



BAROLI 02P

Battery Powered Digital Pressure Gauge

Stainless Steel Diaphragm
Flush Welded

class 0.25

Nominal pressure

from 0 ... 100 mbar up to 0 ... 40 bar

Special characteristics

- ▶ rotatable housing
- ▶ 2-line LC display
4.5-digit 7-segment display
6-digit 14-segment additional display
- ▶ hygienic process connections

Functions

- ▶ min / max function with reset function
- ▶ offset and end point calibration
- ▶ setting the pressure unit
- ▶ configuration of switch-off automatic

The battery-powered digital pressure gauge BAROLI 02P with flush welded stainless steel sensor enables a local displaying of values in applications, where high requirements on hygienic process connections and easy cleaning or sterilization are requested. The filling medium is food compatible oil with FDA approval.

The BAROLI 02P display housing is rotatable, thus ensuring an easy reading even under unfavourable mounting conditions.

Additional functions:

switching the unit, displaying min / max values, calibrating the offset and the end point, configuring the automatic switching-off

Preferred areas of use are



Food industry



Pharmacy



BAROLI 02P

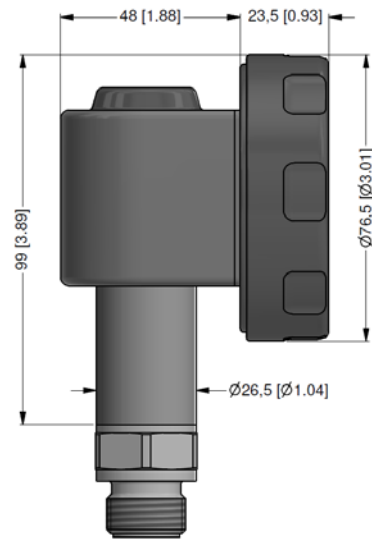
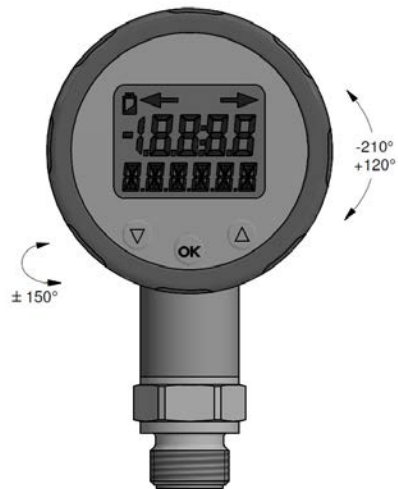
Digital Pressure Gauge

Technical Data

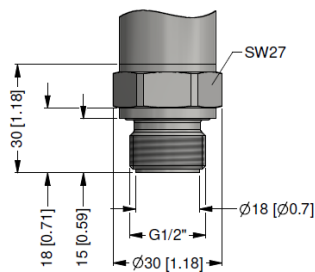
Input pressure ranges ¹									
Nominal pressure gauge	[bar]	-1 ... 0	0.10	0.16	0.25	0.40	0.60	1	1.6
Nominal pressure absolute	[bar]	-	-	-	-	0.40	0.60	1	1.6
Overpressure	[bar]	5	0.5	1	1	2	5	5	10
Burst pressure ≥	[bar]	7.5	1.5	1.5	1.5	3	7.5	7.5	15
Nominal pressure gauge / absolute	[bar]	2.5	4	6	10	16	25	40	
Overpressure	[bar]	10	20	40	40	80	80	105	
Burst pressure ≥	[bar]	15	25	50	50	120	120	210	
Vacuum resistance		p _N ≥ 1 bar: unlimited vacuum resistance p _N < 1 bar: on request							
¹ consider the pressure resistance of fitting and clamps									

