

THE NEW GENERATION OF BILGE ALARMS

15 ppm Bilge Alarm Monitor

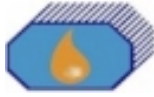
according to IMO Resolution MEPC.60 (33)

Type: OMD-11



Accurate Monitoring of Oil-in-Water

We help to protect the Environment



DECKMA HAMBURG GmbH

DECKMA Decksmaschinen und Automation Vertriebsgesellschaft in Hamburg mbH

The OMD-11 Monitor is developed by DECKMA HAMBURG GmbH with the aim to improve the reliability and operation of 15 ppm Bilge Alarms. Based on more than 20 years experience in continuous Oil-in-Water Monitoring we have gained recognition and reputation in this field world-wide. In 1996 DECKMA HAMBURG GmbH launched an all new Oil-in-Water Monitor, the "OMD-7 Industrial Monitor" capable of distinguishing between the different characteristics of Oil particles, Solid particles and Water Turbidity on a continuous basis.

DECKMA HAMBURG GmbH now continues this Series with the "OMD-11", a new generation of Bilge Alarm Monitors including improvement on solids suppression.

Utilizing the latest "state of the art" in micro-processor design and measuring technique, the benefits of the OMD-11 are:



OMD-11

- ◆ Easy to operate
- ◆ Improvement on Solids suppression
- ◆ Variable Parameters
- ◆ Compact Model
- ◆ 14 Segment LED's
- ◆ Reliable
- ◆ Light Weight (3,5 kgs)

Specification:

Range:	0-30 ppm, trend indication to 50 ppm
Accuracy:	To IMO MEPC.60 (33)
Degree of Protection:	IP 65
Size:	175 x 190 x 220 mm (W x H x D)
Output Signal:	0 (4) - 20 mA, selectable
Sample Temperature:	+1° to 60° C
Alarm Operating Points:	15 ppm (Factory Set) adjustable from 2-15 ppm
Alarm 1 & 2 Operating Delay:	2 - 20 sec. adjustable
Power supply:	24 Volt AC/DC, other voltages on request

(Note: The manufacturer reserves the right to change or amend specifications without notice.)

Contacts / Enquiries:

Agent:

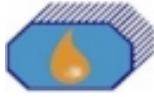
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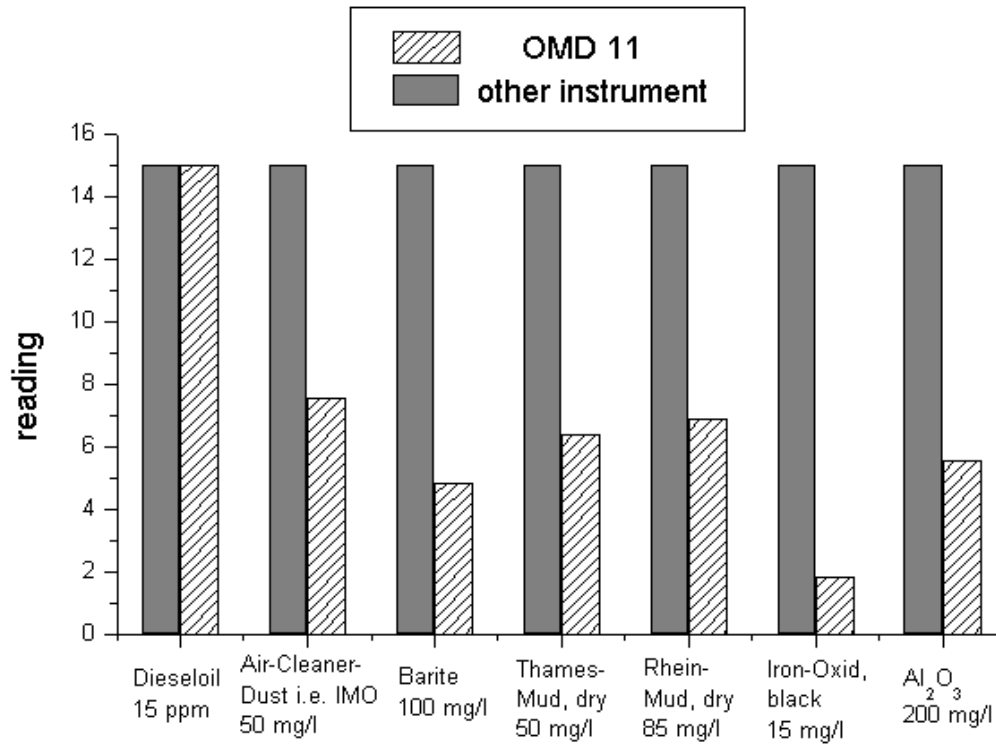
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Solids Suppression OMD-11

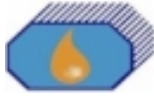


Legend

If the displayed concentration of solids are exceeded, an alarm condition will be encountered on the other instrument. The readings of the OMD-11 remain lower compared to the older type instrument in the presence of solids. This shows the reduced solids background sensitivity of the OMD-11.

Example:

15 mg/l black Iron Oxid will be displayed as 15 ppm of Oil by the older monitor type. The OMD-11 displays only 2 ppm of Oil.

