

Bourdon pressure gauge with analogue output signal in stainless steel case

Nominal size ND 50

Connection position bottom, radial or back, central



Description

The ND 50 pressure gauges are a logically consistent development of the proven contact pressure gauges. In addition to the visual display, they provide an output signal for processing in programmable controllers or intelligent measuring systems. By virtue of their compact design, they can replace suitable applications in which simple pressure sensors are used.

A wide variety of threaded as well as capillary-type connections guarantee flexible mounting.

Features

- o Local display without auxiliary power
- o Manufactured to EN 837-1
- o Display over 270-degree angle
- o Non-contact sensor (non-wearing)
- o Unlimited mounting options

Measuring ranges

ND 50: 0 ... 1.6 bar to 0 ... 400 bar



and also all relevant ranges for negative or negative and positive overpressure

Applications

Display and monitoring of vessel pressure,
Signalling loss of vessel content
inert extinguishing plant,
General industrial applications

Model: P1171, P1172

Technical data

Models	P1172	P1171	Options
Nominal size	50		
Style			
Accuracy class	2.5 acc. to EN 837-1		
Ranges	0...1.6 bar to 0...400 bar		
Application	Constant load: 3/4 x full-scale value Alternating load: 2/3 x full-scale value Short-time: full-scale value		
Case	Stainless steel		
Window	Polycarbonate		
Dial	Plastic, white and scale black		
Pointer	Plastic, black		
Movement	Copper alloy		
Measuring element	Copper alloy, circular		
Pressure connection	Copper alloy		
- position	back centric	radial bottom	
- thread	G1/8 B	G1/4 B	
Temperatures			
- Medium	+90°C max.		
- Ambient	-20°C ... +60°C		
Temperature drift	With deviation from reference temperature (+20°C) on measuring system: max. ±0.4%/10K of display span.		
Protection	IP65 accord. to EN 60529 / IEC 529		
Electrical data			
Supply voltage	5 V DC	12...32 V DC	Vs = 12...32 V DC
Output signal	0,5 ... 2,5 V, 0,5 ... 3,5 V, 0,5 ... 4,5 V		4...20 mA 2-wire
EMC	Accord. to EN 61000-4-6 / EN 61000-4-3		
Burden	See illustration: output signal and permitted burden		
Electrical output	Cable output, cable length 2 metres		

Output signal and allowed load

Output voltage (3-wire):

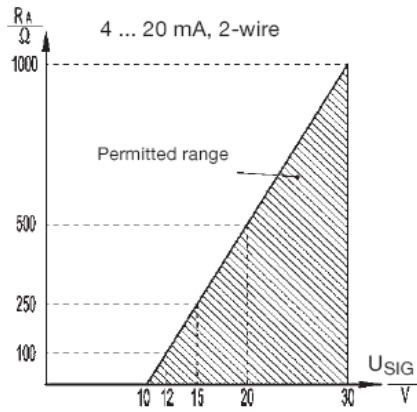
$R_A > 5 \text{ k}\Omega$

Output current (2-wire)

4 ... 20 mA

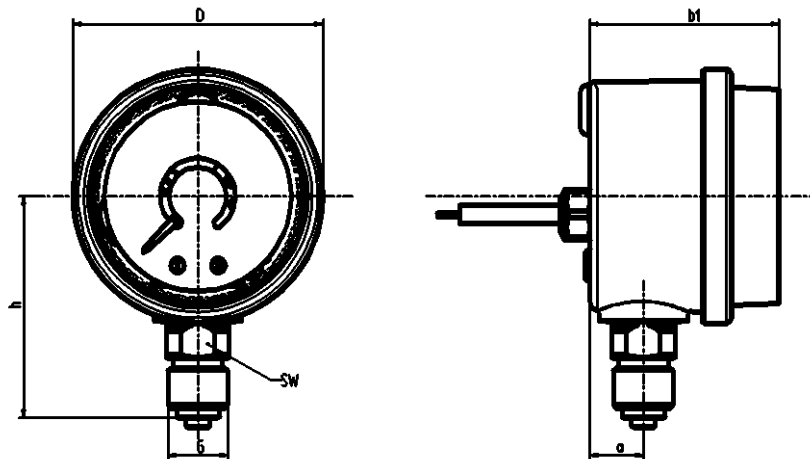
$R_A \leq (U_{SIG} - 10 \text{ V}) / 0.02 \text{ A}$ with

R_A in Ohm and U_{SIG} in VDC

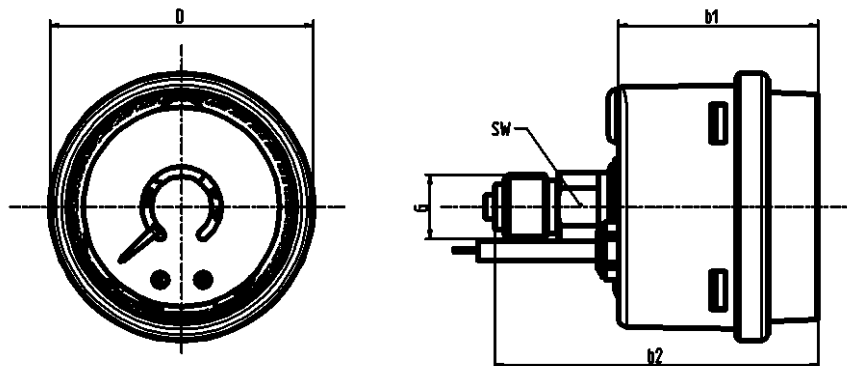


Dimension

Bottom radial connection



Back centric connection



Models	Sizes in mm							Weight in kg
	ND	A	$b_1 \pm 0.5$	$b_2 \pm 1$	G	H	SW	
P1171, P1172	50	12	34	63	G1/4 B	48	14	0.20

Subject to change without notice