

FEATURES

- Two independent systems and movements
- Bronze Bourdon tube and brass process connections
- Two non-adjustable red and black pointers
- Measures two independent pressure sources on one dial

SPECIFICATIONS

Accuracy:	±2-1-2% of span (ASME B40.100 Grade A)
Process Connection Location:	1038A - Lower or lower back 1339A - Back
Ranges:	Compound to 30-1,000 psi
Movement:	Bronze
Window Material:	Glass
Pointer:	Non-adjustable black & red
Mounting Option:	Stem, surface or flush

WETTED COMPONENTS

Model	Bourdon Tube	Process Connection Materials
1038A 1339A	Grade A Phosphor Bronze	Brass

NON-WETTED COMPONENTS

Model	Case	Ring
1038A	Aluminum black epoxy coated	Aluminum, threaded, black epoxy coated
1339A	Aluminum black epoxy coated	Aluminum, hinged, black epoxy coated

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)



1038A
4½" dial size



1339A
4½" dial size panel mounting
back only



ORDERING CODE	Example:	45	1038	A	02	L	100#
Dial Size							
45 - 4½" dial		45					
Model							
1038A - Duplex, black aluminum, open front			1038				
1339A - Duplex, black aluminum, open front, panel mount							
System							
A - Phosphor bronze tube/brass process connection				A			
Process Connection Size							
02 - ¼ NPT					02		
Process Connection Location							
L - Lower, (N/A with 1339)						L	
B - Lower Back							
Range (see range table on page 37 for all standard ranges)							
Single Scales							
100# - 100 psi							100#

1038A, 1339A Standard Ranges Code - Single Scale			
	psi	bar	kPa
Compound	30IMV&15#		
			N1/1.5BR N100/150KP
	30IMV&30#		
			N1/3BR N100/300KP
	30IMV&60#		
			N1/5BR N100/500KP
	30IMV&100#		
		N1/9BR N100/900KP	
Positive Pressure	30IMV&150#		
			N1/15BR N1C/1500KP*
	30IMV&300#		
			N1/24BR N1C/2400KP*
	30#	-	-
	-	2.5BR	250KP
	60#	4BR	400KP
	-	6BR	600KP
	100#	-	-
	-	10BR	1000KP
	160#	-	-
	200#	-	-
	-	16BR	1600KP
300#	-	-	
-	25BR	2500KP	
400#	-	-	
600#	40BR	4000KP	
800#	-	-	
-	60BR	6000KP	
1000#	-	-	

*C = 00

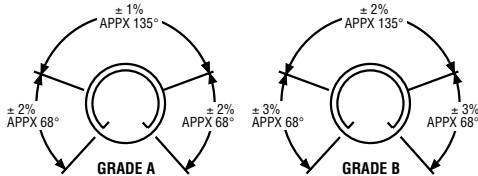
1495 Receiver Gauge Standard Ranges Code			
Input Signal Range PSI	Single Scale	Dual Scale	Inner / Outer
3-15#	0-100%		
3-15#	0-10sq rt		
3-15#		0-10 sq rt/0-100linear	

1490 Standard Ranges Code- Single Scale				
	psi	inH ₂ O	oz/in ²	kPa
Vacuum				N2.5KP
		15IWV		N4KP
		30IWV		N10KP
		60IWV		N16KP
				N25KP
		100IWC		N40KP
		200IWV		N100KP
			15ZSIV	
			30ZSIV	
			60ZSIV	
Ccompound			100ZSIV	
		N30/30IW		
			N30/30ZSI	
		N10/10IW		
				N10/60CMW
				N10/80CMW
				N20/40CMW
				N10/100CMW
				N10/120CMW
		10IW		2.5KP
		15IW		4KP
				60CMW
		30IW		10KP
		60IW		16KP
		100IW		25KP
	160IW		40KP	
	200IW		100KP	
	300IW			
Positive Pressure			10ZSI	
			15ZSI	
			30ZSI	
			60ZSI	
			100ZSI	
			160ZSI	
			250ZSI	
		3#		
		5#		
		10#		
	15#			

ACCURACY:

Accuracy – the conformity of indication to an accepted standard or true value. Accuracy is the difference (error) between the true value and the indication expressed as a percent of the span. It includes the combined effects of method, observer, apparatus and environment. Accuracy error includes hysteresis and repeatability errors but not friction error. It is determined under specific conditions. (Normal position, 73.4°F (23°C), and 29.92 in Hg barometric pressure.)

