New Feature

"Mini Sonic" Ultrasonic Transmitters- Standard Mtg.

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FEATURES

Standard 5 feet of interconnection cable
Simple push-button calibration
Output 4- 20 mA / 20- 4 mA
Built-in temperature compensation
Optional High Level Alarm relay dual pole output 5A/230 Vac
Optional RS485 communications with calibration, diagnostics and data logging software
PLC compatible
Three Wire Operation

APPLICATIONS

Food and Beverages
Water
Pharmaceutical

Mounting Options

Mounting Adaptors Available:
1"- 3/4" NPT or 1"- 1/2" NPT

ENVIRONMENTAL

Temperature : - 40 to 140°F(- 40 to 60°C) PVC Body
Pressure : 1 –10 bar
Installation Category : Class II

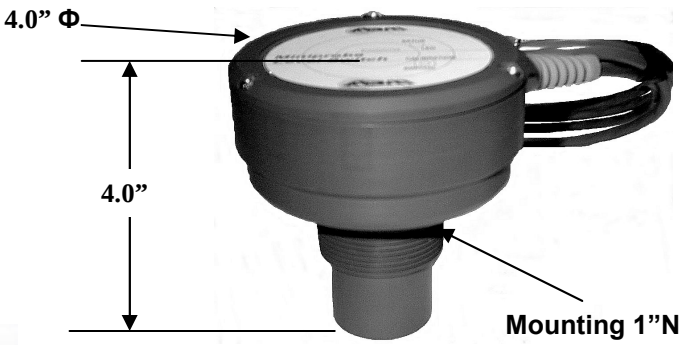
MECHANICAL

Std. Interconnection Cable :
5'- Belden #9503 : 3 Pair-24AWG
1) Supply : 12 - 30 Vdc 1 pair shielded (Red/Blk.)
2) Output : 4 - 20 mA 1 Pair shielded (Blk./Green)
3) Comm.:RS485 (optional) 1 Pair Shielded (Blk./Wht.)

Optional Relay Cable :
5'- Belden #9493 : 3-18 AWG unshielded
1) Relay (optional) DPST 5A /230Vac
Enclosure : PVC-94V0
Ingress Protection : NEMA 4X (IP65)

ELECTRICAL SPECIFICATIONS

Power DC **ABM300**	12 to 30 VDC , 0.07 A max @ 24 Vdc R load = (Vs — 6) / 24 mA
Output	4-20 mA Output 6.1 uA resolution
Optional	- communications port RS485
	- Relay DPST 5A / 230 Vac



New ! Fast Motion Detector
10 echoes / sec. Or Higher

OPERATIONAL

Accuracy : +/-0.10% of max. range
(in lab using 4-20 Ma current output)
+/-0.25% of max. range (typically in field)
Response Time: Standard. Unit 2 - 3 echoes / sec.
: Std. with less damping 6 echoes / sec.
: Fast Protocol ** I.R. 10 echoes / sec.
Or higher ** IF Required
Beam Angle : 10 - 12 degree at –3dB
Loss of Echo : Programmable from 1 min. to 4 min.
(Default = 1 min.) 22mA or 2 mA output
Temp. Comp. : In transducer
Calibration : Push-button or programmable
via optional communications port
Diagnostics :(Echo Profile) via communications port
High Level Alarm 5A. Relay has hysteresis and delay of 5% of the tank height, this can be adjusted using Communications software. Relay's state changes at 20mA calibration point or at 4 mA calibration point. To switch the above "push-button" or "communication software" can be used . Using push-button press and hold until the light goes off. Continuous green light indicates alarm at 20mA. ,blinking green indicates alarm at 4 mA. Relay "ON" set point is adjustable using communications software.

CATALOGUE # - On the Web return to Home Page & refer to Catalogue Number Structure for Ordering information. In Product Documentation refer to page 3.

TECHNICAL SPECIFICATIONS

Range Code	Operating Range in Liquids	Resolution	Mounting NPT
148	0.33 - 6 ft. 0.10 - 1.8 m	0.03" 0.7 mm	1"

