

New Product

Self Adjusting "Smart" 26 GHz Radar for Solid Materials



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

Self Adjusting Tracking Radar for Solid Materials
 Programmable (recommended) and
 Simple push-button calibration
 Swivel Mtg. Aimer (recommended)
 Output 4-20 mA / 20-4mA
 (Isolated on 4 Wire Model's only)
 Optional RS232 OR RS485
 For communications with calibration,
 diagnostics & data logging software
 PLC Compatible (Modbus RTU)
 Three or four Wire Operation

APPLICATIONS

Solids with Dust
 Powders

MECHANICAL

Conduit Entry : 1/2" NPT x 2
 Enclosure : Aluminum Or S.S. - 94V0
 Ingress Protection : NEMA 4 (IP65) Type 4/4X

ENVIRONMENTAL

Temperature : - 40 to 140°F (- 40 to 60°C)
 Installation Category : Class II

PROCESS

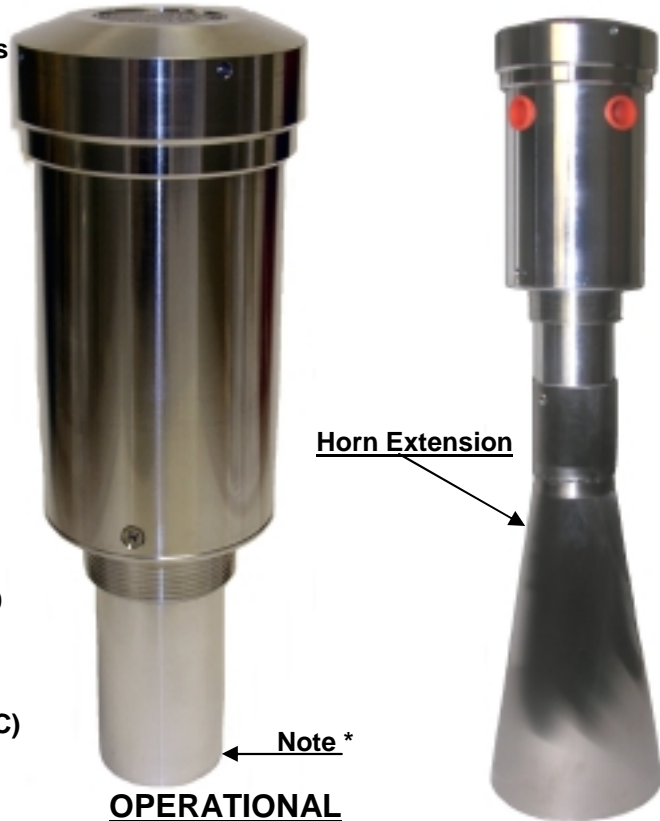
Temperature Std. : - 40 to 140°F (- 40 to 60°C)
 c/w Teflon De-coupler: - 40 to 350°F (- 40 to 177°C)
 Material Dielectric : Er >2
 Max. Pressure : 5 bar
 For very dusty applications divide max. range by two.

Catalogue # - On the Web return to Home
 Page & Refer to Catalogue Number Structure for Ordering
 information. In Product Documentation refer to Page 2.

TECHNICAL SPECIFICATIONS

Radar Range Code	RANGE In Solids	RESOLUTION	MOUNTING
017	* - 17 ft. * - 5 m	0.08" 2.0mm	2.0 NPT
033	* - 33 ft. * - 10 m	0.15" 3.9mm	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
240	* - 240 ft. * - 73 m	1.06" 26 mm	2.0" NPT

Note - * Minimum Distance 36" from the bottom of the thread base.



Horn Extension

Note *

OPERATIONAL

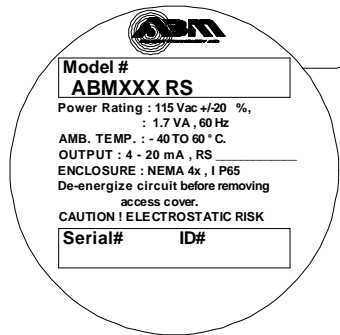
Operation : Pulse Radar
 Accuracy : +/- 0.1% of max. range in lab using
 4-20mA current output
 +/-0.25% of max. range (typically in field)
 Frequency : 26 GHz
 Loss of Echo: Hold 1 to 3 min.,
 22mA or 2 mA. output
 Transmitter Power : 50 uW average
 Calibration : Via communications port (required)
 Diagnostics : (Echo Profile) via communications port
 Antenna : Point Antenna PTFE with Horn for
 solid materials. A horn extension is
 required for very low dielectric and
 dusty powder materials.

Power ABM400 AC	115 VAC 60 Hz or 230 VAC 50 Hz (+/-20%), 1.7 VA
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.

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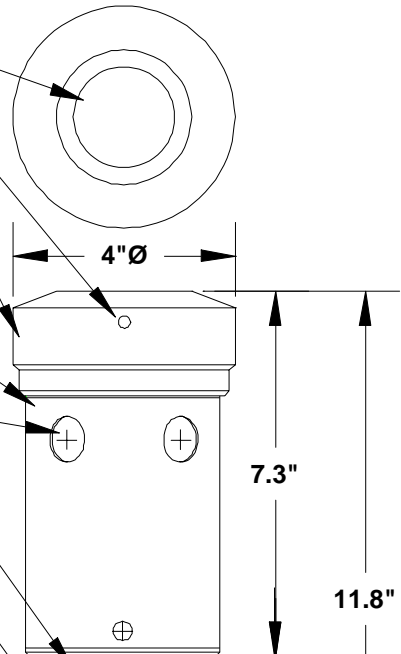
Nameplate Recess
 Cover Tool Access Hole
 Thread on Wiring Access Cover (Aluminum or S.S.)
For Wiring Dtl. refer to 3 & 4 Wire Ultrasonic and Radar Sensors User Instruction Manual

Electronics Enclosure Aluminum or S.S.
 3.5" Ø O.D.

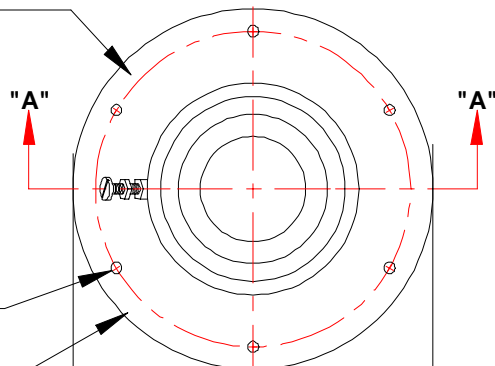
1/2" NPT Conduit Entry
 Optional Swivel Aimer Mount Here

Integral Horn

Optional Horn Extension



Upper & Lower Support Plates - Painted Mild Steel



Aim As Required

Install Radar Unit on this Side

3"-2" NPT Adaptor For Sensor Mounting

1/4"-20 Swivel Nut & Lockscrew

Nylon Swivel Ball

1/4" Thk. Rubber

1/8" Thk. Rubber Mounting Gasket supplied

Section 'A'-'A' Ball Swivel Flange Mount
 Maximum Angle 16° Off Perpendicular

ABM300/4XX-033R2,050R2,
 100R2 & 240R2

3 & 4 Wire Radar Level Sensor Outline Detail