

Pressure sensors SPAU

FESTO



Pressure sensors SPAU

FESTO

Key features

At a glance

Product description

The pressure sensor SPAU is suitable for monitoring compressed air and non-corrosive gases. The variant with display offers the option of reading the pressure and set values on-site. The pressure value is transmitted to the connected control system as a switching signal, as an analogue signal or via IO-Link®.



The pressure sensor without display transmits the pressure value to the connected control system as an analogue signal. Display of the pressure and parameterisation of the sensor are provided centrally, e.g. via a display that is part of a machine control system. The pressure sensor can be parameterised using IO-Link® as a tamper-proof pressure switch without display with up to two switching outputs.



Areas of application

- Network monitoring (pressure present)
- Regulator monitoring (pressure in the setpoint range)
- Vacuum (part picked up)
- Leak test (pressure drop over time)
- Object detection (back pressure present)

Product benefits

An assembly concept with short assembly times that is easy to implement in all installation situations. Female/male thread or push-in fitting QS – the perfect pneumatic adapter for every application.

Mounting:

- Threaded mounting
- H-rail mounting
- Front panel mounting
- Mounting bracket
- Wall mounting
- Adapter for MS4, MS6

Electronic system:

- Maximum versatility and reduced warehousing thanks to switchable electrical outputs (PNP/NPN/ N/C/N/O contact and current/voltage output)

Pressure sensors SPAU

Key features

Operation

Monitoring and setting of a pressure threshold, a pressure range or a pressure difference, using a teach-in function or by entering values.

Variants with display:

- Pressure indicator, pressure switching outputs and readout of analogue value from a device can be set on-site
- Quick commissioning of the pressure sensor thanks to straightforward menu navigation
- Display colour blue/red as visual feedback about the pressure of the medium
- Min./max. value memory for monitoring compressed air (display of rapid pressure peaks that are not visible to the human eye)
- Adjustable filter evens out the sensor signal generated by pressure peaks
- Scaling the analogue output to increase the signal dynamics
- Choice of pressure units: bar, MPa, PSI and more
- Offset compensation possible
- ECO function "Switch off display" available
- Optional security code can be freely chosen (4-digit code)
- All settings that have been carried out on one sensor (master) can be transferred (replication) to other, identical sensors (device). This significantly shortens the commissioning time

Variants without display:

- Analogue value output and pressure switching outputs proportional to the pressure
- Switching output behaviour can be set on the machine display using IO-Link®
- Other functions can be set using IO-Link®

Variants with IO-Link®:

- With and without display
- Serial communication integrated using IO-Link® 1.1
- Analogue process value is provided digitally
- The sensor can be parameterised and maintained remotely at control level using an IO-Link® master
- Automatic parameterisation following a sensor change means there is no need to repeat parameterisation and sensor settings after changing the sensor

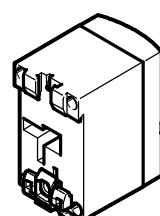
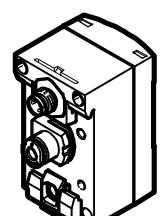
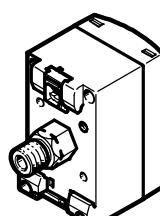
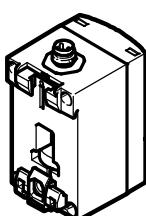
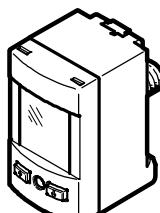
Pressure sensors SPAU

Key features

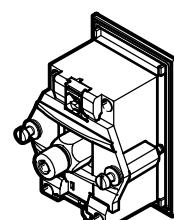
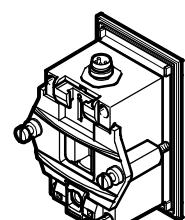
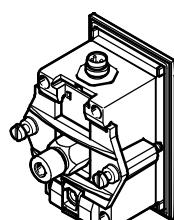
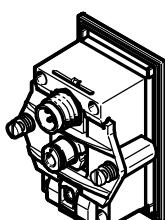
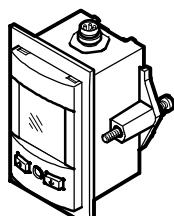
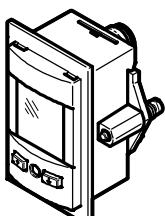
FESTO

Device variants

Variants with display

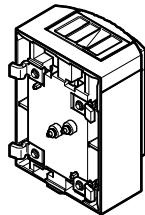
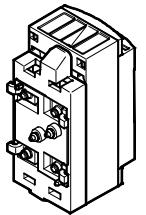
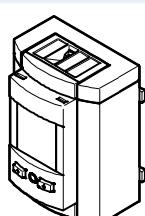
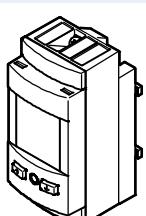


Variants with display for front panel mounting



The connections shown are by way of example.

Variants with display and MS adapter

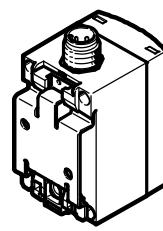
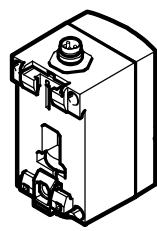
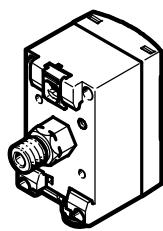
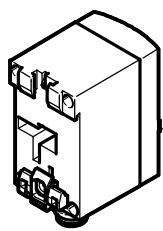
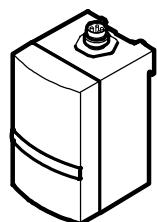
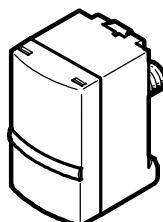
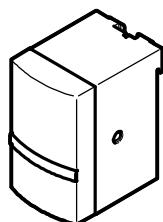


Pressure sensors SPAU

Key features

Device variants

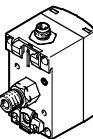
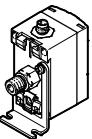
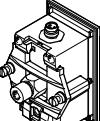
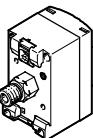
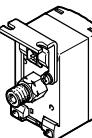
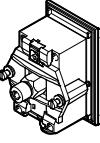
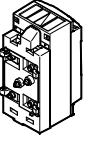
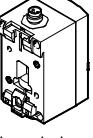
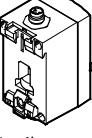
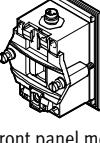
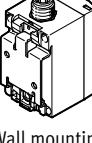
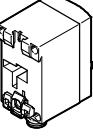
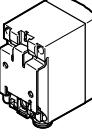
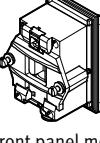
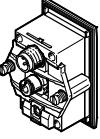
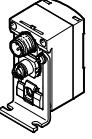
Variants without display



The connections shown are by way of example.

