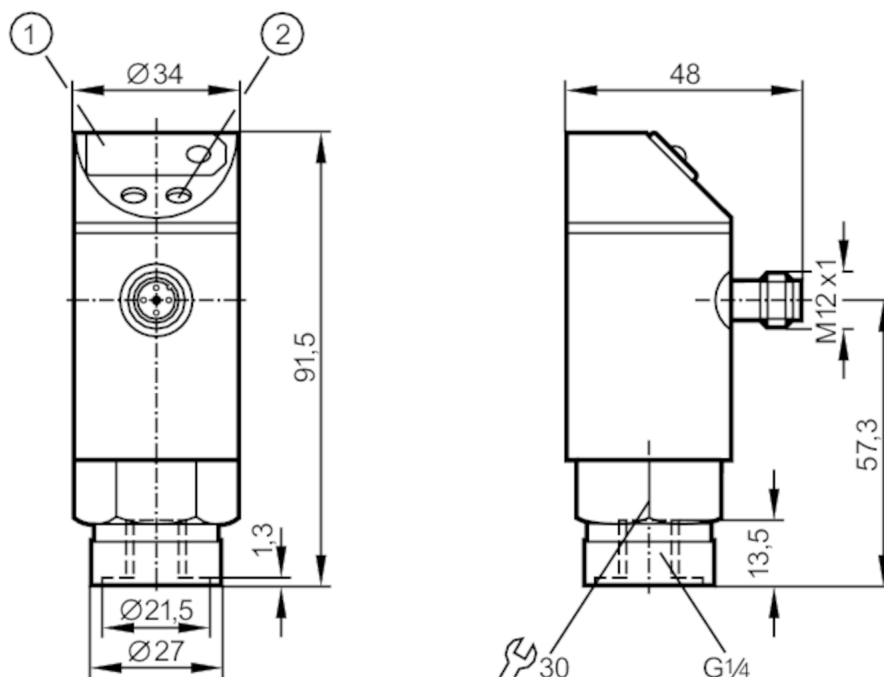


## Pressure sensor with display

PE-100-SBR14-KFPKG/US/ /E

Article no longer available - archive entry



- 1 7-segment LED display  
2 programming button



### Product characteristics

|                              |                                                             |
|------------------------------|-------------------------------------------------------------|
| Number of inputs and outputs | Number of digital outputs: 1; Number of analogue outputs: 1 |
| Measuring range [bar]        | 0...100                                                     |
| Process connection           | threaded connection G 1/4 internal thread                   |

### Application

|                              |                                                              |
|------------------------------|--------------------------------------------------------------|
| Special feature              | Gold-plated contacts                                         |
| Application                  | for industrial applications                                  |
| Media                        | liquids and gases                                            |
| Conditionally suitable for   | For gaseous media the application is limited to max. 25 bar. |
| Cannot be used for           | oils                                                         |
| Medium temperature [°C]      | -25...80                                                     |
| Min. bursting pressure [bar] | 650                                                          |
| Pressure rating [bar]        | 300                                                          |
| Type of pressure             | relative pressure                                            |

### Electrical data

|                                 |                 |
|---------------------------------|-----------------|
| Operating voltage [V]           | 20...30 DC      |
| Current consumption [mA]        | < 60            |
| Min. insulation resistance [MΩ] | 100; (500 V DC) |
| Protection class                | III             |
| Reverse polarity protection     | yes             |



## Pressure sensor with display

PE-100-SBR14-KFPKG/US/ /E

|                         |     |
|-------------------------|-----|
| Power-on delay time [s] | 0.2 |
| Integrated watchdog     | yes |

### Inputs / outputs

|                              |                                                             |
|------------------------------|-------------------------------------------------------------|
| Number of inputs and outputs | Number of digital outputs: 1; Number of analogue outputs: 1 |
|------------------------------|-------------------------------------------------------------|

