



PRODUCT DATASHEET

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Damcos™ MAS 2600

Tank Contents Transmitter



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.

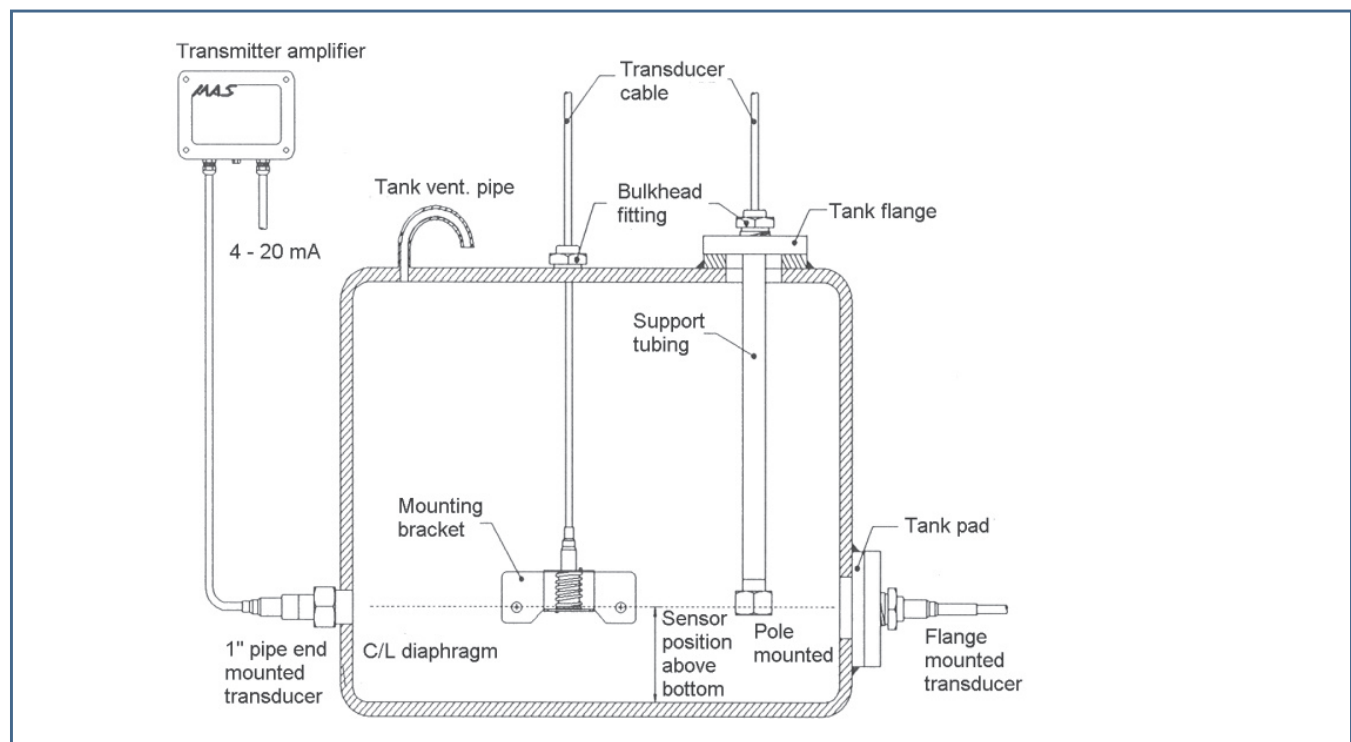
Pressure changes in the front of the diaphragm will bring about a resistance change in the Whetstone bridge of the transducer. This change in the Whetstone bridge will be transmitted to the amplifier as a change in the electrical signal.

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

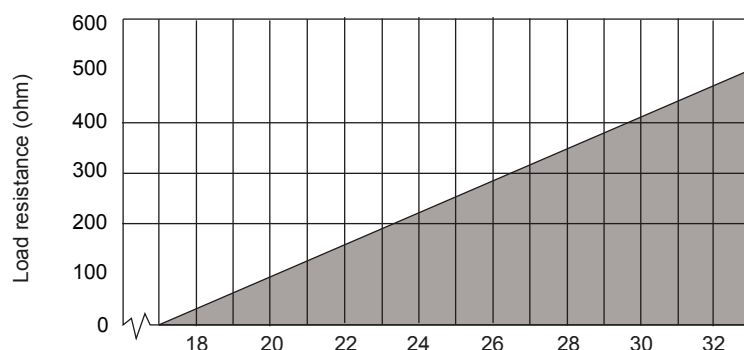
The MAS 2600 has been developed for level measuring in ballast, oil, service and fresh water tanks as well as tanks containing media which are not hostile to titanium.

For further information about the two controls please see separate data sheets.



Power Supply

The Power Supply can vary from 17 to 33 VDC. Permissible load resistance is shown graphically below.



