

B00020-02

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 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.

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).

✔ **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&Canada) includes class & divisions and zones.

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

✔ **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
- 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
	a	b	c	dd	ee	f	gg

- f Version (frequency range)**
 - R optimized from 700 MHz to 3.9 GHz and from 4.6 GHz to 6 GHz
- gg Approval**
 - N0 USA&Canada apparatus (Class&Divisions and Zones)
 - X0 IECEx and ATEX apparatus
 - XN IECEx, ATEX, USA&Canada apparatus

SPECIFICATIONS

ATEX certification
nr. TÜV CY 18 ATEX 0206158 X

 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 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

USA & Canada certification
cQPSus 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

Typical Insertion Loss @ 20°C (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 Dielectric 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°C (+176°F) when max RF input = 6W (T5)
-40°C (-40°F) to +70°C (+158°F) when max RF input = 2W (T6)
-40°C (-40°F) to +65°C (+149°F) when max RF input = 6W (T6)

DIMENSIONAL DRAWINGS [inch]

