Antenna couplers

SX SERIES with integrated surge protection



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 occures. 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.

Fitting is approved for hazardous locations and can be installed with a simple wrench.











FEATURES

SHORT CIRCUIT PROTECTION

Includes integrated blocking circuitry.

SURGE PROTECTION

An integrated surge protection circuit, according to IEC61643-21 Category C2, protects the radio from potential surges (patent pending).

O ENVIRONMENTAL PROTECTION

Fitting 300 series stainless steel construction and integral potting protects electronics from corrosive environments.

CERTIFICATION

The SX Series is certified Atex, IECEx and for North America as an apparatus, and can be installed per the conditions of acceptability, without further assessment. North America approval (USA and Canada) includes class & divisions and zones.

IECex certification is issued from an Australian notified body, therefore SX can be installed in Queensland mines.

O 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 Female
S SMA Female

b Thread Connection

3 3/4" NPT M M25x1.5

c Housing Material

S AISI 303 L AISI 316L

dd Radio Side Connector

02 RP-SMA Female (SXF and SXN only)

04 SMA Female (SXS only)

ee Coax cable length radio side (optional on request)

00 no cable (with connector on body)

SX	N	3	S	02	00	R	X0
	а	b	С	dd	ее	f	99

f Version (frequency range)

R optimized from 700 MHz to 3.9 GHz and from 4.6 GHz to 6 GHz

gg Approval

N0 Class&Divisions and Zones apparatus marking (USA&Can.)
 X0 IECEx and ATEX apparatus marking
 XN IECEx, ATEX an North America

apparatus marking (dual marking)

SPECIFICATIONS

ATEX apparatus certification nr. TÜV CY 18 ATEX 0206158 X

(Ex)

Ex 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 mb tb [ia Da] IIIC T80°C...T100°C Db

IECEx apparatus certification

nr. IECEx MSC 19.0001X

Ex db mb [ia Ma] I Mb

Ex db mb [ia Ga] IIA/IIB/IIC T5....T6 Gb Ex mb tb [ia Da] IIIC T80°....T100°C Db

cQPSus apparatus certification

nr. LR-1504-3

Class I, Division 1, GROUP ABCD

Class II, Division 1, GROUP EFG

[Ex ia Ga] IIC [Ex ia Da] IIIC

Class I, Zone 1, AEx db mb [ia Ga] IIA/IIB/IIC T6...T5 Gb

Zone 21, AEx mb tb [ia Da] IIIC T80°C...100°C Db

Ex db mb [ia Ga] IIA/IIB/IIC T6...T5 Gb Ex mb tb [ia Da] IIIC T80°C...T100°C Db

Maximum Fault Voltage

250VDC, 250VAC 50-60Hz

Approximate Insertion Loss (dB)

 Frequency
 100 MHz
 500 MHz
 1.4 GHz
 1.7 GHz
 2.5 GHz
 3.9 GHz
 4.9 GHz
 5.4 GHz
 6.0 GHz

 R version
 0.6
 0.6
 0.8
 1.1
 1.8
 1.4
 2.0

Approximate Weight 0.32 kg (70.6 lb)

Minimum Dieletric Strength

1500V

Impedance

50 Ω

Housing Material

300 series stainless steel

Ambient Temperature Range

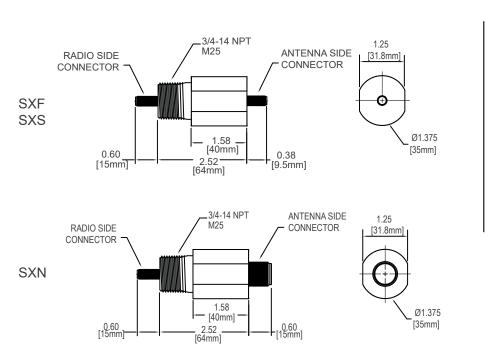
 -40° C (-40°F) to +85°C (+185°F) when max RF input = 2W (T5)

 -40° C (-40° F) to $+80^{\circ}$ C ($+176^{\circ}$ F) when max RF input = 6W (T5)

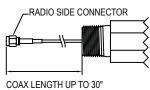
 -40° C (-40° F) to $+70^{\circ}$ C ($+158^{\circ}$ F) when max RF input = 2W (T6)

 -40° C (-40° F) to $+65^{\circ}$ C ($+149^{\circ}$ F) when max RF input = 6W (T6)

DIMENSIONAL DRAWINGS







ACCORDING TO CUSTOMER NEEDS