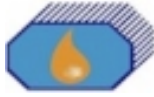


TYPE APPROVAL CERTIFICATES-LIST

to IMO-Resolution: **MEPC.60 (33)**
BILGE ALARM MONITORS

Type: **OMD-11**

COUNTRY:	ADMINISTRATION AUTHORITY:	OMD-11 Certificate-No.:	Date of Issue:
Germany (FRG)	SEE-BERUFGGENOSSENSCHAFT	320024	15.10.1997
Germany (FRG)	Germanischer Lloyd	92 697 - 97 HH	01.10.1997
Belgium	MINISTERIE VAN VERKEER EN INFRASTRUCTUUR	OCM 27/97	20.11.1997
Canada	Department of Transport Canada Safety and Security Marine Safety	CBA-007	23.04.1998
P.R. China	REGISTER OF SHIPPING OF THE PEOPLE'S REPUBLIC OF CHINA	BJX9860004	07.09.1998
Danmark	Danish Maritime Authority	File No.5611.1082- 10	21.07.1998
England	MSA MARINE SAFETY AGENCY	93 428-97 HH	14.11.1997
Finland	Finnish Maritime Administration	HR 1662/97	17.11.1997
France	Ministère de l'Équipement des Transport et du Logement	97120151POL	30.12.1997
Italy	Ministero dell'Ambiente	N. 04/98	27.04.1998
Japan	NIPPON KAIJI KYOKAI	00 EQ017 N	31.01.2000
The Netherlands	Ministerie van Verkeer en Waterstraat The Head of the Netherlands Shipping Inspectorate	SI/310/97-5.12 SIKW/AH	05.01.1998
Norway	SJØFARTSDIREKTORATET Norwegian Maritime Directorate	Anerkennungsbrief Acceptance-Letter File No.: 527.2	27.10.1997
Poland	Polski Rejestr Statków	TM/665/867967/98	18.09.1998
Russia	Russian Maritime Register of Shipping	97.243.009	20.11.1997
Spain	Ministerio de Fomento	030/0398	03.03.1998
Sweden	SWEDISH MARITIME ADMINISTRATION	Anerkennungsbrief Acceptance-Letter Ref.: 0605-9735694	07.11.1997
U.S.A	U.S. Department of Transportation United States Coast Guard	162.050/3030/0	28.10.1999
<u>EC-Type Examination Certificate</u>	SEE-BERUFGGENOSSENSCHAFT	320.024	05.02.1999



OIL CONTENT METERING SYSTEM 15 ppm Alarm

Type: **OMD-8**

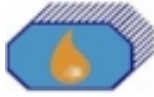
NO TROUBLE WITH DIRTY BILGE WATER ANYMORE



OMD-8 Data Processing Unit

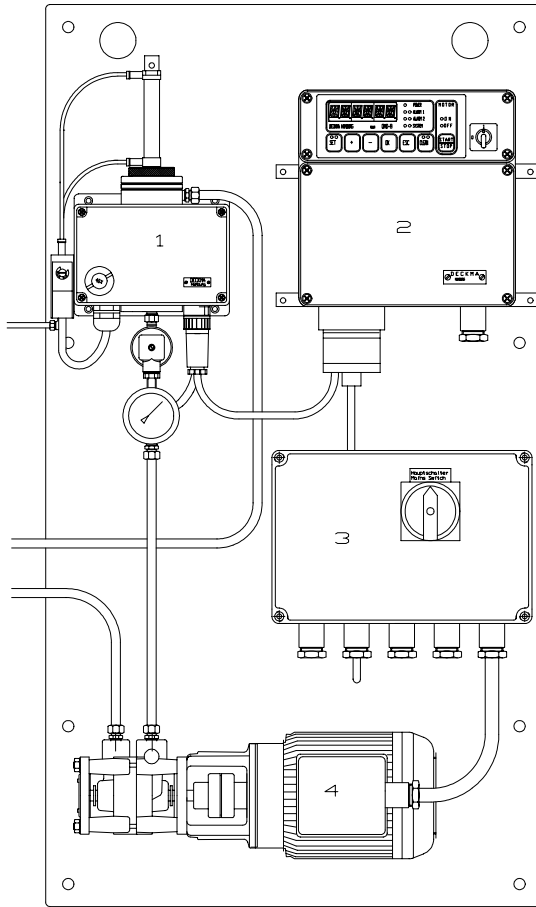
- Exceeds IMO-Resolution MEPC.60 (33) -
- Reliable Solids Suppression -
- Modular Construction -
- Easy to operate -
- Prepared for the future -

We help to protect the Environment.



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The OMD-8 Oil Content Metering System has been developed by DECKMA HAMBURG GmbH to assist the operators of Bilge Water Separators with the handling of oil-free but solids contaminated water. Small solids particles can be detected as oil in conventional oil content meters, preventing an otherwise normal discharge to sea. By use of our innovative light scattering technology the OMD-8 system is fully capable of distinguishing between solids and oil particles.

The unique modular design of the new OMD-8 system makes it easy to install and operate. All components of the system are mounted on a corrosion resistant Stainless Steel plate that is ready for immediate connection. Piping and electrical connections are remarkably simple. During operation a sample is taken continuously from the main discharge line of the oily water separator and is passed through the systems Sample Conditioning Unit and Measuring Cell. All Measurements are fully automatic, and the Optical data is passed to the OMD-8 processing unit where the oil content is accurately and reliably calculated. If the oil content exceeds the

IMO requirements, the overboard discharge valve is de-energised and the polluted water is returned to the bilge. The main components of the system are: (1) Measuring Cell, (2) Data Processing Unit, (3) Power Supply Box (4) Sample Conditioning Unit (3) Power Supply Box (4) Sample Conditioning Unit

Specification

Range:	0 - 50 ppm
Display:	6 digit alphanumerical LED Display
Degree of Protection:	IP 65
Output Signal:	0 (4) - 20 mA, selectable
Air Supply:	5 - 7 bar for Autoclean System
Alarm Operating Points:	15 ppm (Factory Set) adjustable from 2 - 15 ppm
Alarm 1 & 2 Operating Delay:	2 - 20 sec. adjustable
Power Supply:	230 Volt 50 Hz standard, other on request

(Note: The manufacturer reserves the right to change or amend specifications without notice.)

Contacts / Enquiries:

Agent:

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