

# PSD-S AE SM8-5 100DB/1

Siren element, 8 tones, 24 V AC/DC, max. 100 dB(A)



Data sheet  
7944\_en\_02

© PHOENIX CONTACT 2015-05-04

## 1 Description

This audible signal element is designed as a component of a modular signal tower.

According to your requirements, a signal tower may comprise any combination of up to five signal elements. You may use up to five optical signal elements or up to four optical and one audible signal element.

An audible signal element can be used as top element only.

A bayonet locking system establishes the mechanical and electrical connection between the elements.

Connection elements with spring-cage or screw connection can be used for electrical connection of the signal tower.

Mounting elements for base or tube mounting can be used to mount the signal tower.

### Features

- Siren element for 24 V AC/DC
- Volume can be adjusted using potentiometer
- Tone function can be adjusted using DIP switch
- Degree of protection: IP65, when mounted



Make sure you always use the latest documentation.  
It can be downloaded from the product at [phoenixcontact.net/products](http://phoenixcontact.net/products).

---

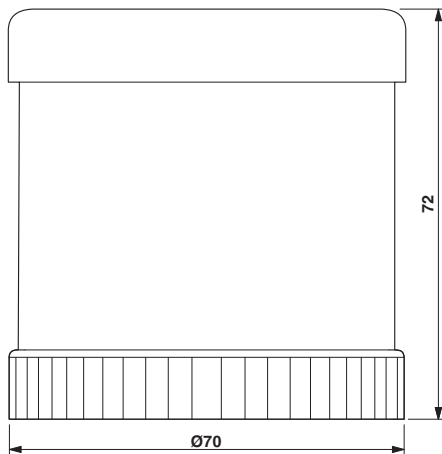
<b>2</b>	<b>Table of contents</b>	
1	Description .....	1
2	Table of contents .....	2
3	Ordering data .....	3
4	Technical data .....	3
5	Set the volume and the tone type .....	4
6	Example of a signal tower .....	5
7	Assembly notes for a signal tower .....	5
8	Assembling the individual elements.....	5
9	Example for signal tower dimensions .....	6

### 3 Ordering data

Description	Type	Order No.	Pcs./Pkt.
Siren element, 8 tones, 24 V AC/DC, max. 100 dB(A), tones can be selected via the DIP switch, black	PSD-S AE SM8-5 100DB/1	2700138	1

### 4 Technical data

#### Dimensions (in mm)



Diameter	70 mm
Height	72 mm

#### General data

Material	Polycarbonate PC
Color	black
Weight	81 g
Ambient temperature (operation)	-30 °C ... 50 °C
Degree of protection	IP65, when installed
Mounting position	any

#### Electrical data

Input voltage	24 V AC/DC
Inrush current	max. 500 mA
Current consumption	80 mA
Type of acoustic signal	8 tones, adjustable volume
Signal frequency	approx. 1 Hz (Pulse tone)
Tone frequency	approx. 1.6 kHz
Volume	max. 100 dB(A) (for continuous and pulse tone of 3.4 kHz)
Service life, electrical	min. 5,000 h
Operating time	100 %

#### Approvals / conformities

Conformance with EMC Directive 2004/108/EC

For the latest approvals, please visit [phoenixcontact.net/products](http://phoenixcontact.net/products).

## 5 Set the volume and the tone type

Disconnect the power to the signal tower before changing the tone!

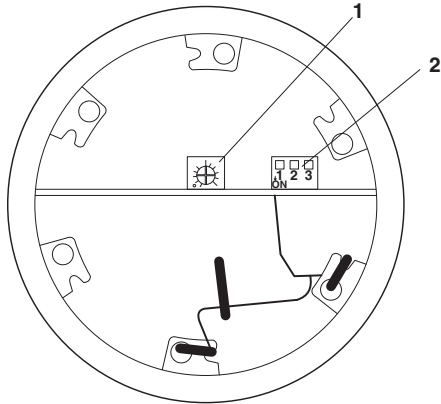


Figure 1 Potentiometer (1) and DIP switch (2) (view from below)

### Volume can be set using potentiometer

Set the volume using the potentiometer.

There is a maximum volume of 100 dB(A) for 3,4 kHz of continuous and pulse tone.

### Set tone type using the DIP switch

Set the tone type using the DIP switch.

