

PSD-S 50 CE ...

Connection elements for PSD-S 50 signal towers

Data sheet
109297_en_01

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1 Description

This connection element is intended to be part of a modular signal tower and is used to electrically connect the 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.

Only use an audible signal element as the top element.

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

Please note that PSD-S 50 signal towers (50 mm diameter) are not mechanically compatible with PSD-S signal towers (70 mm diameter).

Features

- Connection element for mounting on a mounting surface (floor), junction box, or bracket
- Push-in connection technology
- Degree of protection: IP65, when mounted

Observe this note



Make sure you always use the latest documentation.
It can be downloaded from the product at phoenixcontact.com/products.

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3 Ordering data

Description	Type	Item no.	Pcs./Pkt.
Base for horizontal and third-party tube assembly	PSD-S 50 CE	1018740	1
Base for NPT 1/2 conduit assembly	PSD-S 50 CE A-NPT 1/2	1018850	1
Base for vertical assembly	PSD-S 50 CE BR-SM/HCR	1018742	1
Tube base on 100 mm plastic tube with integrated foot	PSD-S 50 CE BT 100	1018760	1
Tube base on 250 mm aluminum tube with plastic foot	PSD-S 50 CE BT 250-M	1018801	1

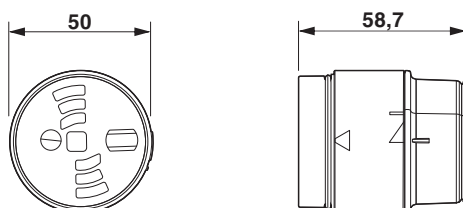
Additional ordering data

For additional ordering data (accessories), go to:

www.phoenixcontact.com/product/1018740
www.phoenixcontact.com/product/1018850
www.phoenixcontact.com/product/1018742
www.phoenixcontact.com/product/1018760
www.phoenixcontact.com/product/1018801

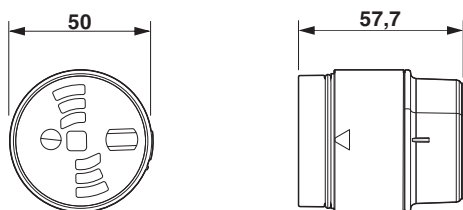
4 Technical data

Dimensions (in mm) (PSD-S 50 CE)

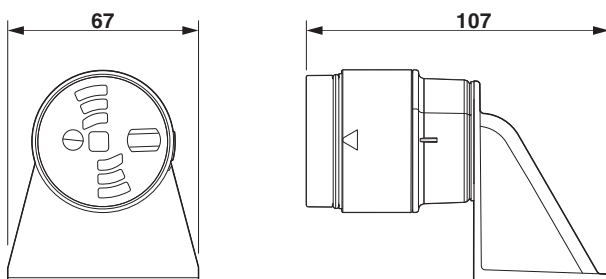


Diameter	50 mm
Height	58.7 mm

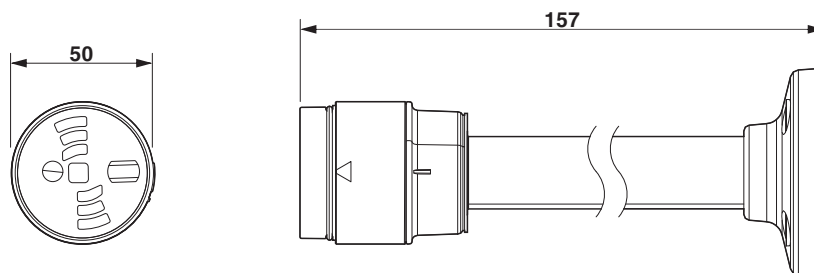
Dimensions (nominal sizes in mm) (PSD-S 50 CE A-NPT 1/2)



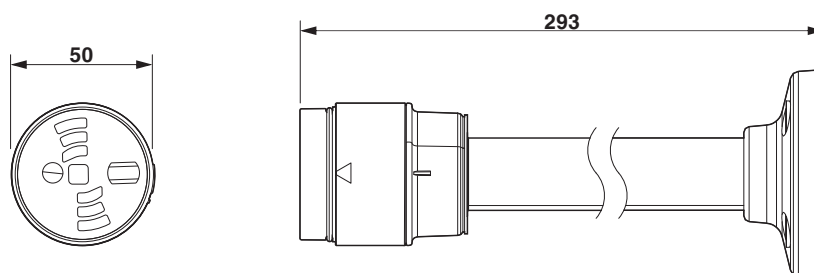
Diameter	50 mm
Height	57.7 mm

Dimensions (nominal sizes in mm) (PSD-S 50 CE BR-SM/HCR)

Width	67 mm
Height	107 mm

Dimensions (nominal sizes in mm) (PSD-S 50 CE BT 100)

Diameter	50 mm
Height	157 mm

Dimensions (nominal sizes in mm) (PSD-S 50 CE BT 250-M)

Diameter	50 mm
Height	293 mm

General data

Material	PA-GF
Color	black
Weight (PSD-S 50 CE)	79.9 g
Weight (PSD-S 50 CE A-NPT 1/2)	83 g
Weight (PSD-S 50 CE BR-SM/HCR)	113.5 g
Weight (PSD-S 50 CE BT 100)	150 g
Weight (PSD-S 50 CE BT 250-M)	246.1 g
Ambient temperature (operation)	-30 °C ... 60 °C
Degree of protection	IP65 (when installed)
Mounting position	any
Mounting type	Base mounting (Seal enclosed)
Number of mountable signal elements	max. 5
Scope of supply	End cover and seal

