

ANTENNA COUPLER AX SERIES

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

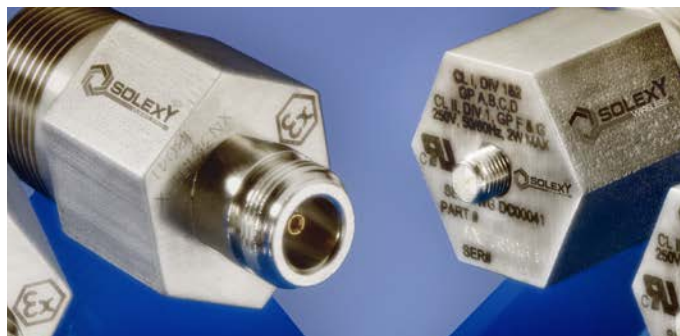
This coupler is designed to be used directly with listed explosion proof housings or conduit fittings.

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

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

 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 ⁽¹⁾

⁽¹⁾ Values shown for 18" (457 mm) coaxial cable and standard RP-SMA connectors

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

Approximate Weight 0.23 kg

Ambient Temperature Range -40°C +85°C

Minimum Dielectric Strength 1500V

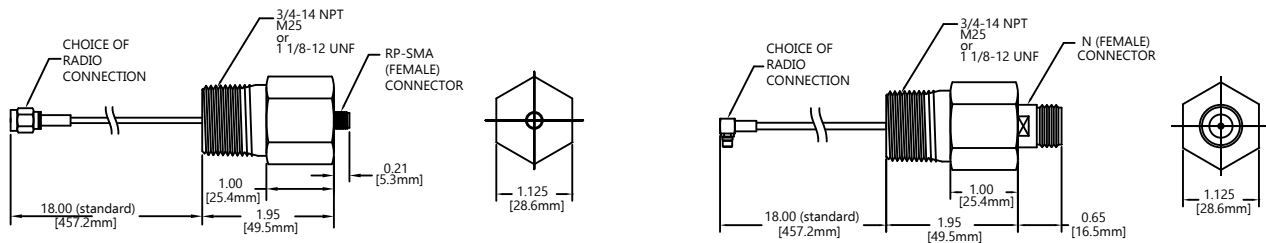
Impedance 50 Ω

Housing Material 300 series stainless steel



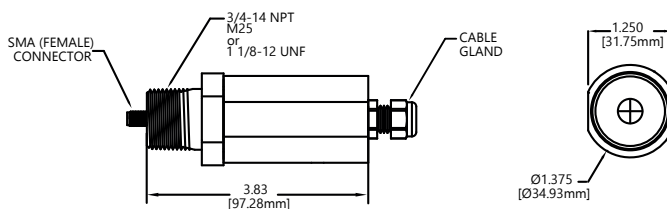
ANTENNA COUPLER AX SERIES

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)	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)
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)	e	Frequency range A full frequency range J optimized from 169 MHz to 2.5 GHz T optimized from 2 GHz to 6 GHz
cc	Coaxial Connector ** see ordering guide	f	Approval N cURus Recognized Component Marking X IECEX and ATEX Component Marking M MSHA Evaluation Marking