

# BX-SOL BX-SOL-CT

Loop Siren  
SecuriLine eXtended

The BX-SOL(-CT) can be connected directly to the fire alarm line. The volume can be set to either "Low" or "High" and the tone type is set via the fire alarm control panel, even during ongoing operation, depending on the event.

The siren is available in the colours red and white and corresponds to environmental category type A pursuant to EN 54-3, suitable for interior rooms.

The siren fulfils EN54-3 and EN54-17.

It meets the specifications of SecuriLine eXtended for operation on the ring circuit of the Securiton fire detection system SecuriFire and SecuriPro (only BX-SOL).



Fig. 1 BX-SOL

## Description

The BX-SOL(-CT) can be directly connected to the fire detector line SecuriLine eXtended of the fire alarm system SecuriFire and SecuriPro (only BX-SOL).

The Loop Siren BX-SOL(-CT) is an addressable alarm unit for the acoustic alarming of a fire alarm in indoor applications

The Loop Siren unit BX-SOL(-CT) can be connected directly to the fire alarm line, mixed with other participants such as manual call points or automatic fire detectors.

It is available as the standard version BX-SOL and as the energy buffered version BX-SOL-CT. The MLAR variant BX-SOL-CT provides uninterrupted alarm transmission even if the fire detector line fails.

The different tone type are defined via software (SecuriFire: 4, SecuriPro: 3).

The required volume „Low" or „High" is set either via software or via DIP switch. (SecuriFire via Software, the DIP-switch has no function; SecuriPro: via DIP-switch).

The module includes a short-circuit isolator. In the event of wire breakage or short-circuit this functionality ensures that the fault is localised and that operation of the ring circuit remains fully functional.

## Interface

View with cover removed



Fig 2 BX-SOL

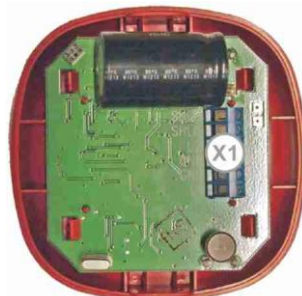


Fig 3 BX-SOL-CT

### X1 SecuriLine eXtended

Terminal	Designation	Description
1	L1	Data A
2	GND	GND A
3	GND	GND B
4	L2-	Data B
5	SHLD	Screen support point
6	SHLD	Screen support point

### S1 DIP-switch (only BX-SOL)

DIP for the setting of the volume

Switch 1 (VOL): ON = High (default)

OFF = Low

Switch 2 (FLASH)

No function

## Connection

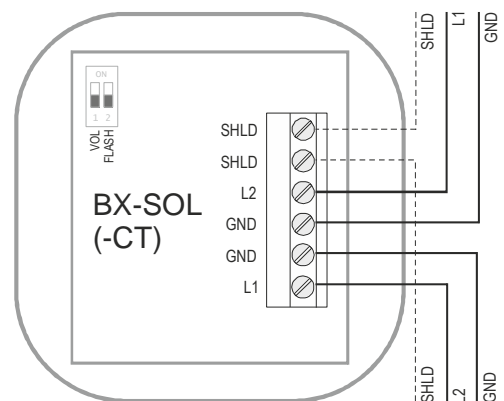



Fig. 4 Connection

## Planning

Planning is to be carried out in accordance with the applicable standards and directives.



Acoustic loop units must not be used in combination with controlling of fire extinguishing system!

Up to 60 BX-SOL units can be planned per address-able loop. However, the maximum number of BX-SOL(-CT) units per addressable loop depends on the total number of all connected addressable loop de-vices, on the set sound volume, and on the application (standard or MLAR).

	Application				
	Standard		MLAR		
	Volume low	Volume high	Volume low	Volume high	Mixed operation
BX-SOL	60	30	20	20	No <sup>1)</sup>
BX-SOL-CT	43	23	40	23	Yes <sup>2)</sup>

<sup>1)</sup> Operation with other loop devices for alarm transmission compliant with MLAR is not possible. In the event of a fault, the alarm transmission is interrupted for 5 seconds.

<sup>2)</sup> Operation with other loop devices for alarm transmission compliant with MLAR is possible. In the event of a fault, the alarm transmission is not interrupted.

Depending on the set volume, the current consumption can vary. This has to be considered when making the loop length check and also the power calculation.

## Programming / Settings

### Volume setting

The volume can be set individually per loop siren.

### SecuriFire:

Selection of the volume High/Low via SecuriFire Studio. The DIP-switch 1 has no function.

### SecuriPro:

Selection of the volume High/Low via DIP-switch 1, see chapter Interface

### Tone type setting

#### SecuriFire and SecuriPro:

The tone type can be set individually per loop siren via software. Furthermore, the tone type can be programmed depending of the type of event.

**Notice**

The BX-SOL is limited to these tones when using with SecuriPro:

- Permanent tone **not** pulsed
- DIN 33404-3
- EN 2575

## Synchronisation

A synchronisation for the loop sounder BX-SOL(-CT) is carried out in combination with SecuriFire, but not with SecuriPro.

## Mounting and Installation

In order to remove the siren from the socket, put the enclosed tool in the provided opening and remove the siren from the socket.

