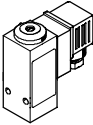
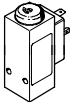
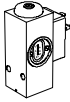
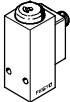
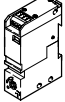


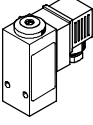
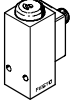
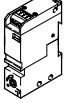


- Mechanical pressure switches with adjustable switching point
- Versions with adjustable hysteresis

# Pressure switches PEV, mechanical

Product range overview



Function	Version	Type	Pneumatic connection	Operating voltage	Electrical connection		
					Plug	Terminals	
Mechanical pressure switches	Mounting via screws						
		PEV-1/4-B	G1/4	0 ... 250 V AC/DC	■ <sup>1)</sup>	-	
		PEV-1/4-B-CT	G1/4	0 ... 250 V AC/DC	■ <sup>1)</sup>	-	
		PEV-1/4-B-OD	G1/4	0 ... 250 V AC/DC	■	-	
		PEV-1/4-B-OD-CT	G1/4	0 ... 250 V AC/DC	■	-	
		PEV-1/4-SC-OD Visual scale for pressure adjustment	G1/4	0 ... 250 V AC/DC	■	-	
		PEV-1/4-B-M12	G1/4	0 ... 250 V AC/DC	■ M12x1	-	
	H-rail mounting						
		PEV-W-S-LED-GH	M5	10 ... 30 V DC	■ M8x1	-	
		PEV-W-KL-LED-GH	M5	10 ... 30 V DC	-	■	
	Mounting via screw-in thread						
		PEV-1/4-A-SW27	G1/4	0 ... 250 V AC/DC	■	-	
		PEV-1/4-A-SW27-B-OD	G1/4	0 ... 250 V AC/DC	■	-	
	Mechanical vacuum switches	Mounting via screws					
			VPEV-1/8	G1/8	0 ... 250 V AC/DC	■ <sup>1)</sup>	-
		VPEV-1/8-M12	G1/8	0 ... 250 V AC/DC	■ M12x1	-	
H-rail mounting							
		VPEV-W-S-LED-GH	M5	10 ... 30 V DC	■ M8x1	-	
		VPEV-W-KL-LED-GH	M5	10 ... 30 V DC	-	■	

1) Plug socket included in scope of delivery

# Pressure switches PEV, mechanical

Product range overview



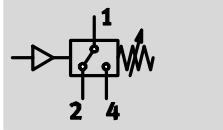
Type	Adjustable hysteresis	Visual scale for pressure adjustment	Switching status display with LED	Free of copper, PTFE and silicone	→ Page
<b>Mounting via screws</b>					
PEV-1/4-B	■	-	-	-	4 / 8.1-4
PEV-1/4-B-CT	■	-	-	■	4 / 8.1-4
PEV-1/4-B-OD	■	-	-	-	
PEV-1/4-B-OD-CT	■	-	-	■	4 / 8.1-4
PEV-1/4-SC-OD Visual scale for pressure adjustment	-	■	-	-	
PEV-1/4-B-M12	■	-	-	-	4 / 8.1-4
<b>H-rail mounting</b>					
PEV-W-S-LED-GH	-	-	■	-	4 / 8.1-7
PEV-W-KL-LED-GH	-	-	■	-	
<b>Mounting via screw-in thread</b>					
PEV-1/4-A-SW27	-	-	-	-	4 / 8.1-9
PEV-1/4-A-SW27-B-OD	-	-	-	-	4 / 8.1-9
<b>Mounting via screws</b>					
VPEV-1/8-B	■	-	-	-	Volume 6
VPEV-1/8-B-M12	■	-	-	-	Volume 6
<b>H-rail mounting</b>					
VPEV-W-S-LED-GH	-	-	■	-	Volume 6
VPEV-W-KL-LED-GH	-	-	■	-	

# Pressure switches PEV, mechanical

Technical data – Mounting via screws



Function



- - Voltage  
0 ... 250 V DC/AC
- - Pressure  
1 ... 12 bar
- - Temperature range  
-20 ... +80 °C



