

PendoTECH® Single Use Pressure Sensors with Ingress-Protection (IP) Rated 67 Connectors

1. Introduction

PendoTECH Single Use Pressure Sensors™ connect to PendoTECH monitor/transmitters, or third-party systems, via an integral 4 contact connector. The standard white over-molded connectors are user-friendly and make for easy installation and removal of sensors. However, these connections are not ingress-protection (IP) rated to be water-tight when connecting to a panel mount bulk head receptacle or a re-usable cable. Therefore, water-tight connector with an IP-67 rating may be more ideal in specific panel mount installations particularly for manufacturers of OEM equipment. Accordingly, PendoTECH offers all pressure sensors with an optional water-tight, panel-mount connector to plug into a panel mount or in-line free hanging receptacle with an IP-67 rating. This technical note includes specific information on the type of connector used and ordering information.



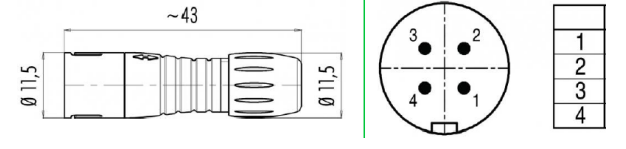
Sensor with IP-67 Rated Connector

2. Specifications



PendoTECH Pressure Sensors can be ordered with a BINDER Series 620 male connector, part number 99 9209 00 04, with IP67 degree of protection when plugged into a panel mount receptacle or an in-line mating connector that is often passed through a water-tight panel mount grommet. The wiring information and specifications for this particular connector are shown below.

Pressure Sensor with BINDER Series 620 male connector, part number 99 9209 00 04

Pin	Signal	Sensor Wire Color
1	Excitation +	Red
2	Signal -	White
3	Signal +	Green
4	Excitation -	Black



The 4-pin female receptacles for the connector mentioned above are Binder part numbers 99 9212 00 04 for the panel mount and 99 9210 00 04 for the cable connector. The cable flying leads can be connectorized with a panel mount connector preferred to be used, or routed through a water-tight grommet into a panel for connection inside the panel. These two items are pictured below. There are also a range of other options offered by Binder including a panel mount option install from inside the cabinet and dust covers and some are listed in the Appendix.

Female Panel Mount Connector Binder Part Number: 99 9212 00 04*	Female Cable Connector Extension (6ft/2meter) (In-Line Free Hanging) Binder Part Number: 99 9210 00 04
 <p>*PendoTECH offers this part with 12 inches of wire leads attached to the connector sockets inside the cabinet to streamline installation Part Number: PMAT-W-PNL-1</p>	

Complete specifications for male and female Binder connectors can be found in the Appendix of this document.

Sample installation- one shown with sensor connected and one with both connected are shown in the following pictures.



Sample installation with one sensor connected



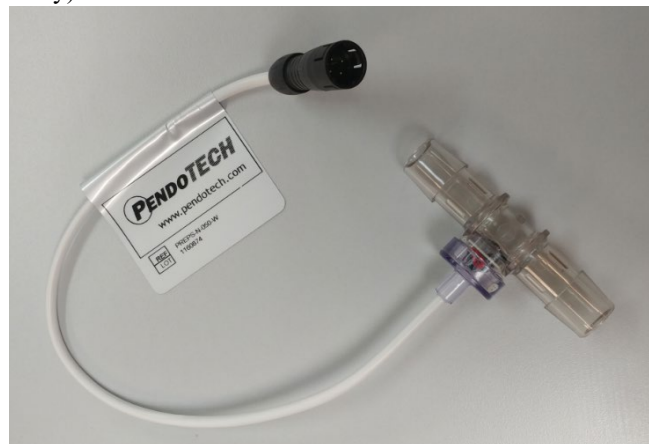
Sample installation with 2 sensors connected

Technical drawings of both connectors are shown in the Appendix.

The part numbers referenced above are for the female connectors in black. Other color options and cordsets are available.

3. Ordering Information

All versions of PendoTECH Single Use Pressure sensors can be ordered with Binder IP67 rated connectors. They are ordered by simply adding a -W to the standard part number. For example, the Binder connectorized version of the 1/4" hosebarb polysulphone sensor part number PREPS-N-050 is ordered as PREPS-N-050-W. Please note the minimum order quantity is 100 units and these are made to order (ie, not part of the standard sensor stocked inventory) and there is also an additional cost.



