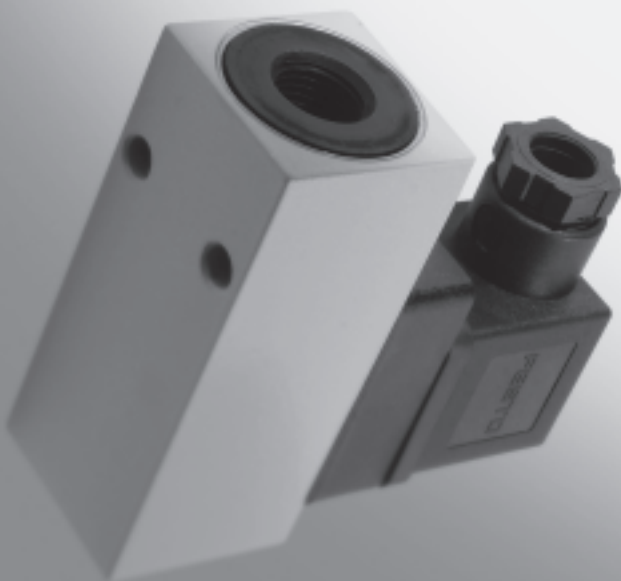


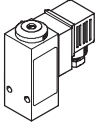
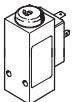
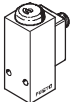
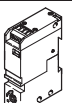
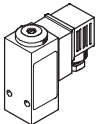
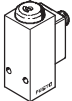
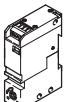


- Mechanical pressure switches with adjustable switching point
- Versions with adjustable hysteresis

Pressure switches PEV, mechanical

Product range overview

FESTO

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	■ ¹⁾	—	
		PEV-1/4-B-CT	G1/4	0 ... 250 V AC/DC	■ ¹⁾	—	
		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	■ ¹⁾	—
		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

FESTO

Type	Adjustable hysteresis	Visual scale for pressure adjustment	Switching status display with LED	Copper, PTFE and silicone-free	→ Page
Mounting via screws					
PEV-1/4-B	■	–	–	–	4 / 8.1-5
PEV-1/4-B-CT	■	–	–	■	
PEV-1/4-B-OD	■	–	–	–	4 / 8.1-5
PEV-1/4-B-OD-CT	■	–	–	■	
PEV-1/4-SC-OD Visual scale for pressure adjustment	–	■	–	–	4 / 8.1-5
PEV-1/4-B-M12	■	–	–	–	4 / 8.1-5
H-rail mounting					
PEV-W-S-LED-GH	–	–	■	–	4 / 8.1-9
PEV-W-KL-LED-GH	–	–	■	–	
Mounting via screw-in thread					
PEV-1/4-A-SW27	–	–	–	–	4 / 8.1-12
PEV-1/4-A-SW27-B-OD	–	–	–	–	4 / 8.1-12
Mounting via screws					
VPEV-1/8-B	■	–	–	–	Volume 6
VPEV-1/8-B-M12	■	–	–	–	Volume 6
H-rail mounting					
VPEV-W-S-LED-GH	–	–	■	–	Volume 6
VPEV-W-KL-LED-GH	–	–	■	–	

Pressure switches PEV, mechanical

Type codes, peripherals overview – Mounting via screws

FESTO

Type codes	
PEV - 1/4 - B - - - -	
Type	
PEV	Pressure switch
Pneumatic connection	
1/4	G1/4
Generation	
B	B series
Electrical connection	
-	Plug, square design to DIN 43 650, type A
M12	Plug M12x1, 4-pin, round design
Setting options	
SC	Scale for pressure adjustment
Plug socket	
-	Included in scope of delivery
OD	Not included in scope of delivery
Note on materials	
-	Not free of copper and PTFE
CT	Free of copper and PTFE

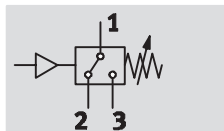
Peripherals overview	
	Accessories
	1 Pressure switch PEV-1/4-B-..., plug socket in scope of delivery
	2 Pressure switch PEV-1/4-B-OD-...
	3 Pressure switch PEV-1/4-SC-OD-... with scale for pressure adjustment
	4 Pressure switch PEV-1/4-B-M12
	5 Plug socket PEV-1/4-WD-LED-... with switching status display
	6 Plug socket with cable SIM-M12-4GD-... with straight socket
	7 Plug socket with cable SIM-M12-4WD-... with angled socket
	8 Push-in fitting QS-1/4-...
	9 Mounting plate APL-2N-PEV
	10 Mounting frame NRRQ-2N

