

Pressure transmitters SPTE



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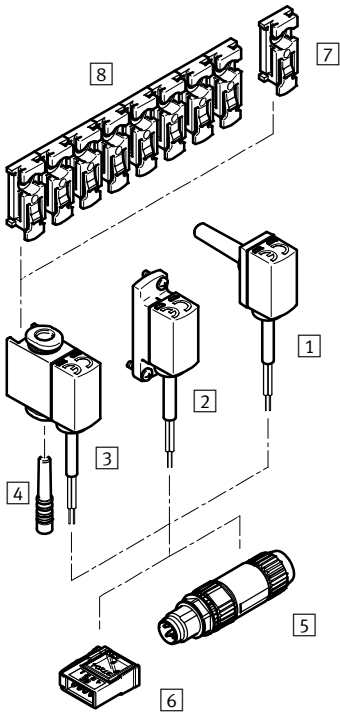
Product range overview



Method of measurement	Pressure measuring range [bar]	Measured variable	Pneumatic connection	Analogue output [V]	Electrical connection
Piezoresistive pressure sensor	0 ... -1	Relative pressure	Push-in sleeve 4 mm	1 ... 5	Cable, 3-wire, open end
			Push-in sleeve 6 mm		
			Push-in connector 3 mm		
			Push-in connector 4 mm		
			Flange	0 ... 10	
			Push-in sleeve 4 mm		
			Push-in sleeve 6 mm		
			Push-in connector 3 mm		
	Push-in connector 4 mm				
	Flange				
	0 ... 10	Relative pressure	Push-in sleeve 4 mm	1 ... 5	Cable, 3-wire, open end
			Push-in sleeve 6 mm		
			Push-in connector 3 mm		
			Push-in connector 4 mm		
			Flange	0 ... 10	
			Push-in sleeve 4 mm		
Push-in sleeve 6 mm					
Push-in connector 3 mm					
Push-in connector 4 mm					
Flange					

Pressure transmitters SPTE

Peripherals overview



Accessories		→ Page/Internet
1	Pressure transmitter SPTE-...-S...	5
2	Pressure transmitter SPTE-...-F	5
3	Pressure transmitter SPTE-...-Q...	5
4	Blanking plug QSMC-3H (included in the scope of delivery with SPTE-...-Q...)	qs
5	Plug NECU-S-M...G3-HX	9
6	Plug NECU-S-ECG4-HX-Q3	9
7	Mounting clip SAMH-PE-MC-1	9
8	Mounting clip SAMH-PE-MC-8	9

Pressure transmitters SPTE

Type codes

FESTO

S P T E - P 1 0 R - S 4 - B - 2.5 K

Function

S P T E	Pressure transmitter
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Pressure measuring range

V1	0 ... -1 bar
P10	0 ... 10 bar

Pressure input

R	Relative pressure
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Pneumatic connection

S4	Push-in sleeve 4 mm
S6	Push-in sleeve 6 mm
Q3	Push-in connector 3 mm
Q4	Push-in connector 4 mm
F	Flange

Electrical output

B	1 ... 5 V
V	0 ... 10 V

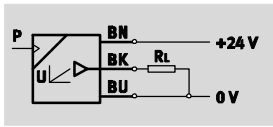
Electrical connection

2.5K	2.5 m cable, open end
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Pressure transmitters SPTE

Technical data

Function



- - Voltage
10 ... 30 V DC

- - Pressure
-1 ... +10 bar

- - Temperature range
0 ... +50 °C



General technical data	
Certification	C-Tick c UL us - Recognized (OL)
CE mark (see declaration of conformity) ¹⁾	To EU EMC Directive
Note on materials	RoHS-compliant

1) For information about the applicability of the component see the manufacturer's EC declaration of conformity at: www.festo.com/sp → User documentation.
If the component is subject to restrictions on usage in residential, office or commercial environments or small businesses, further measures to reduce the emitted interference may be necessary.

