

**New  
Feature**

# "Mini Sonic" Ultrasonic Transmitters - Standard & Sanitary Ferrule Mtg.



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## FEATURES

S.S. 316L Face Material c/w Ferrule Mtg.  
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



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

## APPLICATIONS

Food and Beverages ,Water ,Pharmaceutical

## ENVIRONMENTAL

Temperature :  
Electronics Enclosure :- 40 to 140°F(- 40 to 60°C)  
Continuous Operation  
Std. & Sanitary Nozzle :- 40 to 140°F(- 40 to 60°C)  
Teflon Std. Nozzle :- 40 to 266°F(- 40 to 130°C)  
PVC Sanitary No Steam Cleaning (CIP)  
S.S. Sanitary :- 40 to 266°F(- 40 to 130°C) for 1/2 Hr.  
Ferrule Steam Cleaning. Removed sensor for  
longer Cleaning cycle ,recommended.  
Not for Continuous Operation  
Pressure : 5 bar Max.  
Installation Category: Class II

## 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 More \*\* 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 in-  
dicates alarm at 20mA. ,blinking green indicates alarm  
at 4 mA. Relay "ON" set point is adjustable using  
communications software.

## TECHNICAL SPECIFICATIONS

Range Code	Beam Angle	OPERATING RANGE	Resolution	Mounting
070	12°	0.8 - 33 ft. 0.2 - 10 m	0.03" 0.7 mm	2.0" NPT or 2" Ferrule
080	12°	0.8 - 20 ft. 0.2 - 6 m	0.03" 0.7 mm	2.0" NPT or 2" Ferrule
081	12°	0.6 - 16 ft. 0.18 - 4.9 m	0.07" 1.8 mm	1.5" NPT or 1.5"/ 2" Ferrule
148	12°	0.33 - 6 ft. 0.10 - 1.8 m	0.03" 0.7 mm	1.0" NPT or 1.5"/ 2" Ferrule

## ELECTRICAL SPECIFICATIONS

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

## 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) SPDT 5A /230Vac

**Enclosure PVC-94V0**

Ingress Protection: NEMA 6 (IP68)

**Catalogue # - On the Web return to Home page & Refer to Catalogue Numbering for Order Information!**