Pressure switches PEV, mechanical

Technical data – Mounting via screws

FESTO

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
Mechanical					
Pneumatic connection		G1/4			
Measuring method		Pneumatic/electrical pressure transducer		Pneumatic/electrical pressure transducer with setting scale	Pneumatic/electrical pressure transducer
Measured variable		Relative pressure			
Hysteresis		➔ Graph			
Electrical connection		Plug, square design to DIN 43650, type A			Plug M12x1, 4-pin, round design to EN 60 947-5-2
Type of mounting		Via through-holes			Via through-holes
Assembly position		Any ¹⁾			
Materials		Wrought aluminium alloy			
Note on materials		Copper, PTFE and silicone-free versions ➔ Ordering data			
Weight [g]		220	170	220	
Electrical					
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		
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) Should prevent the collection of condensate in the pressure switch.

Operating and environmental conditions	
Operating medium	Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm
	Water
	Mineral oil
Operating pressure [bar]	1 ... 12
Threshold value setting range [bar]	1 ... 12
Ambient temperature [°C]	-20 ... +80
Temperature of medium [°C]	-20 ... +80
Certification	CCC

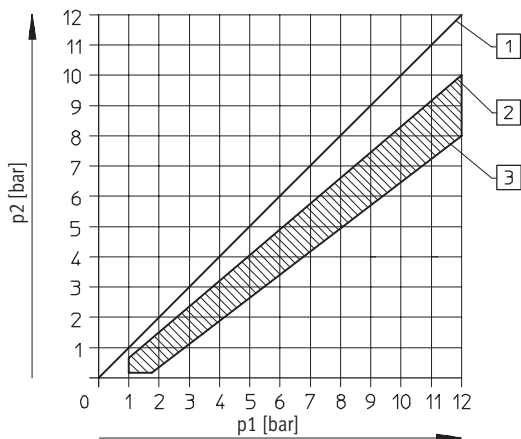
Pressure switches PEV, mechanical

Technical data – Mounting via screws

FESTO

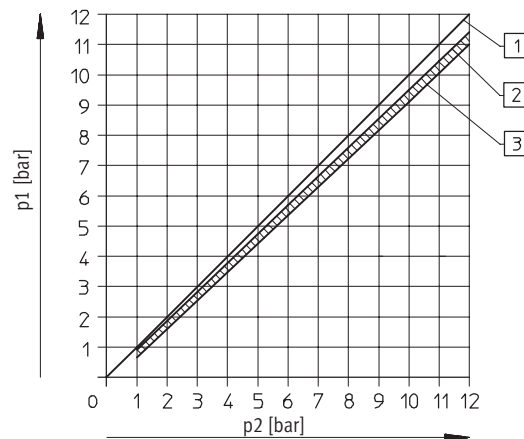
Hysteresis

PEV-1/4-B...



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

PEV-1/4-SC-OD

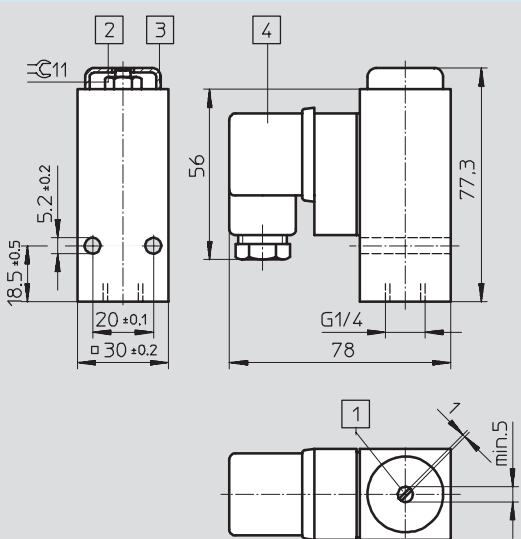


- p1 = Switch-on pressure
- p2 = Switch-off pressure

Dimensions

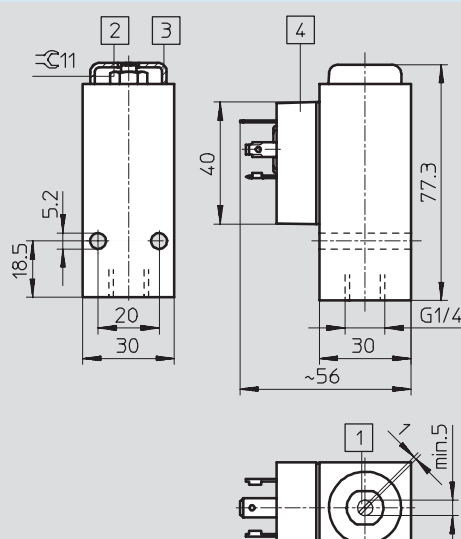
Download CAD data → www.festo.com/en/engineering