Input signal/measuring element		
SPTE-	V1	P10
Measured variable	Relative pressure	
Method of measurement	Piezoresistive pressure sensor	
Pressure measuring range starting value [bar]	0	0
Pressure measuring range final value [bar]	-1	10
Max. overload pressure [bar]	5	15
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]	
Note on operating/pilot medium	Operation with lubricated medium possible (in which case lubricated operation will always be required)	
Temperature of medium [°C]	0 ... +50	
Ambient temperature [°C]	0 ... +50	

Output, general		
Accuracy ±FS ¹⁾ [%]	3 (at room temperature of approx. 23 °C) 4 (in the ambient temperature range 0 ... 50 °C)	
Repetition accuracy ±FS ¹⁾ [%]	0.3	
Temperature coefficient ±FS/K ¹⁾ [%]	0.05	

1) % FS = % of the measuring range (full scale)

Analogue output		
SPTE-...-	B	V
Analogue output [V]	1 ... 5	0 ... 10
Rise time [ms]	1	
Min. load resistance of voltage output [kΩ]	15	

Output, additional data	
Protection against short circuit	For all electrical connections

Electronic components		
SPTE-...-	B	V
Operating voltage range DC [V]	10 ... 30	18 ... 30
Reverse polarity protection	For all electrical connections	

Pressure transmitters SPTE

Technical data

Electromechanical components	
Electrical connection	Cable, 3-wire, open end
Cable length [m]	2.5

Mechanical components					
SPTE-...-	S4	S6	Q3	Q4	F
Type of mounting	Push-in		Via accessories		Via through-hole and screw
Mounting position	Any				
Pneumatic connection	Push-in sleeve QS-4	Push-in sleeve QS-6	QS-3	QS-4	Flange
Product weight [g]	35				
Housing materials	PA, reinforced				

Immissions/emissions	
Protection class	IP40
Corrosion resistance class CRC ¹⁾	2

1) Corrosion resistance class 2 according to Festo standard 940 070
 Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

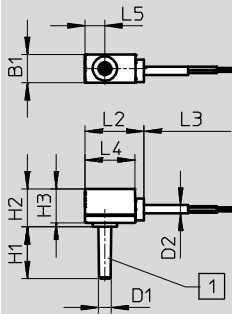
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Technical data

Dimensions

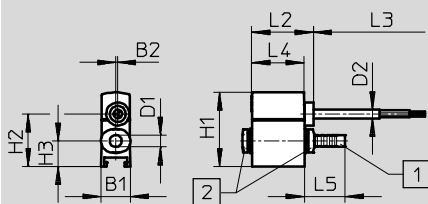
Download CAD data → www.festo.com

SPTE-...-S...



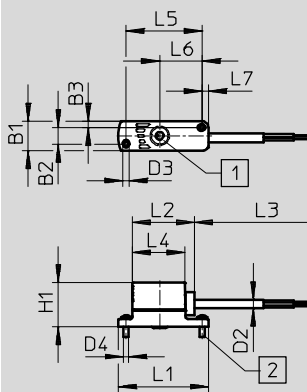
1 Pneumatic connection

SPTE-...-Q...



1 Blanking plug
2 Pneumatic connection

SPTE-...-F



1 Pneumatic connection with O-ring for flat mounting
2 M2x6 screw

Type	B1	B2	B3	D1 Ø	D2 Ø	D3 Ø	D4	H1	H2	H3	L1	L2	L3	L4	L5	L6	L7
SPTE-...-S4	9.8	-	-	4	2.9	-	-	18	13.3	11.8	-	20.5	2500	17.5	6.9	-	-
SPTE-...-S6		-	-	6		-	-	18	13.3	11.8	-				6.9	-	-
SPTE-...-Q3		0.7	-	3		-	-	24.7	17.5	8.5	-				13.6	-	-
SPTE-...-Q4		0.7	-	4		-	-	24.7	17.5	8.5	-				13.6	-	-
SPTE-...-F		5.4	2.1	-		-	2.1	M2x6	15	-	-				30	25	13.9