General technical data			
Type	PEV-1/4-B...	PEV-1/4-SC-OD	PEV-1/4-B-M12
<b>Mechanical</b>			
Pneumatic connection	G <sup>1</sup> / <sub>4</sub>		
Method of measurement	Pneumatic/electrical pressure transducer		
Measured variable	Relative pressure		
Hysteresis	→ Diagram		
Electrical connection	Plug, square design to EN 175 301-803, type A		Plug M12x1, 4-pin, round design to EN 60 947-5-2
Type of mounting	Via through-holes		Via through-holes
Mounting position	Any <sup>1)</sup>		
Materials	Wrought aluminium alloy		
Note on material	Designs free of copper, PTFE and silicone → Ordering data		
Weight	[g]	220	170
<b>Electrical</b>			
Operating voltage range	[V DC]	0 ... 250	
	[V AC]	0 ... 250	
Max. switch output voltage	[V DC]	250	
	[V AC]	250	
Max. output current	[mA]	5 000	
Max. switching frequency	[Hz]	3.3	
Protection against short circuit	No		
Protection against polarity reversal	Yes		
Switching element function	Changeover switch		
Ready status display	-		
Switching status display	-		
Protection class to EN 60 529	IP65		
CE symbol	73/23/EEC (low voltage)		

1) The collection of condensate in the sensor should be prevented.

Operating and environmental conditions			
Type	PEV-1/4-B...	PEV-1/4-SC-OD	PEV-1/4-B-M12
Operating medium	Filtered compressed air, lubricated or unlubricated Water Mineral oil		
Operating pressure	[bar]	1 ... 12	1 ... 12
Threshold value setting range	[bar]	1 ... 12	1 ... 12
Ambient temperature	[°C]	-20 ...+80	-20 ...+80
Temperature of medium	[°C]	-20 ...+80	-20 ...+80

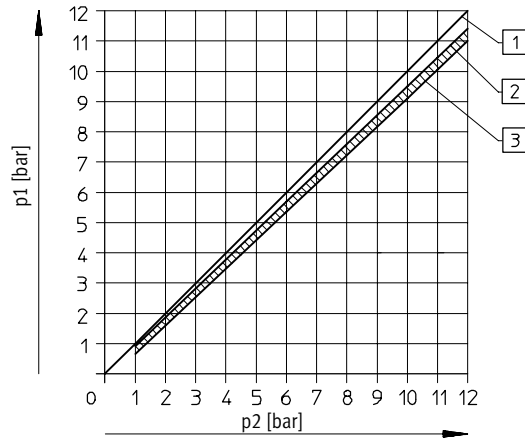
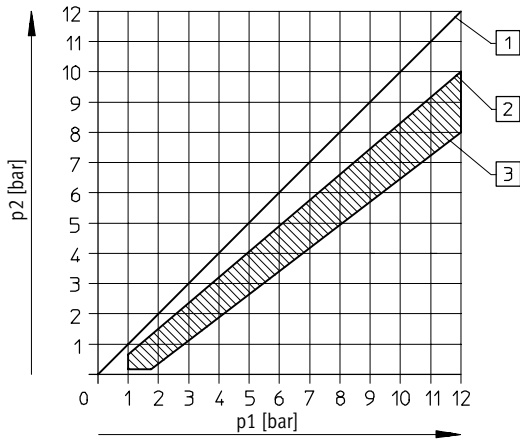
# Pressure switches PEV, mechanical

Technical data – Mounting via screws

## Hysteresis

PEV-1/4-B...

PEV-1/4-SC-OD



- 1 Switch-on pressure
- 2 Switch-off pressure (min.)
- 3 Switch-off pressure (max.)