Pressure sensors SPAU

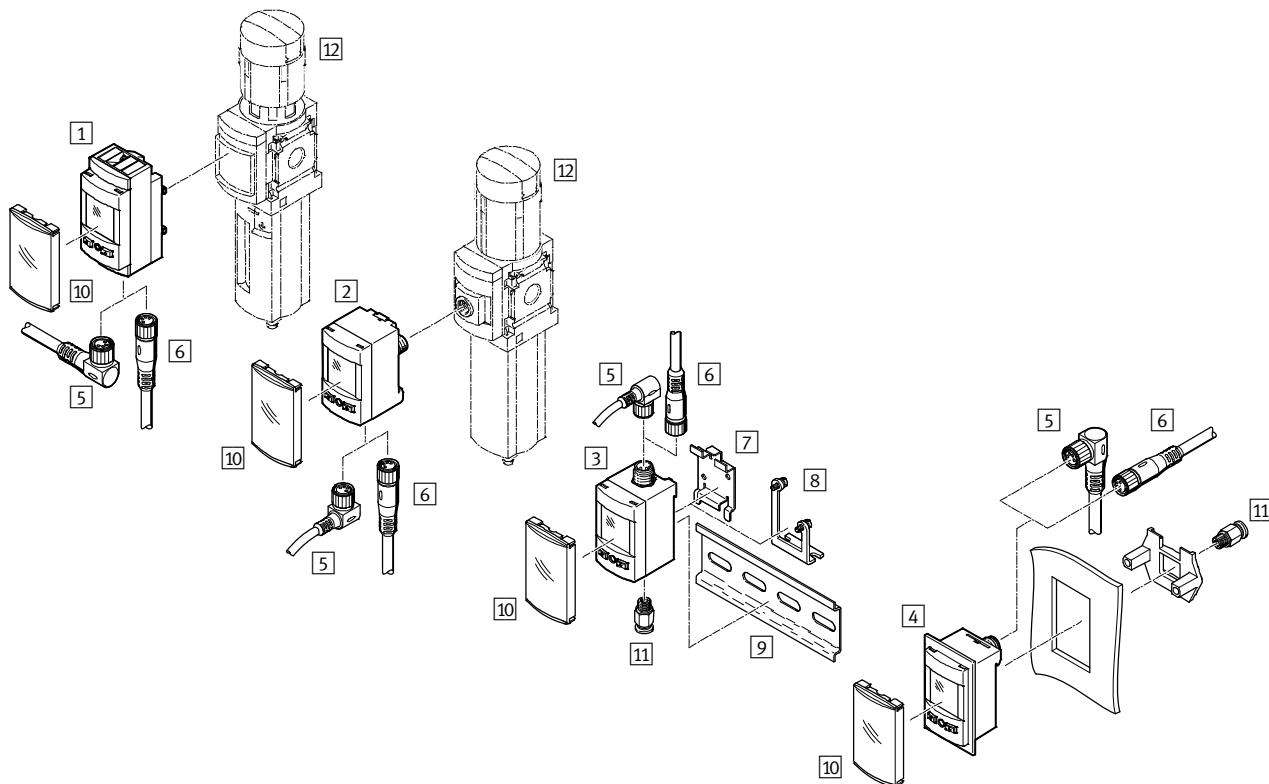
Key features

Housing variants	Types of mounting		Pneumatic connection
<ul style="list-style-type: none"> • Pneumatic connection at rear • Electrical connection on top 	 Threaded mounting ¹⁾	 Mounting bracket (standing)	Male thread: G1/8, R1/8, N1/8, R1/4 Female thread: M5, M7
	 Front panel mounting		
<ul style="list-style-type: none"> • Pneumatic connection at rear • Electrical connection underneath 	 Threaded mounting	 Mounting bracket (suspended)	Male thread: G1/8, R1/8, N1/8, R1/4 Female thread: M5, M7 Flange
	 Front panel mounting	 MS adapter	
<ul style="list-style-type: none"> • Pneumatic connection underneath • Electrical connection on top 	 Threaded mounting	 H-rail	Female thread: G1/8, R1/8, N1/8, M7 Push-in connector: QS4, QS6, QS5/32
	 Front panel mounting	 Wall mounting	
<ul style="list-style-type: none"> • Pneumatic connection underneath • Electrical connection underneath 	 H-rail	 Wall mounting	Push-in connector: QS4, QS5/32
	 Front panel mounting		
<ul style="list-style-type: none"> • Pneumatic connection at rear • Electrical connection at rear 	 Front panel mounting	 Mounting bracket (standing)	Push-in connector: QS4, QS6, QS5/32

1) Threaded mounting with M5 female thread not recommended

Pressure sensors SPAU

Peripherals overview



Accessories	➔ Page/ Internet
[1] Pressure sensors SPAU, display variants for MS service unit components	10
[2] Pressure sensors SPAU, variants for threaded mounting	10
[3] Pressure sensors SPAU, variants for H-rail, wall mounting or mounting bracket	10
[4] Pressure sensors SPAU, variants for front panel mounting	10
[5] Connecting cable, angled plug socket M8x1	23
[6] Connecting cable, straight socket M8x1	23
[5] Connecting cable, angled plug socket M12x1	23

Accessories	➔ Page/ Internet
[6] Connecting cable, straight socket M12x1	23
[7] Wall mounting SAMH-PU-W	21
[8] Mounting bracket SAMH-PU-A	21
[9] H-rail to DIN EN 60715	nrh
[10] Safety guard SACC-PU-G	22
[11] Pressure supply port	-
[12] Service unit component MS4, MS6	ms4, ms6

Pressure sensors SPAU

Type codes

FESTO

SPAU	B2	R	H	Q4		D
Type						
SPAU	Pressure sensor					
Pressure measuring range [bar]						
P025	0 ... 0.25					
P05	0 ... 0.5					
P1	0 ... 1					
P2	0 ... 2					
P6	0 ... 6					
P10	0 ... 10					
P12	0 ... 12					
P16	0 ... 16					
B2	-1 ... 1					
B11	-1 ... 10					
V025	0 ... -0.25					
V05	0 ... -0.5					
V1	0 ... -1					
Supply port						
R	Relative pressure					
Type of mounting						
T	Threaded mounting					
H	H-rail mounting					
W	Wall mounting					
A	Mounting bracket					
F	Front panel mounting					
MS4	Adapter MS4					
MS6	Adapter MS6					
Pneumatic connection						
G18	G 1/8					
R14	R 1/4					
R18	R 1/8					
N18	1/8NPT					
M5	M5					
M7	M7					
Q4	Push-in connector 4 mm					
Q6	Push-in connector 6 mm					
T532	Push-in connector 5/32					
F	Flange					
Thread type						
-	None					
M	Male thread					
F	Female thread					
Outlet direction						
-	At rear					
D	Underneath					

Pressure sensors SPAU

Type codes

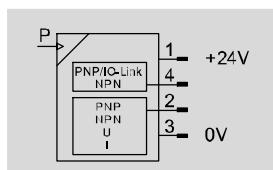
		-	LK	-	A	-	M8		+	2,5S	G	T
Display												
-	None											
L	LCD, backlit											
Electrical output 1												
PNLK	PNP, NPN, IO-Link®											
LK	IO-Link®											
Electrical output 2												
PNVBA	PNP, NPN, 0 ... 10 V, 1 ... 5 V, 4 ... 20 mA											
V	0 ... 10 V											
B	1 ... 5 V											
A	4 ... 20 mA											
Electrical connection												
M8	Plug M8											
M12	Plug M12, A-coded											
Electrical outlet direction												
-	At rear											
D	Underneath											
U	On top											
Electrical accessories												
-	None											
2,5A	Angled plug socket, cable 2.5 m											
2,5S	Straight socket, cable 2.5 m											
5A	Angled plug socket, cable 5 m											
5S	Straight socket, cable 5 m											
Protective devices												
-	None											
G	Safety guard											
Certificate												
-	None											
T	Test report											

Pressure sensors SPAU

Technical data

FESTO

Display ... -L



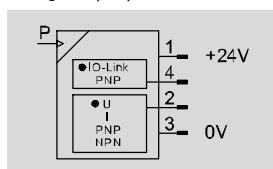
-  - Voltage
20 ... 30 V DC

-  - Pressure measuring range
-1 ... +16 bar

-  - Temperature range
0 ... +50 °C

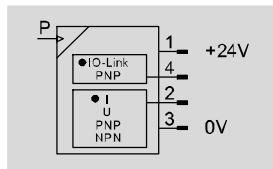
Variant without display

Voltage output preset ... -LK-V



Variant without display

Current output preset ... -LK-A



General technical data

Certification	RCM compliance mark c UL us - Listed (OL) ¹⁾
CE marking (see declaration of conformity)	To EU EMC Directive To EU RoHS Directive
KC mark	KC EMC
Electrical connection	To EN 60947-5-24-pin plug, round design
Mounting position	Any
Note on materials	RoHS-compliant

1) Not variant MS4, MS6

Input signal, measuring element

SPAU	-B2	-B11	-V025	-V05	-V1	-P025	-P05
Measured variable	Relative pressure						
Method of measurement	Piezoresistive pressure sensor						
Pressure measuring range start value [bar]	-1		0				
Pressure measuring range end value [bar]	1	10	-0.25	-0.5	-1	0.25	0.5
Overload range [bar]	5	15	1	2	5	1	2
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases						
Note on the operating/pilot medium	Lubricated operation possible						
Temperature of medium [°C]	0 ... +50						
Ambient temperature [°C]	0 ... +50						

Pressure sensors SPAU

Technical data

SPAU	-P1	-P2	-P6	-P10	-P12	-P16
Measured variable	Relative pressure					
Method of measurement	Piezoresistive pressure sensor					
Pressure measuring range start value	[bar]	0				
Pressure measuring range end value	[bar]	1	2	6	10	12
Overload range	[bar]	5	6	15	15	20
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases					
Note on the operating/pilot medium	Lubricated operation possible					
Temperature of medium	[°C]	0 ... +50				
Ambient temperature	[°C]	0 ... +50				

Signal processing						
Resolution ADC	[bit]	12				

Output, general	-B2	-B11	-V025	-V05	-V1	-P025	-P05
Accuracy FS	[%]	±1.5					
Repetition accuracy	%FS	±0.3					
Temperature coefficient	%FS/K	±0.05					

Output, general	-P1	-P2	-P6	-P10	-P12	-P16
Accuracy FS	[%]	±1.5				±2
Repetition accuracy	%FS	±0.3				
Temperature coefficient	%FS/K	±0.05				

Switching output	-PNLK	-LK
Switching output	2x PNP or 2x NPN, switchable	2x PNP ¹⁾
Switching function	Freely programmable	
Switching element function	N/C or N/O contact, switchable	

1) Second PNP output can only be activated using IO-Link®

Analogue output	-PNLK-PNVBA	-LK-A	-LK-V	-LK-B
Analogue output	[V]	0 ... 10	– 1)	0 ... 10
	[V]	1 ... 5	– 2)	– 2)
	[mA]	4 ... 20	4 ... 20	– 3)
Rise time	[ms]	3		
Max. output current	[mA]	100		
Max. load resistance of current output	[Ω]	500		
Min. load resistance of voltage output	[kΩ]	10		

1) 0 ... 10 V analogue output can only be activated using IO-Link®

2) 1 ... 5 V analogue output can only be activated using IO-Link®

3) 4 ... 20 mA analogue output can only be activated using IO-Link®

Pressure sensors SPAU

Technical data

Additional output data	
Short circuit protection	Yes
Overload protection	Available

IO-Link device to IEC 61131-9	
Protocol	IO-Link®
IO-Link®	
Protocol version	Device V 1.1
Profile	Smart Sensor profile
Function classes	Binary data channel (BDC) Diagnostics Identification Process data variable (PDV) Teach channel
Communication mode	COM2 (38.4 kBaud)
SIO mode support	Yes
Port class	A
Process data width OUT	0 bytes
Process data width IN	2 bytes
Process data content IN	14 bit PDV (pressure reading) 2 bit BDC (pressure monitoring)
Minimum cycle time [ms]	3
Data memory required [kB]	0.5

Electronic system	
Operating voltage range DC [V]	20 ... 30
Reverse polarity protection	For all electrical connections

Pin allocation to EN 60947-5-2				
Plug, 4-pin				
M8x1	M12x1	Pin	Wire colour	Allocation
		1	Brown	Operating voltage: +24 V DC
		3	Blue	Operating voltage 0 V
		4	Black	Switching output (C/Q-...)
		2	White	Switching output or analogue output

Pressure sensors SPAU

Technical data

Display/operation		
SPAU	-L-PNLK	-LK
Display type	Illuminated LCD	LED
Displayable units	bar inchH2O inchHg kgf/cm ² kPa mmHg MPa psi	– – – – – – – –
Setting options	IO-Link® Teach-in Via display and keys	– – –
Protection against tampering	IO-Link® PIN code	–
Threshold value setting range	[%]	0 ... 100
Hysteresis setting range	[%]	0 ... 90

Immissions/emissions		
Degree of protection	IP67, IP65	IP65
Corrosion resistance class CRC ¹⁾	2	

- 1) Corrosion resistance class 2 to Festo standard 940070
Components subject to moderate corrosion stress. External visible parts with primarily decorative surface requirements which are in direct contact with the surrounding industrial environment or media such as coolants or lubricating agents.

