



HAZARDOUS LOCATIONS
TELEMETRY EQUIPMENT

**COMPONENTS
CATALOGUE** &
ACCESSORIES



COMPANY

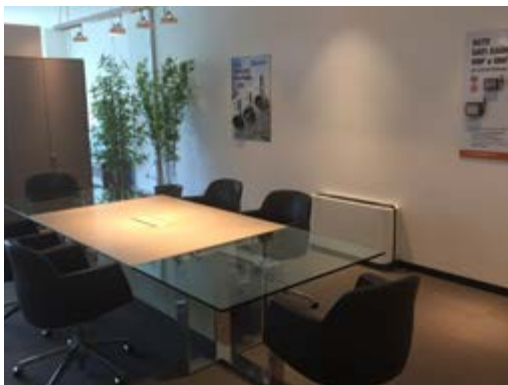
SOLEXY specializes in **devices and patented technology for radio and buss transmissions in hazardous classified areas** such as refineries, chemical plants, mines, off shore rigs and other hazardous rated areas.

Our flameproof intrinsically safe barriers for radios and busses allowed transmission of RF signals into classified “Hazardous Areas”.

Expanding on the need of this technology in industrial environments, we developed a **line of industrial antennas** that meet the demanding requirements and hostility of the process environment.

Expanding our patented technology and realizing the demand to protect other signals, we developed a **solution for Ethernet**.

It is now possible to transmit Ethernet signals from explosion proof enclosures or purge panel systems into a hazardous area with the use of our Passive Ethernet barrier, without the cost of additional sealing devices, area rated conduit systems, or additional power.



The Italian Solexy headquarter in Desenzano del Garda (Brescia) and the USA R&D department, located in Cincinnati (Ohio)

APPROVALS

Our product range is totally designed and manufactured according to the stringent specifications of both European and North American standards.

Our technical department works with highly sophisticated systems, which include state-of-the-art 3D design software, finite element analysis, vector network analyzers, and other electronic equipment.





COMPONENTS CATAGLOGUE



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Explosion proof antenna couplers allow transmission of radio frequency signals into hazardous areas by incorporating an intrinsically safe barrier circuit, encapsulated in an explosion proof housing, all internal to a seal-off fitting in a single compact package.

Common applications include coastal, high wash down, pharmaceutical and chemical and food processing applications.





Antenna couplers

RF antenna barrier for hazardous area

RX SERIES

Solexy's patented (7,057,577) Explosion-Proof Antenna Coupler permits the installation of non-Ex certified antennas 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.

✔ ENVIRONMENTAL PROTECTION

All required circuitry is recessed into fitting and encapsulated against harsh environments.

✔ CERTIFICATION

The RX Series is certified Atex, IECEx and for USA&Canada 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 RX 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.

✔ ISOLATED ANTENNA GROUND

Optional antenna ground isolation (RX1..) from housing ground, combined with a capacitive circuit, solves ground loop issues in case of remote mounted antennas and prevents potential ground noise to interfere with RF signal (*patent pending*).

NOMENCLATURE

a Antenna Side Connector

F	RP-SMA Female
N	N Female
S	SMA Female
1	N Female (ground isolated)

b Thread Connection

3	3/4" NPT
M	M25x1.5

c Housing Material

S	AISI 303 (standard)
L	AISI 316L

dd Radio Side Connector

02	RP-SMA Female (RXF and RXN only)
04	SMA Female (RXS only)

ee Coax cable length radio side (*optional on request*)

00	no cable (with connector on body)
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RX	N	3	S	02	00	J	X0
	a	b	c	dd	ee	f	gg


f Version (frequency range)

J	optimized from 100 MHz to 1.4 GHz
R	optimized from 500 MHz to 3.9 GHz and from 4.6 GHz to 6 GHz
L	optimized from 3.9 GHz to 4.6 GHz

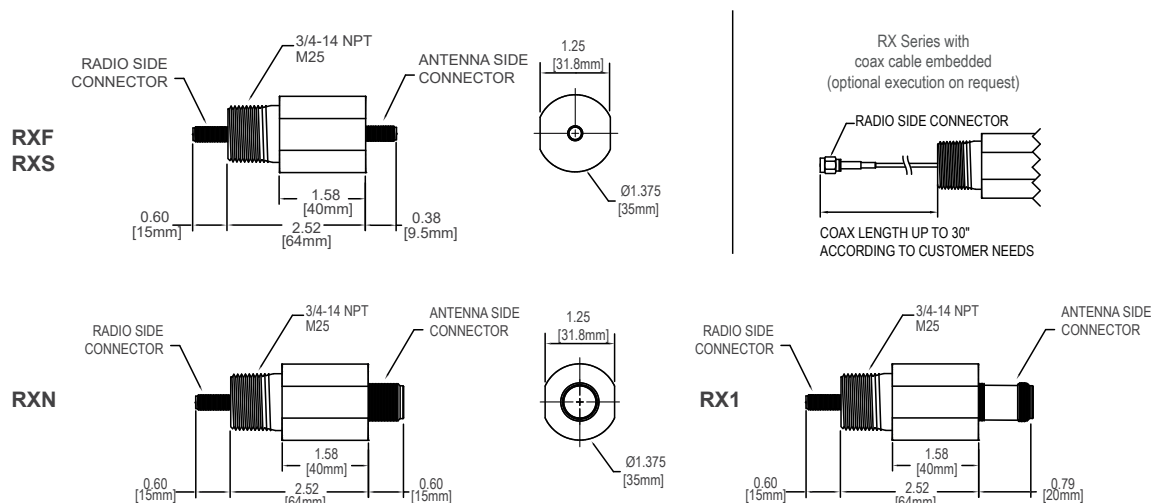
gg Approval

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	<div><div></div><div>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</div></div>									
Standard Ref.	EN 60079-0, EN 60079-1, EN 60079-11, EN 60079-18, EN 60079-31									
IECEX certification nr. IECEX MSC 19.0001X	<div>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</div>									
Standard Ref.	IEC 60079-0, IEC 60079-1, IEC 60079-11, IEC 60079-18, IEC 60079-31									
USA & Canada certification cQPSus LR-1504-3	<div>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</div>									
Standard Ref.	<div><div><div>CAN/CSA C22.2 No. 60079-0</div><div>UL 60079-0</div></div><div><div>CAN/CSA C22.2 No. 60079-1</div><div>UL 60079-1</div></div><div><div>CAN/CSA C22.2 No. 60079-11</div><div>UL 60079-11</div></div><div><div>CAN/CSA C22.2 No. 60079-18</div><div>UL 60079-18</div></div><div><div>CAN/CSA C22.2 No. 60079-31</div><div>UL 60079-31</div></div><div><div>CAN/CSA C22.2 No. 60950-1</div><div>UL 60950-1</div></div><div><div>CAN/CSA C22.2 No. 25-17</div><div>UL 1203</div></div><div><div>CAN/CSA C22.2 No. 30-M1986</div><div></div></div><div><div>CAN/CSA C22.2 No 157</div><div>UL 913</div><div>UL 508</div></div><div><div>CAN/CSA C22.2 No. 94.2-15</div><div>UL 50E</div><div>NEMA 250-2014</div></div></div>									
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
	J version	1.3	0.4	0.4	0.5	0.8	-	-	-	-
	R version	-	1.2	0.6	0.6	0.8	1.1	1.8	1.4	2.0
Approximate Weight	0.32 kg (70.6 lb)									
NEMA rating	Provides a NEMA 4X connection when connected to a NEMA 4X rated enclosure									
Impedance	50 Ω									
Ambient Temperature Range	<div>-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)</div>									

DIMENSIONAL DRAWINGS



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
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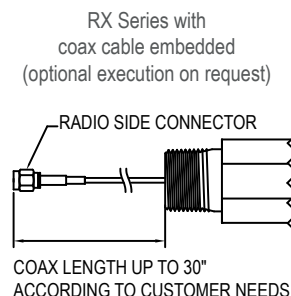
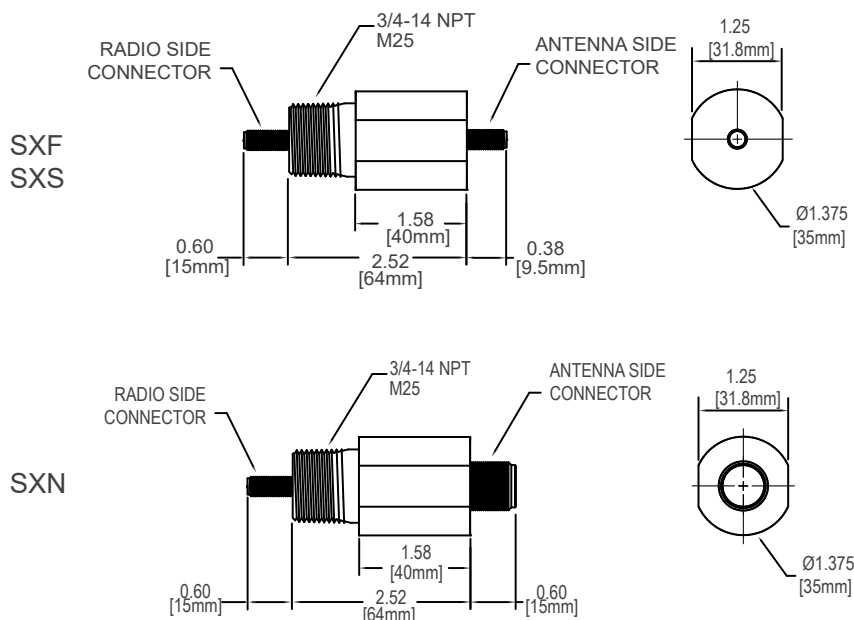
gg Approval

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 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									
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 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



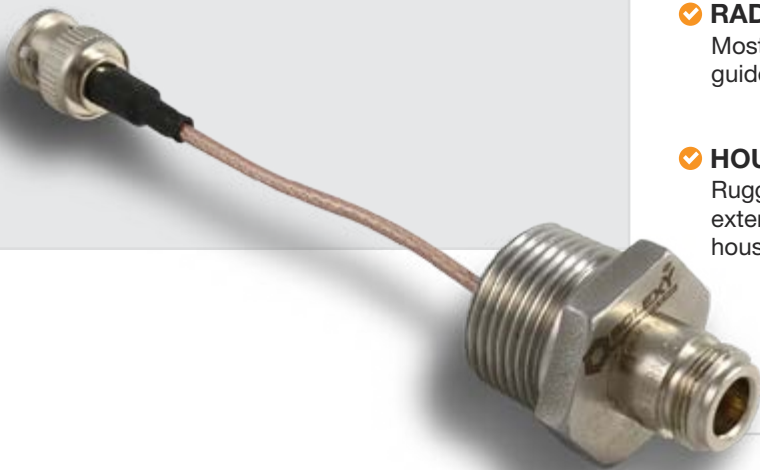
AW SERIES

Solexy's Weather-Proof Antenna Coupler permits the installation of antennas in outdoor and hose down areas.

