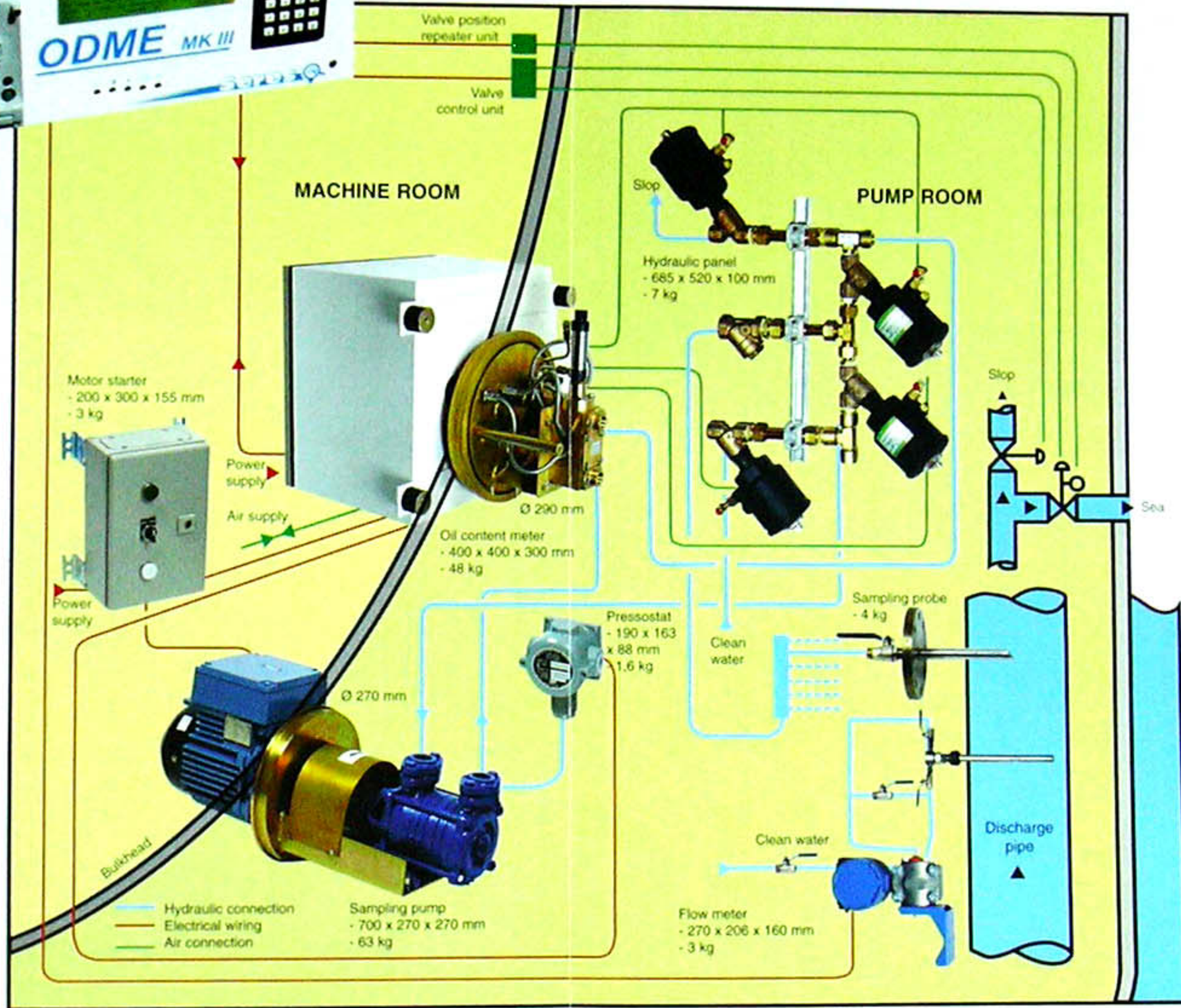


IMO RES. A 586 (XIV)

- Guidelines and specifications for oil discharge monitoring and control systems for tankers.
- Category A : Tankers ≥ 4,000 DWT
- Category B : 150 Gross Tons < Tankers ≤ 4,000 DWT

FEATURE	CATEGORY	
	A	B
INPUT INFORMATION		
PPM	A	A
FLOW RATE	A	M
SPEED	A	M
DATE & TIME	A	A
STARTING INTERLOCK	A	M
DISCHARGE VALVE CONTROL	A	M
OUTPUT INFORMATION		
L/MILE	A	A
TOT. QUANTITY	A	A
DATE & TIME	A	A
PPM	A	A
SYSTEM FORMAT	Control unit	Computing unit

A : Automatic Function
M : Manually inserted data from installed source.
■ : Information presented or permanent record.



Display

Situation.

- Date and time.
- Channel.
- Type of product.
- Discharge situation.
- Discharge valve position.
- Sampling pump situation.
- Discharge flow range.
- Discharge flow rate.
- Ship's speed.
- Total oil limit
- Instruction to operate.
- Oil discharge rate.
- Total oil discharged.
- Oil content in effluent

Alarm

- 30 l/m exceeded.
- Discharge valve wrongly open.
- Oil limit exceeded.
- 15 ppm exceeded.
- 100 ppm exceeded.
- ppm range exceeded.
- Discharge flow under minimum range.
- Discharge flow range exceeded.
- Flowmeter failure.
- Ship's speed range exceeded.
- Water failure.
- Motor pump wrongly powered.
- Calibration failure.
- Oil content meter failure.
- Printer paper failure



Trouble-shooting page.

- In event of alarm an instruction line enables display of trouble-shooting page to help the operator solve the operating problem.
- Equipment can be delivered with screen in any language.

Printer

Message.

- All messages required by IMO resolution A 586 (XIV) are automatically printed in english.

Advantages.

- Electrical printer ● Printing device with no moving parts ● Paper easy to replace.

Supplies

Electrical

- Operator console: 220 V, 50/60 Hz, 1 ph, 0.2 kVA (110 V optional).
- Oil content meter: 220 V, 50/60 Hz, 1 ph, 0.2 kVA (110 V optional).
- Motor pump unit: 380/440 V, 50/60 Hz, 3 ph, 1.7 kW.

Air

- Machine air: 5 - 9 bars.

Clean water

- Self-filling tank: 100 l.
- Clean water source: 1 - 3 bars - 1 m³/h.

Sample flow

- Between 600 l/h and 1,200 l/h.
- Automatic pump shut-down if low pressure.

Dimensions and weights (see pictures).

Approvals

- Administrations: Belgium, Finland, France, Italy, Netherlands, Norway, Germany, Sweden, United Kingdom, USA, CIS...
- Classification Societies : ABS, BV, DNV, LLOYDS, RINA, Register of shipping.

- CE and  marked.



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