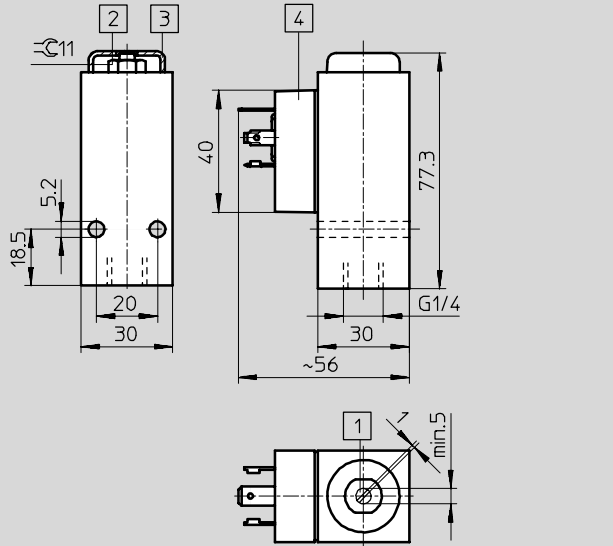
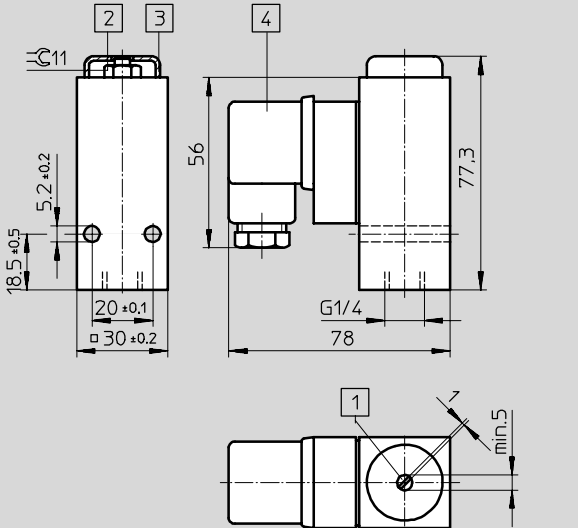
- p1 = Switch-on pressure
- p2 = Switch-off pressure

## Dimensions

Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

PEV-1/4-B, PEV-1/4-B-CT

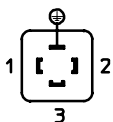
PEV-1/4-B-OD, PEV-1/4-B-OD-CT



- 1 Switching point adjustment screw
- 2 Spindle for hysteresis setting (under protective cover)
- 3 Protective cover
- 4 Plug socket MSSD-C-4P  
Cable outlet selectable by rotating the socket insert 4x90°

- 1 Switching point adjustment screw
- 2 Spindle for hysteresis setting (under protective cover)
- 3 Protective cover
- 4 Plug, square design, suitable for connector socket  
DIN EN 175 301-803-A

## Terminal allocation



- 1 + (-)
- 2 NC contact
- 3 NO contact

# Pressure switches PEV, mechanical

Technical data – Mounting via screws



## Dimensions

Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

PEV-1/4-SC-OD	PEV-1/4-B-M12
<p>1) Switching point adjustment screw</p> <p>2) Scale for reading the selected switching pressure</p> <p>3) Protective cover</p> <p>4) Push-in connector, suitable for connector socket DIN EN 175 301-803-A M16x1.5</p>	<p>1) Switching point adjustment screw</p> <p>3) Remove the cover cap to adjust hysteresis</p> <p>4) Connection for plug connectors to EN 60 947-5-2, M12x1</p> <p>5) Hysteresis adjustment</p>

## Terminal allocation

PEV-1/4-SC-OD	PEV-1/4-B-M12
<p>1) + (-)</p> <p>2) NC contact</p> <p>3) NO contact</p>	<p>1) + (-)</p> <p>2) NC contact</p> <p>3) Unused</p> <p>4) NO contact</p>

## Ordering data

Circuit symbol	Description	Pneumatic connection	Plug socket (included in scope of delivery)	Part No.	Type
	Pneumatic/electrical pressure transducer	G1/4	■	10 773	PEV-1/4-B
		G1/4	■	165 869	PEV-1/4-B-CT <sup>1)</sup>
		G1/4	-	175 250	PEV-1/4-B-OD
		G1/4	-	175 251	PEV-1/4-B-OD-CT <sup>1)</sup>
		G1/4	-	161 760	PEV-1/4-SC-OD
		G1/4	■	192 488	PEV-1/4-B-M12

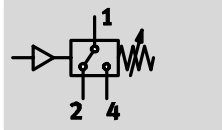
1) Free of copper, PTFE and silicone




# Pressure switches PEV-W, mechanical

Technical data – H-rail mounting

FESTO

Function



-  Voltage  
10 ... 30 V DC
-  Pressure  
2 ... 8 bar
-  Temperature range  
0 ... 60°C



