

Improper installation in a nozzle can create “ringing” which may adversely affect measurement. Ideally, the antenna should be mounted so the end of the antenna is a minimum of 0.5" (12 mm) below the nozzle (be sure to include any nozzle dimension *inside* the vessel). Two antenna extension lengths (2" or 8") are offered to allow the R82 transmitter to work reliably in a variety of nozzles.

The Minimum Blocking Distance of 15" (380 mm), BSP: 16" (405 mm) is always measured from the bottom of the threads or face of a flange. The related distance (as measured from the end of the antenna) varies depending on the antenna extension chosen. Refer to Figure 6.

When necessary, the narrow beam width of the 26 GHz R82 does allow mounting so that the antenna is recessed inside the nozzle. Optimally, the recessed dimension should never exceed 2× the nozzle diameter (Sch. 40 maximum). Refer to Figure 7.

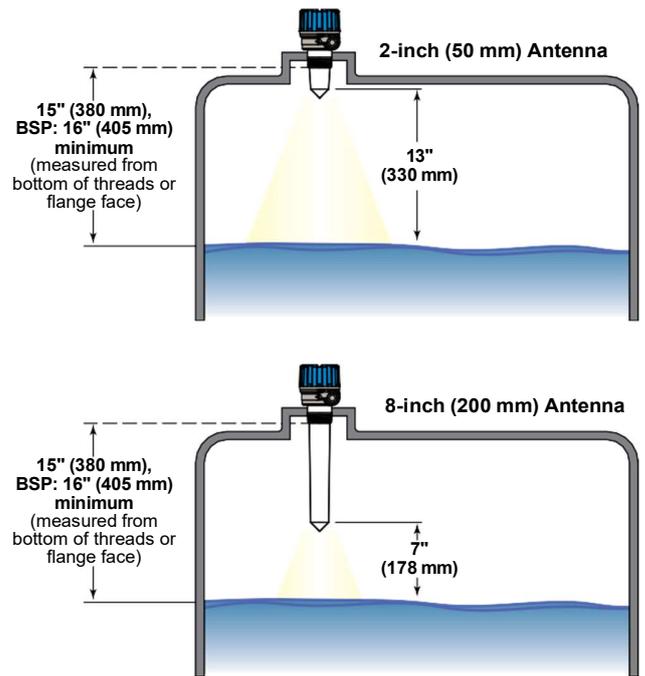


Figure 10

Maximum Recess (m) is $2 \times$ Nozzle Diameter (d) (Sch. 40 maximum)