There are also multiple adapter cables available for the -W sensors.

1. PDKT-650-298-W: Adapter cable from -W sensors to traditional connector



2. PDKT-650-298-BIND: Adapter cable from traditional white pressure sensor connector to Binder (-W) receptacle, 3ft



3. PDKT-W-EXT-1: 1 foot re-usable extension cable for -W pressure sensors (Male/Female)



4. PDKT-W-EXT-6: 6 foot re-usable extension cable for -W pressure sensors (Male/Female)
SAME AS PREVIOUS BUT 6 FEET LENGTH

5. PMAT-650-298-W: Cable Adapter with IP67 receptacle for Single Use Pressure Sensor for PressureMAT (3 feet)



6. PMAT-650-298-W-12: Cable Adapter with IP67 receptacle for Single Use Pressure Sensor for PressureMAT (12 feet)- SAME AS PREVIOUS BUT 12 FEET LENGTH
7. PMAT-W-PNL-1: Binder 620 (-W) panel mounted connector, female, 4 conductor black, with 12" flying leads FOR STREAMLINED INSTALLATION PROCESS



Appendix- Binder Technical Documentation

NOTE: THIS WAS THE LATEST INFORMATION AT THE PUBLICATION OF THIS DOCUMENT IN SEPTEMBER 2019- PLEASE CONTACT BINDER DIRECTLY FOR THE LATEST SPECIFICATIONS.

Product Area

Polzahl: 4, Flanschdose
Snap-in IP67

Series 620

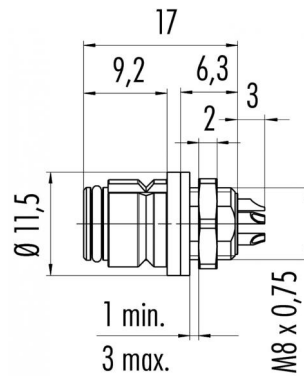
Pole
Article number

4
99 9212 00 04

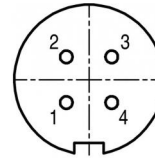
Illustration



Masszeichnung



Contact Arrangement



	X	Y
1	-1,55	-1,55
2	-1,55	1,55
3	1,55	1,55
4	1,55	-1,55

You can find the item description and assembly instruction on the next page.

Technical data

Common values

Connector Design	Female panel mount connector
Connector locking system	Snap
Termination	Solder
Wire gauge (mm)	0.25 mm ²
Wire gauge (AWG)	24
Cable outlet	3 - 5 mm
Upper temperature	85 °C
Lower temperature	-25 °C

Electrical values

Rated voltage	125 V
Rated impulse voltage	1500 V
Pollution degree	2
Overvoltage category	II
Material group	II
Rated current (40°C)	2.5 A
Volume resistivity	≤ 3 mΩ
EMV compliance	not shieldable
Degree of protection	IP67
Mechanical operation	> 500 mating cycles

Material

Material of contact	CuSn (Bronze)
Contact plating	Au (Gold)
Material of contact body	PA (UL 94 V-0)
Material of housing	PA (UL 94 V-0)

Cable data

material housing	-
Insulation single lead	-
Single lead structure	-
Conductor resistance	-