General technical data		
Type	PEV-W...	
<b>Mechanical</b>		
Pneumatic connection	G $\frac{1}{4}$	
Method of measurement	Pneumatic/electrical pressure transducer	
Measured variable	Relative pressure	
Hysteresis	0.5 ... 2 bar, not adjustable	
Electrical connection	Plug vanes for socket PEV- $\frac{1}{4}$ -A or terminals	
Type of mounting	With mounting rail, via through-holes	
Mounting position	Any <sup>1)</sup>	
Materials	Galvanised steel	
Weight [g]	56	
<b>Electrical</b>		
Operating voltage range	[V DC]	10 ... 30
	[V AC]	–
Max. output current [mA]	2 500	
Maximum switching frequency [Hz]	3.3	
Protection against short circuit	No	
Protection against polarity reversal	Yes	
Switching element function	Changeover switch	
Ready status display	–	
Switching status display	Yellow LED	
Protection class to EN 60 529	IP65	
CE symbol	73/23/EEC (low voltage)	

1) The collection of condensate in the sensor should be prevented.

Operating and environmental conditions		
Type	PEV-W...	
Operating medium	Filtered compressed air, lubricated or unlubricated	
Operating pressure [bar]	0 ... 8	
Pressure measuring range [bar]	2 ... 8	
Threshold value setting range [bar]	2 ... 8	
Ambient temperature [°C]	0 ... 60	
Temperature of medium [°C]	0 ... 60	

# Pressure switches PEV-W, mechanical

Technical data – H-rail mounting

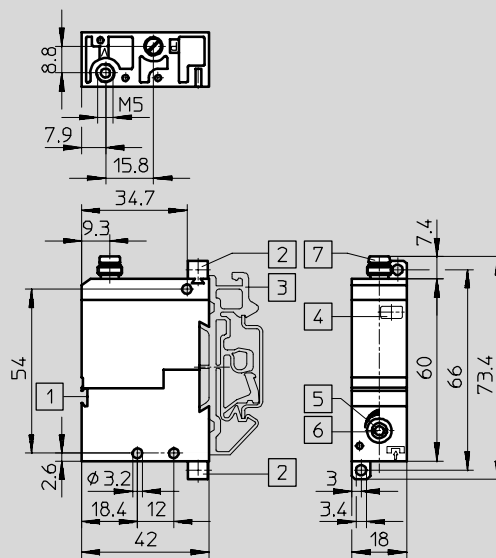
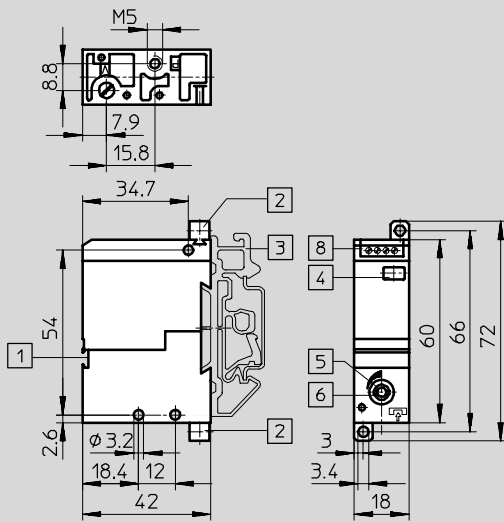


## Dimensions

Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

PEV-1/4-W-KL-LED-GH

PEV-1/4-W-S-LED-GH

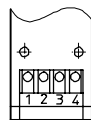
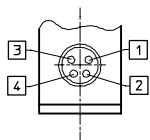


- 1 Slot for inscription label
- 2 Foot mounting (included in scope of delivery)
- 3 Mounting latch for G/H rail (accessories)
- 4 Switching status display, yellow
- 5 Switching point adjustment screw
- 6 Manual override
- 7 Integral plug, suitable for plug sockets to DIN EN 60 947-5-2, M8, 4-pin SIM-K-4-... or SIM-M8-...
- 8 Cable terminals

## Terminal allocation

PEV-W-S-LED-GH

PEV-W-KL-LED-GH



- 1 + (-) Brown
- 2 NC contact (switch output 2) white
- 3 - (+) Blue
- 4 NO contact (switch output 1) black

## Ordering data

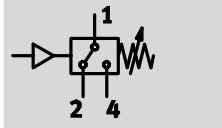
Circuit symbol	Description	Pneumatic connection	Plug socket (included in scope of delivery)	Part No.	Type
	Pneumatic/electrical pressure transducer	M5	–	152 618	PEV-W-KL-LED-GH
		M5	–	152 616	PEV-W-S-LED-GH



# Pressure switches PEV, mechanical

Technical data – Mounting via screw-in thread

Function



- Voltage  
0 ... 250 V AC/DC
- Pressure  
1 ... 10 bar
- Temperature range  
-20 ... +100 °C



General technical data		
Type	PEV-1/4-A-SW27...	
Mechanical		
Pneumatic connection	G1/4	
Method of measurement	Pneumatic/electrical pressure transducer	
Measured variable	Relative pressure	
Hysteresis	15±5% at 6 bar 30±5% at 2 bar	
Electrical connection	Plug vanes for socket PEV-1/4-A	
Type of mounting	Threaded	
Mounting position	Any <sup>1)</sup>	
Materials	Polyacetal	
Weight	[g]	138
Electrical		
Operating voltage range	[V DC]	0 ... 250
	[V AC]	–
Max. output current	[mA]	2 500
Max. switching frequency	[Hz]	3.3
Protection against short circuit	No	
Protection against polarity reversal	No	
Switching element function	Changeover switch	
Ready status display	–	
Switching status display	–	
Protection class to EN 60 529	IP65	
CE symbol	73/23/EEC (low voltage)	

1) The collection of condensate in the sensor should be prevented.

Operating and environmental conditions		
Type	PEV-1/4-A-SW27...	
Operating medium	Filtered compressed air, lubricated or unlubricated	
Operating pressure	[bar]	1 ... 10
Threshold value setting range	[bar]	1 ... 10
Ambient temperature	[°C]	-20 ...+100
Temperature of medium	[°C]	-20 ...+80

# Pressure switches PEV, mechanical

Technical data – Mounting via screw-in thread



## Dimensions Download CAD data → [www.festo.com/en/engineering](http://www.festo.com/en/engineering)

<p><b>PEV-1/4-A-SW27</b></p>	<p><b>PEV-1/4-A-SW27-B-OD</b></p>
<p>1 Max. tightening torque 50 Nm 2 Integral plug in accordance with DIN 46 244-A6,3</p>	<p>1 Max. tightening torque 50 Nm 2 Integral plug in accordance with DIN EN 175 201-803-A003M 3 Switching point adjustment</p>

## Terminal allocation

<p><b>PEV-1/4-A-SW27</b></p>	<p><b>PEV-1/4-A-SW27-B-OD</b></p>	<p>1 + (-) 2 NC contact 4 NO contact</p>
------------------------------	-----------------------------------	--

## Ordering data

Circuit symbol	Description	Pneumatic connection	Plug socket (included in scope of delivery)	Part No.	Type
	Pneumatic/electrical pressure transducer	G1/4	–	<b>175 252</b>	<b>PEV-1/4-A-SW27-B-OD</b>
		G1/4	–	<b>159 259</b>	<b>PEV-1/4-A-SW27</b>

