

Astragauge High Pressure Gauges

High Pressure Equipment has added the full line of ASTRAGAUGE high pressure gauges, ROTASEAL high pressure swivels and high pressure Gauge Snubbers to their product family. ASTRAGAUGE has established a reputation for producing highly accurate and reliable bourdon-tube style gauges for pressures up to 150,000 psi.

ASTRAGAUGE Features

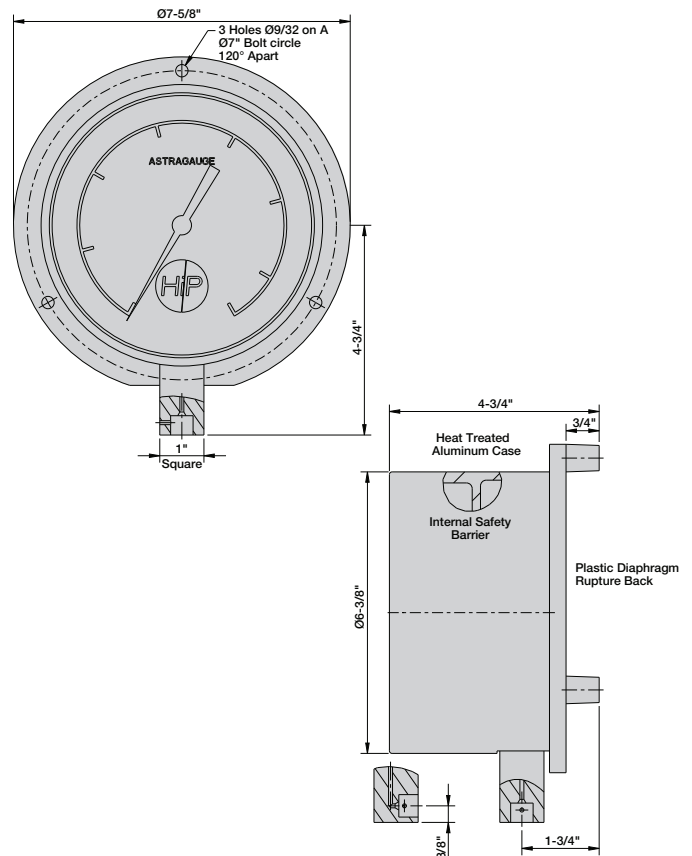
- Wall or flush mounting
- Bottom or back connected
- 6" diameter black-on-white dial
- All "wetted" parts 316 SS
- Accuracy - 1/2 of 1% ascending pressure
- 14 Ranges from 7,500 PSI to 150,000 PSI
- Polycarbonate front window
- 316 SS multiturn (10 turns) bourdon element (Ni-Span "C" for 150,000 PSI)



- Turret type heavy duty sealed aluminum case
- Oxygen, gas and water service
- PSI: Kg/Cm²; megapascals; bars

Astragauge High Pressure Gauges

Range psi	Connection 1/4" HP	Astragauge Part No.		HiP Part No. Surface Mount	Division psi
		Panel Mount	Surface Mount		
7,500	Bottom	W-7-1	F-7-1		50
	Back	WB-7-1	FB-7-1		
10,000	Bottom	W-10-1	F-10-1		100
	Back	WB-10-1	FB-10-1		
15,000	Bottom	W-15-1	F-15-1		100
	Back	WB-15-1	FB-15-1		
20,000	Bottom	W-20-1	F-20-1	6PG20C	200
	Back	WB-20-1	FB-20-1	—	
30,000	Bottom	W-30-1	F-30-1	6PG30C	250
	Back	WB-30-1	FB-30-1	—	
40,000	Bottom	W-40-1	F-40-1		500
	Back	WB-40-1	FB-40-1		
50,000	Bottom	W-50-1	F-50-1	6PG50	500
	Back	WB-50-1	FB-50-1	—	
60,000	Bottom	W-60-1	F-60-1		500
	Back	WB-60-1	FB-60-1		
75,000	Bottom	W-75-1	F-75-1		500
	Back	WB-75-1	FB-75-1		
80,000	Bottom	W-80-1	F-80-1		1,000
	Back	WB-80-1	FB-80-1		
100,000	Bottom	W-100-1	F-100-1		1,000
3/8" or 5/16" HP					
75,000	Bottom	W-75-2	F-75-2	6PG75	500
100,000	Bottom	W-100-2	F-100-2	6PG100	1,000
150,000	Bottom	W-150-2V	F-150-2V	6PG150	1,000



Astragaugue

Accuracy

The standard accuracy is 1/2 of 1%. All gauges are calibrated against NIST traceable dead weight testers accurate to 1/10 of 1% or against a certified master gauge. Gauges are checked at a minimum of five (5) points.

Element

Of specially cold drawn and cold formed 316 SS. This multiturn (10 turns) helical Bourdon tube gives longer life and provides better accuracy. It is used in all ranges to 100,000 PSI. Ni-Span "C" is used for 150,000 PSI. Element has mechanically sealed end to permit cleaning when required (as for oxygen service). No soldered or welded joints. Available in 14 ranges as shown in table.

Pressure Test

All gauges are "over-pressurized" to 130% of the rated pressure (except for 150,000 which is proof tested at 180,000 PSI) and cycled to full pressure prior to calibrating.

Movement

For best accuracy and smoothness of operation, a special bronze movement is used. Zero adjustment is achieved by means of a micro pointer gear arrangement. The range can be field adjusted from the outside of the case, provided a suitable calibration standard is available.