Polzahl: 4, Flanschdose

Product
Area

Polzahl: 4, Flanschdose
Snap-in IP67

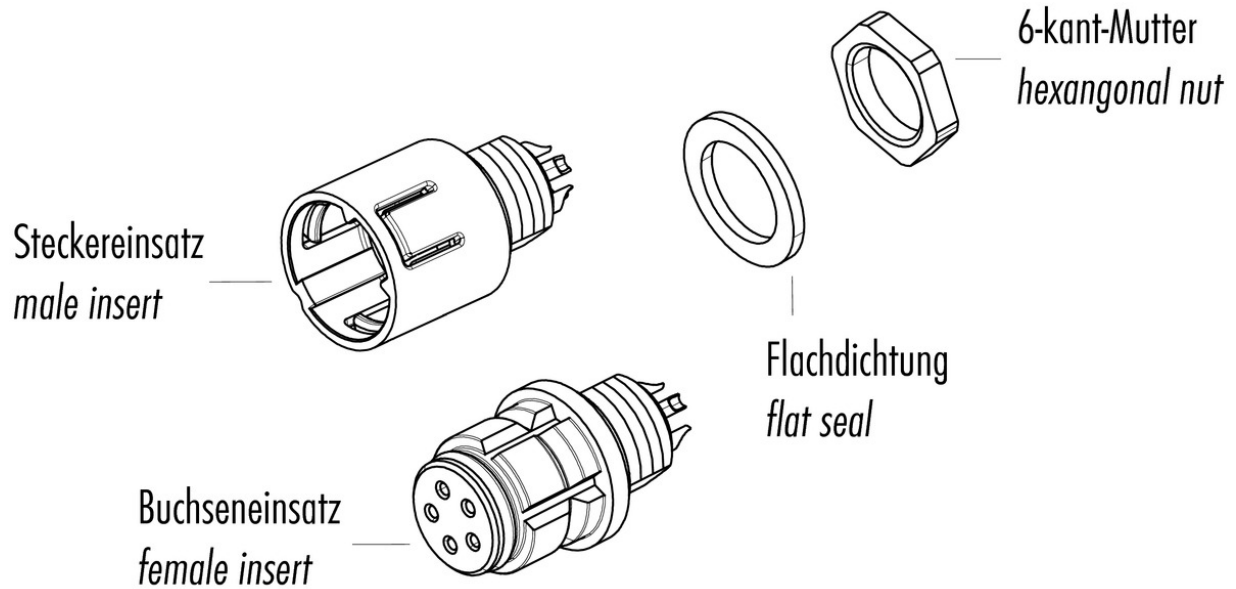
Series 620

Pole
Article number

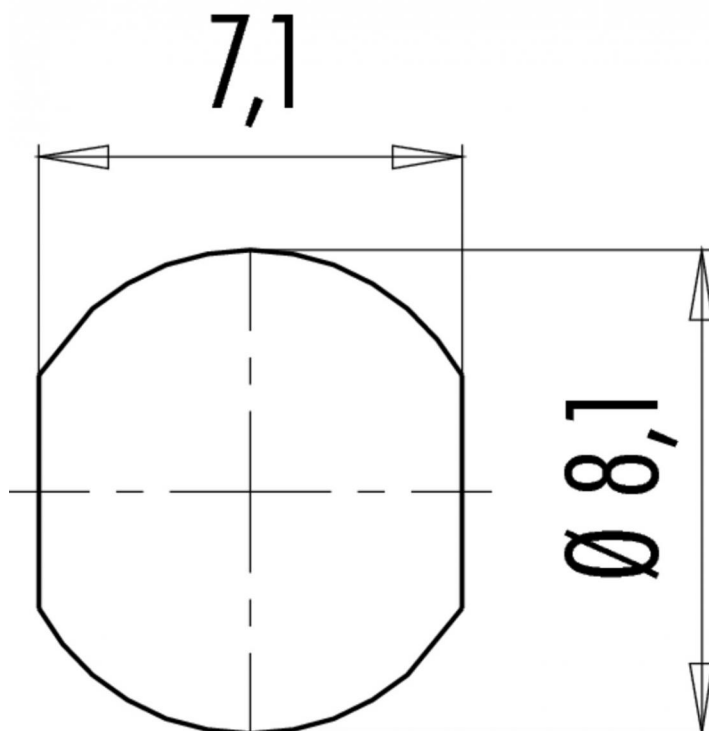
4
99 9212 00 04

Date: 2015-03-10 - Page 2 of 2

Item description



Installation instructions / Mounting cutout



Product Area

Adapter für Flanschsteckverbinder (Verschraubung von vorne)
Snap-in IP67 Series 620

Pole

-

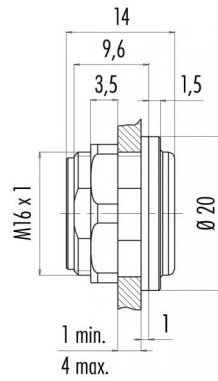
Article number

08 2629 000 001

Illustration



Masszeichnung



You can find the item description and assembly instruction on the next page.