example: 2" diameter nozzle

example: 4" diameter nozzle

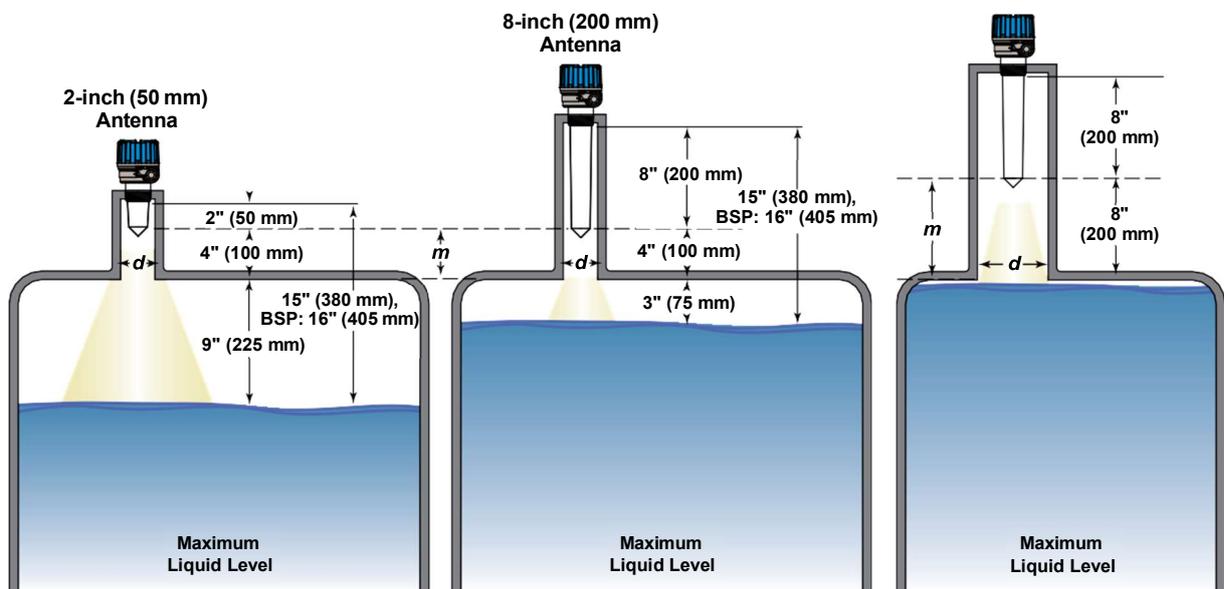


Figure 7
Maximizing Useable Capacity



BASIC MODEL NUMBER

R	RADAR Level Transmitter
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OPERATING FREQUENCY

8	26 GHz
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TRANSMITTER MODEL

2	Economical
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POWER/SIGNAL

5	24 VDC, Two-Wire; 4–20 mA with HART
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AGENCY CLASSIFICATION

1	Integral, General Purpose/Non-Incendive (cFMus)
2	Integral, Intrinsically Safe (cFMus)
A	Integral, General Purpose (ATEX)
B	Integral, Intrinsically Safe (ATEX II 1G Ex ia IIC T4 @70°C)/IEC Ex ia IIC T4 Ga

HOUSING/CONDUIT CONNECTION

0	Cast Aluminum, Single Compartment; 3/4" NPT
1	Cast Aluminum, Single Compartment; M20
6	Lexan® Plastic, Single Compartment, 3/4" NPT
7	Lexan Plastic, Single Compartment, M20

ACCESSORIES

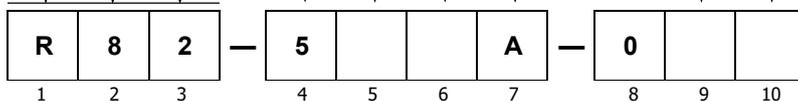
A	Digital Display and Keypad
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ANTENNA TYPE

1	Polypropylene, 2" (50 mm) Extension
2	Polypropylene, 8" (200 mm) Extension
3	ETFE, 2" (50 mm) Extension
4	ETFE, 8" (200 mm) Extension

PROCESS CONNECTION

1	2" NPT (Sch. 40 maximum)
2	2" BSP (G2) (Sch. 40 maximum)



THREAD-ON FLANGE PART NUMBERS

FOR USE WITH 2" NPT CONNECTIONS

CARBON STEEL		
2"	150#	004-6820-013
3"		004-6820-001
4"		004-6820-007
6"		004-6820-016
3"	300#	004-6820-002
4"		004-6820-008
3"	600#	004-6820-003
4"		004-6820-009

304 SS		
2"	150#	004-6820-019
3"		004-6820-020
4"		004-6820-021
6"		004-6820-022
316 SS / 316L SS		
2"	150#	004-6820-023
3"		004-6820-024
4"		004-6820-025
6"		004-6820-026
3"	300#	004-6820-005
4"		004-6820-011
3"	600#	004-6820-006
4"		004-6820-012

FIBERGLASS	
2"	004-6823-018
3"	004-6823-019
4"	004-6823-020
KYNAR	
2"	004-6823-028
3"	004-6823-029
4"	004-6823-030
PVC	
2"	004-6823-008
3"	004-6823-009
4"	004-6823-010

DIMENSIONAL SPECIFICATIONS

INCHES (MM)