Performance			
Accuracy ²	nominal pressure ≥ 0.4 bar: ≤ ± 0.25 % FSO nominal pressure < 0.4 bar: ≤ ± 0.5 % FSO		
Measuring rate	5/sec		
² accuracy according to IEC 61298-2 – limit point adjustment (non-linearity, hysteresis, repeatability)			
Thermal effects (offset and span)			
Nominal pressure p _N	[bar]	-1 ... 0	< 0.40
Tolerance band	[% FSO]	≤ ± 0.75	≤ ± 1.5
in compensated range	[°C]	0 ... 70 °C	0 ... 50 °C
Permissible temperatures			
Medium ³	filling fluid of silicone oil:		-40 ... 125 °C
	filling fluid of food compatible oil:		-10 ... 125 °C
Environment	-20 ... 70 °C		
Storage	-30 ... 80 °C		
³ max temperature of the medium for nominal pressure gauge > 0 bar: 150 °C for 60 minutes with a max. environmental temperature of 50 °C			
Mechanical stability			
Vibration	5 g RMS / 10 ... 2000 Hz		according to IEC 60068-2-6
Shock	500 g / 1 msec half sine		according to IEC 60068-2-27
Materials / Filling fluids			
Housing	stainless steel 1.4404 (316 L)		
Pressure port	inch thread: stainless steel 1.4404 (316 L) Clamp, dairy pipe: stainless steel 1.4435 (316 L) other on request		
Display housing	PA 6.6, polycarbonate		
Seals (media wetted)	standard: FKM clamp and dairy pipe: none		
Diaphragm	stainless steel 1.4435 (316 L)		
Media wetted parts	pressure port, seals, diaphragm		
Filling fluids	standard: silicone oil option: food compatible oil with FDA-certificate (mobile SHC Cibus 32; class code: H1; NFS registration no.: 141500) other on request		
Miscellaneous			
EHEDG certificate Type EL Class I	EHEDG conformity is only ensured in combination with an approved seal. This is e.g. for - Clamp (C62): T-ring-seal from Combifit International B.V. - dairy pipe (M73): ASEPTO-STAR k-flex upgrade seal by Kieselmann GmbH		
Display	LC display, visible range 40 x 30 mm; 4.5-digit 7-segment-display, digit height 11 mm, range of indication ±19999; 6-digit 14-segment additional display, digit height 7.5 mm		
Electromagnetic compatibility	emission and immunity according to EN 61326		
Supply	3.6 V Lithium battery; 2 pieces (type 1/2 AA)		
Data storage	EEPROM (non-volatile)		
Ingress protection	IP 65		
Installation position	any (standard: the device is calibrated in a vertical position with the pressure connection down; other than the given position for p _N ≤ 2 bar have to be declared at ordering)		
Weight	min. 350 g (pendent on the pressure connection)		
AD-converter solution	14 Bit		
Operational life of battery	standby mode: approx. 5 years		
Mech. operational life	100 million load cycles		
CE-conformity	EMV Directive: 2014/30/EU		

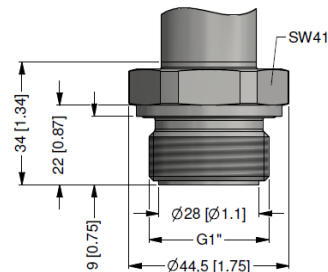
Dimensions (mm / in)



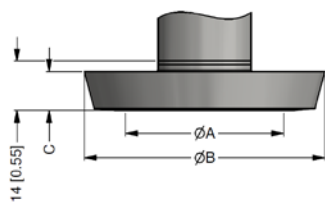
Mechanical connections (dimensions mm / in)



G1/2" DIN 3852 flush
p_N ≥ 1 bar

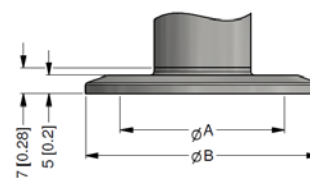


G1" DIN 3852 flush



dimensions in mm [in]	
size	DN 25
A	23 [0.91]
B	44 [1.73]
C	10 [0.39]

diary pipe (DIN 11851)
p_N ≥ 0.25 bar



dimensions in mm [in]	
size	DN 1 1/2"
A	23 [0.91]
B	50.5 [1.99]

Clamp (DIN 32676)
p_N ≤ 16 bar

The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.



Ordering code BAROLI 02P

BAROLI 02P

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Pressure									
	gauge	M	0	G					
	absolute ¹	M	0	H					
Input									
	[bar]								
	0.10	¹		1	0	0	0		
	0.16	¹		1	6	0	0		
	0.25	¹		2	5	0	0		
	0.40			4	0	0	0		
	0.60			6	0	0	0		
	1.0			1	0	0	1		
	1.6			1	6	0	1		
	2.5			2	5	0	1		
	4.0			4	0	0	1		
	6.0			6	0	0	1		
	10			1	0	0	2		
	16			1	6	0	2		
	25			2	5	0	2		
	40			4	0	0	2		
	-1 ... 0			X	1	0	2		
	customer			9	9	9	9		consult
Accuracy									
standard for p _N ≥ 0.4 bar	0.25 % FSO					2			
standard for p _N < 0.4 bar	0.5 % FSO					5			
	customer					9			consult
Mechanical connection									
G1/2" DIN 3852 with						Z	0	0	
flush diaphragm ²									
G1" DIN 3852 with						Z	S	1	
flush diaphragm									
Clamp 1 1/2" (DIN 32676) ³						C	6	2	
dairy pipe DN 25 (DIN 11851) ^{4, 5}						M	7	3	
customer						9	9	9	consult
Seal									
for clamp or dairy pipe:	without					0			
	FKM					1			
	customer					9			consult
Diaphragm									
stainless steel 1.4435 (316L)						1			
customer						9			consult
Front foil									
standard						1			
neutral						N			
customer						9			consult
Filling fluid									
silicone oil						1			
food compatible oil						2			
customer						9			consult
Special version									
standard						0	0	0	
customer						9	9	9	consult

¹ absolute pressure possible from 0.4 bar

² possible only for p_N ≥ 1 bar

³ possible only for p_N ≤ 16 bar

⁴ possible only for p_N ≥ 0.25 bar; cup nut for dairy pipe included and pre-assembled

⁵ The cup nut has to be mounted by production of pressure gauge. The cup nut has to be ordered as separate position.