Technical data

Common values

Connector Design	Adaptor
Termination	-
Wire gauge (mm)	-
Cable outlet	-

Material

Material of contact	-
Contact plating	-
Material of contact body	-
Material of housing	PA (UL 94 V-0)

Electrical values

Pollution degree	-
Overvoltage category	-
Material group	-
Rated current (40°C)	-
Volume resistivity	-
EMV compliance	-

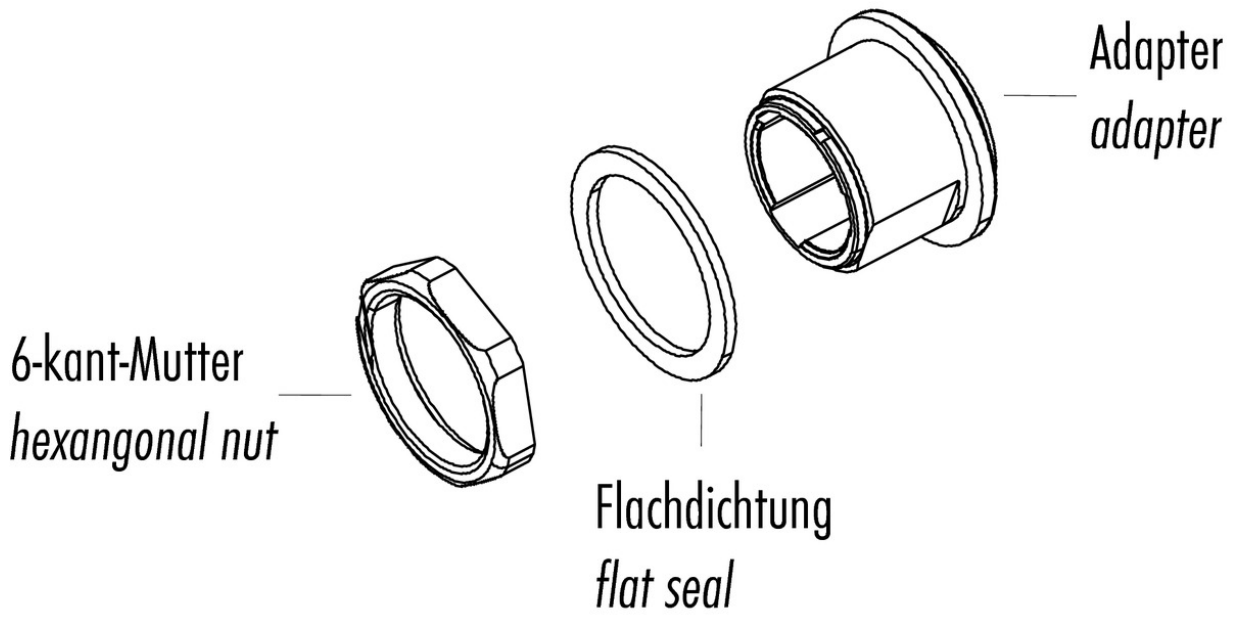
Cable data

material housing	-
Insulation single lead	-
Single lead structure	-
Conductor resistance	-

Adapter für Flanschsteckverbinder
(Verschraubung von vorne)

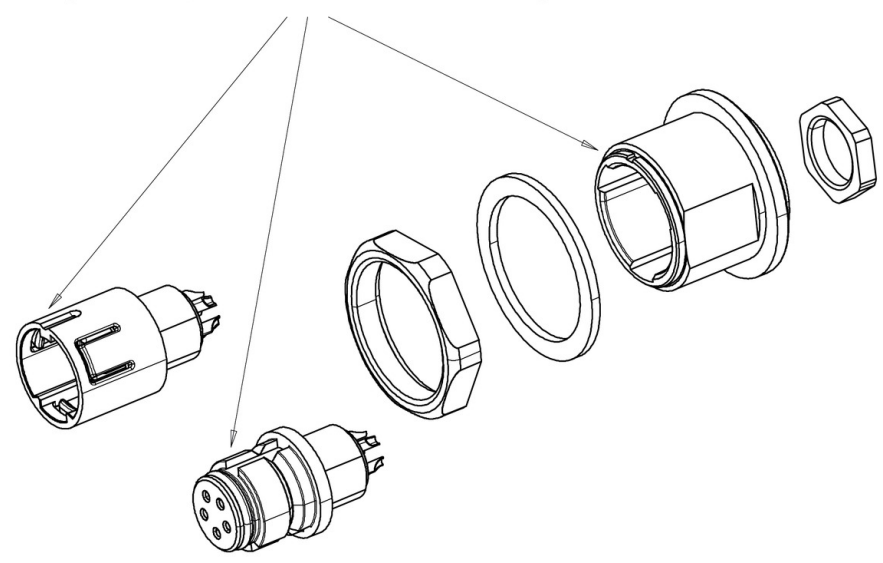
Product Area	Adapter für Flanschsteckverbinder (Verschraubung von vorne) Snap-in IP67 Series 620	Pole	-
		Article number	08 2629 000 001