This coupler is designed to be used directly with any weatherproof (IP67, Nema 4, or 4X) housings or conduit fittings.

An internal epoxy encapsulate ensures no moisture ingress from the external environment. The coupler's robust design allows for connection to practically any radio and antenna.

It is a highly flexible and cost effective solution to environmentally challenging radio installations.



FEATURES

✓ ENVIRONMENTAL PROTECTION

300 series stainless steel construction or nickel plated brass and integral potting protects electronics from corrosive environments.

✓ FLEXIBILITY

Permits a wide variety of passive antennas to be installed.

✓ ANTENNA CONNECTION

Type N female, RP-SMA female, BNC female or TNC female connection available for antenna connection.

✓ RADIO CONNECTION

Most all 50 Ω connections are available (see ordering guide)

✓ HOUSING CONNECTION

Rugged 3/4" NPTm, 1/2" NPT-m, M25x1.5 or M20x1.5 external threads are available for connection into housing or enclosure.

NOMENCLATURE

aaa	Antenna Coupler
AWF	RP-SMA Female antenna connection
AWN	N Female antenna connection
AWB	BNC Female antenna connection
AWT	TNC Female antenna connection
b	Thread Connection
2	1/2" NPT male
3	3/4" NPT male
M	M25x1.5
T	M20x1.5
cc	Coaxial Connector
**	see ordering guide
dd	Coax cable length
06	6" (152.4 mm)
12	12" (304.8 mm)
18	18" (457.2 mm)
24	24" (609.6 mm) 01 RP-SMA Male

AWF	3	S	01	06
aaa	b		cc	dd

** Ordering guide:

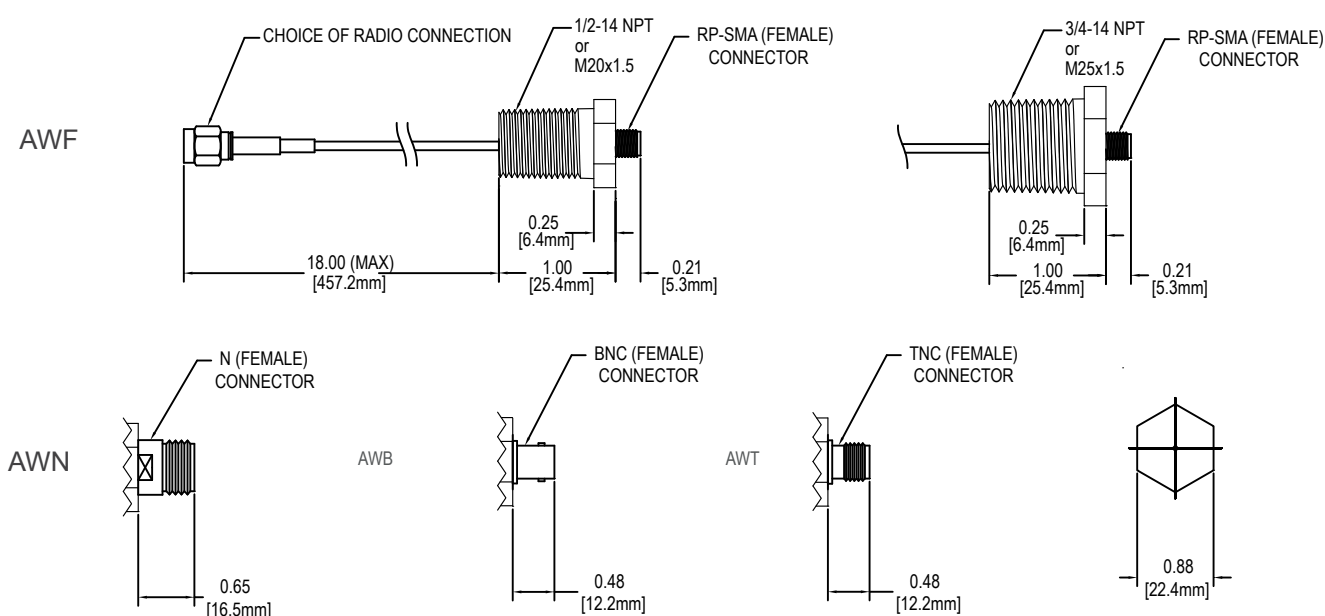
02 RP-SMA Female	13 MCX Jack Male 90°
03 SMA Male	15 MMCX Jack Male 90°
04 SMA Female	16 RP-SMA Male 90°
07 N Male	18 SMA Male 90°
08 N Female	19 SMB Jack Male
09 TNC Male	21 RP-TNC Male
10 TNC Female	23 SMB Plug Female
11 BNC Male	24 U.FL Plug Female
12 BNC Female	29 N Female bulkhead

SPECIFICATIONS

Approximate weight	0.09 kg				
Housing material	300 Series Stainless Steel				
Ambient Temperature Range	-40°C +85°C				
Rating	10 W max				
Frequency Range	100 MHz to 6 GHz				
Impedance	50 Ω				
Approximate Signal Attenuation ⁽¹⁾	Frequency	AWF	AWN	AWB	AWT
	169 MHz	0.3 dB	0.3 dB	0.3 dB	0.3 dB
	425 MHz	0.3 dB	0.3 dB	0.3 dB	0.3 dB
	915 MHz	0.4 dB	0.6 dB	0.4 dB	0.4 dB
	2.4 GHz	0.3 dB	0.5 dB	0.3 dB	0.3 dB
	5.8 GHz	0.8 dB	0.9 dB	0.8 dB	0.8 dB

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

DIMENSIONAL DRAWINGS



BXF and BAF series patented (7507105) Ethernet couplers allow **transmission of Ethernet into hazardous areas** by incorporating an intrinsically safe barrier circuit and a seal-off fitting into a single package.

BXF series Ethernet couplers **housing** is **explosion proof**.

BAF series Ethernet couplers include an **aluminum housing** with gasket ideal for use in purged panels and other non-hazardous areas.

BXF and BAF series Ethernet couplers are for 10/100 Ethernet signals and operate with CAT5e cable.

Available with UL, ATEX, IECEx or MSHA certifications.





Ethernet couplers

Ethernet barrier for hazardous area

BXF & BAF SERIES

Solexy's patented (7,507,105) Explosion-Proof/ intrinsically Safe Ethernet Coupler allows for the transmissions of Ethernet into hazardous areas with a standard RJ45 connector.

With the Solexy Ethernet coupler it's possible to connect any standard Ethernet devices located in a hazardous or safe area.

The BXF explosion proof and intrinsically safe barrier is certified for installation in hazardous areas and BAF intrinsically safe barrier is suitable for installation in safe areas and purged systems.

The BXF is designed to be used with any UL, CSA, MSHA, ATEX or IECEx listed explosion proof housing without the need of a seal fitting taking up no internal space.

The BAF is designed to be used in safe areas directly with any CAT5 or CAT5e cable system.

The BAF is also designed to be used with air purge panel systems.

A BXF and/or BAF coupler is required on each end of a cable installation for full protection of both the RX and TX lines.



FEATURES

✓ NO SEALING FITTING REQUIRED

BXF couplers are pre-approved for hazardous locations and can be installed with a simple wrench and no potting compounds. Eliminates the need for costly seal fittings, and reduces the chance of error associated with field installed sealing practices.

✓ CORROSION RESISTANT

The BXF series, made from 300 series stainless, protects the fitting from corrosive environments, sealing fittings are typically constructed of aluminium or galvanized steel, neither being well suited for the process industry.

✓ ENVIRONMENTAL PROTECTION

All required circuitry is recessed into fitting and encapsulated against harsh environments; this is impossible with conventional sealing methods.

✓ INTERCHANGEABILITY

Ethernet cables can be Hot Connected or Disconnected without powering down the system. This is critical for temporary connections such as PLC or VFD programming

✓ INDUSTRIAL M12 "D" CONNECTION

With this secure weather proof industrial connection, cable installation and removal can be accomplished without removing power.