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Interconnection Diagram

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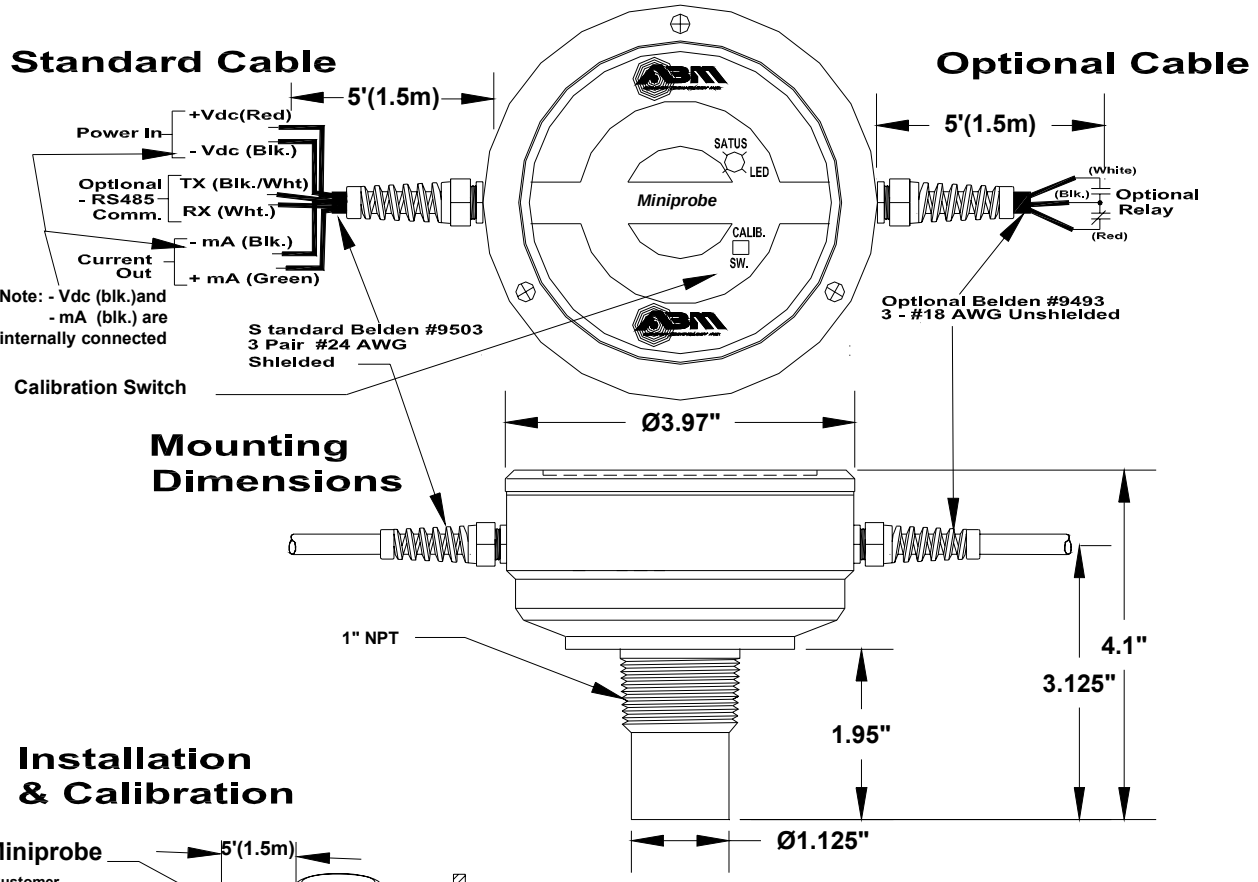
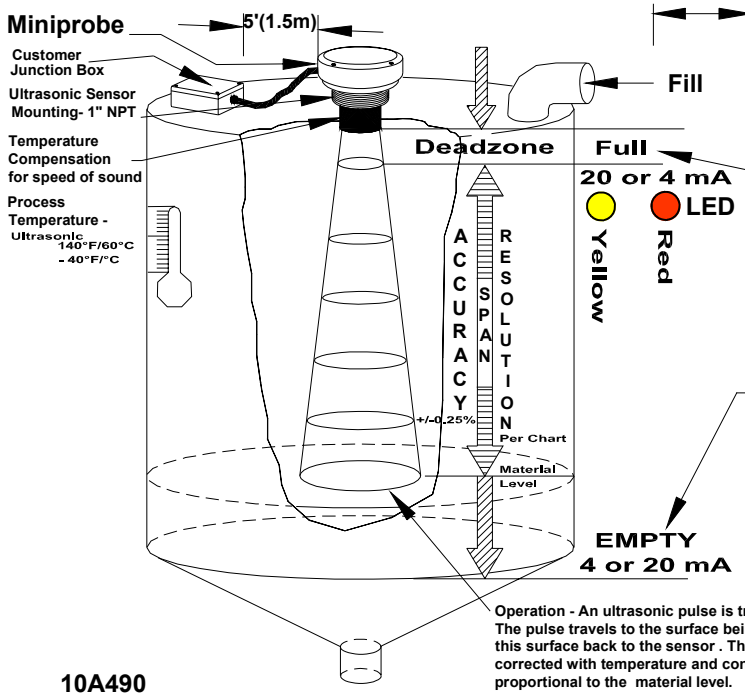
Interconnection Diag.



Installation & Calibration



Calibration - 4-20 or 20-4 mA Output

FULL - Calibration 20 mA or 4 mA(Set Near Target)

1. Calibration mode LED colour is Green.
2. Push button and hold until LED turns Yellow (20mA) or push button and hold until LED turns Red (4 mA).
3. Release button, observe LED flashes to acknowledge the calibration.

EMPTY - Calibrate 4mA or 20mA (Set Far Target)

1. Calibration mode LED colour is Green.
2. Push button and hold until LED turns Red (4mA) or push button and hold until LED turns Yellow (20ma).
3. Release button, observe LED flashes to acknowledge the calibration.

Operation - An ultrasonic pulse is transmitted from the ABM sensor . The pulse travels to the surface being monitored and is reflected off this surface back to the sensor . The time of flight is divided by 2 , corrected with temperature and converted to an output signal directly proportional to the material level.

10A490