The following tables define the ASME B40.1* accuracy grades used by Ashcroft products.



Accuracy of a pressure gauge may be expressed as percent of span or percent of indicated reading. Percent of span is the most common method. Percent of indicated reading is usually limited to precision test gauges and unless specifically spelled out, it may be assumed that an accuracy of ±0.5% means ±0.5% of span.

GRADE 4A:

Gauges offering the highest accuracy and calibrated to ±0.1% of span over the entire range of the gauge. These gauges are called laboratory precision test gauges and are generally 8½", 12" or 16" dials. These high-accuracy gauges may be temperature compensated. They must be handled carefully in order to retain accuracy.

ACCURACY EXAMPLES

Range	Accuracy Span	Grade	Permissible Error % of Span
0/100 psi	100 psi	1A	1.0
0/400 kPa	400 kPa	2A	0.5
0/1000 bar	1000 bar	B	3 (0/250 & 750/1000 bar) 2 (250/750 bar)
-100/400	400 kPa	2A	0.5
30 inHg/ 30 psi	44.7 psi	4A	0.1

The last item (30 inHg/30 psi) deserves some explanation. The span is defined as the algebraic difference between the limits of the scale. 30 inHg = -14.7 psi Span = 30 psi - (-14.7) = 44.7 psi. 0.1% of 44.7 psi = 0.045 psi or 0.022 Hg.

*ASME B40.1 may be ordered from:
 American Society of Mechanical Engineers
 Three Park Avenue, New York, NY 10016

GRADE 3A:

Gauges are calibrated to an accuracy of ±0.25% of span over the entire range of these gauges. These gauges are called test gauges and are generally 4½", 6" or 8½" dials. The gauges are generally not temperature compensated (except Ashcroft Type 1082).

GRADE 2A:

Gauges are calibrated to an accuracy of ±0.5% of span over the entire range of the gauge. They are often referred to as process gauges and are usually supplied as 4½" and 6" cases and are not temperature compensated.

GRADE 1A:

Gauges are calibrated to an accuracy of ±1% over the entire range of the gauge. These gauges are high-quality industrial gauges and are supplied in 2½", 3½" and 4½" sizes.

GRADE A:

Gauges are calibrated to an accuracy of ±1% of span over the middle half of the scale and ±2% of span over the first and last quarters of the scale.

GRADE B:

Gauges are calibrated to an accuracy of ±2% of span over the middle half of the scale and ±3% of span over the first and last quarters of the scale. These gauges are often referred to as commercial or utility gauges and are supplied in 1½", 2", 2½", 3½" and 4½" case sizes.

GRADE C:

Gauges are calibrated to an accuracy of ±3% of span over the middle half of the scale and ±4% of span over the first and last quarters of the scale.

GRADE D:

Gauges are calibrated to an accuracy of ±5% of span over the entire scale.

ACCURACY EXAMPLES

Type of Gauge	Grade	Permissible Error % of Span			Max. Friction (% of Span)
		Lower 25%	Middle 50%	Upper 25%	
Precision Test (A4A)	4A	0.1	0.1	0.1	See Note
Test (1082)	3A	0.25	0.25	0.25	0.25
Process (1279)	2A	0.5	0.5	0.5	0.5
Industrial/Hydraulic (1009)	1A	1.0	1.0	1.0	1.0
Industrial/Hydraulic (1010, 1188, 1490)	A	2.0	1.0	2.0	1.0
Commercial/Utility (1005, 3005, 1008A)	B	3.0	2.0	3.0	2.0

Note: Grade 4A gauges must remain within 0.1% before and after being lightly tapped.