Pressure sensors SPAU

Technical data

FESTO

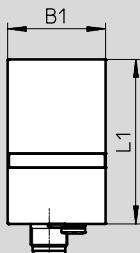
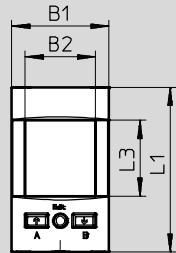
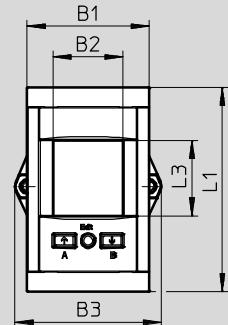
Dimensions

Download CAD data → www.festo.com

SPAU-...-F-...-L-PNLK-...

SPAU-...-L-PNLK-...

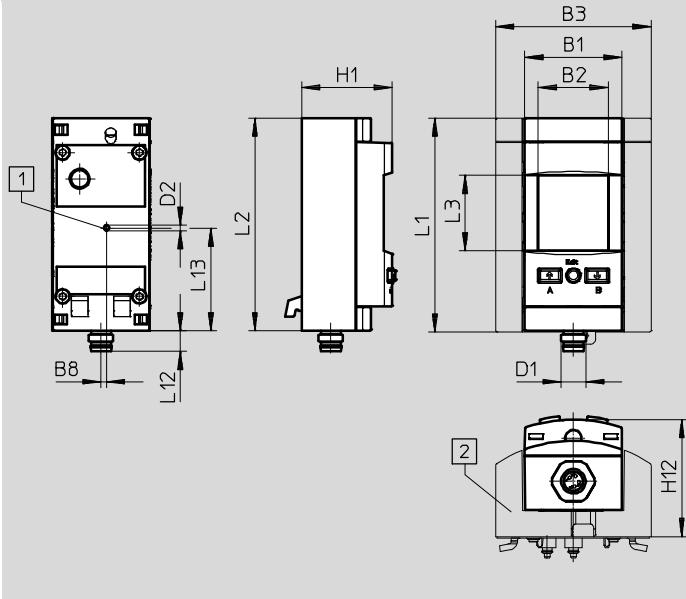
SPAU-...-LK-...



Type	B1	B2	B3	L1	L3
SPAU-...-F-...-L-PNLK-...	40		48	67	
SPAU-...-L-PNLK-...	32	23	-	54	24.8
SPAU-...-LK-...					-

Service unit dimensions

Download CAD data → www.festo.com



- [1] Pressure supply port
- [2] Adapter for MS4, MS6 series (is enclosed for the customer to fit)

Type	B1	B2	B3	B8	D1	D2	H1	H12	L1	L2	L3	L12	L13
SPAU-P10R-MS-...-L-...-M8	32	23	-	1.8	M8x1	1.8	29.8	-	-	69.8	24.8	6.7	33.8
SPAU-P10R-MS-...-L-...-M12	32	23	-	1.8	M12x1	1.8	29.8	-	-	69.8	24.8	6.7	33.8
SPAU-P10R-MS4-F-L-...-M8D	32	23	32	1.8	M8x1	1.8	29.8	~38.3	70.2	69.8	24.8	6.7	33.8
SPAU-P10R-MS6-F-L-...-M8D	32	23	51	1.8	M8x1	1.8	29.8	~38.3	70.2	69.8	24.8	10	33.8
SPAU-P10R-MS4-F-L-...-M12D	32	23	32	1.8	M12x1	1.8	29.8	~38.3	70.2	69.8	24.8	6.7	33.8
SPAU-P10R-MS6-F-L-...-M12D	32	23	51	1.8	M12x1	1.8	29.8	~38.3	70.2	69.8	24.8	10	33.8

Pressure sensors SPAU

FESTO

Technical data

Dimensions of connections

Download CAD data → www.festo.com

SPAU-...-G18M-...

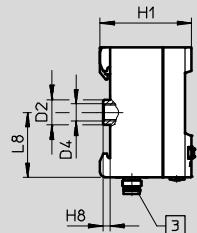
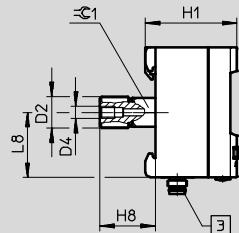
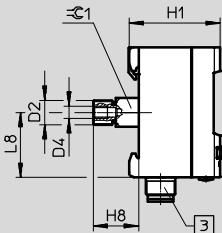
SPAU-...-R18M-...

SPAU-...-N18M-...

SPAU-...-M5F-...

SPAU-...-R14M-...

SPAU-...-M7F-...



SPAU-...-G18MD-...

SPAU-...-R18MD-...

SPAU-...-N18MD-...

SPAU-...-M7FD-...

SPAU-...-Q4D-...-MxU

SPAU-...-Q6D-...-MxU

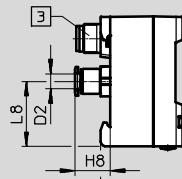
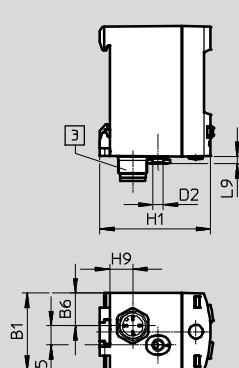
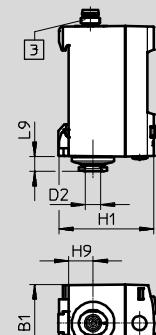
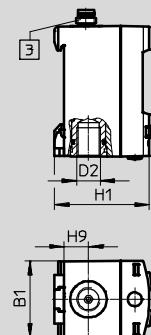
SPAU-...-Q532D-...-MxU