### Outputs

|                                                      |                                                   |
|------------------------------------------------------|---------------------------------------------------|
| Total number of outputs                              | 2                                                 |
| Output signal                                        | switching signal; analogue signal; (configurable) |
| Electrical design                                    | PNP                                               |
| Number of digital outputs                            | 1                                                 |
| Max. voltage drop switching output DC [V]            | 2                                                 |
| Permanent current rating of switching output DC [mA] | 250                                               |
| Number of analogue outputs                           | 1                                                 |
| Analogue current output [mA]                         | 4...20                                            |
| Max. load [Ω]                                        | 500                                               |
| Short-circuit protection                             | yes                                               |
| Type of short-circuit protection                     | pulsed                                            |
| Overload protection                                  | yes                                               |

### Measuring/setting range

|                       |          |
|-----------------------|----------|
| Measuring range [bar] | 0...100  |
| Set point SP [bar]    | 1...100  |
| Reset point rP [bar]  | 0.5...99 |
| In steps of [bar]     | 0.5      |

### Accuracy / deviations

|                                                  |                                                  |
|--------------------------------------------------|--------------------------------------------------|
| Switch point accuracy [% of the final value]     | < ± 1,5                                          |
| Repeatability [% of the final value]             | < ± 0,25; (with temperature fluctuations < 10 K) |
| Characteristics deviation [% of the final value] | < ± 1,0                                          |
| Temperature drift per 10 K                       | < ± 0.3                                          |

### Response times

|                                                                 |                                                                                             |     |    |    |    |    |    |     |     |     |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----|----|----|----|----|----|-----|-----|-----|
| Switching frequency for a given set response time of one output | Response time [ms] (dAP)                                                                    | 3   | 6  | 10 | 17 | 30 | 60 | 125 | 250 | 500 |
|                                                                 | Switching frequency [Hz]                                                                    | 170 | 80 | 50 | 30 | 16 | 8  | 4   | 2   | 1   |
| Response time [ms]                                              | at rectangular pressure characteristic; switch point (SPx) = 70 %; reset point (rPx) = 30 % |     |    |    |    |    |    |     |     |     |
| Delay time programmable dS, dr [s]                              | 0, 0,2,...10, 11,...50                                                                      |     |    |    |    |    |    |     |     |     |
| Max. response time analogue output [ms]                         | 3                                                                                           |     |    |    |    |    |    |     |     |     |

### Software / programming

|                                |                    |
|--------------------------------|--------------------|
| Adjustment of the switch point | programming button |
|--------------------------------|--------------------|

PE3022



Pressure sensor with display

PE-100-SBR14-KFPKG/US/ /E

|                           |                                                                                           |
|---------------------------|-------------------------------------------------------------------------------------------|
| Parameter setting options | hysteresis / window; normally open / normally closed; switch-on/switch-off delay; Damping |
|---------------------------|-------------------------------------------------------------------------------------------|

Operating conditions

|                     |      |           |
|---------------------|------|-----------|
| Ambient temperature | [°C] | -25...80  |
| Storage temperature | [°C] | -40...100 |
| Protection          |      | IP 67     |

Tests / approvals

|                      |                           |                     |
|----------------------|---------------------------|---------------------|
| EMC                  | EN 61000-4-2 ESD          | 4 kV CD / 8 kV AD   |
|                      | EN 61000-4-3 HF radiated  | 10 V/m              |
|                      | EN 61000-4-4 Burst        | 2 kV                |
|                      | EN 61000-4-6 HF conducted | 10 V                |
| Shock resistance     | DIN IEC 68-2-27           | 50 g (11 ms)        |
| Vibration resistance | DIN IEC 68-2-6            | 20 g (10...2000 Hz) |

Mechanical data

|                          |                                                        |
|--------------------------|--------------------------------------------------------|
| Materials                | EPDM/X; FKM; PA; PBT; PC; stainless steel (304/1.4301) |
| Materials (wetted parts) | EPDM/X; ceramics; stainless steel (303/1.4305)         |
| Min. pressure cycles     | 100 million                                            |
| Process connection       | threaded connection G 1/4 internal thread              |

Displays / operating elements

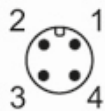
|         |                  |                       |
|---------|------------------|-----------------------|
| Display | switching status | LED, red              |
|         | function display | 7-segment LED display |
|         | measured values  | 7-segment LED display |

Remarks

|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection