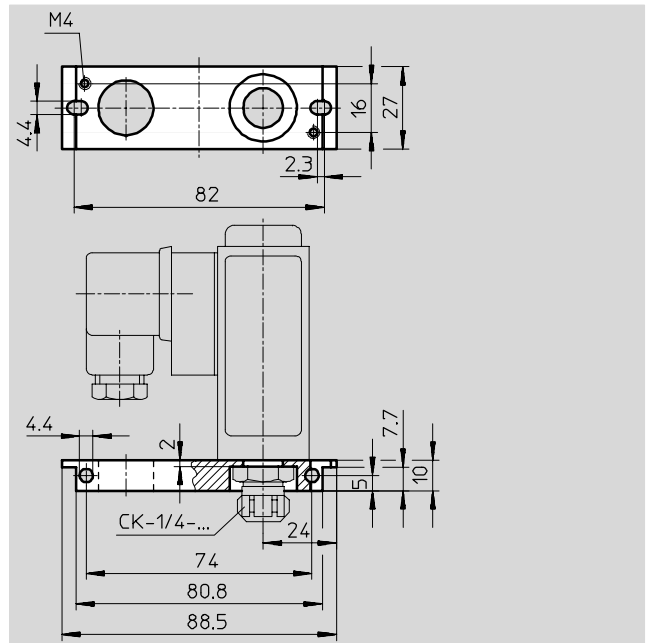
# Pressure switches PEV, mechanical

Accessories



## Mounting plate APL-2N-PEV

Material:  
Fibreglass reinforced polyamide



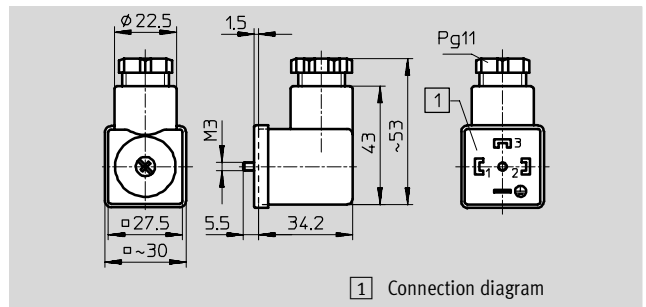
Sensors and monitoring devices  
Pressure switches

8.1

Ordering data		Weight [g]	Part No.	Type
Mounting plate for mounting of pressure switch PEV		18	9 349	APL-2N-PEV

## Plug socket PEV-1/4-WD with integrated LED, angled

Material of housing:  
Fibreglass reinforced polyamide



Ordering data							
For pressure switches	Weight [g]	Operating voltage range		Ready status display	Switching status display	Part No.	Type
		[V DC]	[V AC]				
PEV-1/4-B-OD ...	34	15 ... 30	–	Green LED	Yellow LED	164 274	PEV-1/4-WD-LED-24
PEV-1/4-SC-OD	34	≤180	≤230	Green LED	Yellow LED	164 275	PEV-1/4-WD-LED-230

# Pressure switches PEV, mechanical

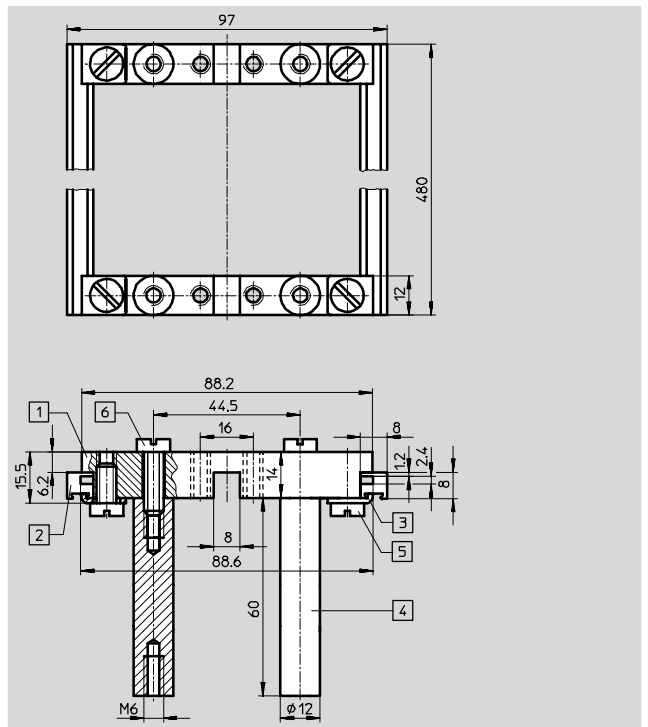
Accessories



## Mounting frame NRRQ-2N

### Scope of delivery

- 2 x connector NRV-2N,
- 2 x mounting rail NRQ-8-480,
- 4 x mounting bracket NRW-12/3,
- 4 x bolt NRB-12/60,
- 4 x socket head screw  
DIN 84-M6X18-4.8
- 4 x socket head screw  
DIN 84-M6X12-4.8
- 4 x mounting bracket NRW-9/1,5-B
- 4 x socket head screw  
DIN 84-M4X10-4.8



- 1 Connector NRV-2N
- 2 Mounting rail NRQ-8-480
- 3 Mounting bracket NRW-12/3
- 4 Bolt NRB-12/60
- 5 Socket head screw  
DIN 84-M6X18-4.8
- 6 Socket head screw  
DIN 84-M6X12-4.8

Mounting frame	Part No.	Type
Mounting frame 2N complete for 16 components	9 365	NRRQ-2N
<b>Accessories</b>		
Mounting bracket for mounting sub-bases on frame	11 571	NRW-9/1,5-B
Socket head screw (scope of delivery includes 2 pieces)	204 021	DIN 84-M4X12-4.8