Item description



Installation instructions / Mounting cutout

Die Markierung des Adapters muss mit der Kodiernase des Einsatzes übereinstimmen
The marking of the adapter must conform with the coding nut of the insert



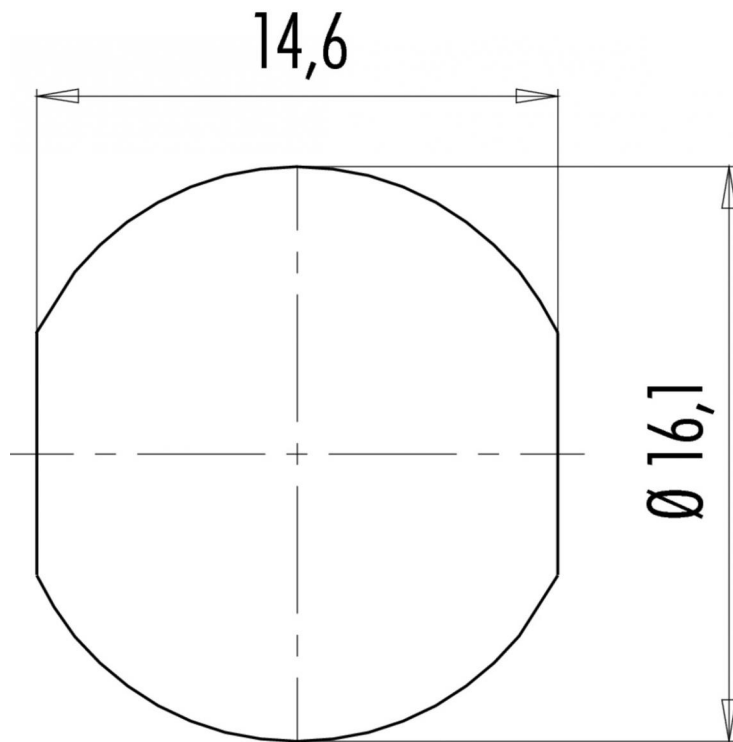
Einsätze müssen separat bestellt werden
Inserts have to be ordered separately

Product Area Adapter für Flanschsteckverbinder (Verschraubung von vorne)
Snap-in IP67 Series 620

Pole -
Article number 08 2629 000 001

Date: 2015-03-16 - Page 3 of 3

Installation instructions / Mounting cutout

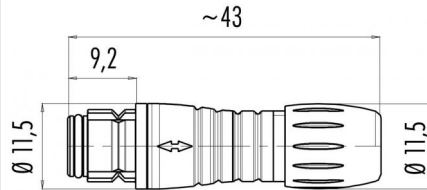


Product **Polzahl: 4, Kabeldose**
Area **Snap-in IP67 Series 620**
Article number **99 9210 00 04**

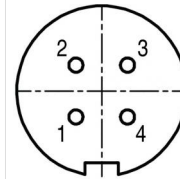
Illustration



Scale drawing



Contact Arrangement



	X	Y
1	-1,55	-1,55
2	-1,55	1,55
3	1,55	1,55
4	1,55	-1,55

You can find the item description on the next page.

Technical data

Common values

Connector Design	Female cable connector
Connector locking system	Snap
Termination	Solder
Wire gauge (mm)	0.25 mm ²
Wire gauge (AWG)	24
Cable outlet	3 - 5 mm
Upper temperature	85 °C
Lower temperature	-40 °C

Cable data

material housing	-
Insulation single lead	-
Single lead structure	-
Conductor resistance	-