SPAU-...-Q4D-...-MxD

SPAU-...-Q532D-...-MxD

SPAU-...-Q4-...-Mx

SPAU-...-Q532-...-Mx



[3] Connections
SPAU-...-M12... M12, 4-pin
SPAU-...-M8... M8, 4-pin

Type	B1	B5	B6	D2	Thread length Male (M)	Female (F)	Thread engagement	D4	H1	H8	H9	L8	L9	=C1			
SPAU-...-G18M-...-MxD	-	-	-	G1/8	8	-	Until stop	M5	37.9	19	-	27	12				
SPAU-...-R18M-...-MxD				R1/8			Min. 6.5										
SPAU-...-N18M-...-MxD				1/8NPT			Min. 6.9										
SPAU-...-M5F-...-MxD				M5	-	6	Until stop										
SPAU-...-R14M-...-MxD				R1/4	12	-	Min. 9.7										
SPAU-...-M7F-...-MxD				M7	8	Until stop	M7										
SPAU-...-G18FD-...-MxU	32	-	-	G1/8			Min. 6.5										
SPAU-...-R18FD-...-MxU				R1/8			Min. 6.9										
SPAU-...-N18FD-...-MxU				1/8NPT			Until stop										
SPAU-...-M7FD-...-MxU				M7													
SPAU-...-Q4D-...-MxU				QS4	-	-	-	-	39.4	10	-	-	6.1	-			
SPAU-...-Q6D-...-MxU				QS6													
SPAU-...-T532D-...-MxU				T5/32													
SPAU-...-Q4D-...-MxD				QS4													
SPAU-...-T532D-...-MxD				T5/32													
SPAU-...-Q4-...-Mx				QS4													
SPAU-...-Q6-...-Mx				QS6													
SPAU-...-T532-...-Mx				T5/32													

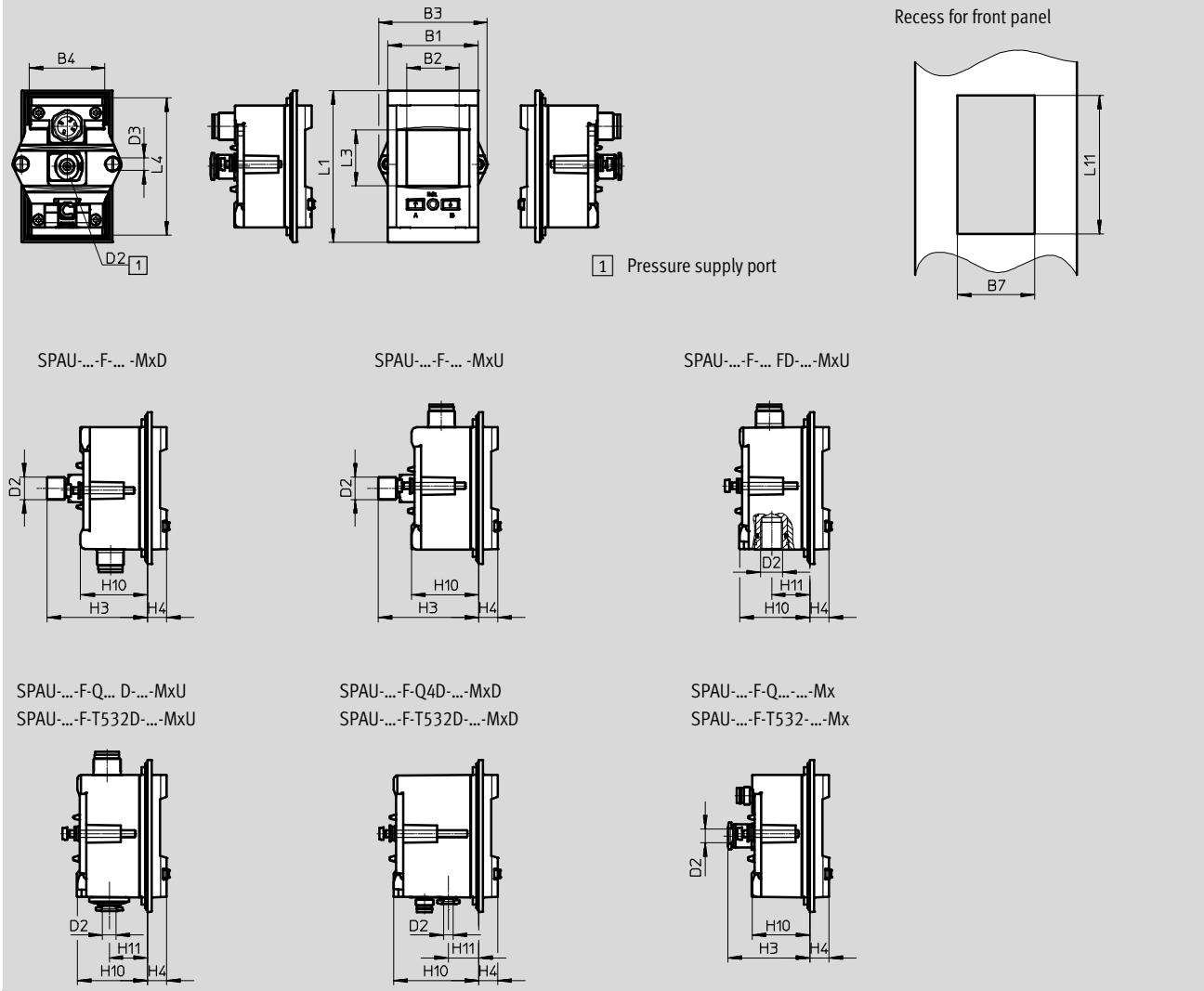
Pressure sensors SPAU

FESTO

Technical data

Dimensions for front panel mounting

Download CAD data → www.festo.com



Type	B1	B2	B3	B4	B7 ±0.3	D2	D3	H3	H4	H10	H11	L1	L3	L4	L11 ±0.3
SPAU-...-F-...18M-...-MxD						—		44.4							
SPAU-...-F-R14M-...-MxD						R1/8		48.4							
SPAU-...-F-M7F-...-MxD						M7		28.4							
SPAU-...-F-M5F-...-MxD						M5		—							
SPAU-...-F-...18M-...-MxU						—		44.4							
SPAU-...-F-R14M-...-MxU						R1/4		48.4							
SPAU-...-F-M7F-...-MxU						M7		28.4							
SPAU-...-F-M5F-...-MxU						M5		—							
SPAU-...-F-...18FD-...-MxU						—									
SPAU-...-F-M7FD-...-MxU						M7		—							
SPAU-...-F-Q...D-...-MxU						—									
SPAU-...-F-T532D-...-MxU						T5/32									
SPAU-...-F-Q4D-...-MxD						QS4									
SPAU-...-F-T532D-...-MxD						T5/32									
SPAU-...-F-Q...-...-Mx						—									
SPAU-...-F-T532-...-Mx						T5/32									

