

Sensit Trident Mini Submersible

The TRIDENT MINI Submersible

The Trident Mini is the latest in the submersible range from RM&C. Providing an accurate and stable measurement of hydrostatic liquid levels, the Trident Mini may be used in a variety of level measurement applications including, ground water & surface water measurement, coastal flood defence monitoring, tank level in land based liquid storage vessel, contaminated water levels in land fill sites.

Description

The ceramic pressure sensor technology and optional titanium welded construction, allows the sensor to be submersed in even the most aggressive fluids. Available with either mV or mA output the sensors can be easily interfaced to measuring and control instrumentation or data logging equipment. The slim 17.5mm diameter size allows for installation where access is minimal. Fully temperature compensated, the Trident Mini provides an accurate and stable measurement of hydrostatic liquid levels.

Key features

- 17.5 mm housing for boreholes
- 4–20 mA or 10mV/V Outputs
- Excellent accuracy includes:-
NL, H & R $\pm 0.1\%$ span
Thermal Error Band $\pm 0.3\%$ span
Long term stability $\pm 0.1\%$ span / year
- Suitable for aggressive medias:
Salt water, Leachate
- Suitable for use with data loggers:
fast response / low power consumption
- Lightning surge protected
EN61000-4-5



Specification:

Performance Specification:

Pressure Ranges	1 to 500mH ₂ O		
Output Type	4-20 mA	10mV/V	
Non-Linearity, Hysteresis & Repeatability	<0.1% span BSL <0.05% span optional		
Thermal Error	< 0.3% span (0°C to 40°C)		
Stability	<0.1% span / year typical		
Operating Temperature	-20°C to +60°C		
Proof Pressure	4 X FS		
Burst Pressure	10 X FS		
Drop test	1m onto concrete		
Weight excluding all cable	<50g (Sink Weight Available)		

Electrical Specification:

Output Type	4 20 mA	10mV/V
Supply Voltage	10 – 32Vdc	2.5 – 12Vdc
Supply Current	N/A	<5mA
Output Resistance	Max lead resistance	<1 kohm
Response Time	< 10mS	< 10mS
Reverse Polarity Protection	Yes	Yes

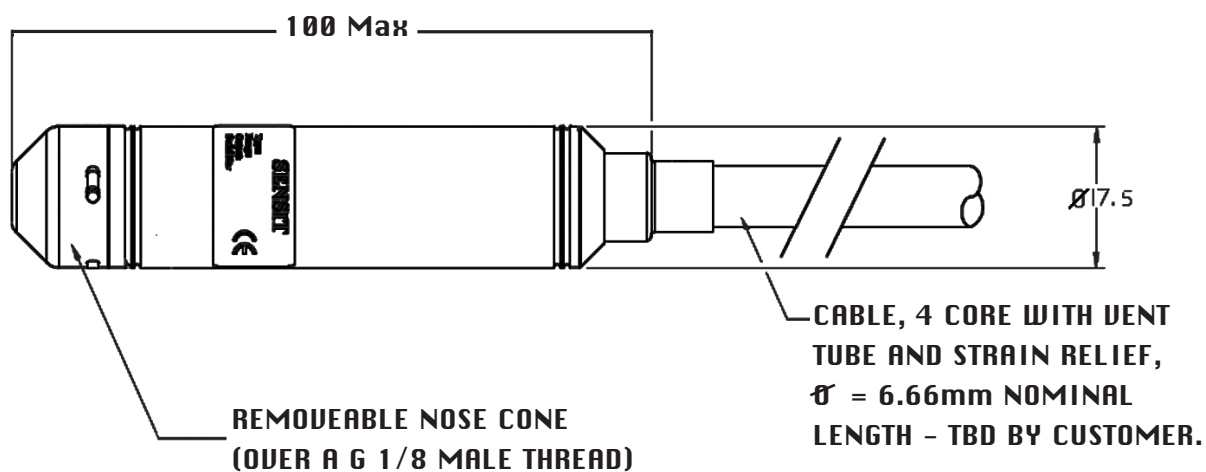
Environmental Specification:

IP68 to 200mH₂O

Wetted Materials:	
Body:	316L stainless steel or titanium
Sensor:	Al ₂ O ₃
Cable:	Polyurethane or Hytrel, integral strain relief
O-Ring:	Viton or Chemraz

EMC Compatibility:	2004/108/EC
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DIMENSIONS (mm)



Outline Dimensional Drawing:

Accessories

- | | |
|----------------------------|------------|
| • Sink Weight | SW-TDTM |
| • Calibration Adaptor | CA - TDTM |
| • Termination Box | TDT-TE10 |
| • Dry Box Desiccate Module | TDT-DM10 |
| • Vent Breather | TDT- VF/SS |
| • Surge Protector | TDT-SP10 |

Related Products:

- | | |
|---------------------|--------|
| Trident | DS2801 |
| Trident Leachate | DS2802 |
| Trident Exel | DS2817 |
| Trident Waste Water | DS2818 |



Ordering Information

Product Family

TM - Trident Mini

Pressure Range

001 to 500mH20 @ 4°C/39 °F

Pressure Datum

G - Gauge

Accuracy

S - 0.05%

A - 0.1%

Electrical Connection

P - Polyurethane Cable

H - Hytrel Cable

Output Type

mV - 10mV/V (2.5 to 12 V excitation)

mA - 4 - 20 mA (10 to 32 V excitation)

O-Ring

V - Viton

C - Chemraz

Material

S - 316L stainless steel

T - Titanium

Cable Length

005 - 5 metres

Submersible transducers and transmitters must be installed to the RM&C recommended method, please contact the Bramley sales office (on +44 (0)1256 884 900) for details.

Every effort has been made during the preparation of this document to ensure the accuracy of statements and specifications. However, we do not accept liability for damage, injury, loss or expense caused by errors or omissions made. We reserve the right to withdraw or amend products or documentation without notice.

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