#### Possible tones

DIP switch			Tone type	Tone frequency	Maximum volume
1	2	3			
OFF	ON	ON	Continuous tone	1.6 kHz	100 dB(A)
ON	ON	ON	Continuous tone	3.4 kHz	93 dB(A)
OFF	OFF	ON	Pulse tone (1 Hz)	1.6 kHz	94 dB(A)
ON	OFF	ON	Pulse tone (1 Hz)	3.4 kHz	92 dB(A)
OFF	ON	OFF	Trill tone (20 Hz)	1.6 kHz	90 dB(A)
ON	ON	OFF	Trill tone (20 Hz)	3.4 kHz	91 dB(A)
OFF	OFF	OFF	Hum tone (420 Hz)	1.6 kHz	78 dB(A)
ON	OFF	OFF	Hum tone (420 Hz)	3.4 kHz	84 dB(A)

## 6 Example of a signal tower

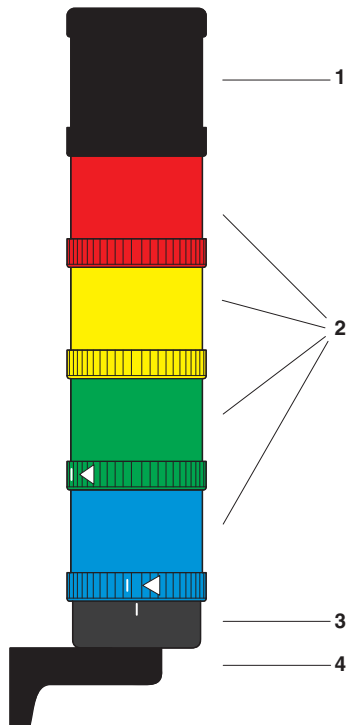


Figure 2 Example of a signal tower

Key:

- 1 Audible signal element
- 2 Optical signal element
- 3 Connection element
- 4 Assembly element

## 7 Assembly notes for a signal tower

- Only use a maximum of five elements within a signal tower.
- Use only one audible element in a signal tower and position this element on top.
- When closing the bayonet locking system, observe the markings (see "Assembling the individual elements").

## 8 Assembling the individual elements

Audible and optical signal elements are assembled in the same way. The illustration shows the assembly of two optical elements.

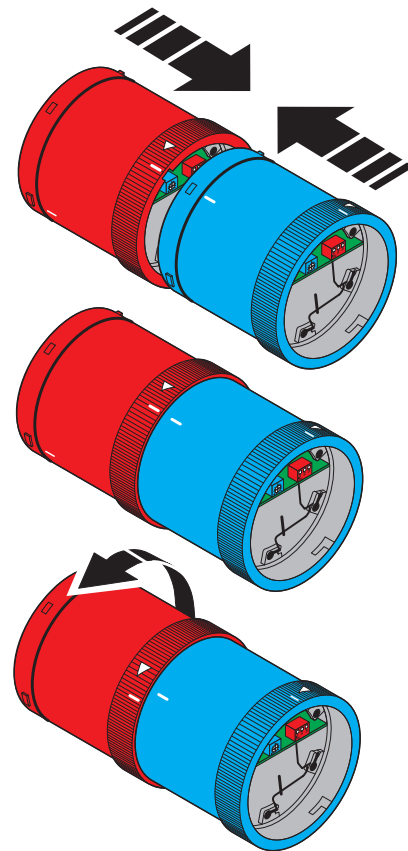


Figure 3 Assembling the individual elements

- Select the elements for your application.
- Connect the elements to be assembled so that the markings are aligned.
- Turn the upper element in the direction of the arrow.

## 9 Example for signal tower dimensions

The following figure shows the dimensions of a typical signal tower.

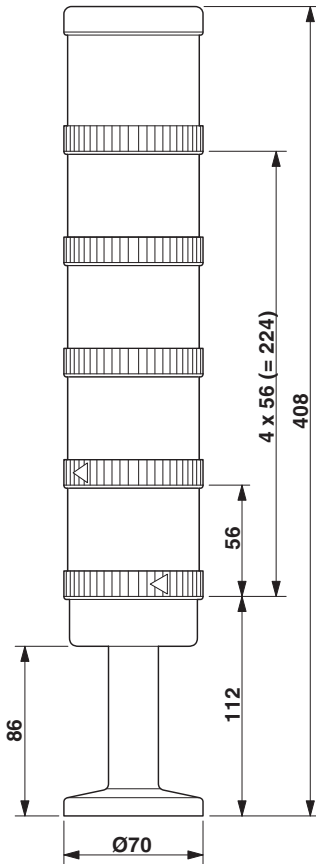


Figure 4 Dimensions of a signal tower (example)