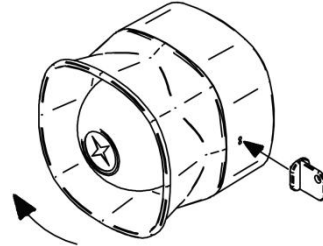


Fig. 5: Opening the housing

Drill out the mounting holes and cable entry at the indicated points in the base (see dimensioned drawing), insert cable, and screw the base onto the mounting surface. Connect the cable to the terminal block (see interfaces) and insert the signal transmitter into the base.

## Dimensioned drawings

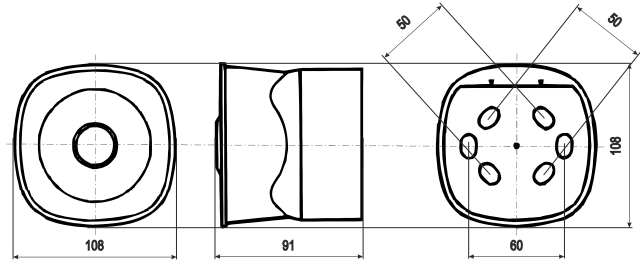


Fig. 6: Dimensioned drawings

## Maintenance

The provisions of the respective country in which the facility is operated basically apply for maintenance and inspection work on danger alarm systems.

## Article numbers / spare parts

Short designation		Art. number CH	Art. number
BX-SOL-R	Loop Siren (red)	115.247588	20-2100008-01-08
BX-SOL-W	Loop Siren (white)	115.247596	20-2100008-02-08
BX-SOL-CT-R	Loop Siren (red)	---	20-2100008-12-01
BX-SOL-CT-W	Loop Siren (white)	---	20-2100008-12-01

## Technical data

Operating voltage:	12 to 30 V DC
Power consumption: (all tone types)	BX-SOL / BX-SOL-CT
Idle mode	0,5 / 0,7 mA
„Low“ volume	2,5 / 2,9 mA
„High“ volume	5,1 / 5,3 mA
Volume <sup>1)</sup> (all tone types)	
„Low“ volume	89 (+/- 3) dB (A)
„High“ volume	96 (+/- 3) dB (A)
Tone types	
DIN-tone	(DIN 33404-3) 1200 ~ 500 Hz
Slow Whoop	(EN 2575) 500 ~ 1200 Hz
Permanent tone	(Pulse programmable) 990 Hz
“Swedish” tone	(150ms on, 150ms off) 660 Hz
Protection class	IP 21C
Ambient temperature	- 10 °C to + 55 °C
Dimensions (D x H)	108 x 91 mm
Terminal (screw able)	max. 2.5 mm <sup>2</sup>
Weight	ca.230 g
Case material	ABS
Case colour white / red	similar RAL 9003 / similar RAL 3001
Cable entry	Rear side or at the side
VdS Approval (EN 54-3, EN54-17)	G210086
CPD-Certificate (EN 54-3, EN54-17)	0786-CPD-20986
SBSC- Certificate (SBF 110:6)	12-963

<sup>1)</sup> Measurement values 1 m / 90° from point of reference compliant with EN54-3, Appendix A

## Measurement value table

Measurement values 1 m from point of reference compliant with EN54-3, Appendix A

Tone type	Volume	Voltage	Sound pressure horizontal dB(A)						Sound pressure vertical dB(A)					
			15°	45°	75°	105°	135°	165°	15°	45°	75°	105°	135°	165°
Permanent tone	Low	12V	71,6	82,7	84,9	84,8	82,6	71,5	72,0	82,9	84,6	84,9	83,0	71,8
		30V	71,9	83,3	85,4	85,2	83,2	72,0	72,4	83,3	85,1	85,3	83,3	72,2
	High	16V	77,7	87,4	90,3	89,9	87,4	77,3	81,2	91,3	93,4	92,5	91,2	78,8
		30V	78,8	88,1	91,3	91,2	88,0	78,1	82,6	92,6	94,6	93,8	92,4	79,7
Slow Whoop	Low	12V	74,5	84,6	86,7	86,3	84,4	75,4	74,3	84,6	86,8	87,3	84,9	74,1
		30V	75,0	85,0	85,1	87,2	84,8	73,5	74,7	85,0	87,2	86,7	85,3	74,4
	High	16V	86,0	90,9	95,6	95,3	90,3	85,7	85,3	90,5	95,5	95,8	90,4	84,4
		30V	87,2	92,0	96,6	96,9	91,3	86,9	86,3	95,4	95,8	96,7	94,7	84,4
DIN-tone	Low	12V	74,6	83,8	86,4	86,6	84,1	75,0	74,4	83,9	86,3	86,8	84,1	73,5
		30V	75,0	84,3	87,0	87,3	84,5	75,5	74,9	84,3	86,7	87,2	84,5	73,8
	High	16V	85,5	94,0	95,6	96,0	94,3	85,7	84,3	93,0	94,4	94,7	93,0	83,6
		30V	84,3	93,1	94,5	94,6	92,9	84,6	85,3	94,4	95,7	95,8	94,0	84,6
Swedish-tone	Low	12V	74,3	84,1	87,0	87,8	85,6	76,7	75,6	84,5	86,7	88,0	85,2	75,4
		30V	74,6	84,7	87,2	88,1	85,7	77,0	76,1	84,9	87,1	88,4	85,6	75,7
	High	16V	80,7	90,5	93,5	93,3	91,3	82,6	81,4	91,2	93,1	94,0	91,2	80,5
		30V	82,4	91,5	94,1	94,8	92,4	83,5	82,4	92,5	94,5	94,9	92,0	81,4