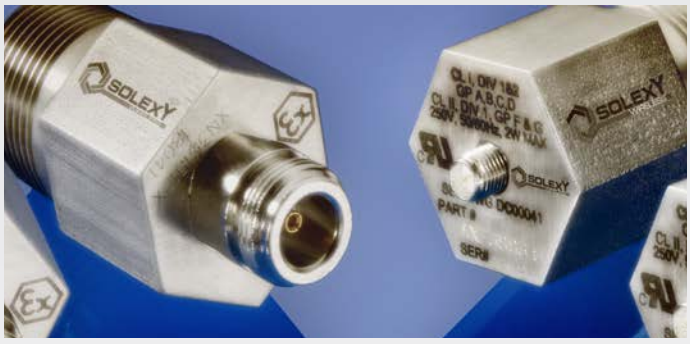
ANTENNA COUPLERS

AXN & AXF EXPLOSION PROOF / INTRINSICALLY SAFE ANTENNA COUPLER



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

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

SPECIFICATIONS

IECEx / ATEX Component Certification		Ex 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 IECEx certificate nr. IECEx DNV 11.0015U ATEX certificate nr. DNV 06 ATEX 0183U				
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 [1]		Frequency	AXF	AXN	AXZ	
		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				
Minimum Dieletric Strength		1500V				
Approximate Weight		0.23 kg				
Ambient Temperature Range		-40°C +85°C				
Impedance		50 Ω				
Housign Material		300 series stainless steel				

[1] Values shown for 18" (457 mm) coaxial cable and standard RP-SMA connectors (no adapter)

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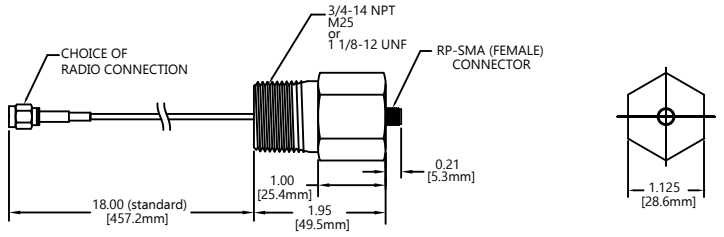
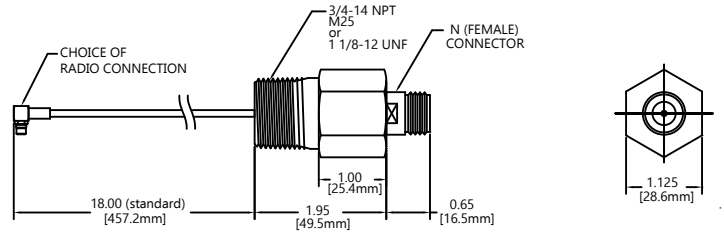
DIMENSIONAL DRAWING

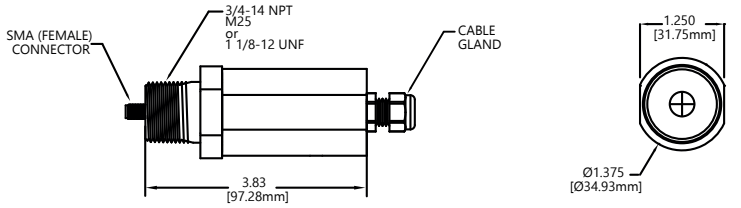
AXF



AXN



AXZ



NOMENCLATURE

AXF	3	S	01	06	A	N	18
aaa	b	c	dd	ee	f	g	hh

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)
c	**Housing Material**	**S**	300 series stainless steel
dd	**Coaxial Connector**	**	see ordering guide
ee	**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)
f	**Frequency range**	**A**	full frequency range
		J	optimized from 169 MHz to 2.5 GHz
		T	optimized from 2 GHz to 6 GHz
g	**Approval**	**N**	cURus Recognized Component Marking
		X	IECEx and ATEX Component Marking
		M	MSHA Evaluation Marking
hh	**Antenna Adapter**	**blank**	No adapter required
		**	see ordering guide

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