NOMENCLATURE

aaa Barrier Type

BXF	Explosion Proof / Intrinsically Safe suitable for hazardous area
BAF	Intrinsically Safe suitable for safe area and UL purge panels

b Thread Connection

3	3/4" NPT
M	M25x1.5
S	1 1/8"-12 UNF (MSHA only)

c Housing Material

A	Aluminum T6 Nickel Plated (BAF only)
S	AISI303 stainless steel
L	AISI316L stainless steel

BXF	3	S	01	01	N0	018
aaa	b	c	dd	ee	ff	ggg

dd Housing Connector

01	Shielded M12 Female "D" coded
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ee Cable Connector

01	RJ45 Plug Male
02	Shielded M12 Male "D" coded
03	Shielded M12 Female "D" coded



ff Approval

N0	USA&Canada (Class&Divisions and Zones)
X0	IECEX and ATEX apparatus marking
XN	IECEX, ATEX, USA&Canada
M0	MSHA

ggg Cable Length (included in the 70 mt max)

018	18" (0,45 mt) CAT5e
040	40" (1 mt) CAT5e
***	custom lenght

SPECIFICATIONS

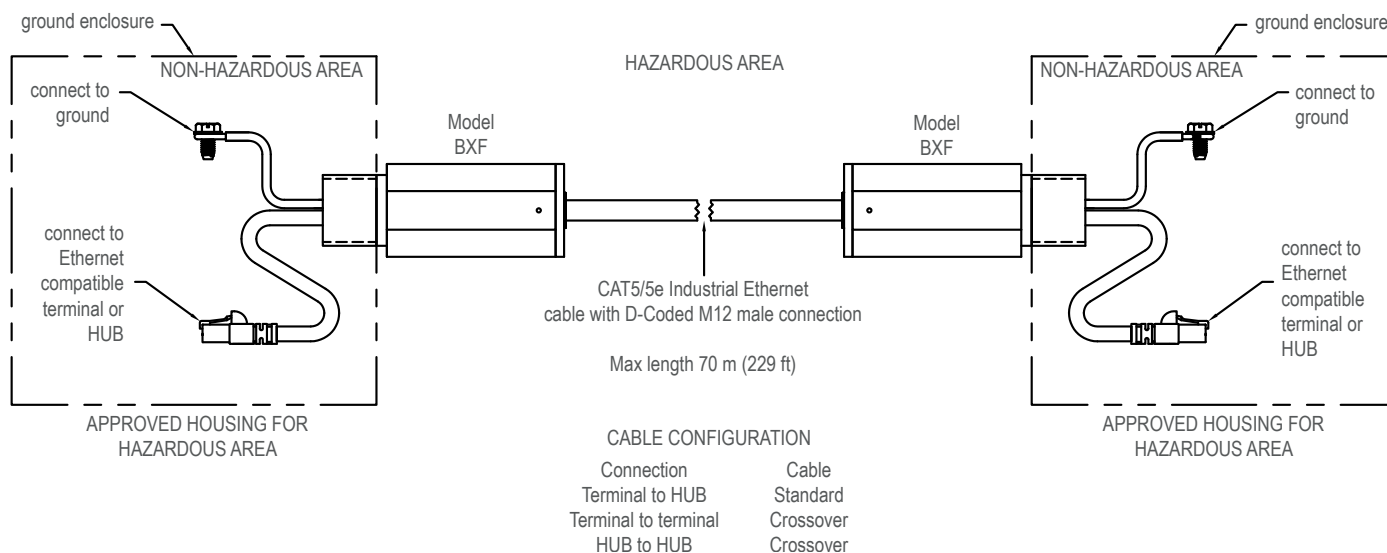
ATEX certification nr. TUV CY 18ATEX 0206141X Standard Ref.	BAF  I (M1) [Ex ia Ma] I II (1)G [Ex ia Ga] IIC II (1)D [Ex ia Da] IIIC EN 60079-0, EN 60079-1, EN 60079-11, EN 60079-18	BXF3S & BXFMS  I M2 (M1) Ex db mb [Ia Ma] I Mb II 2(1)G Ex db mb [ia Ga] IIC T5...T4 Gb II 2(1)D Ex mb [ia Da] IIIC T100°C...T135°C Db
IECEx certification nr. IECEx MSC 18.0014X Standard Ref.	BAF [Ex ia Ma] I [Ex ia Ga] IIC [Ex ia Da] IIIC IEC 60079-0, IEC 60079-1, IEC 60079-11, IEC 60079-18	BXF3S & BXFMS Ex db mb [Ia Ma] I Mb Ex db mb [ia Ga] IIC T5...T4 Gb Ex mb [ia Da] IIIC T100°C...T135°C Db
USA & Canada certification cQPSus nr. LR1504 Standard Ref.	BAF <i>Associated Apparatus for installation in non-hazardous location provides I.S. output for:</i> Class I, Division 1, Groups ABCD Class II, Division 1 Groups EFG [Ex ia Ga] IIC [Ex ia Da] IIIC The BAF & BXF provide a NEMA 4X connection CAN/CSA C22.2 No. 60079-0 CAN/CSA C22.2 No. 60079-1 CAN/CSA C22.2 No. 60079-11 CAN/CSA C22.2 No. 60079-18 CAN/CSA C22.2 No. 60950-1 CAN/CSA C22.2 No. 25-17 CAN/CSA C22.2 No. 94.2-15 CAN/CSA C22.2 No. 30-M1986	BXF3S & BXFMS Class I, Division 1 Groups ABCD Class II, Division 1 Groups EFG <i>Associated Apparatus, provides I.S. output for:</i> Class I, Division 1 Groups ABCD, Class II, Division 1 Groups EFG Class I, Zone 1, AEx db mb [ia Ga] IIC T5...T4 Gb Zone 21, AEx mb [ia Ga] IIC T5...T4 Gb Ex mb [ia Da] IIIC T100°C...T135°C Db UL 60079-0 UL 60079-1 UL 60079-11 UL 60079-18 UL 60950-1 UL 1203 UL 50E NEMA 250-2014
Current Protection	50 mA	
Maximum Fault Voltage	RMS 250 V	
Insertion loss	-5.5 dB	
Total impedance	< 100 Ohm	
Protection	3.6 V	
Ambient Temperature Range	-40°C (-40°F) to +85°C (+185°F) (T4) -40°C (-40°F) to +60°C (+140°F) (T5)	
Ethernet connection	IEEE 802.3 - 100BaseTX - 100 Mbps (not suitable for POE connection)	
Data connector (Haz Loc external side)	M12 Industrial "D" coded connector	
Housing Material	BXF = 300 SST (approximate weight 0,38 kg (0.83 lb)) BAF = T6 Aluminum nickel plated (approximate weight 0,2 kg (0.44 lb))	



■ INSTALLATION SCHEMES

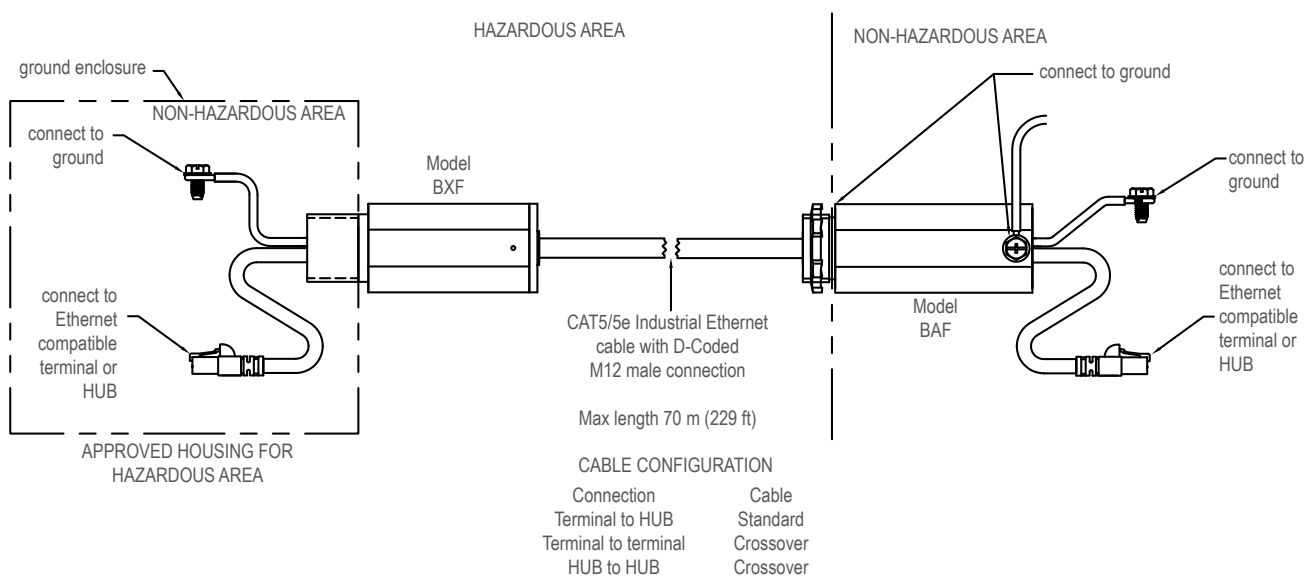
DEVICES INSTALLED IN A HAZARDOUS AREA

A BXF Coupler must be used at either end of the Ethernet cable to ensure the safety of this system. The BXF must be securely mounted and grounded within a UL/CSA (or equivalent), MSHA or ATEX/IECEx approved explosion proof enclosure.



