

“Smart” Radar Sanitary Ferrule Mtg. Sensors



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FEATURES

Food Grade Teflon Antenna c/w Ferrule Mtg. Base
 Programmable (recommend) and Simple push-button calibration
 Output 4- 20 mA / 20- 4mA
 (Isolated on 4 Wire Model's only)
 Optional RS232 OR RS485 communications with calibration, diagnostics & data logging software
 PLC compatible (Modbus RTU)
 Three or four Wire Operation

APPLICATIONS

Food and Beverages
 Water
 Pharmaceutical

MECHANICAL

Conduit Entry : 1/2” NPT x 2
 Enclosure : Aluminum or S.S. 94V0
 Ingress Protection : NEMA 6 (IP68)

ENVIRONMENTAL

Temperature : - 40 to 140°F (- 40 to 60°C)
 Installation Category : Class II
 Approvals : FCC Part 15 - Low Power Communication Device, CE
 CAN/CSA: C22.2 No. 1010.1-M92 +A2
 CE: IEC 61010-1:90 + A1:92 +A2:95
 UL: 61010A-1(2002)

CATALOGUE # - On the Web return to Home Page & Refer to catalogue Number Structure for Ordering information. In Product Documentation refer to page 4.

TECHNICAL SPECIFICATIONS

Range Code	Operating RANGE In Liquids	Resolution	Mounting Ferrule
017	* - 17 ft. * - 5 m	0.08” 2.0 mm	2.0” NPT
033	* - 33 ft. * - 10 m	0.15” 3.9 mm	2.0” NPT
050	* - 50 ft. * - 15 m	0.22” 5.7 mm	2.0” NPT
100	* - 100 ft. * - 30 m	0.44” 11 mm	2.0” NPT

Note - * Minimum Range starts at the lower tip of the antenna for high dielectric materials (water). For low dielectric materials allow for longer Minimum Range

Standard Unit
 - Aluminum Housing
 - Teflon Antenna

Sanitary Ferrule - 2”
 Teflon - PTFE



PROCESS

Temperature : PTFE Rod - 40 to 400°F(- 40 to 204°C)
 Pressure : max. 2 bar
 Material Dielectric: Er >2

OPERATIONAL

Operation : Pulse Radar
 Accuracy : +/- 0.1% of max. range in lab using 4-20mA current output
 +/-0.25% of max. range (typically in field)
 Response Time: Standard Unit 2 - 3 echo's / sec.
 : Std. with less damping 6 echo's / sec.
 : Fast Protocol 10 - 30 echo's / sec.
 Frequency : 5.8 GHz or 6.3 GHz.
 Loss of Echo : Hold 1min., 22mA or 2 mA output.
 Transmit Power: 50 uW average
 Calibration : Via communications port (required).
 Diagnostics : (Echo Profile) via communications port
 Antenna : Dielectric Rod Std. PP & Optional PTFE

ELECTRICAL SPECIFICATIONS

Power	115 VAC 60 Hz or 230 VAC 50 Hz (+/-20%), 1.7 VA
ABM400 AC	
ABM300 DC	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
	750 Ohms (Isolated on 4 Wire only)
	Optional RS232 or RS485 communications port.