

Technical Data for IS-Pro **ISP/ISPS-Series** Pressure Meters

1 PSI full scale through **3000** PSI full scale in absolute, gauge, or differential pressure applications.

Standard specifications. Consult Alicat for available options



+1 (888) 290-6060

alicat.com/isp

CERTIFICATIONS	MARKING	CERTIFICATE
ATEX	II 1G Ex ia IIC T4 Ga T _{amb} -20°C to +70°C	DEKRA 22ATEX0075X
IECEX	Ex ia IIC T4 Ga T _{amb} -20°C to +70°C	IECEX DEK 22.0078X
North America	Class I, Div 1, Groups A-D T4, Ex ia Class I, Zone 0, AEx\Ex ia IIC T4 Ga T _{amb} -20°C to +70°C	DEKRA 23CAUS40-127215

SENSOR PERFORMANCE	
Pressure accuracy ¹	Standard accuracy: ± 0.250% of full scale High-accuracy option: ± 0.125% of full scale
Pressure repeatability (2σ) ¹	± 0.08% of full scale
Pressure measurement range	0.01 – 100% of full scale (10,000:1 turndown ratio)
Temperature sensitivity	Zero shift: 0.02% full scale per °C from tare temperature Span shift: 0.02% full scale per °C from calibration temperature
Operating temperature range	-20 – 70°C
Sensor response time	< 1 ms
Typical indication response time	< 10 ms
Typical warm-up time	< 1 s

¹ Stated accuracy is after tare under equilibrium conditions; includes repeatability and linearity.

MECHANICAL	
Fluid compatibility ²	ISP-Series: Compatible with all non-corrosive gases; check wetted materials ISPS-Series: Compatible with all non-corrosive gases and liquids, and many corrosive gases; check wetted materials
Sensor burst pressure	1 – 100 PSI models: 3× full scale range 500 – 3000 PSI models: 1.5× full scale range
Maximum common mode pressure for differential pressure models	≤ 100 PSID models: 200 PSIG 500 PSID models: 750 PSIG
Relative humidity range	0 – 95%, non-condensing
Ingress protection	IP66 rating Dust-tight and protected against strong jets of water
Mounting orientation sensitivity	None
Mounting holes	4× 6-32 UNC threaded ⌀ 0.276" [7.01 mm]
Process connections ³	½" NPT female

² For use with water and other liquids, please contact Alicat.

³ Consult Alicat for available connection options, such as: compression, face seal, push-to-connect, BSPP, SAE, or Swagelok®-compatible (VCO® and VCR®).

POWER AND COMMUNICATION	
Digital output options	RS-232 or RS-485 (both options work with the Alicat ASCII command and control language AND the Modbus RTU industrial protocol)
Digital data update rate	40 Hz at 19200 baud
Analog output options	4 – 20 mA
Analog data update rate	1 kHz
Analog signal accuracy	± 0.1% of full scale additional uncertainty
Interactive display	Monochrome LCD with integrated touchpad and backlight; displays current pressure
Display update rate	10 Hz
Electrical connection options	DB-15

Technical Data for IS-Pro **ISP/ISPS-Series** Pressure Meters
1 PSI full scale through 3000 PSI full scale in absolute, gauge, or differential pressure applications.

Standard specifications. Consult Alicat for available options

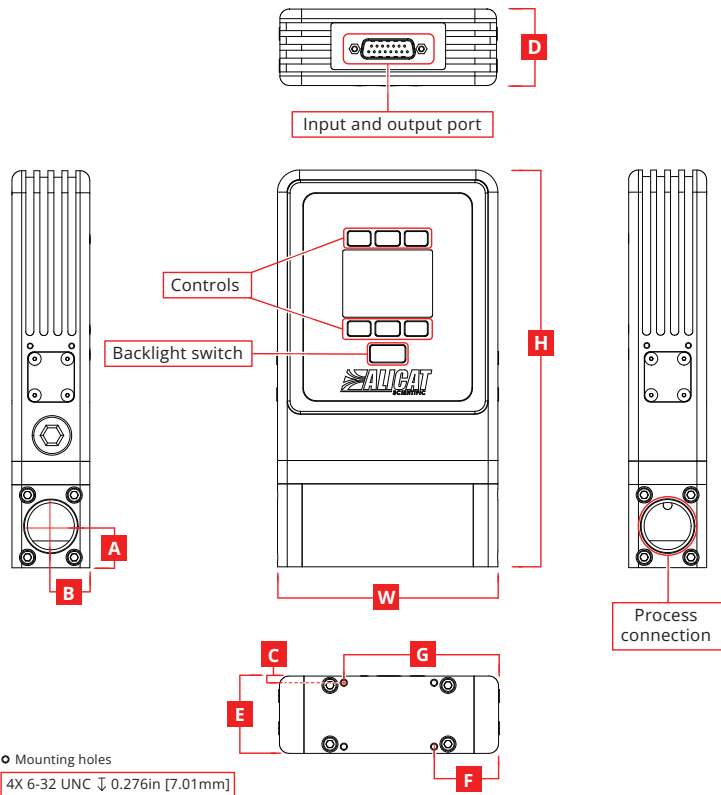


+1 (888) 290-6060
alicat.com/isp

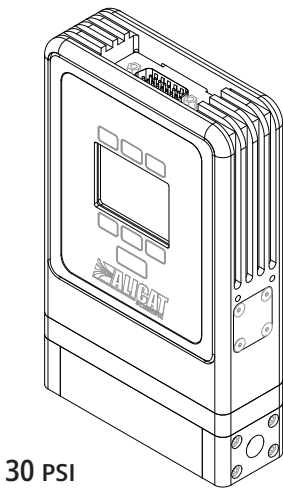
STANDARD AVAILABLE RANGES									
Model	1 PSI	5 PSI	15 PSI	30 PSI	100 PSI	500 PSI	1000 PSI	2000 PSI	3000 PSI
ISP-Series PSIA			✓	✓	✓				
ISP-Series PSIG	✓	✓	✓	✓	✓				
ISP-Series PSID	✓	✓	✓	✓	✓				
ISPS-Series PSIA			✓	✓	✓	✓	✓	✓	✓
ISPS-Series PSIG		✓	✓	✓	✓	✓	✓	✓	✓
ISPS-Series PSID		✓	✓	✓	✓	✓			

WETTED MATERIALS: MEASUREMENT HEAD							
Series	Pressure range	Stainless steels	Heat-cured epoxy and silicone rubber, alumina, gold, silicon, glass, nylon	Sealing Materials			
		316L		FKM	FFKM ⁴	EPDM	Silicone
ISP	1–100 PSI	✓	✓	Opt.	Opt.	Opt.	Opt.
ISPS	5–3000 PSI	✓					

⁴ Low temperature FFKM required for operation below -10°C. Please consult alicat for availability.



Representative Example



DIMENSIONS ⁵										WEIGHT
Port size	Width	Depth	Height ⁶	A	B	C	E	F	G	
1/8" NPT	4.25"	1.50"	7.05"	0.50"	0.75"	0.13"	1.37"	1.25"	3.00"	≈ 5.0 lb
	108.0 mm	38.1 mm	179.1 mm	12.7 mm	19.1 mm	3.3 mm	34.8 mm	31.8 mm	76.2 mm	≈ 2.3 kg

⁵ Port sizes may affect maximum available pressure range, please consult Alicat.

⁶ ISPS-Series differential pressure models for aggressive gases, add 0.950" height.