



Safety instructions

A-900, A-901

Safety instructions

The device is in conformity with ATEX Directive 2014/34/EU by compliance with European standards EN 60079-0:2012/2018 and EN 60079-7:2015 and marked with the following:



II 3G Ex ec IIC T6 Gc
Presafe 19 ATEX 10763 X
MASC S/20-8443X

Safe installation

1. Turn the sensor on by rotating the power switch on its bottom side from OFF to ON. The switch is easily operated with a coin or something similar. Do not operate the switch within explosive atmospheres.
2. Place the sensor carefully on stable ground.
3. Place a gas cylinder carefully on top of the sensor, by for instance using a trolley or by rolling the cylinder onto the sensor from the ground. Verify that the cylinder is stable on top of the sensor.
4. When changing cylinders after the first installation of the sensor, simply remove the empty cylinder from the sensor and put a new one on top of it.

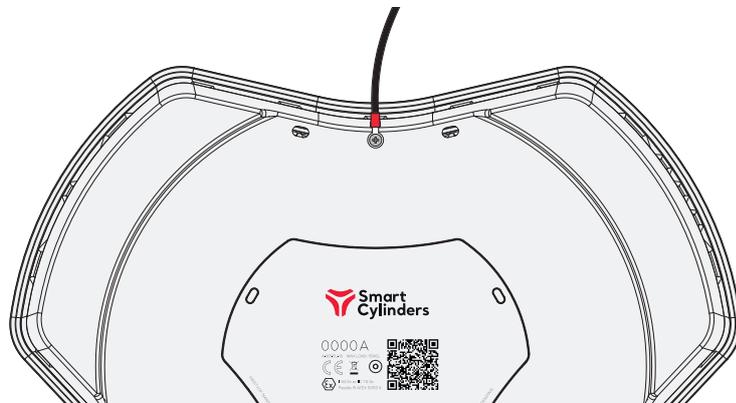
Earthing

The sensor should be earthed in order to remain ATEX compliant. This can be accomplished by

- A. Placing the sensor on earthed ground, for instance in a metal cabinet, or
- B. Placing a gas cylinder on top of the sensor which is itself earthed, or
- C. Attaching an earthing cable to the sensor

The following items are needed for option (c):

- A cable with a conductor cross-sectional area of at least 4mm² (AWG 11 or lower).
- A Cable Lug that fits the chosen cable and with an internal diameter that fits an M3 Screw.
- An M3 screw of minimum A2 grade steel, with 4-5mm threaded length and a head lower than 2.55mm. For example ISO7380 M3x5 A2.



Ensure that the Cable Lug is securely fastened to the cable and that the cable has sufficient length. Turn the sensor upside-down and use the screw to fasten the Cable Lug in the dedicated hole on top of the sensor as shown above. Connect and secure the free end of the cable to earth. Proceed with the instructions above to finish installing the sensor.

Specific conditions of use

The sensor should be placed such that it is not directly exposed to the weather when in use.

Battery information

Each sensor contains a battery constructed from two sealed cells, that should last for the lifetime of the device. They are nonrechargeable and non-replaceable, and under no conditions should one attempt to recharge or replace them.

Nominal voltage: 3.6V

Nominal capacity: 13 Ah

Radio emissions

The sensor contains a radio transmitter which operates in specific frequency bands, with defined limits on power output for each band.

EU model (A-90X-EU-YY):

900 MHz:	2W
1800 MHz:	1W
800, 2100, 2600 MHz:	0.2W

APAC model (A-90X-AU-YY):

700, 1700, 1800 MHz:	0.2W
800, 850, 900, 2100 MHz:	0.25W



End-of-life disposal

Any significant damages to the sensor should be reported to Smart Cylinders. The sensor must be disposed as electrical waste in accordance with local regulations. It should only be opened by competent personnel and only as part of proper end-of-life disposal and material recycling. Never open the sensor in the presence of an explosive atmosphere.

Removing the batteries

1. Make sure that the sensor is turned OFF.
2. Remove sealant from the notch on top of the sensor in order to uncover two screws.
3. Unscrew the two screws and remove the top metal plate.
4. Unscrew the screws securing the inner lid.
5. Unplug the battery from the rest of the electronics by pinching on the locking tab on the connector, and remove it from the enclosure.
6. Dispose of the battery in a safe manner according to local regulations. Never attempt to recharge, reuse, or replace the batteries.

NB: The sensor is not certified to be used directly for economic transactions.

EU Declaration of Conformity

Product model: A-900-EU-YY, A-901-EU-YY (YY is production year)
Manufacturer: Smart Cylinders AS, Fridtjof Nansens plass 4, 0160 Oslo, Norway

This declaration of conformity is issued under the sole responsibility of the manufacturer.

The object of the declaration described above is in conformity with the relevant European Union harmonization legislation:

Radio Equipment Directive (RED) 2014/53/EU
ATEX Directive 2014/34/EU
RoHS 2 Directive 2011/65/EU with amendment 2015/863/EU

References to the relevant harmonized standards used or references to the other technical specifications in relation to which conformity is declared:

Directive	Harmonized standard reference
Radio Equipment	ETSI EN 301 511:V12.5.1 ETSI EN 301 908-1:V11.1.1 ETSI EN 301 489-1:V2.1.1 Draft ETSI EN 301 489-52:V1.1.0
ATEX	EN 60079-0:2018 EN 60079-7:2015
RoHS	EN IEC 63000:2018

The conformity assessment procedure detailed in directive 2014/34/EU has been followed with the involvement of the following Accredited Certification Body:

DNV GL Presafe AS, Veritasveien 3, 1363 Høvik, Norway

Signed for and on behalf of Smart Cylinders AS,
Oslo. 01.04.2020



Simon Grevstad, Chief Executive Officer