Dial

PSI/MPa dual dial is standard scale. Special orders are available. (i.e. KgCm², Bar, MPA)

Socket Adapter and Special Openings

We can offer (on special order) sockets for (7,500 - 30,000) 1/2" NPT or 1/2" NPS (straight) but caution that at the higher pressures it will be difficult to achieve leak free joints.

Safety

The case is the turret type and of heat treated high tensile aluminum having a heavy section between the viewer and the Bourdon element, thus providing safety in case of element failure. The standard dial face is an easily removable polycarbonate plastic, sealed with a Tetra-Seal gasket. A light, plastic, frangible diaphragm back sealed to the case by an "O" ring, provides safety in case of element failure, proven by tests to be the safest possible design.

Options

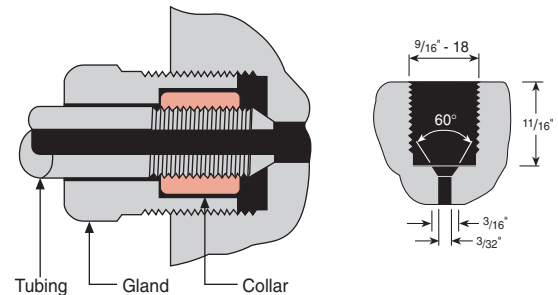
Maximum Pressure Indicator, Liquid Filled, Astrattract (high-low contacts) and Special Order Dial.

Pressure Connections

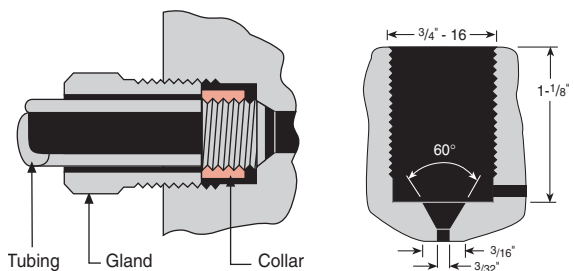
Standard is 1/4" high pressure (1/4" HP, F250C, H F-4) available in bottom or back connected in all ranges up to 100,000 PSI. For the higher pressure ranges (e.g. 50,000 to 150,000 PSI) we can offer our 2V connection suitable for 5/16" OD x 1/16" ID or 3/8" OD x 1/16" ID tubing.



1/4" High Pressure



3/8" High Pressure



High Pressure Gauges

Stainless Steel Panel Mounted Pressure Gauges

Stainless steel, panel mounted pressure gauges are available from stock for immediate delivery. These gauges are standard with a High Pressure 1/4" O.D. tubing connection (HF4). These coned and threaded connections are machined directly into the bottom inlet of the gauges. Adapters for other size connections are available from stock.

HiP stainless steel gauges have a solid front separating the dial face from the pressure tube in order to provide maximum safety. Bourdon tube and socket are 316 S.S. and include a safety blowout back and laminated safety glass. Gauges may be used intermittently to 100 percent of dial reading.

Accuracy on 5,000 psi and 10,000 psi models is 1/2% of full scale reading. Accuracy on 20,000 psi through 30,000 psi models is 1% of full scale reading.

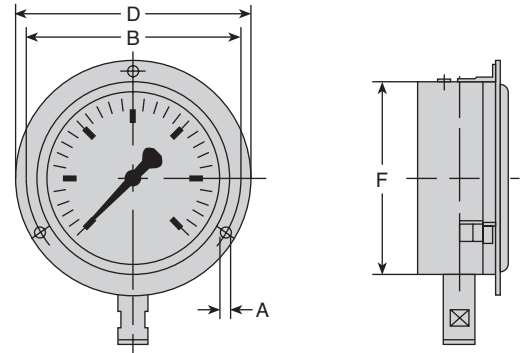


Gauge Size			Graduations			Materials	
Catalog No.	Range psi	Dial Size				Mounting	Case
4PG5	0-5,000	4"	500	100	50	Panel	316 S.S.
4PG10	0-10,000	4"	1,000	500	100		
6PG20	0-20,000	6"	2,000	1,000	200		
6PG30	0-30,000	6"	3,000	1,000	200		

Dimensions

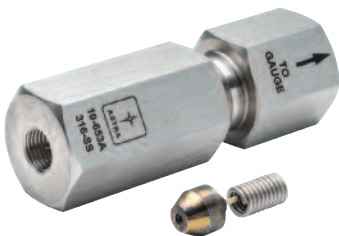
Dial Size	A	B	D	F
4" 4PG5, 4PG10	3/16"	4 35/64"	5 3/16"	3 7/8"
6" 6PG20, 6PG30	7/32"	7"	7 11/16"	6 1/4" - 6 5/16"

PANEL MOUNTING



Gauge Snubber

The gauge snubber is a device used to "smooth" out the pressure fluctuations created by reciprocating pumps commonly used to develop the high pressures required for waterjet cutting. This "smoothing" action provides more accurate pressure indication and extends the life and calibration of the pressure gauge. Gauge Snubber is rated for 60,000 psi service and uses a 1/4" HP connection (3/8" and 9/16" HP available).



Rotaseal

The ROTASEAL was developed for use in the waterjet cutting industry where a rotating member is required to conduct the high pressure water safely and without leaks.

The ROTASEAL is offered in two configurations - right angle or straight through. ROTASEALS are available for pressures to 60,000 PSI and flow rates to 15 GPM (at lower pressures).

