

Product Data Sheet

SD 8601-2E01

August 2008

Damcos® MAS 2600

Tank contents transmitter



Damcos®


EMERSON™
Process Management

Damcos® MAS 2600

Advantages

- Titanium housing and diaphragm.
- Resistant to sea water and chemicals.
- Silicon strain gauge sensor.
- EMI protected.
- Interchangeable with existing transmitters.
- Programmable from 0.2 to 35 mH²O.
- Strong, light and extremely corrosion resistant.

Description

The MAS 2600 tank contents transmitter is an electronic based transmitter designed for tank contents measuring application.

The MAS 2600 is a 2-wire 4-20 mA level transmitter consisting of a transducer and an amplifier connected via a 6-core vented cable.

The transducer is fully welded, housed in titanium with a titanium diaphragm and is submersible (IP68). The amplifier is housed in a sea water-resistant polyester casing (IP56).

The transducer is a pressure sensitive silicon micro strain gauge sensor mounted in a glass

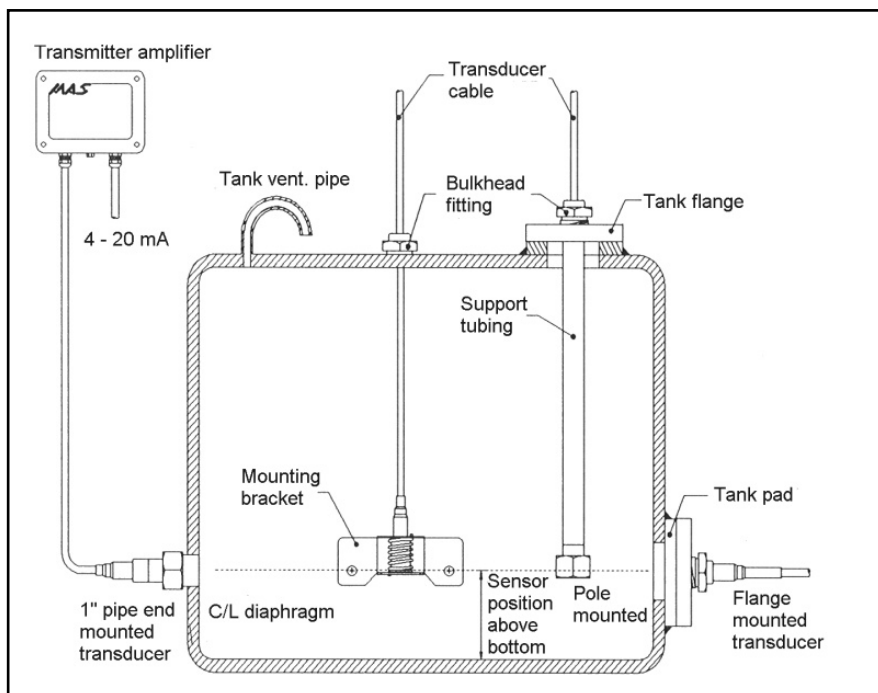
to metal seal. The sensor is protected by an isolation diaphragm, electron beam welded to the transducer housing, with an oil filling between the sensor and the diaphragm.

Pressure changes in the front of the diaphragm will bring about a resistance change in the Whetstone bridge of the transducer. This change in the Whetstone bridge will be transmitted to the amplifier as a change in the electrical signal.

The MAS 2600 is manufactured in 4 programmable ranges from 0-3.5 mH²O to 0-35 mH²O, and available with a built-in Pt100 sensor.

Application

The MAS 2600 has been developed for level measuring in ballast, oil, service and fresh water tanks as well as tanks containing media which are not hostile to titanium.



Product Data Sheet

SD 8601-2E01

August 2008

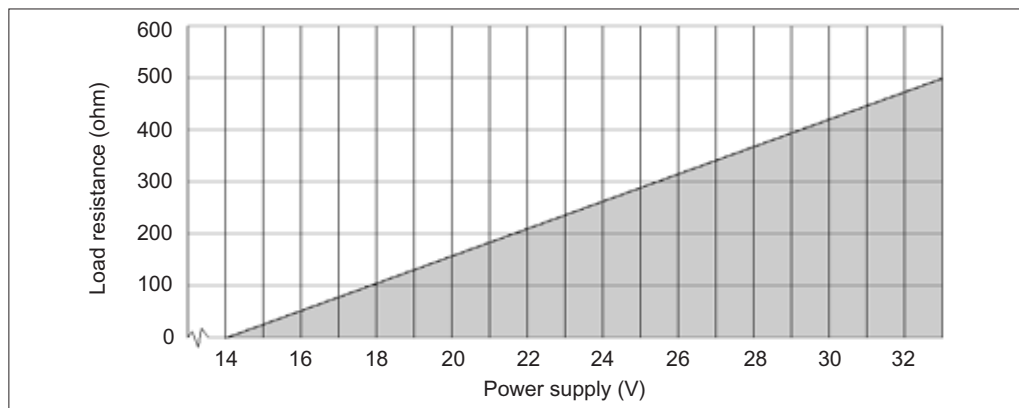
Damcos® MAS 2600

Power Supply

The Power Supply can vary from 14 to 33 VDC. Permissible load resistance is shown graphically below.

