

B00003-00

Antenna couplers

# RX SERIES



Solexy's patented (7,057,577) Explosion-Proof Antenna Coupler permits the installation of non-Ex certified antenna in hazardous areas.

This coupler is designed to be used directly with listed explosion proof housings or conduit fittings.

An integrated blocking circuit prevents hazardous energy reaching the antenna if a radio, modem or access point failure occurs. It also allows for antenna removal in hazardous areas.

The coupler's robust design allows for connection to practically any radio and antenna. It is a highly flexible and cost effective solution to hazardous area radio system deployment. The coupler can also be used as a cable bulkhead.



## FEATURES

- ✔ **SHORT CIRCUIT PROTECTION**  
Includes integrated blocking circuitry.
- ✔ **ENVIRONMENTAL PROTECTION**  
Fitting 300 series stainless steel construction and integral potting protects electronics from corrosive environments.
- ✔ **CERTIFICATION**  
The RX Series is certified Atex, IECEx and UL as an apparatus, and can be installed per the conditions of acceptability, without further assessment. Available on request ANZEx certified unit for Australian/New Zealand market where IECEx scheme is not recognized.
- ✔ **FLEXIBILITY**  
Fitting is approved for hazardous locations and can be installed with a simple wrench.
- ✔ **NO SEALING FITTING REQUIRED**  
Permits a wide variety of passive antennas to be installed in hazardous areas. Antennas may be removed and/or installed with power on. Perfect for a cable bulkhead connection.

## NOMENCLATURE


- a Antenna Side Connector**
  - F RP-SMA Female
  - N N Female
  - S SMA Female
- b Thread Connection**
  - 3 3/4" NPT
  - M M25x1.5 (IECEx and Atex only)
- c Housing Material**
  - S AISI 303
  - L AISI 316L
- dd Radio Side Connector**
  - 02 RP-SMA Female (RXF and RXN only)
  - 04 SMA Female (RXS only)
- ee Coax cable length radio side (optional on request)**
  - 00 no cable (with connector on body)

<b>RX</b>	<b>N</b>	<b>3</b>	<b>S</b>	<b>02</b>	<b>00</b>	<b>J</b>	<b>X0</b>
	<b>a</b>	<b>b</b>	<b>c</b>	<b>dd</b>	<b>ee</b>	<b>f</b>	<b>gg</b>

- f Version (frequency range)**
  - J optimized from 100 MHz to 1.4 GHz
  - R optimized from 500 MHz to 3.9 GHz and from 4.6 GHz to 6 GHz
  - L optimized from 3.9 GHz to 4.6 GHz
- gg Approval <sup>(1)</sup>**
  - N0 cULus apparatus marking
  - X0 IECEx and ATEX apparatus marking
  - XN cULus, IECEx and ATEX apparatus marking (dual marking)

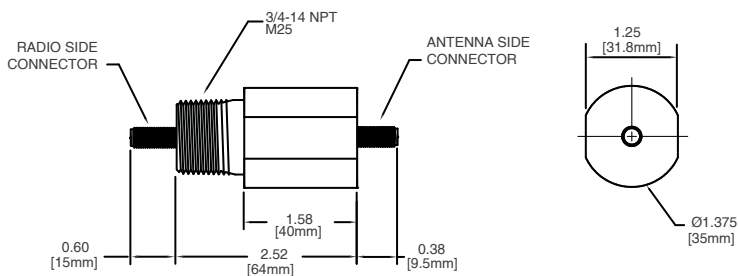
(1) Consult factory for ANZEX certificate

# SPECIFICATIONS

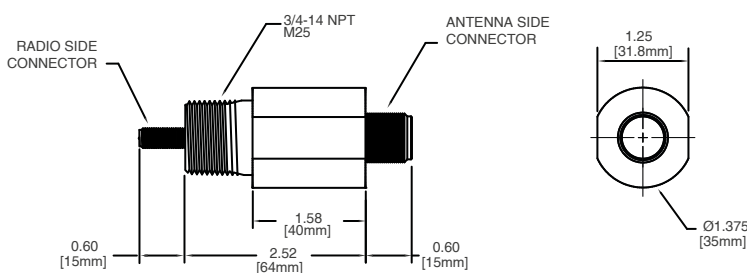
<b>ATEX/IECEX/ANZEX apparatus certification</b>	 I M2 (M1) Ex db mb [ia Ma] I Mb II 2 (1) G Ex db mb [ia Ga] IIA/IIB/IIC T5/T6 Gb II 2 (1) D Ex tb mb [ia Da] IIIC T100°C/T80°C Db									
<b>ATEX certificate nr</b>	EXA 15 ATEX 0042									
<b>IECEX certificate nr</b>	IECEX EXA 15 0005									
<b>cULus certification</b>	Class I, Division 1 & 2, Group A,B,C,D and Class II, Division 1 & 2, Group F&G (UL File E492911)									
<b>Maximum Fault Voltage</b>	250VDC, 250VAC 50-60Hz									
<b>Maximum Antenna Power Output (EIRP)</b>	<b>UL/CSA Group</b>	<b>D, F &amp; G</b>		<b>C</b>	<b>A &amp; B</b>					
	<b>IECE Gas Group</b>	<b>I and III</b>	<b>IIA</b>	<b>IIB</b>	<b>IIC</b>					
	Max Threshold Power Limit	6W	6W	3.5W	2W					
<i>For more details about RF power input and output (EIRP) allowed please consult installation and operation manual.</i>										
<b>Approximate Insertion Loss (dB)</b>	<b>Frequency</b>	<b>100 MHz</b>	<b>500 MHz</b>	<b>1.4 GHz</b>	<b>1.7 GHz</b>	<b>2.5 GHz</b>	<b>3.9 GHz</b>	<b>4.9 GHz</b>	<b>5.4 GHz</b>	<b>6.0 GHz</b>
	J version	1.0	0.4	0.4	0.5	0.8	-	-	-	-
	R version	-	1.3	0.6	0.6	0.6	1.2	1.2	0.8	2.0
<b>Approximate Weight</b>	0.32 kg (70.6 lb)									
<b>Minimum Dielectric Strength</b>	1500V									
<b>Impedance</b>	50 Ω									
<b>Housing Material</b>	300 series stainless steel									
<b>Ambient Temperature Range</b>	cULus: -40°C (-40°F) +75°C (+167°F) ATEX/IECEX: -40°C (-40°F) +85°C (+185°F)									

## DIMENSIONAL DRAWINGS

RXF  
RXS



RXN



RX Series with coax cable embedded (optional execution on request)