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



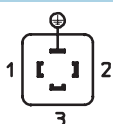
- 1 Switching point adjustment screw
- 2 Spindle for hysteresis setting (under protective cover)
- 3 Protective cover
- 4 Plug socket MSSD-C-4P Cable outlet selectable by rotating the socket insert 4x90°

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, square design, suitable for connector socket DIN EN 175 301-803-A

Pin allocation



- 1 + (-)
- 2 Normally closed contact
- 3 Normally open contact

Pressure switches PEV, mechanical

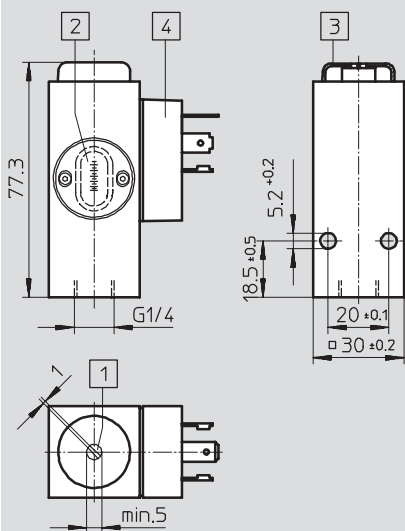
Technical data – Mounting via screws

FESTO

Dimensions

Download CAD data → www.festo.com/en/engineering

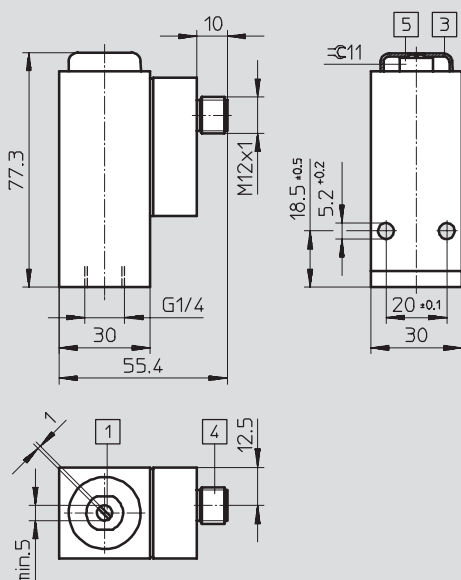
PEV-1/4-SC-OD



- 1 Switching point adjustment screw
- 2 Scale for reading the selected switching pressure

- 3 Protective cover
- 4 Push-in connector, suitable for connector socket DIN EN 175 301-803-A M16x1.5

PEV-1/4-B-M12

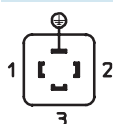


- 1 Switching point adjustment screw
- 3 Remove the cover cap to adjust hysteresis

- 4 Connections for plug to EN 60 947-5-2, M12x1
- 5 Hysteresis adjustment

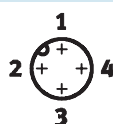
Pin allocation

PEV-1/4-SC-OD



- 1 + (-)
- 2 Normally closed contact
- 3 Normally open contact

PEV-1/4-B-M12



- 1 + (-)
- 2 Normally closed contact
- 3 Unused
- 4 Normally open contact

Ordering data

Description	Pneumatic connection	Adjustable hysteresis	Visual scale for pressure adjustment	Plug socket in scope of delivery	Part No.	Type
Pneumatic/electrical pressure transducer	G1/4	■	–	■	10 773	PEV-1/4-B
		■	–	■	165 869	PEV-1/4-B-CT ¹⁾
		■	–	–	175 250	PEV-1/4-B-OD
		■	–	–	175 251	PEV-1/4-B-OD-CT ¹⁾
		–	■	–	161 760	PEV-1/4-SC-OD
		■	–	–	192 488	PEV-1/4-B-M12

