

# PN8053

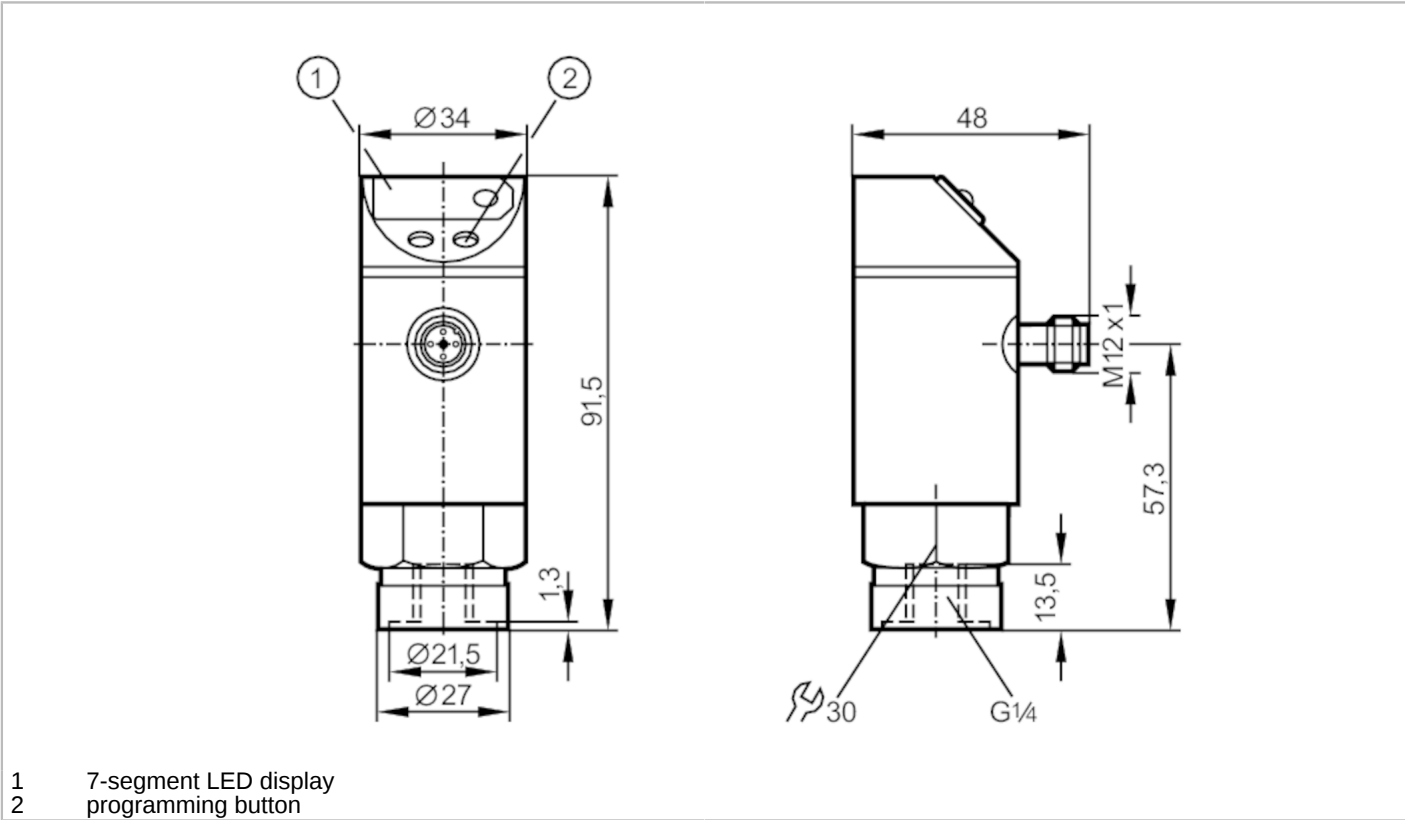


## Pressure sensor with display

PN-025-SDR14-KFPKG/US/ IV

Article no longer available - archive entry

Alternative articles: PE3003  
When selecting an alternative article and accessories please note that technical data may differ!