Electrical values

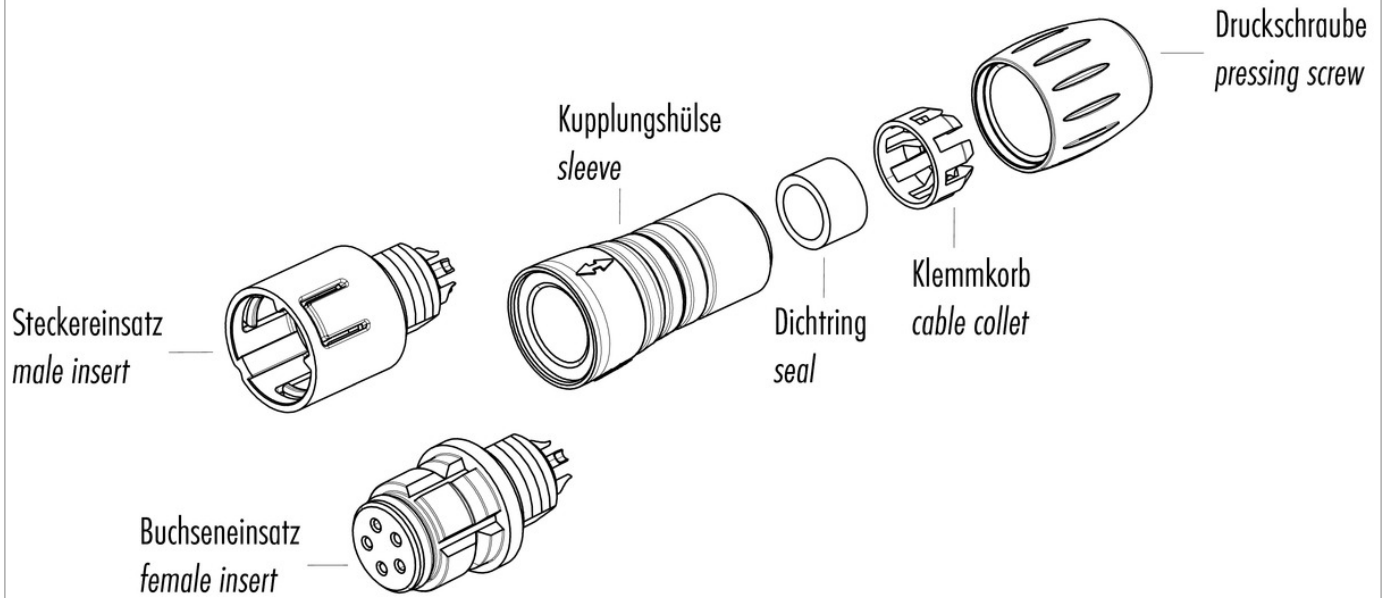
Rated voltage	125 V
Rated impulse voltage	1500 V
Pollution degree	2
Overvoltage category	II
Material group	II
Rated current (40°C)	2.5 A
Volume resistivity	≤ 3 mΩ
EMV compliance	not shieldable
Degree of protection	IP67
Mechanical operation	> 500 mating cycles

Material

Material of contact	CuSn (Bronze)
Contact plating	Au (Gold)
Material of contact body	PA (UL 94 V-0)
Material of housing	PA (UL 94 V-0)

Product	Polzahl: 4, Kabeldose
Area	Snap-in IP67 Series 620
Article number	99 9210 00 04

Item description

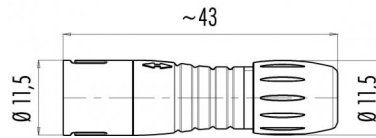


Product Area	Polzahl: 4, Kabelstecker Snap-in IP67	Series 620	Pole	4
			Article number	99 9209 00 04

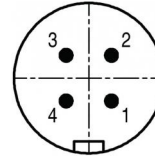
Illustration



Masszeichnung



Contact Arrangement



	X	Y
1	1,55	-1,55
2	1,55	1,55
3	-1,55	1,55
4	-1,55	-1,55

You can find the item description on the next page.

Technical data

Common values

Connector Design	Cable plug connector
Connector locking system	Snap
Termination	Solder
Wire gauge (mm)	0.25 mm ²
Wire gauge (AWG)	24
Cable outlet	3 - 5 mm
Upper temperature	85 °C
Lower temperature	-40 °C

Material

Material of contact	CuZn (Brass)
Contact plating	Au (Gold)
Material of contact body	PA (UL 94 V-0)
Material of housing	PA (UL 94 V-0)

Cable data

material housing	-
Insulation single lead	-
Single lead structure	-
Conductor resistance	-

Electrical values

Rated voltage	125 V
Rated impulse voltage	1500 V
Pollution degree	2
Overvoltage category	II
Material group	II
Rated current (40°C)	2.5 A
Volume resistivity	≤ 3 mΩ
EMV compliance	not shieldable
Degree of protection	IP67
Mechanical operation	> 500 mating cycles

Polzahl: 4, Kabelstecker

Product
Area

Polzahl: 4, Kabelstecker
Snap-in IP67

Series 620

Pole
Article number

4
99 9209 00 04

Date: 2015-03-10 - Page 2 of 2

Item description