1) Copper, PTFE and silicone-free

Pressure switches PEV, mechanical

Type codes, peripherals overview – H-rail mounting



Type codes	
</	

8.1

Peripherals overview

Diagram illustrating the assembly of pressure switches (PEV) using H-rail mounting. The components shown include:

- 1: Pressure switch PEV-W-S-... with plug M8x1
- 2: Pressure switch PEV-W-KL-... with screw terminals
- 3: Plug socket with cable SIM-M8-4GD-... with straight socket
- 4: Plug socket with cable SIM-M8-4WD-... with angled socket
- 5: Push-in fitting QSM-M5
- 6: Inscription label BZ-N...
- 7: Mounting latch PENV-BGH
- 8: Mounting rail to DIN EN 50022
- 9: Mounting rail to DIN EN 50035

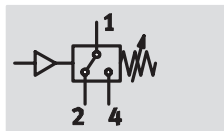
Accessories	
1	Pressure switch PEV-W-S-... with plug M8x1
2	Pressure switch PEV-W-KL-... with screw terminals
3	Plug socket with cable SIM-M8-4GD-... with straight socket
4	Plug socket with cable SIM-M8-4WD-... with angled socket
5	Push-in fitting QSM-M5
6	Inscription label BZ-N...
7	Mounting latch PENV-BGH
8	Mounting rail to DIN EN 50022
9	Mounting rail to DIN EN 50035

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-KL...		PEV-W-S...	
Mechanical					
Pneumatic connection		M5			
Measuring method		Pneumatic/electrical pressure transducer			
Measured variable		Relative pressure			
Hysteresis		0.5 ... 2 bar, not adjustable			
Electrical connection		Screw terminal, 4-pin		Plug M8x1, 4-pin	
Type of mounting		Via H-rail			
		Via through-holes			
Assembly position		Any ¹⁾			
Materials		Polyamide, polyester			
Weight	[g]	56			
Electrical					
Operating voltage range		[V DC]	10 ... 30		
		[V AC]	–		
Max. switch output voltage		[V DC]	250		
		[V AC]	250		
Max. output current		[mA]	2500		
Max. switching frequency		[Hz]	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		89/336/EEC (EMC)			

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]	1.5 ... 8
Ambient temperature	[°C]	0 ... 60
Temperature of medium	[°C]	0 ... 60

Pressure switches PEV-W, mechanical

Technical data – H-rail mounting

FESTO

Dimensions

PEV-W-KL-LED-GH

Download CAD data → www.festo.com/en/engineering

PEV-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 facility

7 Integral plug, suitable for plug sockets SIM-K-4-... or SIM-M8-...

8 Terminals

Pin allocation

PEV-W-S-LED-GH

PEV-W-KL-LED-GH

1 + (–) brown

2 Normally closed contact (switch output 2) white

3 – (+) blue

4 Normally open contact (switch output 1) black

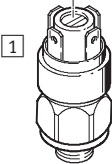
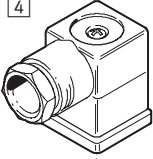
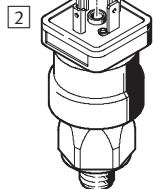
Ordering data				
Description	Electrical connection	Plug socket in scope of delivery	Part No.	Type
Pneumatic/electrical pressure transducer	Screw terminal, 4-pin	–	152 618	PEV-W-KL-LED-GH
	Plug M8x1, 4-pin	–	152 616	PEV-W-S-LED-GH

Pressure switches PEV, mechanical

Type codes, peripherals overview – Screw-in



Type codes	
PEV – 1/4 – A – SW27 –	
Type	
PEV	Pressure switch
Pneumatic connection	
1/4	G1/4
Generation	
A	A series
Width across flats	
SW27	27 mm
Electrical connection	
–	For plug socket PEV-1/4-A-WD
B-OD	For plug socket PEV-1/4-WD-LED-...

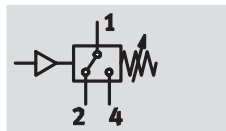
Peripherals overview	
3  1 	4  2 
Accessories	
1	Pressure switch PEV-1/4-A-SW27
2	Pressure switch PEV-1/4-A-SW27-B-OD
3	Plug socket PEV-1/4-A-WD
4	Plug socket PEV-1/4-WD-LED-... with switching status display

Pressure switches PEV, mechanical

Technical data – Screw-in

FESTO

Function



-  Voltage
12 ... 250 V DC
-  Pressure
1 ... 10 bar
-  Temperature range
-20 ... +100 °C