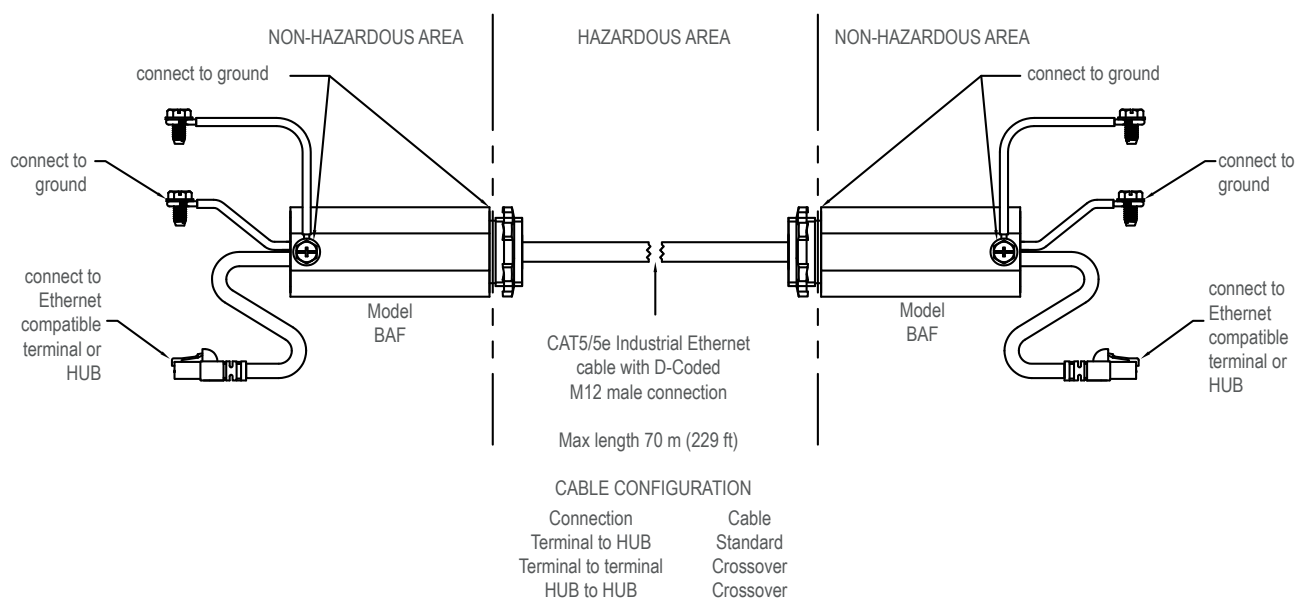
DEVICES INSTALLED IN BOTH AN HAZARDOUS AND A SAFE AREA

One BAF and one BXF Coupler must be used at opposite ends of the Ethernet cable to ensure the safety of this system. The BXF must be securely mounted and grounded within a UL/CSA (or equivalent), MSHA or ATEX/IECEx approved explosion proof enclosure.

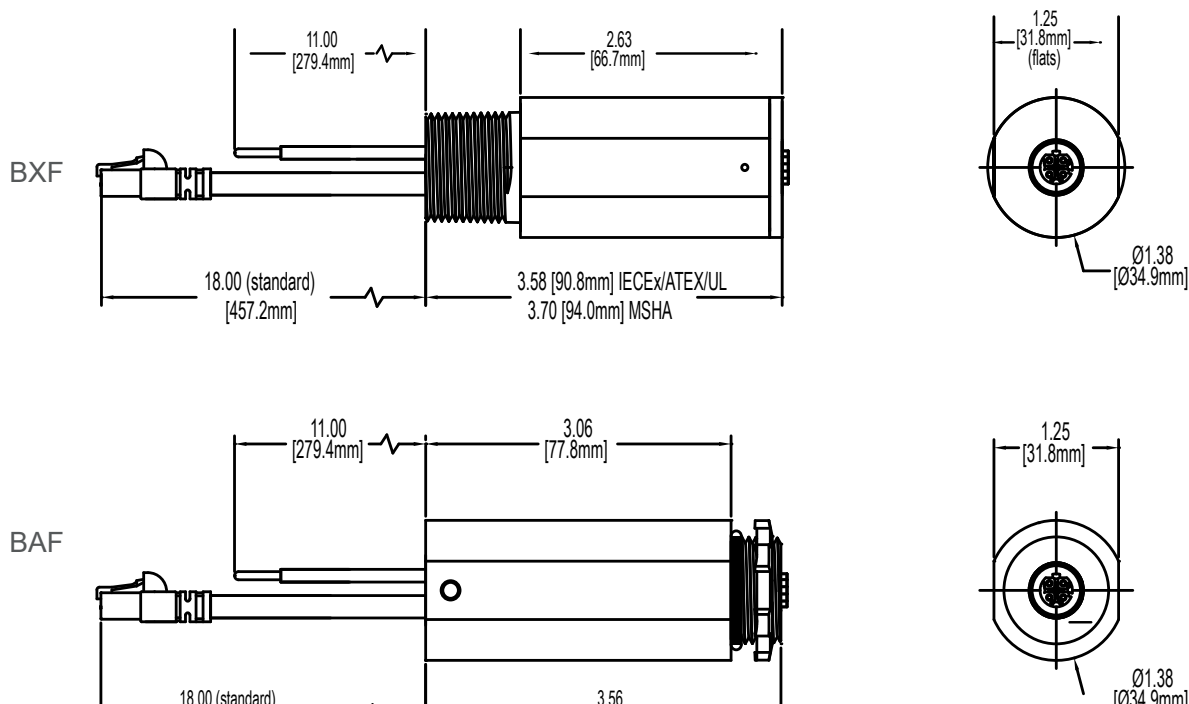


DEVICES INSTALLED IN A SAFE AREA (CABLE IN A HAZARDOUS AREA)

A BAF Coupler must be used at either end of the Ethernet cable to ensure the safety of this system.



DIMENSIONAL DRAWINGS



ANH and ANF series antennas
are hand built and tuned for the best performance.

The rugged construction of the ANH will stand up
to high levels of abuse, and the flexible design of the ANF
“gives” to impacts **to prevent damage
and misalignment of the antenna.**

Their sealed **UV and corrosion resistant** housings and
nickel plated fittings with gold contacts provide a reliable RF
connection in hostile environments.





Heavy duty antennas

UHF antenna for hostile environments

DIPOLE ANH SERIES

The range and performance of a RF link is critically dependent upon the antenna and it is one of the more complex aspects of on RF design.

An antenna can make or break a wireless network.

The proper antenna can optimize the range, reliability and performance of a radio network.



FEATURES

- ✓ **ANH HEAVY DUTY SERIES**
Rugged construction allows the use of our antennas in hostile environments where weather and abuse are a factor
- ✓ **FREQUENCY**
Available for 868 MHz, 900 MHz and 2.4 / 5 GHz
- ✓ **N MALE CONNECTOR**
Available for vertical or 90° mounting

NOMENCLATURE

ANH $\frac{5}{a}$ 2 - $\frac{C}{b}$ N $\frac{S}{c}$ U

a Frequency

4	868 MHz	7	2.4 GHz
5	900 MHz	9	2.4 - 5 GHz

b Antenna connection

3	N Female
C	N Male

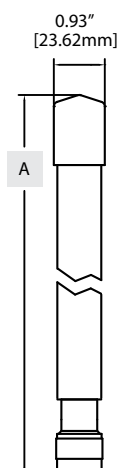
c Antenna mounting

S	Straight (vertical)
R	Elbow (90°)

DIMENSIONAL DRAWINGS

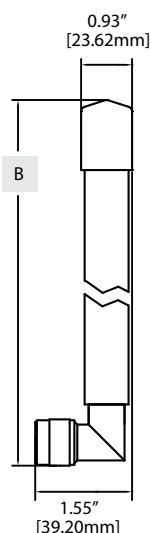
Models

ANH42-CNSU
ANH52-CNSU
ANH72-CNSU
ANH92-CNSS



Models

ANH42-CNRU
ANH52-CNRU
ANH72-CNRU
ANH92-CNRS



Model

A inch [mm]

ANH42-CNSU	9.05 [230]
ANH52-CNSU	9.05 [230]
ANH72-CNSU	4.92 [125]
ANH92-CNSS	9.05 [230]

Model

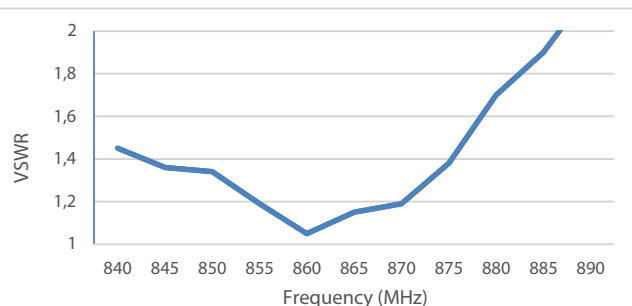
B inch [mm]

ANH42-CNRU	9.44 [240]
ANH52-CNRU	9.44 [240]
ANH72-CNRU	5.31 [135]
ANH92-CNRS	9.44 [240]

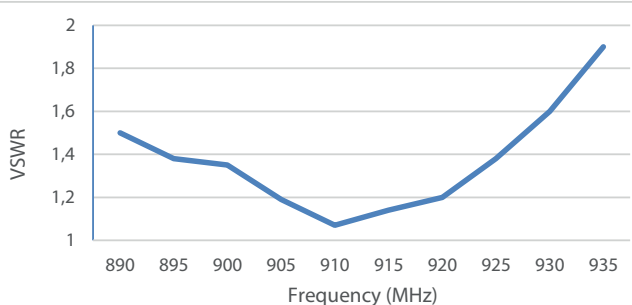
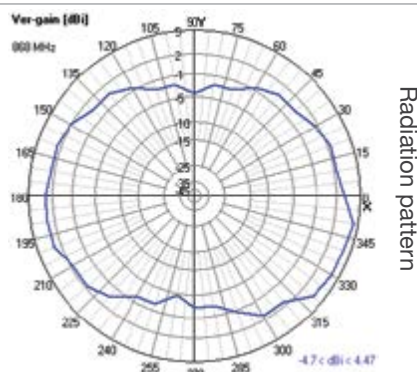
SPECIFICATIONS