| Product characteristics      |       |                                                             |
|------------------------------|-------|-------------------------------------------------------------|
| Number of inputs and outputs |       | Number of digital outputs: 1; Number of analogue outputs: 1 |
| Measuring range              | [bar] | 0...25                                                      |
| Process connection           |       | threaded connection G 1/4 internal thread                   |
| Application                  |       |                                                             |
| Application                  |       | for industrial applications                                 |
| Media                        |       | liquids and gases                                           |
| Medium temperature           | [°C]  | -25...80                                                    |
| Min. bursting pressure       | [bar] | 350                                                         |
| Pressure rating              | [bar] | 100                                                         |
| Electrical data              |       |                                                             |
| Operating voltage            | [V]   | 20...30 DC                                                  |
| Current consumption          | [mA]  | < 60                                                        |
| Reverse polarity protection  |       | yes                                                         |
| Power-on delay time          | [s]   | 0.2                                                         |
| Integrated watchdog          |       | yes                                                         |



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| 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...25                                                                                      |  |    |    |    |    |    |     |     |
| Set point SP [bar]                                              |  | 1.25...25                                                                                   |  |    |    |    |    |    |     |     |
| Reset point rP [bar]                                            |  | 0.75...24.5                                                                                 |  |    |    |    |    |    |     |     |
| In steps of [bar]                                               |  | 0.25                                                                                        |  |    |    |    |    |    |     |     |
| Accuracy / deviations                                           |  |                                                                                             |  |    |    |    |    |    |     |     |
| Repeatability [X16]                                             |  | < ± 0,25; (with temperature fluctuations < 10 K)                                            |  |    |    |    |    |    |     |     |
| Characteristics deviation [X16]                                 |  | < ± 2,0                                                                                     |  |    |    |    |    |    |     |     |
| Temperature drift per 10 K                                      |  | < ± 0.3                                                                                     |  |    |    |    |    |    |     |     |
| Response times                                                  |  |                                                                                             |  |    |    |    |    |    |     |     |
| Switching frequency for a given set response time of one output |  | Response[ms] time (dAP)                                                                     |  | 15 | 20 | 30 | 50 | 90 | 170 | 330 |
|                                                                 |  | Switching [Hz] frequency                                                                    |  | 50 | 35 | 30 | 20 | 15 | 9   | 5   |
| Response time [ms]                                              |  | at rectangular pressure characteristic; switch point (SPx) = 70 %; reset point (rPx) = 30 % |  |    |    |    |    |    |     |     |
| Delay time programmable dS, dr [s]                              |  | 0, 0,2, 0,4,...3                                                                            |  |    |    |    |    |    |     |     |
| Software / programming                                          |  |                                                                                             |  |    |    |    |    |    |     |     |
| Adjustment of the switch point                                  |  | programming button                                                                          |  |    |    |    |    |    |     |     |
| Operating conditions                                            |  |                                                                                             |  |    |    |    |    |    |     |     |
| Ambient temperature [°C]                                        |  | -25...80                                                                                    |  |    |    |    |    |    |     |     |
| Storage temperature [°C]                                        |  | -40...100                                                                                   |  |    |    |    |    |    |     |     |
| Protection                                                      |  | IP 65                                                                                       |  |    |    |    |    |    |     |     |

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PN-025-SDR14-KFPKG/US/ /V

| Tests / approvals             |                                                                  |                       |
|-------------------------------|------------------------------------------------------------------|-----------------------|
| EMC                           | IEC 801/2 ESD                                                    | 4 kV CD / 8 kV AD     |
|                               | IEC 801/3 HF                                                     | 10 V/m                |
|                               | IEC 801/4 Burst                                                  | 2 kV                  |
| 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                     | stainless steel (1.4404 / 316L); PBT; PC; NBR; EPDM/X; FKM; PTFE |                       |
| Materials (wetted parts)      | stainless steel (1.4571/316Ti ); ceramics; FKM                   |                       |
| 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