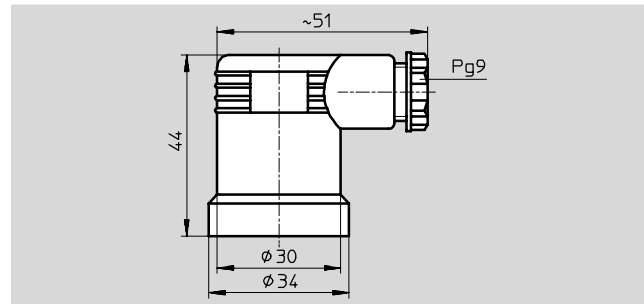
# Pressure switches PEV, mechanical

Accessories



## Plug socket PEV-1/4-A-WD, angled

Material of housing:  
Fibreglass reinforced polyamide



Ordering data					
For pressure switches	Weight [g]	Operating voltage range [V DC] [V AC]		Part No.	Type
PEV-1/4-A-SW27	55	≤180	≤230	161 209	PEV-1/4-A-WD

Ordering data – Plug sockets for pressure switches PEV-1/4-...-OD						Data sheets → 4 / 8.3-7	
	Mounting	Connection	Switch output		Cable length [m]	Part No.	Type
			PNP	NPN			
Angled socket							
	Central screw	4-pin	■	■	–	171 157	MSSD-C-4P

Ordering data – Plug sockets M12x1 for pressure switches PEV-1/4-B-M12						Data sheets → 4 / 8.3-12	
	Mounting	Connection	Switch output		Cable length [m]	Part No.	Type
			PNP	NPN			
Straight socket							
	Union nut M12x1	4-pin	■	■	5	164 259	SIM-M12-4GD-5-PU
Angled socket							
	Union nut M12x1	4-pin	■	■	5	164 258	SIM-M12-4WD-5-PU

Ordering data – Sensor sockets M12x1 for pressure switches PEV-1/4-B-M12						Data sheets → 4 / 8.3-4	
	Mounting	Connection	Switch output		Cable length [m]	Part No.	Type
			PNP	NPN			
Straight socket							
	Union nut M12x1	4-pin	■	■	–	18 494	SIE-GD
Angled socket							
	Union nut M12x1	4-pin	■	■	–	12 956	SIE-WD-TR
Operational status display for angled socket SIE-WD-TR							
	–	–	■	■	–	12 957	SIE-LP-LED-GR

# Pressure switches PEV, mechanical

Accessories



Sensors and monitoring devices  
Pressure switches

8.1

Ordering data – Plug sockets with cable M8x1 for pressure switches PEV-W-S...						Data sheets → 4 / 8.3-9	
	Mounting	Connection	Switch output		Cable length [m]	Part No.	Type
			PNP	NPN			
<b>Straight socket</b>							
	Union nut M8x1	4-pin	■	■	2.5	158 960	SIM-M8-4GD-2,5-PU
			■	■	5	158 961	SIM-M8-4GD-5-PU
	Snap connection	4-pin	■	■	2.5	164 250	SIM-K-4-GD-2,5-PU
			■	■	5	164 251	SIM-K-4-GD-5-PU
<b>Angled socket</b>							
	Union nut M8x1	4-pin	■	■	2.5	158 962	SIM-M8-4WD-2,5-PU
			■	■	5	158 963	SIM-M8-4WD-5-PU
	Snap connection	4-pin	■	■	2.5	164 252	SIM-K-4-WD-2,5-PU
			■	■	5	164 253	SIM-K-4-WD-5-PU

Ordering data – Accessories					Ordering data – Accessories				
	For pressure switches	Length	Part No.	Type		For pressure switches	Length	Part No.	Type
<b>Mounting latch for mounting on G/H rail</b>					<b>Inscription label</b> <span style="float: right;">Data sheets → Volume 2</span>				
	PEV-W-...	-	164 597	PENV-BGH		PEV-W-...	-	6 888	BZ-N1-50
								6 889	BZ-N51-100
<b>DIN mounting rail to DIN EN 50 035</b>					<b>DIN mounting rail to DIN EN 50 022</b>				
	PEV-W-...	2 m	6 756	NRC-32-200		PEV-W-...	2 m	35 430	NRH-35-2000