Radiation	Omni
Polarization	Vertical
Wave	1/2
Connector	N Male Brass nickel plated
Material	UV resistant ABS
Ambient temp. range	-40°C (-40°F) +80°C (+176°F)

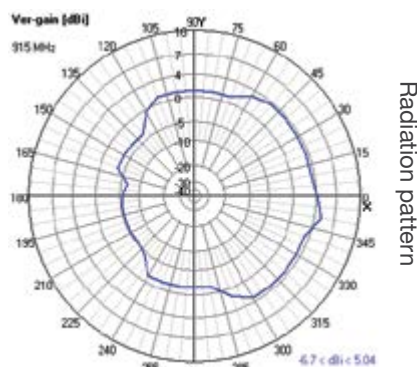
	ANH 42	ANH 52	ANH 72	ANH 92
Frequency Range	855 - 883 MHz	890 - 935 MHz	2.35 - 2.55 GHz	2.4 - 2.485 GHz 5.15 - 5.875 GHz
Impedance (nominal)	50Ω @ 868 MHz	50Ω @ 915 MHz	50Ω @ 2.45 GHz	50Ω @ 2.4 GHz 50Ω @ 5.6 GHz
VSWR (average)	1.14 : 1	1.14 : 1	1.13 : 1	1.7 : 1 @ 2.4 GHz 2 : 1 @ 5 GHz
Gain max	2.00 dBi	2.00 dBi	2.00 dBi	4.7 dBi @ 2.4 GHz 3.4 dBi @ 5 GHz

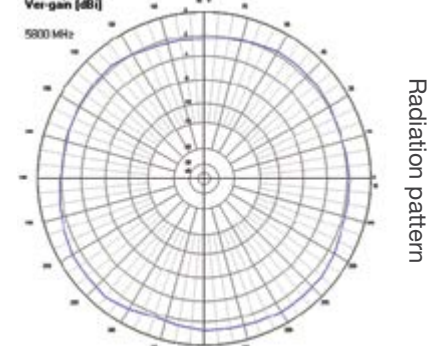
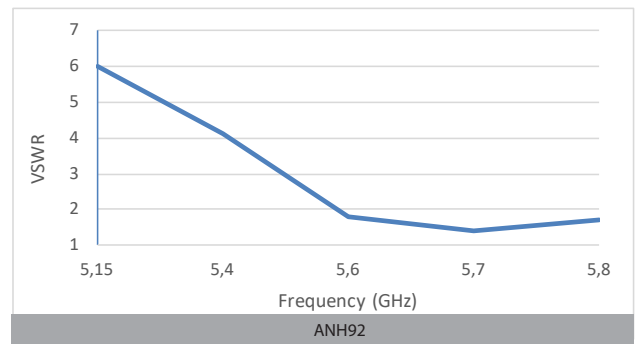
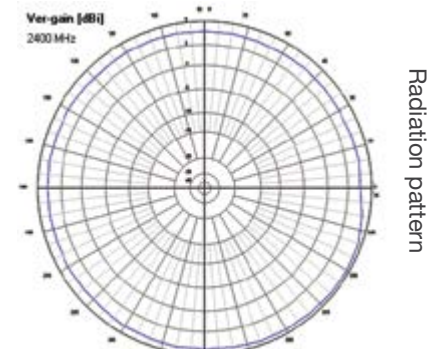
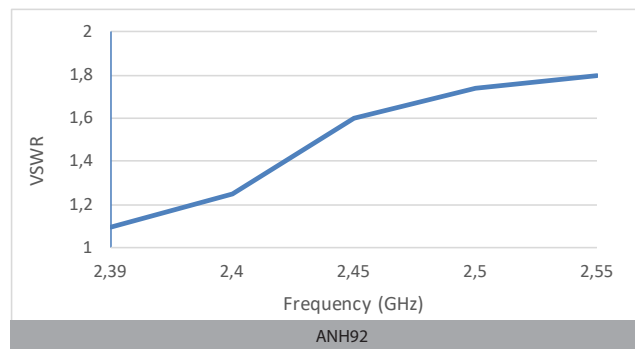
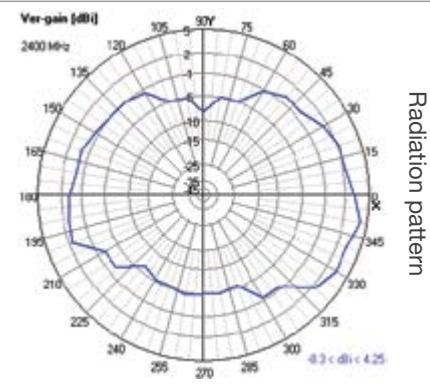
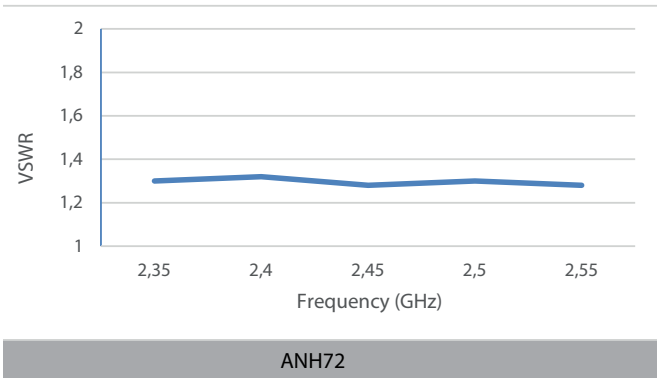


ANH42



ANH52





Heavy duty antennas

CELLULAR ANH SERIES



The range and performance of a RF link is critically dependent upon the antenna and it is one of the more complex aspects of on RF design.

An antenna can make or break a wireless network. The proper antenna can optimize the range, reliability and performance of a radio network.

FEATURES

- ✓ **ANH HEAVY DUTY SERIES**
Rugged construction allows the use of our antennas in hostile environments where weather and abuse are a factor
- ✓ **MULTIBAND CELLULAR ANTENNA**
Suitable for use in GSM, 3G (UMTS) and 4G-LTE Bands application
- ✓ **N TYPE CONNECTOR**
Available for vertical or 90° mounting

NOMENCLATURE

ANH	$\frac{C}{a}$	2 -	$\frac{C}{b}$	N	$\frac{S}{c}$	S
-----	---------------	-----	---------------	---	---------------	---

a Frequency

C GSM, 3G (UMTS), 4G-LTE

b Antenna connection

3 N Female
C N Male

c Antenna mounting

S Straight (vertical)
R Elbow (90°)

DIMENSIONAL DRAWINGS

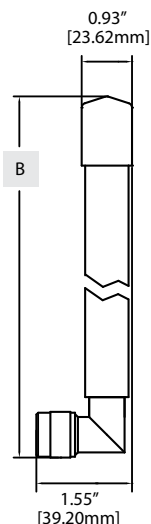
Models

ANH C2-CNSS



Models

ANH C2-CNRS



Model

ANH C2-CNSS

A inch [mm]
13.55 [344.20]

Model

ANH C2-CNRS

B inch [mm]
13.95 [354.30]



SOLEXY SRL

Via Enrico Fermi, 2 - 25015 Desenzano del Garda (BS) ITALY . Phone: (+39) 030 787.0.787 - Fax: (+39) 030 787.0.777 . Email: info@solexy.net - P.Iva/VAT/CF 03471700983

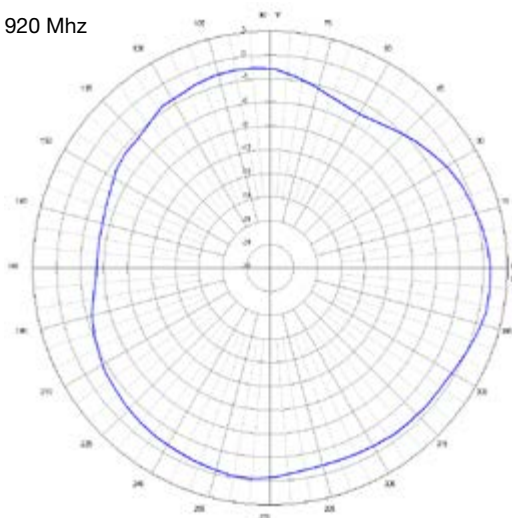
SPECIFICATIONS

Radiation	Omni
Polarization	Vertical
Wave	1/2
Connector	N Type Brass nickel plated
Material	UV resistant ABS
Ambient temp. range	-40°C (-40°F) +80°C (+176°F)

Frequency Range	GSM (850/900/1800/1900) 3G (UMTS) (800-2100) 4G - LTE (Bands 1, 2, 3, 4, 7, 10, 23, 25, 30, 33, 34, 35, 36, 37, 38, 39, 40, 41, 65, 66)
Impedance	50Ω
VSWR	< 4 : 1
Gain max	2.0 dBi

Radiation pattern

920 Mhz



J-POLE ANH SERIES

The range and performance of a RF link is critically dependent upon the antenna and it is one of the more complex aspects of on RF design.

An antenna can make or break a wireless network. The proper antenna can optimize the range, reliability and performance of a radio network.