Pressure sensors SPAU

FESTO

Technical data

Ordering data – Variants with display							
	Type of mounting	Pneumatic connection	Outlet direction	Electrical connection	Outlet direction	Product weight	Part no. Type
Pressure measuring range -1 ... +1							
	Thread	R1/8	At rear	M8x1	Underneath	80	8001207 SPAU-B2R-T-R18M-L-PNLK-PNVBA-M8D
	H-rail	G1/8	Underneath	M8x1	On top	70	8001219 SPAU-B2R-H-G18FD-L-PNLK-PNVBA-M8U
Pressure measuring range 0 ... -1							
	H-rail	G1/8	Underneath	M8x1	On top	70	8001223 SPAU-V1R-H-G18FD-L-PNLK-PNVBA-M8U
		QS-4	Underneath	M8x1	Underneath	65	8001213 SPAU-V1R-H-Q4D-L-PNLK-PNVBA-M8D
		QS-5/32	Underneath	M8x1	Underneath	65	8001217 SPAU-V1R-H-T532D-L-PNLK-PNVBA-M8D
		QS-5/32	Underneath	M12x1	Underneath	65	8001218 SPAU-V1R-H-T532D-L-PNLK-PNVBA-M12D
	Wall/surface bracket	G1/8	Underneath	M8x1	On top	70	8001235 SPAU-V1R-W-G18FD-L-PNLK-PNVBA-M8U
		G1/8	Underneath	M12x1	On top	70	8001234 SPAU-V1R-W-G18FD-L-PNLK-PNVBA-M12U
		QS-4	Underneath	M8x1	Underneath	65	8001239 SPAU-V1R-W-Q4D-L-PNLK-PNVBA-M8D
		QS-4	Underneath	M12x1	Underneath	65	8001214 SPAU-V1R-H-Q4D-L-PNLK-PNVBA-M12D
		QS-4	Underneath	M12x1	Underneath	65	8001238 SPAU-V1R-W-Q4D-L-PNLK-PNVBA-M12D
	Front panel mounting	QS-4	At rear	M12x1	At rear	70	8001227 SPAU-V1R-F-Q4-L-PNLK-PNVBA-M12
		QS-6	At rear	M12x1	At rear	70	8001228 SPAU-V1R-F-Q6-L-PNLK-PNVBA-M12
		QS-5/32	At rear	M12x1	At rear	70	8001229 SPAU-V1R-F-T532-L-PNLK-PNVBA-M12
Pressure measuring range 0 ... 2							
	Wall/surface bracket	G1/8	Underneath	M8x1	On top	70	8001232 SPAU-P2R-W-G18FD-L-PNLK-PNVBA-M8U
Pressure measuring range 0 ... 6							
	Wall/surface bracket	G1/8	Underneath	M8x1	On top	70	8001233 SPAU-P6R-W-G18FD-L-PNLK-PNVBA-M8U

Pressure sensors SPAU



Technical data

Ordering data – Variants with display							
	Type of mounting	Pneumatic connection	Outlet direction	Electrical connection	Outlet direction	Product weight	Part no. Type
Pressure measuring range 0 ... 10							
	Thread	G1/8	At rear	M8x1	Underneath	80	8001201 SPAU-P10R-T-G18M-L-PNLK-PNVBA-M8D
		G1/8	At rear	M12x1	Underneath	80	8001204 SPAU-P10R-T-G18M-L-PNLK-PNVBA-M12D
		R1/8	At rear	M8x1	Underneath	80	8001203 SPAU-P10R-T-R18M-L-PNLK-PNVBA-M8D
		R1/8	At rear	M12x1	Underneath	80	8001206 SPAU-P10R-T-R18M-L-PNLK-PNVBA-M12D
		R1/4	At rear	M8x1	Underneath	80	8001209 SPAU-P10R-T-R14M-L-PNLK-PNVBA-M8D
		R1/4	At rear	M12x1	Underneath	80	8001208 SPAU-P10R-T-R14M-L-PNLK-PNVBA-M12D
		1/8-27NPT	At rear	M8x1	Underneath	80	8001202 SPAU-P10R-T-N18M-L-PNLK-PNVBA-M8D
		1/8-27NPT	At rear	M12x1	Underneath	80	8001205 SPAU-P10R-T-N18M-L-PNLK-PNVBA-M12D
	H-rail	G1/8	Underneath	M8x1	On top	70	8001221 SPAU-P10R-H-G18FD-L-PNLK-PNVBA-M8U
		G1/8	Underneath	M12x1	On top	70	8001220 SPAU-P10R-H-G18FD-L-PNLK-PNVBA-M12U
		QS-4	Underneath	M8x1	Underneath	65	8001211 SPAU-P10R-H-Q4D-L-PNLK-PNVBA-M8D
		QS-4	Underneath	M12x1	Underneath	65	8001212 SPAU-P10R-H-Q4D-L-PNLK-PNVBA-M12D
		QS-5/32	Underneath	M8x1	Underneath	65	8001215 SPAU-P10R-H-T532D-L-PNLK-PNVBA-M8D
		QS-5/32	Underneath	M12x1	Underneath	65	8001216 SPAU-P10R-H-T532D-L-PNLK-PNVBA-M12D
	Wall/surface bracket	G1/8	Underneath	M8x1	On top	70	8001231 SPAU-P10R-W-G18FD-L-PNLK-PNVBA-M8U
		G1/8	Underneath	M12x1	On top	70	8001230 SPAU-P10R-W-G18FD-L-PNLK-PNVBA-M12U
		QS-4	Underneath	M8x1	Underneath	70	8001237 SPAU-P10R-W-Q4D-L-PNLK-PNVBA-M8D
		QS-4	Underneath	M12x1	Underneath	70	8001236 SPAU-P10R-W-Q4D-L-PNLK-PNVBA-M12D
	Front panel mounting	QS-4	At rear	M12x1	At rear	70	8001224 SPAU-P10R-F-Q4-L-PNLK-PNVBA-M12
		QS-6	At rear	M12x1	At rear	70	8001225 SPAU-P10R-F-Q6-L-PNLK-PNVBA-M12
		QS-5/32	At rear	M12x1	At rear	70	8001226 SPAU-P10R-F-T532-L-PNLK-PNVBA-M12
	Service unit	Flange MS4	At rear	M8x1	Underneath	80	8035302 SPAU-P10R-MS4-F-L-PNLK-PNVBA-M8D
		Flange MS4	At rear	M12x1	Underneath	80	8035304 SPAU-P10R-MS4-F-L-PNLK-PNVBA-M12D
		Flange MS6	At rear	M8x1	Underneath	80	8035303 SPAU-P10R-MS6-F-L-PNLK-PNVBA-M8D
		Flange MS6	At rear	M12x1	Underneath	80	8074906 SPAU-P10R-MS6-F-L-PNLK-PNVBA-M12D
Pressure measuring range 0 ... 16							
	Thread	R1/4	At rear	M8x1	Underneath	80	8001210 SPAU-P16R-T-R14M-L-PNLK-PNVBA-M8D
	H-rail	G1/8	Underneath	M12x1	On top	70	8001222 SPAU-P16R-H-G18FD-L-PNLK-PNVBA-M12U

