Technical Data for PS-Series Pressure Gauges

Compatible with some aggressive gases, Alicat's PS-Series pressure gauges accurately and rapidly measure the absolute or gauge pressure, or gauge pressure of process gases and liquids.

Standard Specifications (Contact Alicat for available options.)

Performance	PS-Series Gauges
Full scale pressure Standard Accuracy	± 0.25%
Full scale pressure High Accuracy Option	± 0.125%
Repeatability	± 0.08% full scale
Zero Shift and Span Shift	0.02% full scale / ºC
Operating Range / Turndown Ratio	0.5% to 100% full scale / 200:1 Turndown
Burst Pressure	3x full scale (1.5x full scale for ranges ≥500 psi)
Typical Response Time[1]	5 ms (Adjustable)
Warm-up Time	< 1 Second
1. Volumes, feed pressures, exhaust pressures and line sizing will determine the limits of response times.	

Operating Conditions	PS-Series Gauges
Gas Compatibility	Compatible with all non-corrosive gases and select aggressive gases[1]
Operating Temperature	-10 to +60 ºC
Maximum Common Mode Pressure (Differential Pressure Units Only)	200 psig
Mounting Attitude Sensitivity	None
Ingress Protection	IP40
Wetted Materials	316LSS, FFKM (Kalrez) standard; Viton, EPDM, Buna, Neoprene as needed for some gases. If your application demands a different material, please contact Alicat.
1. In addition to all non-corrosive gases, PS Gauges are configured to operate with the following aggressive gases: Ammonia, Chlorine, Hydrogen Sulfide, Nitric Oxide, Nitrogen Dioxide, Nitrogen Triflouride, Propylene, Sulfur Dioxide The following gases are available upon request: Refrigerant gases to 100% (Refrigerant gases may require custom seals, consult Alicat.) If your application requires another gas or gas mixture, please contact Alicat . For use with water or other liquids please contact Alicat.	

Communication / Power	PS-Series Gauges
Monochrome LCD or Color TFT Display with integrated touchpad	Displays Pressure
Digital Communications Options[1]	RS-232 Serial / RS-485 Serial / Modbus RTU / PROFIBUS / EtherNet/IP / DeviceNet / Modbus TCP/IP / EtherCAT
Analog Signal[2] Options	0-5 Vdc / 1-5 Vdc / 0-10 Vdc / 4-20 mA
Optional Secondary Analog Output Signal[2]	0-5 Vdc / 1-5 Vdc / 0-10 Vdc / 4-20 mA
Electrical Connection Options	8-Pin Mini-DIN / 9-pin D-sub (DB9) / 15-pin D-sub (DB15) / 6-pin locking / 8-pin M12
Supply Voltage	7-30 Vdc (15-30 Vdc for 4-20 mA outputs)
Supply Current	0.040 Amp
1. The **Digital Output Signal** communicates Pressure 2. The **Analog Output Signal** and **Optional Secondary Analog Output Signal** communicate Pressure	

Mechanical Specifications

Pressure Product	Mechanical Dimensions	Process Connections[1]
PS Gauges	4.1"H x 2.4"W x 1.1"D	1/8" NPT Female
1. Compatible with Swagelok® tube, Parker®, face seal, push connect and compression adapter fittings. VCR and SAE connections upon request.		

Standard Available Ranges

PS-Series Gauges		
Absolute	**Gauge**	**Differential**
	-15 psig	
5 psid	5 psig	
	15 psig	
30 psid	30 psig	30 psia
100 psid	100 psig	100 psia
	500 psig	500 psia
	1000 psig	1000 psia
	1500 psig	1500 psia
	2000 psig	2000 psia
	3000 psig	3000 psia
Other ranges available. Please contact Alicat.		

Available Units*			
Absolute	**Gauge**	**Differential**	**Notes**
PaA	PaG	PaD	pascal
hPaA	hPaG	hPaD	hectopascal
kPaA	kPaG	kPaD	kilopascal
MPaA	MPaG	MPaD	megapascal
mbarA	mbarG	mbarD	millibar
barA	barG	barD	bar
g/cm2A	g/cm2G	g/cm2D	gram force per square centimeter
kg/cmA	kg/cmG	kg/cmD	kilogram force per square centimeter
PSIA	PSIG	PSID	pound force per square inch
PSFA	PSFG	PSFD	pound force per square foot
mTorrA	mTorrG	mTorrD	millitorr
torrA	torrG	torrD	torr
mmHgA	mmHgG	mmHgD	millimeter of mercury at 0 C
inHgA	inHgG	inHgD	inch of mercury at 0 C
mmH2OA	mmH2OG	mmH2OD	millimeter of water at 4 C (NIST conventional)
mmH2OA	mmH2OG	mmH2OD	millimeter of water at 60 C
cmH2OA	cmH2OG	cmH2OD	centimeter of water at 4 C (NIST conventional)
cmH2OA	cmH2OG	cmH2OD	centimeter of water at 60 C
inH2OA	inH2OG	inH2OD	inch of water at 4 C (NIST conventional)
inH2OA	inH2OG	inH2OD	inch of water at 60 C
atm			atmosphere
m asl			meter above sea level (only in /ALT builds)
ft asl			foot above sea level (only in /ALT builds)
* Note that only units appropriate to your device will be available for selection.			

PS-Series:
All standard ranges