Pressure transmitters SPTE

Technical data

Ordering data					
Pressure measuring range [bar]	Analogue output [V]	Pneumatic connection	Electrical connection	Part No.	Type
0 ... -1	1 ... 5	Push-in sleeve 4 mm	Cable, 3-wire, open end	571469	SPTE-V1R-S4-B-2.5K
		Push-in sleeve 6 mm		571470	SPTE-V1R-S6-B-2.5K
		Push-in connector 3 mm		571471	SPTE-V1R-Q3-B-2.5K
		Push-in connector 4 mm		571472	SPTE-V1R-Q4-B-2.5K
		Flange		571473	SPTE-V1R-F-B-2.5K
	0 ... 10	Push-in sleeve 4 mm		571474	SPTE-V1R-S4-V-2.5K
		Push-in sleeve 6 mm		571475	SPTE-V1R-S6-V-2.5K
		Push-in connector 3 mm		571476	SPTE-V1R-Q3-V-2.5K
		Push-in connector 4 mm		571477	SPTE-V1R-Q4-V-2.5K
		Flange		571478	SPTE-V1R-F-V-2.5K
0 ... 10	1 ... 5	Push-in sleeve 4 mm	Cable, 3-wire, open end	571479	SPTE-P10R-S4-B-2.5K
		Push-in sleeve 6 mm		571480	SPTE-P10R-S6-B-2.5K
		Push-in connector 3 mm		571481	SPTE-P10R-Q3-B-2.5K
		Push-in connector 4 mm		571482	SPTE-P10R-Q4-B-2.5K
		Flange		571483	SPTE-P10R-F-B-2.5K
	0 ... 10	Push-in sleeve 4 mm		571484	SPTE-P10R-S4-V-2.5K
		Push-in sleeve 6 mm		571485	SPTE-P10R-S6-V-2.5K
		Push-in connector 3 mm		571486	SPTE-P10R-Q3-V-2.5K
		Push-in connector 4 mm		571487	SPTE-P10R-Q4-V-2.5K
		Flange		571488	SPTE-P10R-F-V-2.5K

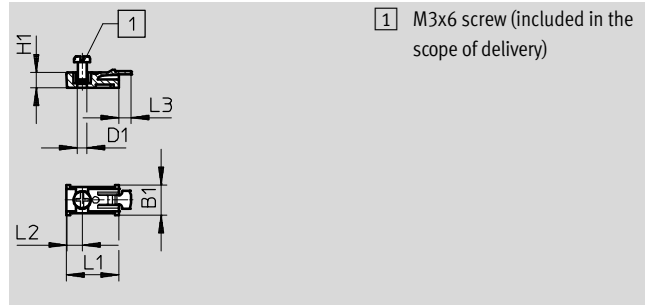
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Accessories

Mounting clip SAMH-PE-MC-1

Material:
POM

Note on materials:
RoHS-compliant

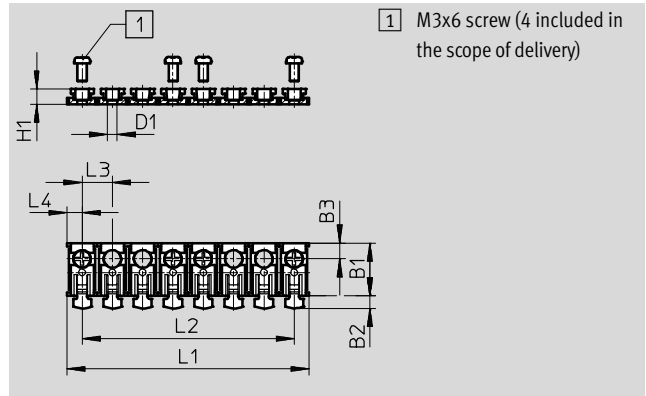


Dimensions and ordering data							Part No.	Type
B1	D1 ∅	H1	L1	L2	L3			
10	3.2	5	17.5	5.3	4	571489	SAMH-PE-MC-1	

Mounting clip SAMH-PE-MC-8

Material:
POM

Note on materials:
RoHS-compliant



Note
The mounting clip SAMH-PE-MC-8 can be shortened by the user to the required number of slots.

Dimensions and ordering data										Part No.	Type
B1	B2	B3	D1 ∅	H1	L1	L2	L3	L4			
17.5	4	5.3	3.2	5	80	70	10	5	571490	SAMH-PE-MC-8	

Ordering data – Plugs			
	Electrical connection	Part No.	Type
	Plug M8x1, 3-pin, straight, insulation displacement connector	562024	NECU-S-M8G3-HX
	Plug M12x1, A-coded, 3-pin, straight, insulation displacement connector	562027	NECU-S-M12G3-HX
	Straight plug/insulation displacement connector, 4-pin, square design	570922	NECU-S-ECG4-HX-Q3