Ordering data – Variants without display							
	Type of mounting	Pneumatic connection	Outlet direction	Electrical connection	Analogue output	Product weight	Part no. Type
Pressure measuring range 0 ... -1							
	Thread	G1/8	At rear	M12x1	0 ... 10 V	80	8003347 SPAU-V1R-T-G18M-LK-V-M12D
			At rear		4 ... 20 mA		8003348 SPAU-V1R-T-G18M-LK-A-M12D
	H-rail	QS-4	Underneath		0 ... 10 V	65	8003351 SPAU-V1R-H-Q4D-LK-V-M12D
			Underneath		4 ... 20 mA		8003352 SPAU-V1R-H-Q4D-LK-A-M12D
Pressure measuring range 0 ... 10							
	Thread	G1/8	At rear	M12x1	0 ... 10 V	80	8003345 SPAU-P10R-T-G18M-LK-V-M12D
			At rear		4 ... 20 mA		8003346 SPAU-P10R-T-G18M-LK-A-M12D
	H-rail	QS-4	Underneath		0 ... 10 V	65	8003349 SPAU-P10R-H-Q4D-LK-V-M12D
			Underneath		4 ... 20 mA		8003350 SPAU-P10R-H-Q4D-LK-A-M12D

Pressure sensors SPAU

Ordering data – Modular product system

Ordering table		Conditions	Code	Entry code
Pressure sensor SPAU				
M Module no.	8001200			
Product type	SPAU, U series	SPAU		SPAU
Pressure measuring range	-1... 1 bar -1... 10 bar 0... -0.25 bar 0... -0.5 bar 0... -1 bar 0... 0.25 bar 0... 0.5 bar 0... 1 bar 0... 2 bar 0... 6 bar 0... 10 bar 0... 12 bar 0... 16 bar	-B2 -B11 -V025 -V05 -V1 -P025 -P05 -P1 -P2 -P6 -P10 -P12 -P16		
Supply port	Relative pressure	R		R
Type of mounting	Threaded mounting Mounting bracket Front panel mounting H-rail mounting Wall mounting Adapter MS4 Adapter MS6	-T -A -F -H -W -MS4 -MS6		

M Mandatory data

O Options

Transfer order code

SPAU - **R** -

Pressure sensors SPAU

Ordering data – Modular product system

FESTO

Ordering table		Conditions	Code	Entry code
Pressure sensor SPAU				
M	Pneumatic connection	G1/8	-G18	
		M5	-M5	[1]
		M7	-M7	
		NPT1/8	-N18	
		Push-in connector 4 mm	-Q4	[2]
		Push-in connector 6 mm	-Q6	[2]
		R1/4	-R14	[15]
		R1/8	-R18	
		Push-in connector 5/32	-T532	[2]
		Flange	-F	[17]
Thread type	None			
	Male thread		M	[3], [4]
	Female thread		F	[3], [5]
Outlet direction	At rear			[6]
	Underneath		D	[7]
Display	None			
	LCD, backlit		-L	[8]

[1] Only with type of mounting A, F

[2] Not with type of mounting T

Not with pressure measuring range P16

[3] Mandatory in combination with G1/8, N1/8, R1/8,

R1/8, R1/4, M7, M5

[4] Not with type of mounting H, W,

MS4, MS6

Not with pneumatic connection

Q4, Q6, T532, M7, M5

[5] Not with type of mounting A if

pneumatic connection G1/8, R1/8,

N1/8

Not with type of mounting MS4, MS6

Not with pneumatic connection

Q4, Q6, Q532

[6] Not with type of mounting W, H

Not with thread type F if

pneumatic connection G1/8, R1/8,

N1/8

[7] Not with pneumatic connection M5

Not with type of mounting A, MS4, MS6

Not with thread type M

[8] In combination with type of mounting F,

MS4, MS6

M Mandatory data

O Options

Transfer order code

– –

Pressure sensors SPAU

Ordering data – Modular product system

Ordering table		Conditions	Code	Entry code
SPAU				
M Electrical output 1	PNP or NPN or IO-Link® IO-Link®	-PNLK -LK	[10] [9]	
Electrical output 2	PNP or NPN or 0 ... 10 V or 1 ... 5 V or 4 ... 20 mA 0 ... 10 V 1 ... 5 V 4 ... 20 mA	-PNVBA	[10] -V [9] -B [9] -A [9]	
Electrical connection	Plug M8 Plug M12, A-coded	-M8 -M12		
Electrical outlet direction	On top Underneath At rear	U D [11]	[13] [12]	
Electrical accessories	None Angled plug socket, cable 2.5 m Straight socket, cable 2.5 m Angled plug socket, cable 5 m Straight socket, cable 5 m		+2,5A +2,5S +5A +5S	
Protective devices	None Safety guard		G	[16]
Certificate	None Test report		T	

- [9] Not with display L
- [10] Not without display
- [11] Only with type of mounting A, F
Not with G18, N18, R18, M7, M5
Not with outlet direction D, U
Only with thread type "none"
- [12] Only with type of mounting MS4, MS6
Only with outlet direction D if QS4
or T532 selected
Not with outlet direction at the rear
if QS4, QS6, T532

- [13] Only with outlet direction U if QS4
or T532 selected
Not with outlet direction at the rear
if QS4, QS6, T532
- [15] Only with thread type M
Outlet direction at the rear only
Not with type of mounting W/H
Not with electrical outlet direction at the rear
- [16] Only with display L
- [17] Only with type of mounting MS4, MS6

 Mandatory data
 Options

Transfer order code

- - - +

Pressure sensors SPAU

FESTO

Accessories – Ordering data

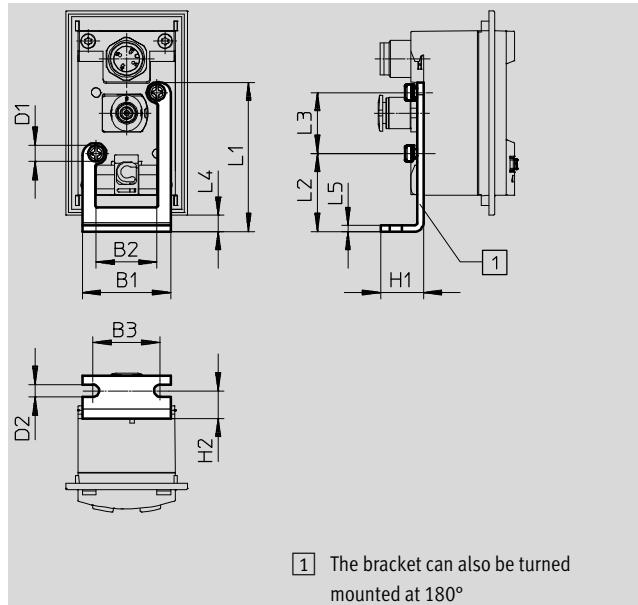
Mounting bracket SAMH-PU-A

Type of mounting: via through-hole and screw

Material: high-alloy stainless steel

Note on materials: RoHS-compliant

Only for variants with pneumatic connection and rear outlet direction



[1] The bracket can also be turned mounted at 180°

Ordering data

Type	B1	B2	B3	D1 -Ø-	D2	H1	H2	L1	L2	L3	L4	L5	CRC ¹⁾	Part no.	Type
SAMH-PU-A	29	20	22	M3x8	4	14	9	49	25.6	20	8.6	2	2	8003354	SAMH-PU-A

1) Corrosion resistance class 2 to Festo standard 940070

Components subject to moderate corrosion stress. External visible parts with primarily decorative surface requirements which are in direct contact with the surrounding industrial environment or media such as coolants or lubricating agents.