FEATURES

✓ J-POLE TECHNOLOGY

This highly stable, higher gain antenna goes the distance and is in a smaller package compared to other high gain antennas. With a higher gain ground plane it is less sensitive to its installed environment ensuring stable communication at longer distances

✓ ANH HEAVY DUTY SERIES

Rugged construction allows the use of our antennas in hostile environments where weather and abuse are a factor

✓ FREQUENCY

Available for 868 MHz, 900 MHz and 2.4 GHz

✓ N MALE CONNECTOR

Available for vertical or 90° mounting

NOMENCLATURE

ANH $\frac{5}{a}$ $\frac{3}{b}$ - $\frac{C}{b}$ N $\frac{S}{c}$ U

a	Frequency
4	868 MHz
5	900 MHz
7	2.4 GHz

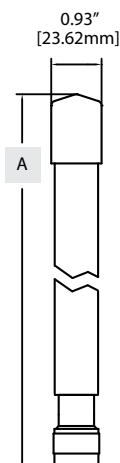
b	Antenna connection
3	N Female
C	N Male

c	Antenna mounting
S	Straight (vertical)
R	Elbow (90°)

DIMENSIONAL DRAWINGS

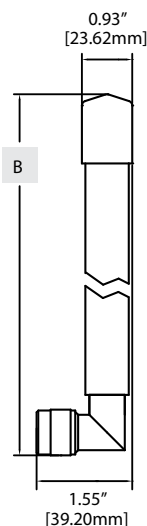
Models

ANH43-CNSU
ANH53-CNSU
ANH73-CNSU



Models

ANH43-CNR
ANH53-CNR
ANH73-CNRU



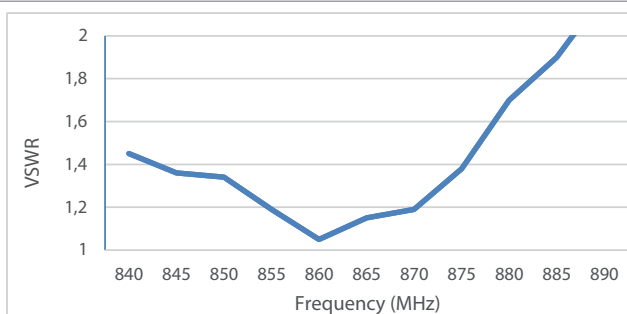
Model	A inch [mm]
ANH43-CNSU	13.55 [344.20]
ANH53-CNSU	13.55 [344.20]
ANH73-CNSU	7.49 [190.20]

Model	B inch [mm]
ANH43-CNRU	13.95 [354.30]
ANH53-CNRU	13.95 [354.30]
ANH73-CNRU	7.89 [200.30]

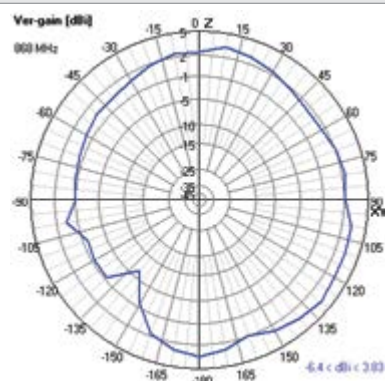
SPECIFICATIONS

Radiation	Omni
Polarization	Vertical
Wave	J-pole configuration
Connector	N Male Brass nickel plated
Material	UV resistant ABS
Ambient temp. range	-40°C (-40°F) +80°C (+176°F)

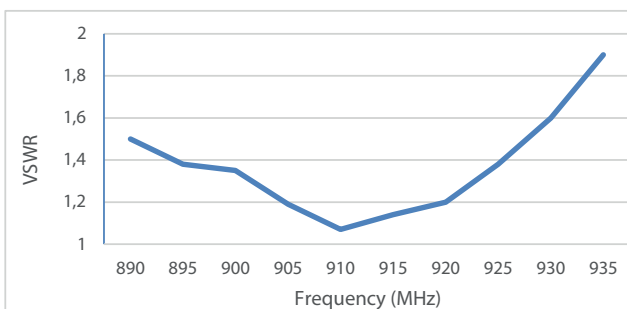
	ANH 43	ANH 53	ANH 73
Frequency Range	855 - 883 MHz	890 - 935 MHz	2.35 - 2.55 GHz
Impedance (nominal)	50Ω @ 868 MHz	50Ω @ 915 MHz	50Ω @ 2.45 GHz
VSWR (average)	1.4 : 1	1.4 : 1	1.4 : 1
Gain max	3.00 dBi	3.00 dBi	4.35 dBi



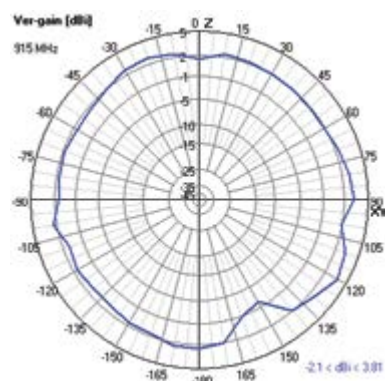
ANH43



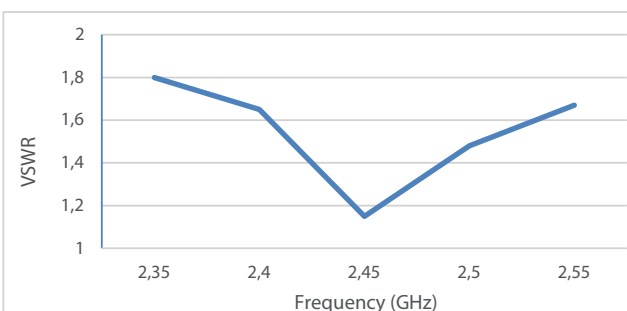
Radiation pattern



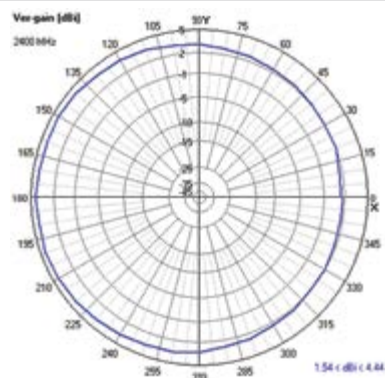
ANH53



Radiation pattern



ANH73



Radiation pattern

Heavy duty antennas

GPS ANH SERIES

The Solexy's ANHA and ANHB series is a selection of heavy duty antennas specifically designed for satellite applications, covering a wide range of frequency bands including GPS, GLONASS and IRIDIUM.

The ANHA and ANHB series are passive, narrow bandwidth and high gain antennas, perfectly compatible with Solexy's AX and RX intrinsically safe antenna couplers.

The ANHA and ANHB series are RHCP (Right Hand Circular Polarized) in order to be compatible with the propagated GPS signals.



FEATURES

- ✓ **PASSIVE**
High gain passive execution to be used in combination with intrinsically safe Solexy antenna couplers
- ✓ **ANH HEAVY DUTY SERIES**
Rugged construction allows the use of our antennas in hostile environments where weather and abuse are a factor
- ✓ **FREQUENCY**
Available for GPS/GLONASS and IRIDIUM systems
- ✓ **N CONNECTOR**
Available N Male straight or elbow and N Female straight bulkhead

NOMENCLATURE

- a Frequency / System**
- | | |
|---|---------------------------|
| A | 1575.42 MHz / GPS-GLONASS |
| B | 1621 MHz / IRIDIUM |
- b Antenna connection**
- | | |
|---|----------|
| 3 | N Female |
| C | N Male |
- c Antenna mounting**
- | | |
|---|------------------------------------|
| S | Straight (vertical) |
| R | Elbow (90°, only N Male connector) |

ANH	$\frac{A}{a}$	A -	$\frac{C}{b}$	N	$\frac{S}{c}$	E
-----	---------------	-----	---------------	---	---------------	---

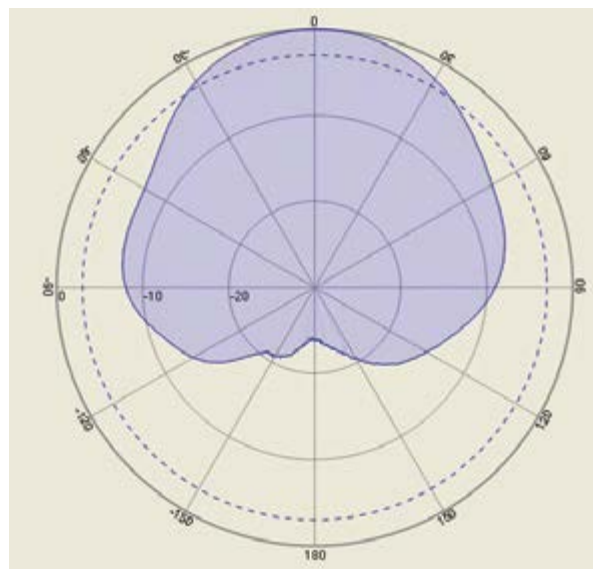
SPECIFICATIONS

Polarization	Right Hand Circular (RHCP)
Connector	N Male or Female brass nickel plated
Material	Fiberglass
Ambient temp. range	-40°C (-40°F) +80°C (+176°F)

ANHA Receiving Frequency	1575.42 MHz GPS/GLONASS Systems
-------------------------------------	---------------------------------

ANHB Center Frequency	1621 MHz IRIDIUM Systems
----------------------------------	--------------------------

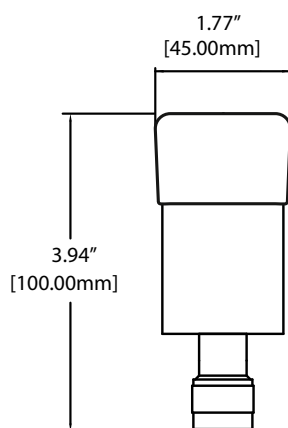
	ANHA	ANHB
-10dB Bandwidth	15 MHz	9 MHz
Impedance	50Ω	50Ω
VSWR	1.5	1.5
Gain (@ Zenith)	4.50 dBic	4.00 dBic
Polarization	RHCP	RHCP
Frequency temperature coefficient	20 ppm/°C	20 ppm/°C



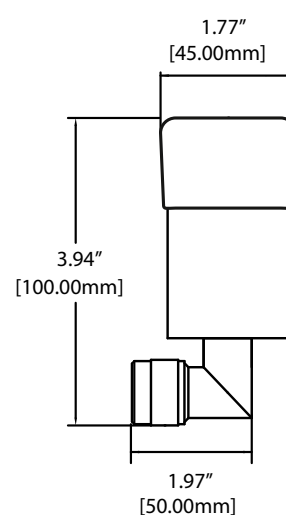
Radiation pattern

DIMENSIONAL DRAWINGS

ANHAA-_NSI
ANHBA-_NSI



ANHAA-CNRI
ANHBA-CNRI



FLEXIBLE ANF SERIES

The Solexy Highly Flexible Antenna is designed for rough environments, this along with our Heavy Duty Line of antennas meets the demands of the tough applications while being affordable yet durable.