Connection data: without ferrule

Connection method	Push-in connection
Conductor cross section, flexible	0.5 mm ² ... 1.5 mm ²
Conductor cross section, flexible [AWG]	21 ... 16
Stripping length	7 mm

Connection data: With ferrule

Connection method	Push-in connection
Conductor cross section, flexible	0.25 mm ² ... 1.5 mm ²
Conductor cross section, flexible [AWG]	24 ... 16
Stripping length	7 mm

Connection data: solid

Connection method	Push-in connection
Conductor cross section, rigid	0.5 mm ² ... 1.5 mm ²
Conductor cross section, rigid [AWG]	21 ... 16
Stripping length	7 mm

Approvals and manufacturer's declarations

The latest documents can be found at:	www.phoenixcontact.com/product/1018740 www.phoenixcontact.com/product/1018850 www.phoenixcontact.com/product/1018742 www.phoenixcontact.com/product/1018760 www.phoenixcontact.com/product/1018801
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5 Mounting the connection element

Mount the connection element directly on a flat mounting surface, a junction box, or a bracket.

For the mounting the connection element, proceed as described in the package slip.



The connection options can be found in the packing slip. This is enclosed with the connection element and can be downloaded at www.phoenixcontact.com/products.



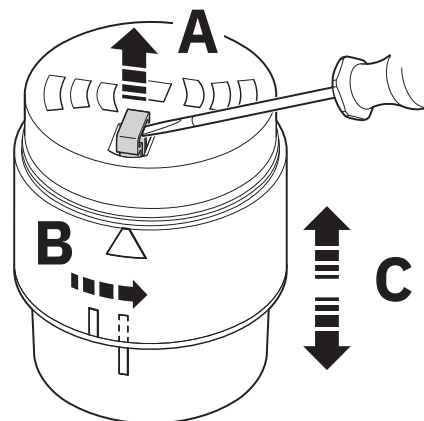
A selection guide for the elements of a signal tower can be found in the application note "PSD-S 50 SELECTION GUIDE". The application note can be downloaded via the item (www.phoenixcontact.com/products).

6 Opening and closing a connection element

To open a connection element, proceed as follows:

1. Unlock the locking pin by applying pressure upward using a screwdriver.
2. Open the bayonet lock by turning it counterclockwise.
3. Pull the upper section upward.

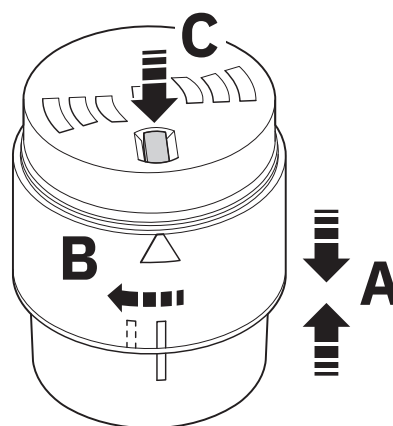
Figure 1 Opening the connection element



To close a connection element, proceed as follows:

1. With the locking pin unlocked, push the upper section onto the lower section.
2. Close the bayonet lock by turning it clockwise.
3. Lock the locking pin downward.

Figure 2 Closing the connection element



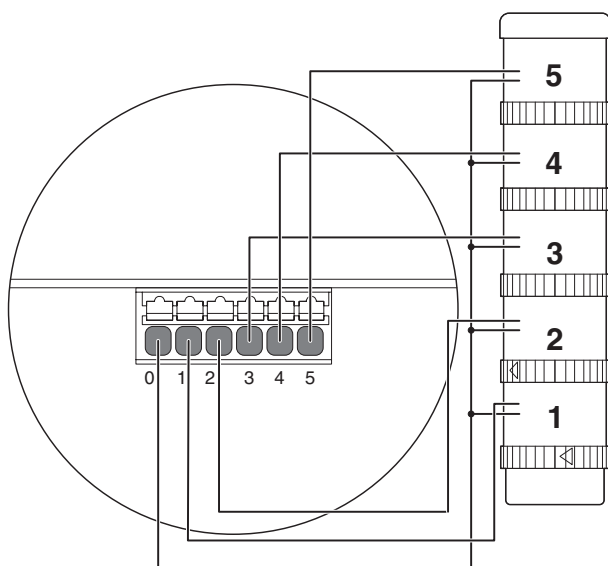
7 Connecting the cables



NOTE:

When working on the connection element, disconnect the power to the signal tower!

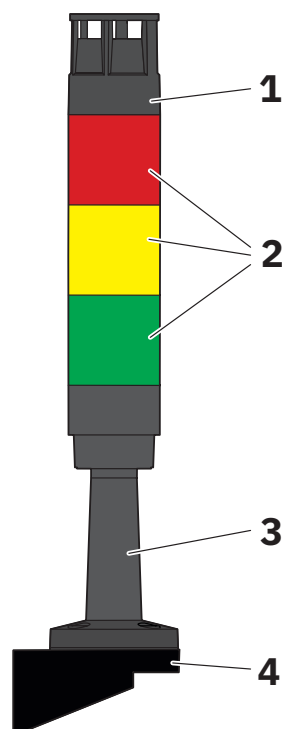
Figure 3 Connections in the connection element



Connection	Meaning
0	Reference potential (GND, N)
1	Control of signal element 1 (24 V DC)
2	Control of signal element 2 (24 V DC)
3	Control of signal element 3 (24 V DC)
4	Control of signal element 4 (24 V DC)
5	Control of signal element 5 (24 V DC)

8 Example of a signal tower

Figure 4 Example of a signal tower



Key:

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

9 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 connecting the bayonet locking, please note the markings (see "Assembly of the individual elements" in the data sheets of the signal elements).