

"Smart" Radar Explosion Proof 2 Wire Measurement Sensors"



730 The Kingsway Peterborough, Ont. K9J6W6 Canada
Tel: (705) 740 - 2010 Web: www.abmsensor.com
Fax: (705) 740 - 2563 E-mail: info@abmsensor.com

FEATURES

2 Wire Operation
Self Adjusting Tracking Radar
Output 4-20 mA / 20- 4 mA
For communications with calibration,
diagnostics & data logging software
Communication with "HART 7"

APPLICATIONS

Water / Wastewater
Chemicals with vapors

MECHANICAL

Conduit Entry : 1/2" NPT
Enclosure : Aluminum /S.S.- 94V0
Ingress Protection : TYPE 4/4X ,
NEMA 6 (IP68)

ENVIRONMENTAL

Approvals :FM & CSA for Can. & US Explosion Proof
Class I, Div.1, Groups B, C, D:
Dust-Ignition Proof Enclosure for
Class II/III Div. 1,Groups E, F, G
Approvals : FCC Part 15 - Low
Power Communication Device
Temperature : - 40 to 140°F (- 40 to 60°C)
Installation Category : Class II
Catalogue # - On the Web return to Home Page & refer to
Catalogue Number Structure for ordering information. In
Product Documentation refer to page 5.

TECHNICAL SPECIFICATIONS

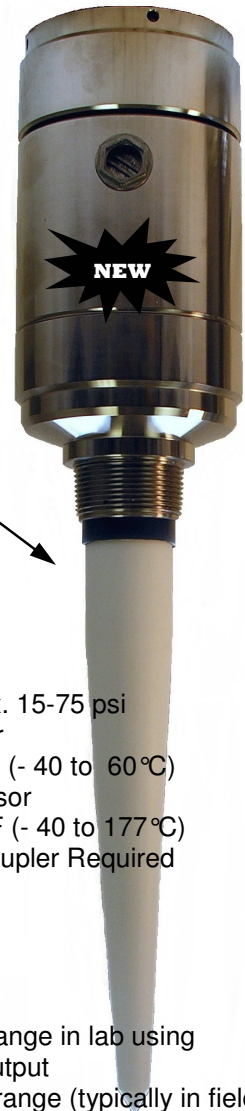
Radars Range Code	RANGE In Liquids	RESOLUTION	MOUNTING
017	* - 17 ft. * - 5 m	0.08" 2.0 mm	2.0",1 1/2" NPT **
033	* - 33 ft. - 10 m	0.15" 3.9 mm	2.0",1 1/2" NPT **
050	* - 50 ft. * - 15 m	0.22" 5.7 mm	2.0",1 1/2" NPT **
100	* - 100 ft. * - 30 m	0.44" 11 mm	2.0",1 1/2" NPT **
140	* - 140 ft. * - 42 m	0.62" 15.7 mm	2.0",1 1/2" NPT **
240	* - 240 ft. * - 73 m	1.06" 26 mm	2.0",1 1/2" NPT **

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

Note -**Only 2" and 3"NPT Mtg. Connection Available on High Temperature Radar.

OPTIONAL

Antenna Extension : 6" or 8" Lengths
- Use only with Teflon Antenna !
- Refer to catalogue number Page for ordering info.
High Temperature Unit :
- 2" / 1 1/2" NPT Process Connection
- Teflon De-coupler threads on with 2" NPT Process Connection.



Antenna Extension

PROCESS

Material Dielectric : Er >2
Pressure : 5 bar Max. 15-75 psi
Temperature : - Std. Sensor
PP Rod : - 40 to 140°F (- 40 to 60°C)
High Temp. Optional Sensor
PTFE Rod : - 40 to 350°F (- 40 to 177°C)
Teflon Temperature De-coupler Required

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)
Frequency : 6.3 GHz
Loss of Echo Hold : 1 min., 22mA or 2mA output
Transmitter Power : 50 uW average
Calibration : via optional communications port.
(required)
Diagnostics: (Echo Profile) via communications port
Antenna : Dielectric rod PP or Optional PTFE

ELECTRICAL SPECIFICATIONS

Power DC 16 to 30 VDC ,
ABM200 R load max. = (Vs - 14) / 25 mA

Output 4-20 mA Output 6.1 uA resolution
Optional Communication with "HART 7"