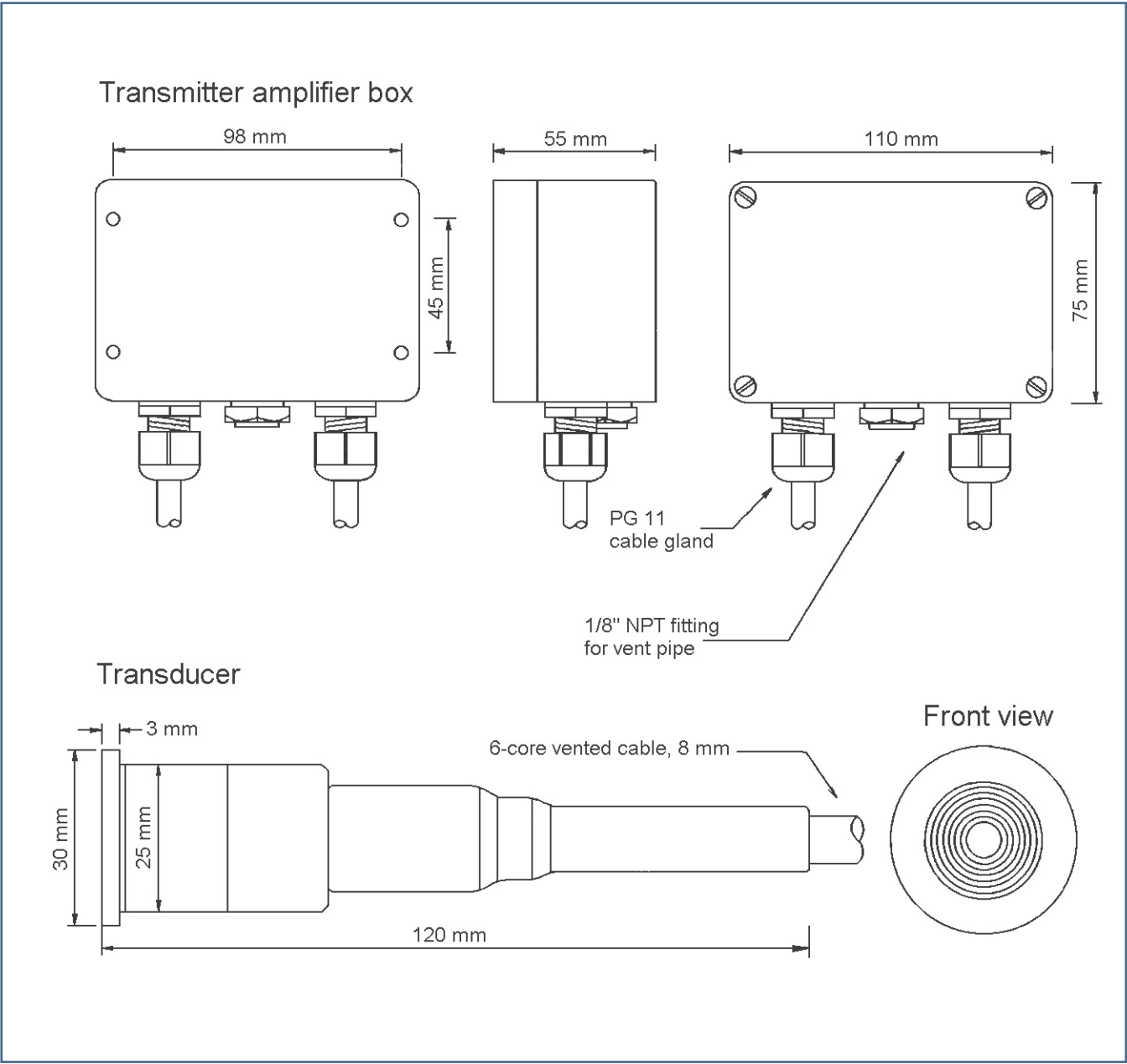
Calculation formula:

$$R_{\text{loop max. (Kohm)}} = \frac{U_{\text{loop}} - 17V}{32 \text{ mA}}$$

Technical Specification

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	Minimum 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	17-33 VDC $R_{\text{loop max. (Kohm)}} = (U_{\text{loop}} - 17V)/32 \text{ mA}$
Current Limiting:	
	Typically 25 mA Maximum 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	Ex ia IIC T4 compliant

Dimension Drawing



Intrinsically Safe in Hazardous Areas

The MAS 2600 has been approved for use with standard transmitter zener barriers and is Ex ia.IIC T4 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, BV, RINA, KRS, ABS

HA HIGH ACCURACY

m e a s u r e m e n t i n s t r u m e n t s

Our offering:

	Pressure Measurement		Level Measurement
	Temperature Measurement		Flow Measurement
	Marine Measurement & Analytical		Gas Analysis
	Liquid Analysis		Flame and Gas Detection
	Tank Gauging		Wireless Infrastructure
	Acoustic & Discrete		

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