General technical data		
Type	PEV-1/4-A-SW27...	
Mechanical		
Pneumatic connection	G1/4	
Measuring method	Pneumatic/electrical pressure transducer	
Measured variable	Relative pressure	
Hysteresis	15±5% at 6 bar 30±5% at 2 bar	
Electrical connection	Plug, 4-pin	
Type of mounting	Screw-in	
Assembly position	Any ¹⁾	
Materials	Galvanised steel	
Weight	[g]	138
Electrical		
Operating voltage range	[V DC]	12 ... 250
	[V AC]	–
Max. switch output voltage	[V DC]	250
	[V AC]	250
Max. output current	[mA]	4000
Max. switching frequency	[Hz]	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-B-OD	PEV-1/4-A-SW27
Operating medium	Filtered compressed air, lubricated or unlubricated	
Operating pressure	[bar]	1 ... 10
Pressure measuring range	[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 – Screw-in

FESTO

Dimensions

PEV-1/4-A-SW27

Download CAD data → www.festo.com/en/engineering

PEV-1/4-A-SW27-B-OD

1 Max. tightening torque 50 Nm

2 Integral plug to DIN 46 244-A6,3

1 Max. tightening torque 50 Nm

2 Integral plug to DIN EN 175 201-803-A003M

3 Switching point adjustment

Pin allocation

PEV-1/4-A-SW27

PEV-1/4-A-SW27-B-OD

1 + (-)

2 Normally closed contact

4 Normally open contact

Ordering data				
Description	Pneumatic connection	Plug socket in scope of delivery	Part No.	Type
Pneumatic/electrical pressure transducer	G1/4	–	175 252	PEV-1/4-A-SW27-B-OD
	G1/4	–	159 259	PEV-1/4-A-SW27

Pressure switches PEV, mechanical

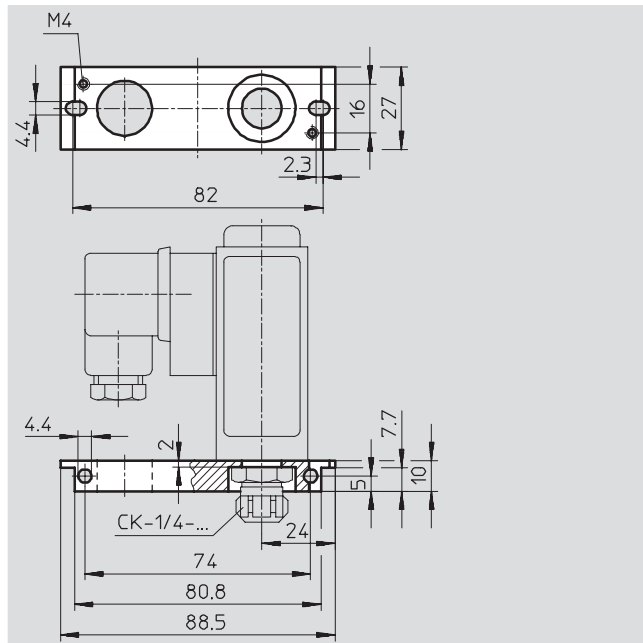
Accessories

FESTO

Mounting plate APL-2N-PEV

Material:

Polyamide, fibreglass reinforced

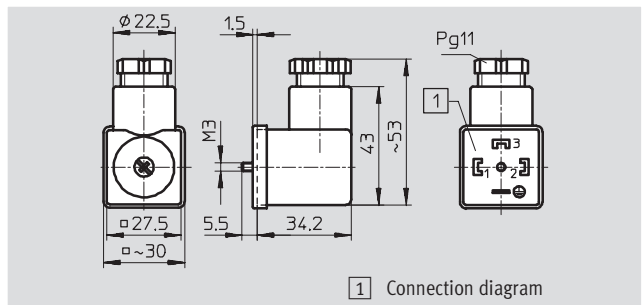


Ordering data		Weight	Part No.	Type
		[g]		
Mounting plate for mounting of pressure switch PEV		18	9 349	APL-2N-PEV

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

Housing material:

Polyamide, fibreglass reinforced



Ordering data						Part No.	Type
For pressure switches	Weight	Operating voltage range		Ready status display	Switching status display		
		[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

