

## pressure-sensor type DS03



### description:

High quality pressure sensor with digital display with internal ceramic membrane in a compact design. High corrosion resistance and long-term stability. Available as pressure switch with two adjustable PNP connections or as transmitter with an additional analog output. Convinced by vacuum resistance, good reproducibility and hysteresis and low temperature impact.

### product features:

- suitable for liquid and gaseous media
- completely closed operating interface, therefore useable in rough and dirty as well as in sanitary environment
- long-term stability, vacuum resistance, good reproducibility and hysteresis
- low temperature influence

### connection:

G 1/2" B, G 1/4" B, G 1/2" B IG

### temperature:

-40°C up to +100°C

### pressure:

0 – 600,0 bar relative – depending on design

### design:

### body material:

### seals:

### membrane:

### process connection:

### supply voltage:

### current consumption:

### characteristic deviation:

### long-term drift:

### temperature deviation:

### 2 x PNP-output:

### output-current:

### Analog output 4 – 20mA:

### process pressure range:

### protection:

### temperature:

### electrical connection:

pressure-switch with internal ceramic membrane

Cr-Ni-steel / PC Polycarbonat

FPM, EPDM

ceramic Al<sub>2</sub>O<sub>3</sub> 96%

stainless steel 1.4404/316L or 1.4571/316Ti

10,5–35V DC reverse voltage protected

≤ 60mA; incl. Analog output with max. 22,5 mA

≤ ±0,5% FS

≤ ±0,2% FS / year not cumulative

≥ 4 bar ≤ ±0,4% FS/10 K (Zero/Span)

≤ 2,5 bar ≤ ±0,5% FS/10 K (Zero/Span)

PNP switches to L+

≤ 200 mA current limited, short-circuit protected

solution ≤ 1μA; response time: ≤ 3ms

0 – 600 bar relative, for absolute and vacuum pressure on request

IP65/67 [≤ 1mWs-1h] (EN/IEC 60529)

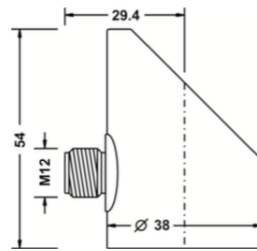
process: -40°C – +100°C

environment: -40°C – +85°C

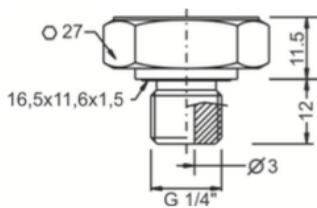
plug M12

**diameter:**

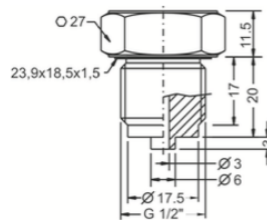
body



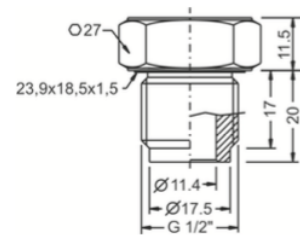
**process connection:**



G 1/2" ISO 228-1 - DIN 837-3

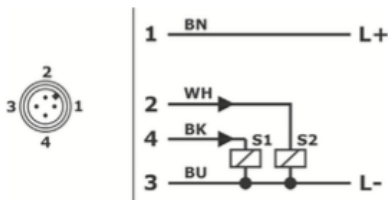


G 1/2" ISO 228-1 – internal bore 11,4mm

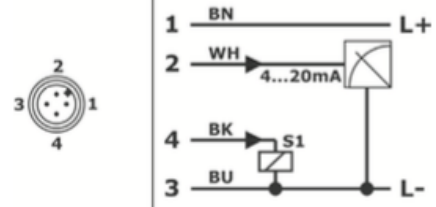


G 1/4" ISO 228-1

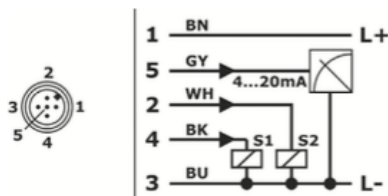
**output:**



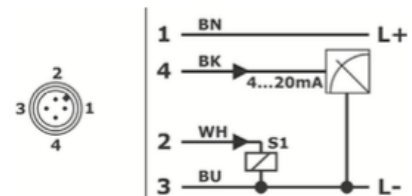
4-wire – output 2x switches PNP



4-wire – output 1x switch PNP / 1x 4 - 20mA



5-wire – output 2x switch PNP / 1x 4 - 20mA



4-wire – output 1x switch PNP / 1x 4 - 20mA / Desina

**explanation:**

Core color standard connection cable M12:  
BN = brown, WH = white, BU = blue, BK = black  
The connection cable is not included.

article number:

type	range of pressure	seal	electrical output	connection
<b>DS03</b>	00 - 0 - 250mbar	<b>0 - FPM</b> 1 - EPDM	0 - 4-wire, 2xPNP	<b>01 - G 1/4" B</b> 03 - G 1/2" B 03.1 - G 1/2" B IB
	01 - 0 - 400mbar		<b>1 - 4-wire, 1xPNP, 1x 4 - 20mA</b>	
	02 - 0 - 600mbar		2 - 5-wire, 2xPNP, 1x 4 - 20mA	
	<b>03 - 0 - 1 bar</b>		3 - 4-wire, 1xPNP, 1x 4 - 20mA, Desina	
	04 - 0 - 1,6 bar			
	05 - 0 - 2,5 bar			
	06 - 0 - 4 bar			
	07 - 0 - 6 bar			
	08 - 0 - 10 bar			
	09 - 0 - 16 bar			
	10 - 0 - 25 bar			
	11 - 0 - 40 bar			
	12 - 0 - 60 bar			
	13 - 0 - 100 bar			
	14 - 0 - 160 bar			
	15 - 0 - 250 bar			
	16 - 0 - 320 bar			
	17 - 0 - 400 bar			
	18 - 0 - 600 bar			

**example:**

**DS03030101**

pressure switch with internal ceramic membrane

output: 4-wire, 1xPNP. 1x 4 - 20mA

seal: FPM

range of pressure: 0 - 1 bar

connection: G 1/4" B

Image similar, subject change without notice.