Solexy Antennas have met the demands and are well known throughout the Oil and Gas industries.



FEATURES

✓ FLEX TECHNOLOGY

This Highly flexible antenna was designed to meet the requirements of a high traffic environment, one hit and it bounces right back.

It also has over a 25Kg (55 lbs.) pull strength.

This antenna has the signal dependability of a Dipole antenna and the flexibility to bounce back from any hit.

✓ ANF HEAVY DUTY SERIES

Rugged construction allows the use of our antennas in hostile environments where weather and abuse are a factor.

✓ FREQUENCY

Available for 868 MHz, 900 MHz and 2.4 GHz

✓ N MALE CONNECTOR

Available for vertical or 90° mounting

NOMENCLATURE

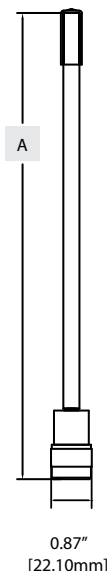
ANF $\frac{5}{a}$ 2 - $\frac{C}{b}$ N $\frac{S}{c}$ U

a	Frequency	
	4	868 MHz
	5	900 MHz
	7	2.4 GHz
b	Antenna connection	
	3	N Female
	C	N Male
b	Antenna mounting	
	S	Straight (vertical)
	R	Elbow (90°)

DIMENSIONAL DRAWINGS

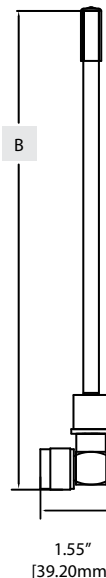
Models

ANF52-CNSU
ANF42-CNSU
ANF72-CNSU



Models

ANF52-CNRU
ANF42-CNRU
ANF72-CNRU



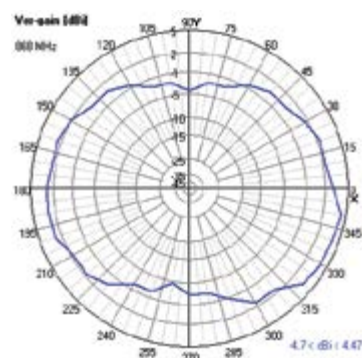
Model	A	inch [mm]
ANF42-CNSU	11,18	[284]
ANF52-CNSU	11,18	[284]
ANF72-CNSU	7,08	[180]

Model	B	inch [mm]
ANF42-CNRU	11,65	[296]
ANF52-CNRU	11,65	[296]
ANF72-CNRU	7,4	[187.96]

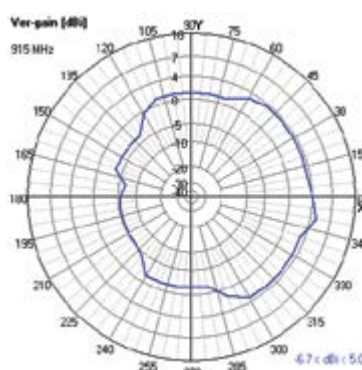
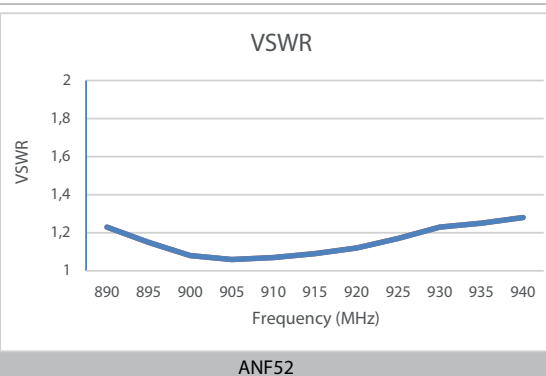
SPECIFICATIONS

Radiation	Omni
Polarization	Vertical
Wave	1/2
Connector	N Male Brass nickel plated
Antenna Tip	Soft black PVC
Adapter	Black Delrin
Material	UV resistant PUR
Ambient temp. range	-40°C (-40°F) +80°C (+176°F)

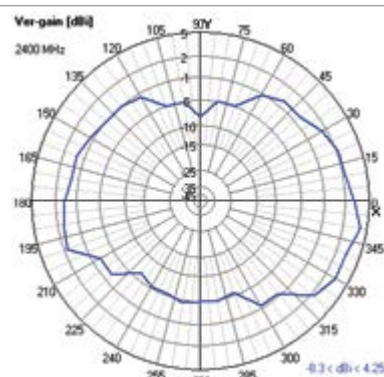
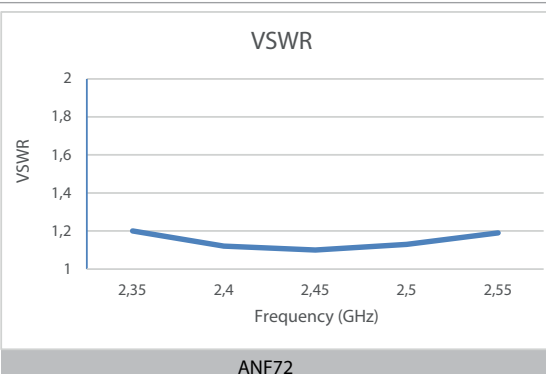
	ANF 42	ANF 52	ANF 72
Frequency range	855 - 883 MHz	902 - 928 MHz	2.35 - 2.55 GHz
Impedance (nominal)	50Ω @ 868 MHz	50Ω @ 915 MHz	50Ω @ 2.45 GHz
VSWR (average)	1.14 : 1	1.14 : 1	1.14 : 1
Gain max	2.00 dBi	2.00 dBi	2.00 dBi



Radiation pattern



Radiation pattern



Radiation pattern



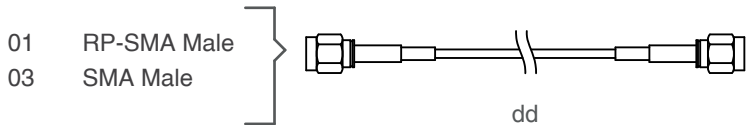


Accessories

COAX CABLE EXTENSION

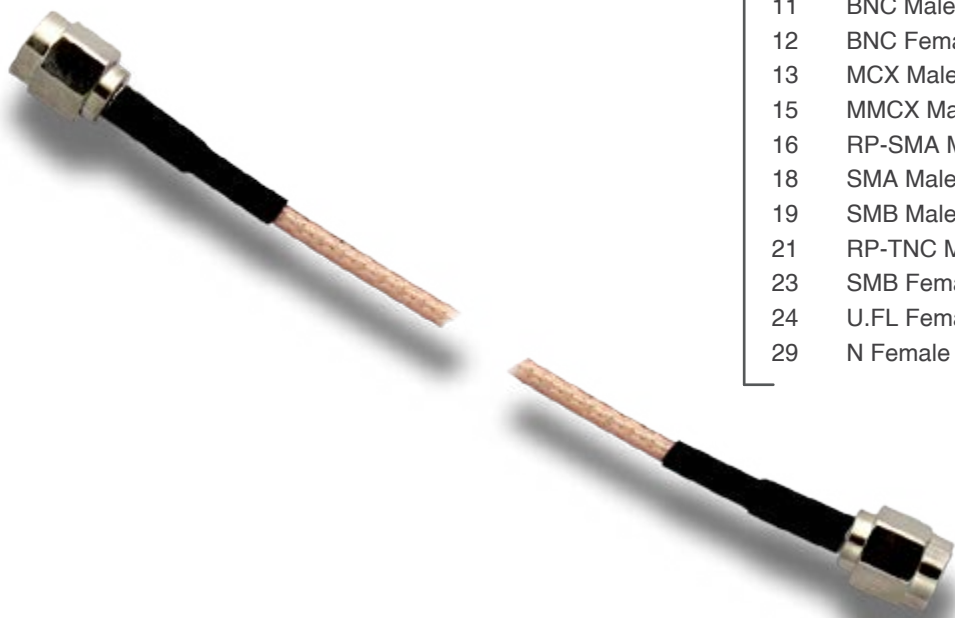
SPECIFICATIONS

RF CONNECTOR COUPLER SIDE (bb)



RF CONNECTOR RADIO SIDE (cc)

