

PSD-S 50 CE ...

Connection element for PSD-S 50 signal towers

Data sheet
109297_en_00

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1 Description

A 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 installing on a mounting surface (floor), junction box or bracket (see Accessories)
- Push-in connection technology
- 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.

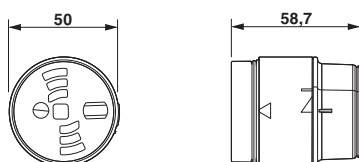
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3 Ordering data

Description	Type	Order 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
Tube base on 400 mm aluminum tube with plastic foot	PSD-S 50 CE BT 400-M	1018845	1
Accessories	Type	Order No.	Pcs./Pkt.
Screw set for third-party tube assembly	PSD-S 50 AS SCREW TM	1094201	1
Metal bracket for exterior cable entry	PSD-S 50 ME BR-SM-M	1018868	1
Metal bracket for products with M12 assembly thread	PSD-S 50 ME BR-M12 M	1094143	1
Plastic bracket for vertical assembly of tubes with plastic foot	PSD-S 50 ME BR-BM/HCR	1018870	1
Junction box for horizontal assembly, M20, incl. assembly screws	PSD-S 50 ME OB-BM	1018871	1
Junction box for vertical assembly, M20	PSD-S 50 ME OB/BR-BM	1018872	1
Junction box for magnetic assembly, M20	PSD-S 50 ME OB/MB-BM	1018873	1
Screw set for junction boxes	PSD-S 50 AS SCREW ME	1094189	10

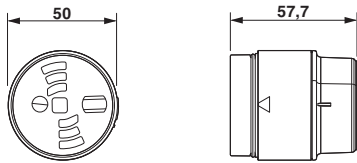
4 Technical data

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



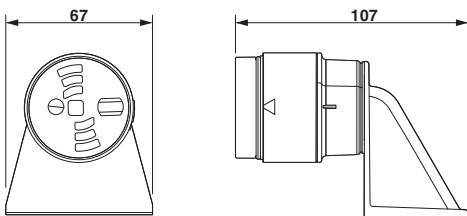
Diameter	50 mm
Height	58.7 mm

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



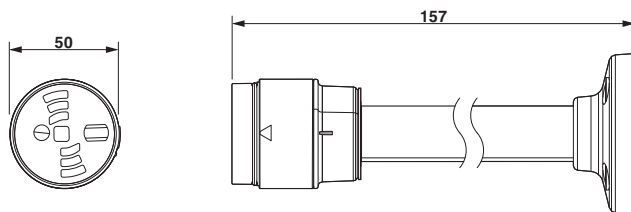
Diameter	50 mm
Height	57.7 mm

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



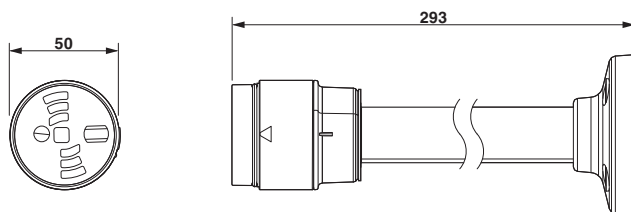
Diameter	67 mm
Height	107 mm

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

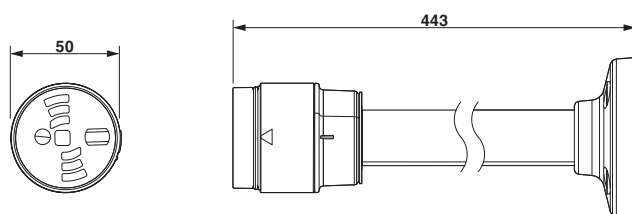


Diameter	50 mm
Height	157 mm

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



Diameter	50 mm
Height	293 mm

Dimensions (nominal sizes in mm) (PSD-S 50 CE BT 400-M)

Diameter	50 mm
Height	443 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
Weight (PSD-S 50 CE BT 400-M)	
Ambient temperature (operation)	-30 °C ... 60 °C
Degree of protection	IP65, when installed
Mounting position	any
Mounting type	Base mounting
Connection	Seal included
Scope of delivery	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]	20 ... 15
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]	23 ... 15
Stripping length	7 mm

Connection data: solid

Connection method	Push-in connection
Conductor cross section, solid	0.5 mm ² ... 1.5 mm ²
Conductor cross section, solid [AWG]	20 ... 15
Stripping length	7 mm

Approvals/conformities

Conformance with EMC directive 2004/108/EC and for low-voltage directive 2006/95/EC

For the latest approvals, please visit phoenixcontact.net/products.

