

Data Sheet

1109 Process Pressure Gauge

FEATURES

- **PLUS!™** Performance dampens vibration, shock and pulsation effects
- Solid front design with full blowout back
- Epoxy coated system offers superior corrosion resistance
- Rugged design

TYPICAL USES

- Oil and Gas
- Offshore Oil Rigs
- Chemical and Petrochemical Plants
- Refineries
- Waterblasting / Water Jetting Equipment
- Specialized OEM Equipment



1109
4 1/2" dial size



SPECIFICATIONS

Accuracy:	±0.5% of span (ASME B40.100, Grade 2A)
Size:	4 1/2"
Ranges:	Vacuum, Compound 15 to 100,000 psi
Process Connection Location:	Lower
Process Connection Size:	1/4 NPT Male, 1/2 NPT Male 1/4 High pressure tubing
Case Style:	Solid front with pressure relief back
Movement:	Adjustable
Window Material:	Glass (STD.), Safety glass (STD.), Shatter proof glass (OPT.)
Dial:	White aluminum with black markings
Pointer:	Aluminum
Weather Protection:	IP64, IP65 Hermetically sealed
Dampening Options:	PLUS!™ Performance, throttle screw, dampeners, capillary, diaphragm seals and snubbers
Mounting:	Stem
Approvals:	CRN, CE/UKCA

WETTED COMPONENTS

Bourdon Tube	Process Connection	Joints
316L SS, Inconel® for ranges greater than 40,000 psi	316 SS	Welded

NON-WETTED COMPONENTS

Case	Ring	Back Cover
304 SS	Cam Lock 300 SS	304 SS

KEY BENEFITS

- Corrosion Resistance
- Superior readability compared to 100mm case gauges

MIN/MAX TEMPERATURE LIMITS

Version	Ambient	Process	Storage
Dry	-20 °F to 200 °F (-29 °C to 93 °C)	-20 °F to 250 °F (-29 °C to 121 °C)	-40 °F to 250 °F (-40 °C to 121 °C)

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ORDERING CODE	Example:	451109	SD	04	L	XLL	15#
Dial Size/Model Code							
451109 - 4½" 300 Stainless steel, solid front case		451109					
System (tube and process connection)							
SD - 316 Stainless steel tube, (Vac-30,000 psi)			SD				
WD - Inconel® 700 tube, 316 Stainless steel process connection (40,000-100,000 psi)							
Process Connection Sizes							
02 - ¼ NPT Male, (up to 20,000 psi)							
04 - ½ NPT Male, (up to 30,000 psi)				04			
09 - ¼" high pressure tubing connection, (40,000-100,000 psi)							
Process Connection Location							
L - Lower connection only					L		
Options (If choosing an option(s) must include an "X")							
LL - PLUS! ™ Performance						X_	LL
TS - Throttle screw							
YW - 316 Stainless steel case							
6B - Cleaned for gasses, oxygen service							
PD - Acrylic window							
SG - Safety glass							
FW - Back flange (welded to case)							
C4 - Traceable calibration certificate							
Range (coding examples only, see range table on page 3 for all standard ranges)							
Single Scales							
15# - 15 psi							15#
1KG - 1 kg/cm²							
100KP - 100 kilopascal							

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	psi	bar	kPa	mPa	kg/cm ²
Vacuum	30IMV	N1BR	N100KP	N1MP	N1KG
	-	N1/0.6BR	N100/60KP	0.1/0.06MP	N1/0.6KG
Compound	V/15#	-	-	-	-
	-	N1/1.5BR	N100/150KP	N0.1/0.15MP	N1/1.5KG
	V/30#	-	-	-	-
	-	N1/3BR	N100/300KP	N0.1/0.3MP	N1/3KG
	V/60#	-	-	-	-
	-	N1/5BR	N100/500KP	N0.1/0.5MP	N1/5KG
	V/100#	-	-	-	-
	-	N1/9BR	N100/900KP	N0.1/0.9MP	N1/9KG
	15#	1BR	100KP	0.1MP	1KG
	20#	-	-	-	-
Positive Pressure	-	1.6BR	160KP	0.16MP	1.6KG
	30#	-	-	-	-
	-	2.5BR	250KP	0.25MP	2.5KG
	60#	4BR	400KP	0.4MP	4KG
	-	6BR	600KP	0.6MP	6KG
	100#	-	-	-	-
	120#	-	-	-	-
	-	10BR	1000KP	1MP	10KG
	160#	-	-	-	-
	200#	-	-	-	-
	-	16BR	1600KP	1.6MP	16KG
	300#	-	-	-	-
	-	25BR	2500KP	2.5MP	25KG
	400#	-	-	-	-
	500#	-	-	-	-
	600#	40BR	4000KP	4MP	40KG
	800#	-	-	-	-
	-	60BR	6000KP	6MP	60KG
	1000#	-	-	-	-
	1500#	100BR	10000KP	10MP	100KG
	2000#	-	-	-	-
	-	160BR	16000KP	16MP	160KG
	3000#	-	-	-	-
	-	250BR	25000KP	25MP	250KG
	4000#	-	-	-	-
	5000#	-	-	-	-
	6000#	400BR	40000KP	40MP	400KG
	8000#	-	-	-	-
	-	600BR	60000KP	60MP	600KG
	10000#	-	-	-	-
15000#	1000BR	100000KP	100MP	1000KG	
20000#	-	-	-	-	
-	1600BR	-	160MP	1600KG	
30000#	-	-	-	-	
-	2500BR	-	250MP	2500KG	
50000#	-	-	-	-	
-	4000BR	-	400MP	4000KG	
80000#	-	-	-	-	
-	6000BR	-	600MP	6000KG	
100000#	-	-	-	-	
1109WD Only					

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DIMENSIONS in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings