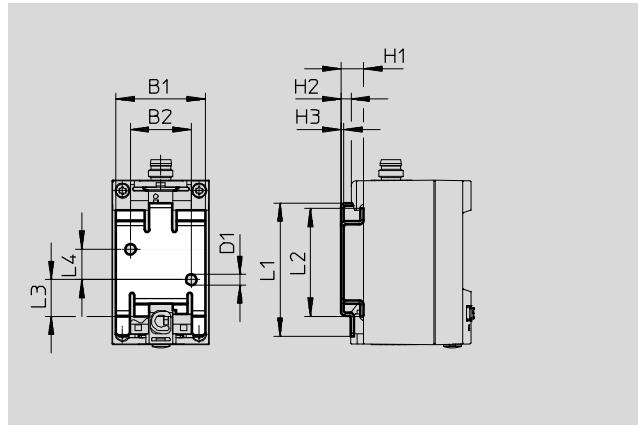
Wall mounting SAMH-PU-W

Type of mounting: with through-hole

Material: high-alloy stainless steel

Note on materials: RoHS-compliant

Only for variants with pneumatic connection and outlet direction underneath



Dimensions and ordering data

Type	B1	B2	D1 -Ø-	H1	H2	H3	L1	L2	L3	L4	CRC ¹⁾	Part no.	Type
SAMH-PU-W	29.4	20	3.5	7.5	3.4	1	43.8	35.4	12	10	2	8003355	SAMH-PU-W

1) Corrosion resistance class 2 to Festo standard 940070

Components subject to moderate corrosion stress. External visible parts with primarily decorative surface requirements which are in direct contact with the surrounding industrial environment or media such as coolants or lubricating agents.

Pressure sensors SPAU

FESTO

Accessories – Ordering data

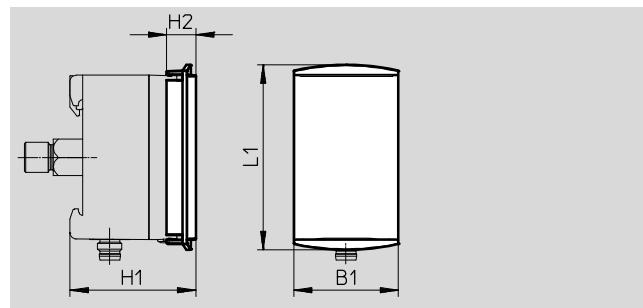
Safety guard SACC-PU-G

to protect the display and operating components

Material: PA

Note on materials:
RoHS-compliant

Only for variants with display



Dimensions and ordering data

Type		B1	H1	H2	L1	CRC	Part no.	Type
SACC-PU-G	SPAU- ... R-T- ...	34.5	41.6	9.6	60.8	2	8003353	SACC-PU-G
	SPAU- ... R-H- ... -D-L- ...		49.6					
	SPAU- ... R-H- ... -FD-L- ...		43.6					
	SPAU- ... R-F- ...		37.6					
	SPAU- ... R-W- ... -D-L- ...		43.6					
	SPAU- ... R-W- ... -FD-L- ...		49.6					

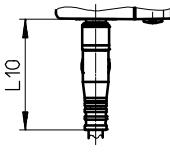
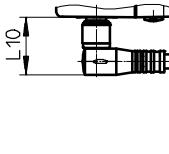
Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Pressure sensors SPAU

FESTO

Accessories – Ordering data

Connecting cables		L10
	M8	Straight socket Angled plug socket
		36.3 18.7
	M12	Straight socket Angled plug socket
		50 28.5

Ordering data					Technical data → Internet: nebu				
	Number of wires	Cable length [m]	Part no.	Type		Number of wires	Cable length [m]	Part no.	Type
M8x1, straight socket									
	4	2.5	541342	NEBU-M8G4-K-2.5-LE4		4	2.5	550326	NEBU-M12G5-K-2.5-LE4
		5	541343	NEBU-M8G4-K-5-LE4			5	541328	NEBU-M12G5-K-5-LE4
M8x1, angled plug socket									
	4	2.5	541344	NEBU-M8W4-K-2.5-LE4		4	2.5	550325	NEBU-M12W5-K-2.5-LE4
		5	541345	NEBU-M8W4-K-5-LE4			5	541329	NEBU-M12W5-K-5-LE4

Ordering data					Technical data → Internet: nebu				
	Number of wires	Cable length [m]	Part no.	Type		Number of wires	Cable length [m]	Part no.	Type
M12x1, straight socket									
	4	2.5	550326	NEBU-M12G5-K-2.5-LE4		4	2.5	550325	NEBU-M12W5-K-2.5-LE4
		5	541328	NEBU-M12G5-K-5-LE4			5	541329	NEBU-M12W5-K-5-LE4
M12x1, angled plug socket									
	4	2.5	550325	NEBU-M12W5-K-2.5-LE4		4	2.5	550326	NEBU-M12G5-K-2.5-LE4
		5	541329	NEBU-M12W5-K-5-LE4			5	541328	NEBU-M12G5-K-5-LE4

Festo - Your Partner in Automation



1 Festo Inc.

5300 Explorer Drive
Mississauga, ON L4W 5G4
Canada

Festo Customer Interaction Center

Tel: 1 877 463 3786
Fax: 1 877 393 3786
Email: customer.service.ca@festo.com

2 Festo Pneumatic

Av. Ceylán 3,
Col. Tequesquínáhuac
54020 Tlalnepantla,
Estado de México

Multinational Contact Center

01 800 337 8669
ventas.mexico@festo.com

3 Festo Corporation

1377 Motor Parkway
Suite 310
Islandia, NY 11749

Festo Customer Interaction Center

1 800 993 3786
1 800 963 3786
customer.service.us@festo.com

4 Regional Service Center

7777 Columbia Road
Mason, OH 45040

Connect with us



www.festo.com/socialmedia



www.festo.com