5 Mounting the connection element

Install the connection element directly on a flat mounting surface, on a contact box or an angle. The possible options are indicated in the ordering data under accessories.

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



Please refer to the package list for connection options. It is enclosed with the connection element and can be downloaded from the internet at phoenixcontact.net/products.

6 Opening and closing a connection element

To open an connection element, do the following:

1. Unlock the Lockstick upwards using a screwdriver.
2. Open the bayonet locking system by turning it counterclockwise.
3. Pull the top up.

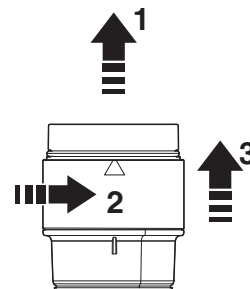


Figure 1 Opening the connection element

To close an connection element, do the following:

1. With the Lockstick unlocked, put the upper part on the lower part.
2. Close the bayonet locking system by turning it clockwise.
3. Lock the lockstick down.

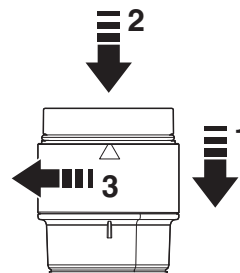


Figure 2 Closing the connection element

7 Connecting the cables



NOTE:

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

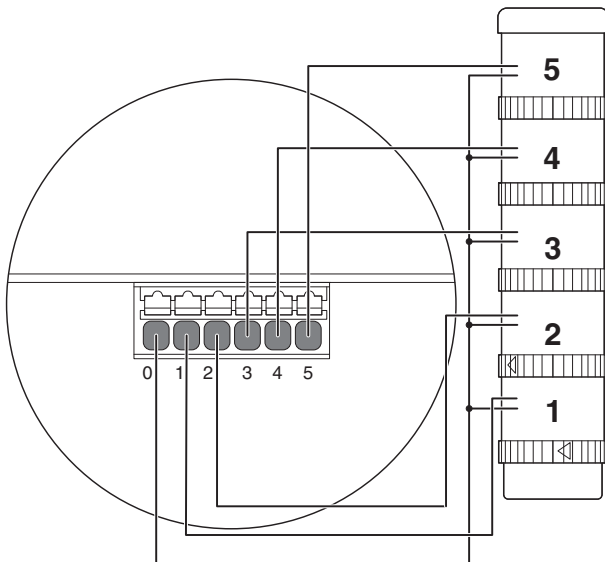


Figure 3 Connections in the connection element

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

8 Example of a signal tower

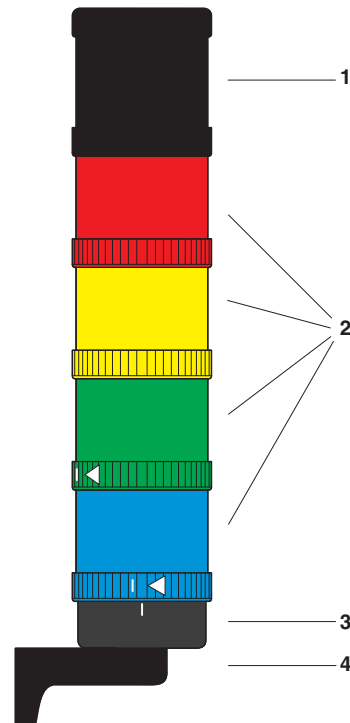


Figure 4 Example of a signal tower

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).