- 01 RP-SMA Male
- 02 RP-SMA Female
- 03 SMA Male
- 04 SMA Female
- 07 N Male
- 08 N Female
- 09 TNC Male
- 10 TNC Female
- 11 BNC Male
- 12 BNC Female
- 13 MCX Male 90°
- 15 MMCX Male 90°
- 16 RP-SMA Male 90°
- 18 SMA Male 90°
- 19 SMB Male
- 21 RP-TNC Male
- 23 SMB Female
- 24 U.FL Female
- 29 N Female bulkehead



NOMENCLATURE

PT	A	01	03	06
	a	bb	cc	dd

a	Coax cable type
A	RG-316
B	LMR-100A-PVC
C	I999
bb	RF Connector Coupler Side
cc	RF Connector Radio Side see below
dd	Coax cable length
06	06" (15 cm)
12	12" (30 cm)
18	18" (45 cm)
24	24" (60 cm)
30	30" (75 cm)

EXPLOSION PROOF ENCLOSURE

WA & WS SERIES

FEATURES

- ✓ **WA series** made in aluminum polyester powder coated (black as standard, other colour available on request)
- ✓ **WS series** made in electropolish stainless steel AISI 316 (CF8M)
- ✓ **Water proof** IP66 / IP68 (ATEX and IECEx version) or Nema 4, 4X (UL version)
- ✓ **Up to four cable entries** M20x1,5 and M25x1,5 (ATEX and IECEx version only) or 1/2" NPT-f, 3/4" NPT-f
- ✓ **Temperature range** ATEX and IECEx version: from -60°C (-76°F) +85°C (+221°F) UL version: +80°C (+176°F)
- ✓ **Atex and IECEx certified**
 - II 2G Ex d IIC T6... T4 Gb
 - II 2D Ex tb IIIC T110°C / T110°C / T140°C
 - I M2 Ex d I Mb (WS only)
 - (certification specifically for radio and electronic apparatus)
- ✓ **UL certified** for Class I, Group B, C, D and Class II, Group E, F, G
(certified as junction box complete up to 24 terminals)



NOMENCLATURE

UL version

WA	0	00	A	E
a	b	c	d	e



- a Enclosure Series**
 WA Aluminum polyester powder coated
 WS Stainless steel AISI 316 (CF8M)
- b Mounting plate inside**
 0 no mounting plate
 1 mounting plate
- c Number of terminals**
 00 no terminals
 1 ... 24 from 1 to 24

- d Colour**
 A black
- e Cable entry**
 E n° 2 1/2" NPT-f
 F n° 4 1/2" NPT-f
 G n° 2 3/4" NPT-f
 H n° 4 3/4" NPT-f

ATEX IECEx version

H	WA	00000	-	41	0	X1
	a			b		c

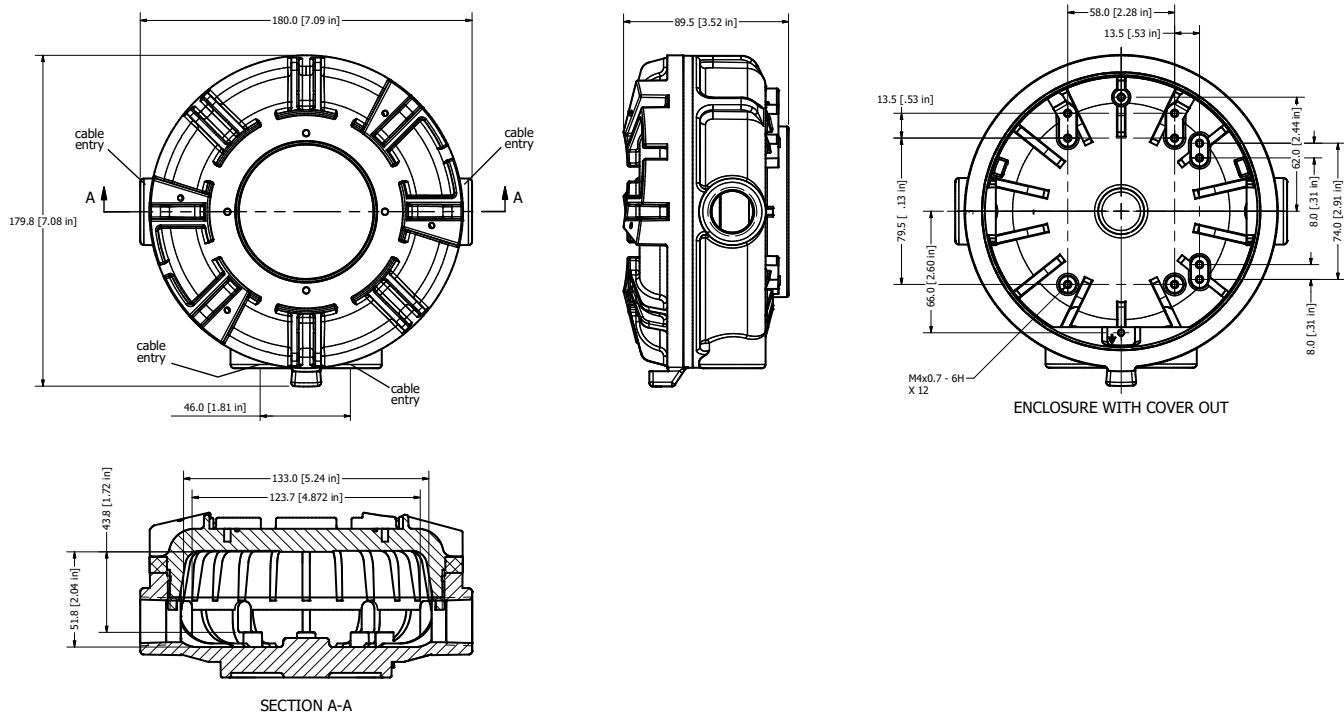


- a Enclosure Series**
 WA Aluminum polyester powder coated
 WS Stainless steel AISI 316 (CF8M)
- b Cable entries**
 21 n° 2 1/2" NPT-f
 22 n° 2 3/4" NPT-f
 23 n° 2 M20x1.5
 24 n° 2 M25x1.5
 41 n° 4 1/2" NPT-f
 42 n° 4 3/4" NPT-f
 43 n° 4 M20x1.5
 44 n° 4 M25x1.5

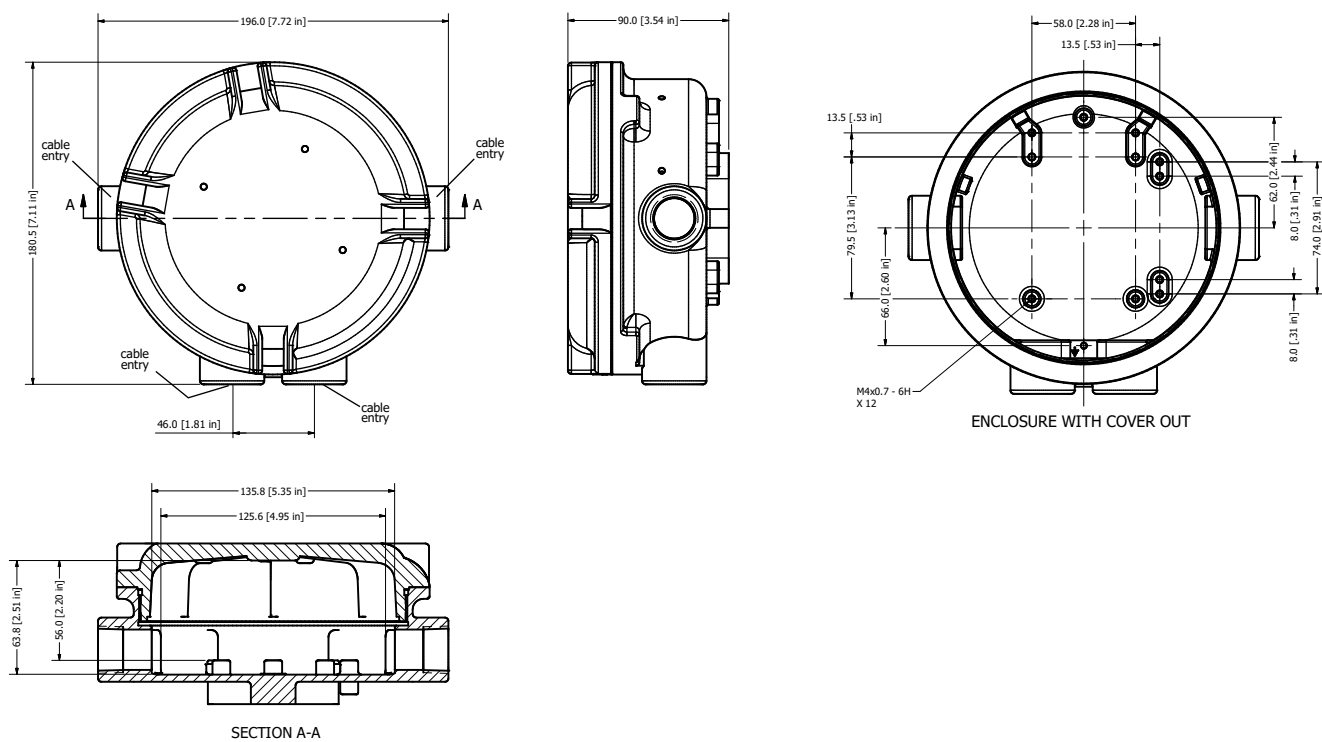
- c Approvals**
 X1 IECEx and ATEX Gas and Dust (WA only)
 X2 IECEx and ATEX Gas, Dust and Mining (WS only)

DIMENSIONAL DRAWINGS

WA SERIES



WS SERIES



NOTES

[illegible]

www.SOLEXY.net

DOWNLOAD PRODUCT CATALOGUE
www.solexy.net/pc



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