

# ANTENNA COUPLER AX SERIES

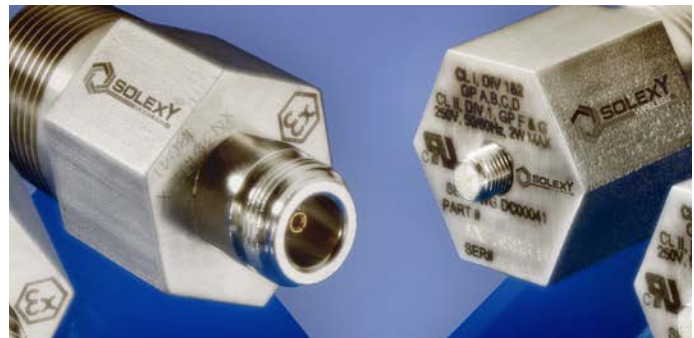
Solexy's patented (7.057.577) Explosion-Proof Antenna Coupler permits the installation of a passive antenna in hazardous areas.

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

An integrated blocking circuit prevents potentially hazardous energy from reaching the antenna in case of radio, modem, or access point failure.

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

<b>Short Circuit Protection</b>	Includes integrated blocking circuitry.
<b>No Sealing Fitting Required</b>	Fitting is approved for hazardous locations and can be installed with a simple wrench.
<b>Environmental Protection</b>	300 series stainless steel construction and integral potting protects electronics from corrosive environments.
<b>Flexibility</b>	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
<b>Certification</b>	Component certification simplifies the required radio system certification process by eliminating or significantly reducing the tests required for evaluation.



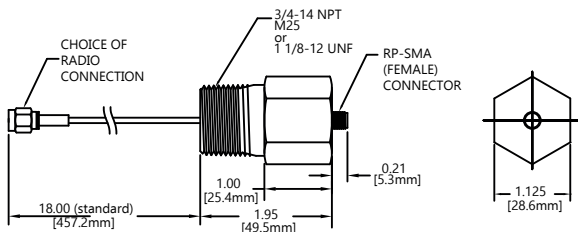
## SPECIFICATIONS

IECEX / ATEX Component Certification	 I M2 (M1) Ex d mb [ia Ma] I Mb II 2 (1) G Ex d mb [ia Ga] IIC Gb II 2 (1) D Ex mb [ia Da] IIIC Db
UL Component Certification	Class I, II Div I Group A,B,C,D,F,G (UL File nr. E358609)
Maximum Fault Voltage	IECEX / ATEX Gas Group IIA, IIB & IIC 250VDC, 250VAC 50-60Hz
	UL A, B, C, D, F, G 250VDC, 250VAC 50-60Hz
	MSHA A, B, C, D, F, G 250VDC, 250VAC @ 60 Hz max
Maximum Antenna Power Output (subject to end product evaluation)	IEC Gas Group I and III IIA IIB IIC NEC 500 Class I, II Group F, G D C A,B Threshold Power Limit 6W 6W 3.5W 2W
Approximate Signal Attenuation <sup>(1)</sup>	Frequency AXF AXN AXZ
<sup>(1)</sup> Values shown for 18" (457 mm) coaxial cable and standard RP-SMA connectors	425 MHz 0.75 dB 0.75 dB - 900 MHz 0.85 dB 0.85 dB - 2.4 GHz 1.4 dB 1.4 dB - 5.8 GHz 2.8 dB 2.8 dB 1.0 dB
Frequency Range	25 MHz to 7 GHz
Approximate Weight	0.23 kg
Ambient Temperature Range	-40°C +85°C
	Minimum Dielectric Strength 1500V
	Impedance 50 Ω
	Housing Material 300 series stainless steel

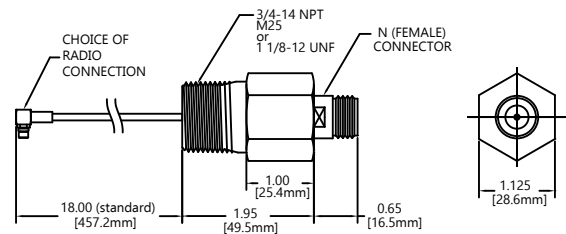


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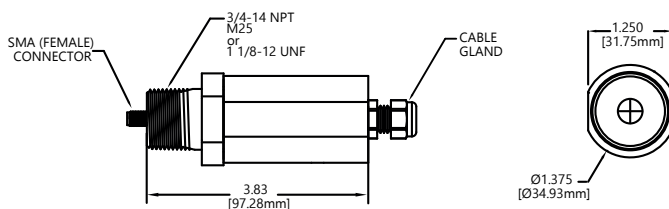
## DIMENSIONAL DRAWINGS



AXF



AXN



AXZ

## NOMENCLATURE

AXF 3 S 01 06 A N  
 aaa b cc dd e f

### aaa Antenna Coupler

**AXF** Antenna coupler with RP-SMA Female antenna connection

**AXN** Antenna coupler with N Female antenna/cable connection

**AXZ** Antenna coupler suitable for 6 to 7 GHz (only IECEX and ATEX certified with 3/4" npt thread connection)

### b Thread Connection

**3** 3/4" NPT (available only for UL, IECEX, ATEX and AXZ series)

**M** M25x1.5 (IECEX and ATEX only)

**S** 1 1/8"-12 UNF (MSHA only)

### cc Coaxial Connector

\*\* see ordering guide

### dd Coax cable length

**00** no cable with SMA Female connector on body (only AXZ series)

**06** 6" (152.4 mm)

**12** 12" (304.8 mm)

**18** 18" (457.2 mm)

**24** 24" (609.6 mm)

### e Frequency range

**A** full frequency range

**J** optimized from 169 MHz to 2.5 GHz

**T** optimized from 2 GHz to 6 GHz

### f Approval

**N** cURus Recognized Component Marking

**X** IECEX and ATEX Component Marking

**M** MSHA Evaluation Marking

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