

General Purpose Digital Pressure Gauge Model D1005PS

Stainless steel thinfilm sensor element
Accuracy 0,5 % or 0,25 % F.S.

Features

- Full scale terminal point accuracy
- Easy-to-read 4 ½ digit display
- Chemical resistant Noryl® case
- Versatility of 9 engineering units
- Min./max. recall
- On/off feature
- Display backlight optional
- Field calibration capability
- Meets ASME B40.7
- High proof pressure



Ranges

-1 ... 0 bar up to 0 ... 1400 bar
-30 ... 0 in. Hg up to 0 ... 19.999 psi

Technical specification	D1005PS
Measuring principle	Thinfilm sensor element with internal diaphragm
Range [bar]	2,5 4 6 10 16 25 40 60 100 160 250 400 600 700 1000 1400
[psi]	-1/0 -1/2 -1/3 -1/5 -1/9 -1/15
[in. Hg/psi]	30 60 100 200 300 500 1000 1500 2000 3000 5000 10.000 15.000 19.999
Overpressure limit	Ranges ≤ 70 bar 2-times, ranges > 70 bar and ≤ 400 bar 1,5-times, ranges > 400 bar 1,2-times
Cycle life	10 ⁸ cycles (20/80 % F.S.)
Pressure type	Gauge, vacuum and compound
Case size	2 ½ Inch (70 mm)
Process connection	G ¼ B male according to EN 837-1, ¼ NPT according to ANSI/ASME B1.20.1, others on request
Connection orientation	Lower, optional 3 or 9 o'clock
Material	
Process connection	Stainless steel 316 (1.4401)
Sensor	Stainless steel 17-4 PH (1.4542/1.4548)
Case	Noryl®
Display	Lexan
Power supply	Two AAA alkaline batteries, battery life approx. 1000 hours
Display	
Type	LCD with optional backlight
Digits, resolution	4 ½ digit, 19.999 counts, 13 mm high
Features	Four level battery indication
Accuracy according DIN 16086	0,5 % F.S., optional 0,25 % F.S.
Method including	Terminal point Linearity, hysteresis and repeatability
Engineering units	psi, in. Hg, cmHg, mmHg, ft. H ₂ O, bar, kPa, MPa, kg/cm ²
Update rate	10 times per second
Auto off [min]	Four options: never, 5, 10 or 20
Permissible	
Ambient temperature	-10 ... 60 °C
Storage temperature	-20 ... 70 °C
Compensated temperature	-29 ... 82 °C
Temperature influence	±0,5 % / 10 K (ref. 20 °C), ranges -1/0 bar and 0/2,5 bar ±0,7 % / 10 K (ref. 20 °C)
Shock resistance	≤ 0,05 % F.S. at 100 g / 20 ms
Vibration	≤ 0,1 % F.S. for 0 ... 2000 Hz at 20 g in any axis according to IEC 770
CE-mark/EMC	According to EN 61326 (1998) + Annex A (heavy industrial)
Protection acc. EN 60 529/IEC 529	IP54, IP65 with protective boot
Weight [kg]	0,14
Accessories, options	Protective boot, carrying pouch, calibration certificate

All specifications are subject to change without notification.

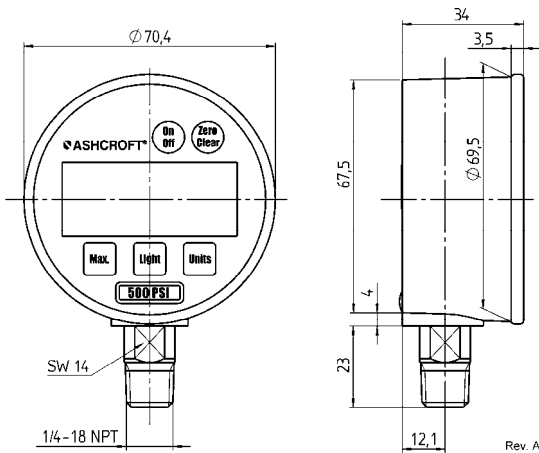
G6.D1005PS/E Rev. C 24/11/2006

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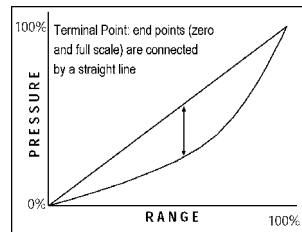
info@ics-schneider.de
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General dimensions [mm]



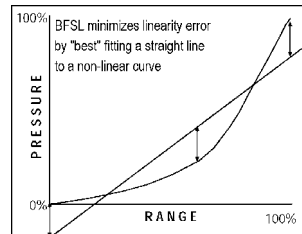
Compare of methods terminal point accuracy and best fit straight line(BFSL)

ASHCROFT Digital pressure gauge with terminal point accuracy



- All points between zero and full-scale will be within stated accuracy.
- Allows zeroing of gauge at start-up to eliminate any sensor offset.

Competitive digital gauges with best fit straight line (BFSL) accuracy



- Linearity error minimized by "best" fitting a straight line to a non-linear curve.
- BFSL gauges have a zero offset at calibration that must be maintained to ensure accuracy throughout range.

Terminal point accuracy statement includes:

- Linearity
- Hysteresis
- Repeatability

Order information

Size	Type/System material	Process connection	Connection orientation	Range	Engineering unit	Options
(25) 2 1/2" (70 mm)	(D1005PS) Stainless steel 316 (1.4401)	(02) 1/4 NPT male (13) G 1/4 B male (KJ) 1/4" straight JIS, BSP	(L) Lower (E) 9 o'clock (D) 3 o'clock	-1/ 0	BAR	(CD4) 4-point calibration certificate
				-1/ 2		
				-1/ 3		
				-1/ 5		
				-1/ 9		
				-1/ 15		
				0/ 2,5		
				0/ 4		
				0/ 6		
				0/ 10		
				0/ 16		
				0/ 25		
				0/ 40		
				0/ 60		
				0/ 100		
0/ 160						
0/ 250						
0/ 400						
0/ 600						
0/ 700						
0/ 1000						
0/ 1400						
others on request						psi and others on request

How to order

Size	Type / System material	Process connection	Connection orientation	Range	Engineering unit	Options
25	D1005PS	13	L	0/4	BAR	BL=B1