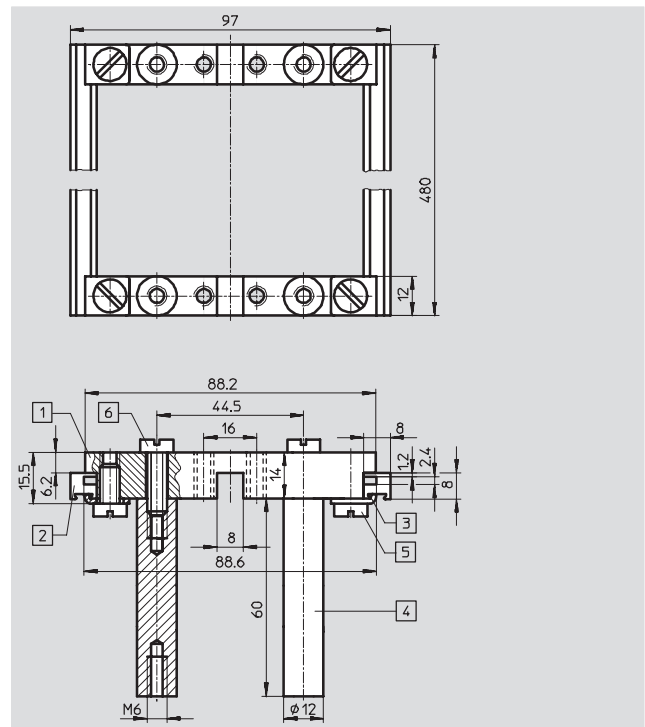
Accessories

FESTO

Mounting frame NRRQ-2N

Scope of delivery

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



- 1 Connecting piece NRV-2N
- 2 Mounting rail NRQ-8-480
- 3 Mounting bracket NRW-12/3
- 4 Spacer NRB-12/60
- 5 Cheese head screw
DIN 84-M6X18-4.8
- 6 Cheese head screw
DIN 84-M6X12-4.8

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

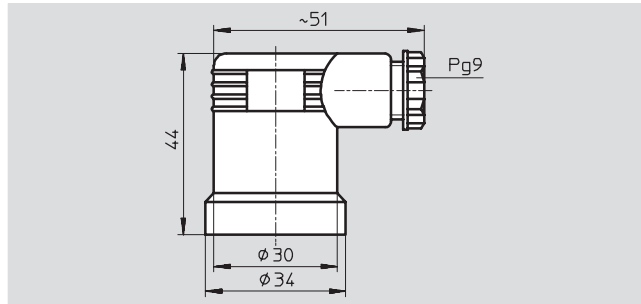
Pressure switches PEV, mechanical

Accessories

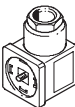
FESTO

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

Housing material:
Polyamide, fibreglass reinforced



Ordering data					
For pressure switches	Weight [g]	Operating voltage range		Part No.	Type
		[V DC]	[V AC]		
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						Technical data → 4 / 8.3-6	
	Assembly	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 with cable M8x1 for pressure switches PEV-W-S...						Technical data ➔ 4 / 8.3-24	
	Assembly	Connection	Switch output		Cable length [m]	Part No.	Type
			PNP	NPN			
Straight socket							
	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
Angled socket							
	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

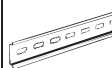
Ordering data – Plug sockets with cable M12x1 for pressure switches PEV-1¼-B-M12						Technical data ➔ 4 / 8.3-27	
	Assembly	Connection	Switch output		Cable length [m]	Part No.	Type
			PNP	NPN			
Straight socket							
	Union nut M12x1	4-pin	■	■	5	164 259	SIM-M12-4GD-5-PU
Angled socket							
	Union nut M12x1	4-pin	■	■	5	164 258	SIM-M12-4WD-5-PU

Pressure switches PEV, mechanical

Accessories

FESTO

Ordering data – Sensor sockets M12x1 for pressure switches PEV-¼-B-M12					Technical data ➔ 4 / 8.3-3		
	Assembly	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
Operating status display for angled socket SIE-WD-TR							
	–	–	■	■	–	12 957	SIE-LP-LED-GR

Ordering data – Accessories									
	for pressure switches	Length	Part No.	Type		for pressure switches	Length	Part No.	Type
Mounting latch for mounting on G/H rail					Inscription label				
	PEV-W-...	–	164 597	PENV-BGH		PEV-W-...	–	6 888	BZ-N1-50
								6 889	BZ-N51-100
Mounting rail to DIN EN 50 035					Mounting rail to EN 60715				
	PEV-W-...	2 m	6 756	NRC-32-200		PEV-W-...	2 m	35 430	NRH-35-2000