Calculation formula:
Rloop max. (Kohm) =

$$\frac{U_{loop}-14V}{32 \text{ mA}}$$

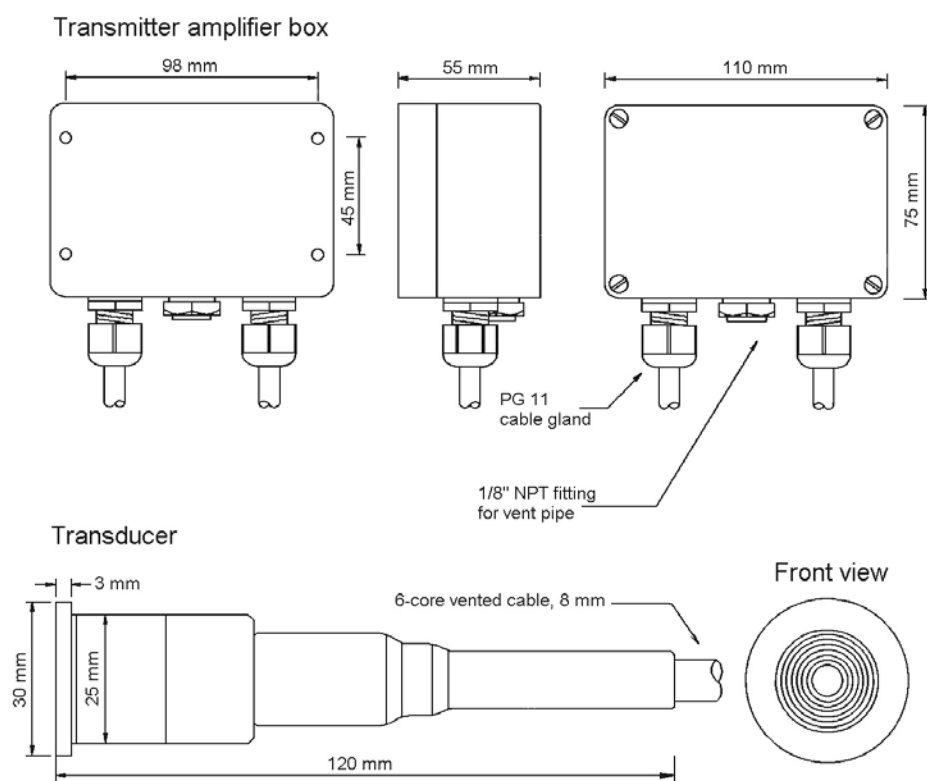


Technical Specifications

Transducer ranges:	0-3.5 / 0-7 / 0-16 / 0-35 m H ² O gauge 0.8 - 2.0/0.8-3.5 bar absolute
Programmable measuring ranges:	Each transducer range programmable in 8 steps.
Accuracy:	± 0.25% F.S. at 20° C
TEB (Total Error Band):	±0.4% F.S. at 0 to +50°C ±2.0% F.S. at -20 to +80°C
Overload Capability:	Min. 4 x transducer range with no changes in calibration.
Burst Pressure:	6 x transducer range.
Built-in Temperature Sensor Pt100:	Optional.
Diaphragm:	Titanium
Sensor Housing:	Titanium
Output Current:	4-20 mA DC, 2-wire system.
Power Supply:	14-33 VDC
Current Limiting:	
Typically:	25 mA
Max.:	32 mA
Operating Temperature Ranges:	
Transducer:	-20 to +80°C (125 c for H-version)
Amplifier:	-40 to + 85°C
Protection Class:	
Transducer:	IP 68
Amplifier:	IP 56
Intrinsic Safety:	EEx ia IIC T5 compliant. Max. 75 m cable between transducer and transmitter amplifier.

Damcos® MAS 2600

Dimension drawing



Damcos® MAS 2600

Intrinsically Safe in Hazardous Areas

The MAS 2600 has been approved for use with standard transmitter zener barriers and is EEx ia.IIC T5 compliant in accordance with CENELEC EN 50020.

Approvals

MAS 2600 meets the strict requirements to marine equipment and is type approved by major classification societies as:
DNV, GL, LRS, MRS, BV, RINA, NK, PRS, KRS, ABS, MSA, DEMKO, CCS

The Emerson logo is a trademark and service mark of Emerson Electric Co. Damcos and the Damcos logotype are registered trademarks of Damcos A/S. All rights reserved. The contents of this publication are presented for information purposes only, and while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, expressed or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available upon request. We reserve the right to modify or improve the designs and specifications of our products at any time without notice. Damcos A/S accepts no responsibility for any errors that may appear in this publication.

For global contacts:
www.radartg.com