

# Pressure and vacuum sensor Type SDE1

FESTO



With the modular SDE1 system for pressure measurement, monitoring and sensing, you have all pressure values under control at all times: For more productivity and faster commissioning of your installation.

#### **Intelligent pressure measurement**

The modular SDE1 system – intelligent pressure sensors with a freely-programmable hysteresis/comparator mode. Choice of relative or differential pressure. Plus very quick and easy programming.

#### **Universal mounting**

Simply click or slide into place, and the modular SDE1 is soon installed. This saves time and requires no additional hardware.

#### **Robust design**

Degree of protection IP65 allows installation in harsh environments.

#### **Easy to use**

With a clear LCD display and simple 3-button menu guidance: fast commissioning without the need for operating instructions. Highly flexible in terms of electrical connections, thanks to a choice of M8 or M12 plug connectors.

#### **Attractive pricing**

The SDE1 is winning customers over with its highly attractive price-performance ratio.



Step 1

Step 2

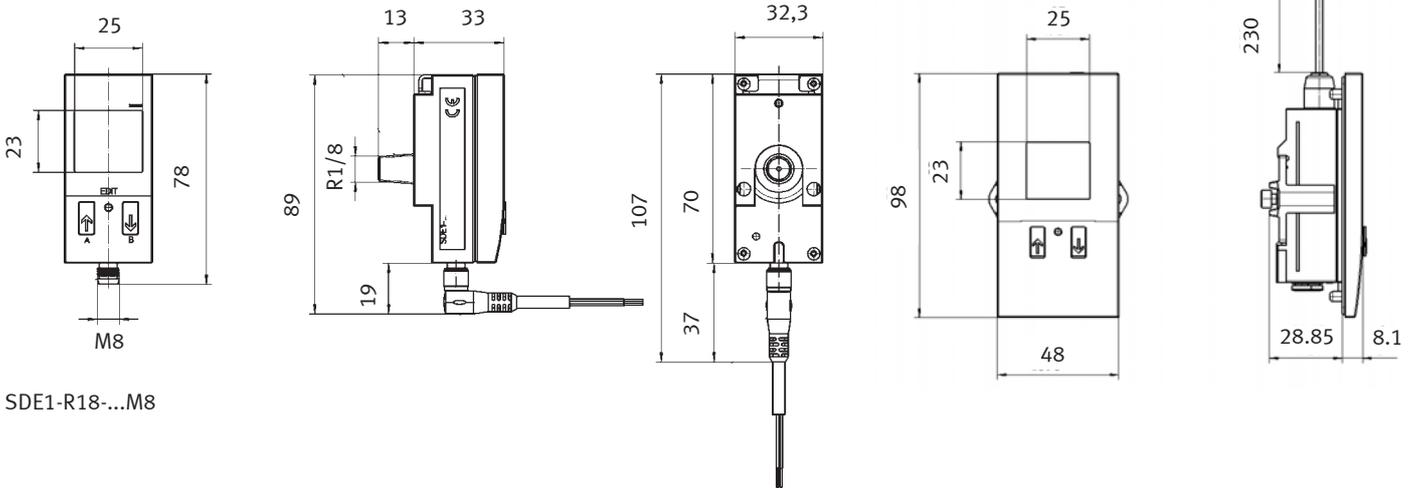
Step 3

304.1.PSI →

Product Short Information

# Pressure and vacuum sensor Type SDE1

## Dimensions



SDE1-R18-...M8

SDE1 modular system: general technical data	
Measuring method	Piezoresistive pressure sensor
Mounting position	Any
Media compatibility	Filtered compressed air/vacuum (40 µm), lubricated or unlubricated (no aggressive gases)
Switching output accuracy	±2 % FS
Reproducibility	±0.3 % FS
Rated operating current	Max. 150 mA
Nominal temperature range	0 to 50 °C
Operating voltage range	15 to 30 V DC
No-load current	Max. 35 mA
Display type	3½-place LCD/illuminated LCD

Type	Measuring range [bar]	Overload capacity [bar]	Threshold value setting range [bar]	Hysteresis setting range [bar]
SDE1-V1-...	0...-1	max. 5	-0.02... -0.998	0.00 ... 0.90
SDE1-B2-...	-1...1	max. 5	-0.999 ... +0.996	0.000 ... 1.800
SDE1-D2-..	0...2	max. 6	0.04 ... +1.996	0.000 ... 1.800
SDE1-D6-...	0...6	max. 16	0.12 ... +5.99	0.00 ... 5.40
SDE1-D10	0...10	max. 20	0.20 ... 9.98	0.00 ... 9.00

## SDE1 modular system: overview of features and variants

### Pressure measuring range

- 0 ... -1 bar
- -1 ... 1 bar
- 0 ... 2 bar
- 0 ... 6 bar
- 0 ... 10 bar

### Display types

- LCD
- Illuminated LCD

### Pneumatic connections and assembly

- R1/8" (for M and D series)
- R1/4" (for M and D series)
- G1/8" for H rail (relative pressure)
- G1/8" for wall and surface mounting (relative pressure)
- QS4 connectors for H rail (differential pressure)
- QS4 connectors for wall and surface mounting (differential pressure)
- QS4 connectors for front panel mounting

### Electrical outputs

- 1 switch, PNP
- 2 switches, PNP
- 1 switch, PNP, and 0 to 10 V analogue
- 1 switch, PNP, and 4 to 20 mA analogue
- 1 switch, NPN
- 2 switches, NPN
- 1 switch, NPN, and 0 to 10 V analogue
- 1 switch, NPN, and 4 to 20 mA analogue

### Electrical connections

- M8 plug
- M12 plug

### Connector cable (accessory)

- Straight socket, 2.5 m
- Angled socket, 2.5 m
- Straight socket, 5 m
- Angled socket, 5 m

### Festo AG & Co. KG

Ruiter Strasse 82  
73734 Esslingen  
Internet [www.festo.com](http://www.festo.com)  
Tel. ++49 (0)711 347-0  
Fax ++49 (0)711 347-2144  
E-mail [service\\_international@festo.com](mailto:service_international@festo.com)