

FEATURES

- PowerFlex™ movement provides superior resistance to shock, vibration and pulsation
- FlutterGuard™ (optional) reduces movement wear and pointer flutter
- True Zero™ indicator, a unique safety feature
- Available as dry, liquid fill or field-fillable versions

SPECIFICATIONS

Accuracy:	±3-2-3% of span (ASME B40.100 Grade B)
Process Connection Location:	Lower, center back
Movement:	PowerFlex™ movement, Brass/polyester segment
Pointer:	Black, aluminum
Weather Protection:	Weather resistant
Dampening Options:	FlutterGuard™, liquid filled

WETTED COMPONENTS

Model	Bourdon Tube	Process Connection Materials	Restrictor
1008A/AL	Bronze (vac.-6,000 psi and compound) 316 SS (10,000 psi-15,000 psi)	Brass	Brass

NON-WETTED COMPONENTS

Model	Case	Window	Ring
1008A/AL	304 SS	Polycarbonate	304 SS, crimped

MIN/MAX TEMPERATURE LIMITS

Version	Process
Dry	-40°F to 150°F (-40°C to 65°C)
Glycerin Fill	-4°F to 150°F (-20°C to 65°C)
Silicone Fill	-40°F to 150°F (-40°C to 65°C)

ORDERING CODE

Example:	63	1008	A	02	L	XSF	100#
Dial Size							
63 - 63 mm (2½")	63						
10 - 100 mm (4")							
Model		1008					
Case Design			A				
A - Dry							
AL - Liquid fill							
Process Connection Size				02			
02 ¼ NPT male							
Process Connection Location					L		
L - Lower							
B - Center back							
Options (if choosing an option(s) must include an "X")						X	
SF - FlutterGuard™ - (SF includes throttle plug – Dry Gauges only)							SF
LJ - Sealed case, field fillable							
GV - Silicone fill							
UC - U-clamp (Back connection only)							
FF - Front flange							
RF - Retrofit flange (Back connection only)							
T4 - Throttle plug .007"							
T7 - Throttle plug .020"							
T9 - Throttle plug .063"							
B1 - Protective black rubber boot (63mm only)							
Range (coding example see range table on page 44 for all standard ranges)							
Single Scales							
100# - 100 psi							100#



1008A/AL
100mm dial size



1008A/AL
63mm dial size

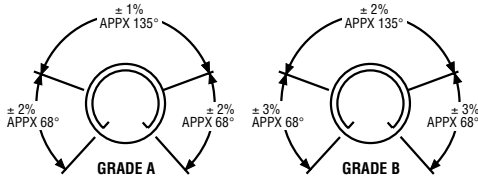


1008A							
psi	CODE	bar	CODE	kPa	CODE	kg/cm ²	CODE
30IWCHgVac/0	VAC	-1/0	VAC-ABE	-100/0	VAC-AGF	76cm/0	VAC-ADP
30IWCHgVac/0/15	15#&VAC					76cm/0/1	15/V-ADB
30IWCHgVac/0/30	30#&VAC	-1/0/1.5	30/V-AAS	-100/0/150	30/V-AFT	76cm/0/2	30/V-ADD
30IWCHgVac/0/60	60#&VAC	-1/0/3	60#-AAV	-100/0/300	60/V-AFV	76cm/0/3	60/V-BEI
						76cm/0/4	60/V-ALQ
30IWCHgVac/0/100	100#&VAC	-1/0/5	100/V-AAW	-100/0/500	100/V-AFX	76cm/0/6	100/V-BEJ
30IWCHgVac/0/160	160#&VAC	-1/0/9	160/V-AYY	-100/0/900	160/V-AFZ	76cm/0/10	160/V-ADI
						76cm/0/15	200/V-BEK
30IWCHgVac/0/300	300#&VAC	-1/0/24	300/V-AUG			76cm/0/20	300/V-BEL
30IWCHgVac/0/600	600#&VAC			0/160			
0/15	15#	0/1	15#-AAA	0/200	15#-AFB	0/1	15#-ACK
				0/160	20#-AFC		
0/30	30#	0/1.6	30#-AAB	0/200	30#-AFD	0/2	30#-ACM
		0/2.5	30#-AAD	0/250	30#-AFE	0/3	45#-ACO
0/60	60#	0/4	60#-AAF	0/400	60#-AFG	0/4	60#-ACP
0/100	100#	0/6	100#-AAG	0/600	100#-AFH	0/6	100#-ACQ
		0/7	100#-AAH	0/800	120#-BAT		
0/160	160#	0/10	160#-AAI	0/1000	160#-AFJ	0/10	160#-ACS
0/200	200#	0/16	200#-AAL	0/1600	200#-AFM	0/15	200#-BEA
0/300	300#					0/20	300#-BEB
0/400	400#	0/25	400#-AAN	0/2500	400#-AFO	0/25	400#-ACX
0/600	600#	0/40	600#-AAP	0/4000	600#-AFQ	0/35	600#-BEC
						0/40	600#-ACZ
						0/50	600#-BED
0/1000	1000#	0/60	1000#-AMK	0/6000	1000#-BAU	0/50	1000#-ANA
				0/8000	1000#-BAV	0/70	1000#-ANB
0/1500	1500#	0/100	1500#-AMM	0/10000	1500#-ATK	0/100	1500#-ANC
0/2000	2000#			0/16000	2000#-BAW	0/150	2000#-BEE
0/3000	3000#	0/160	3000#-AMO			0/160	3000#-ACE
0/4000	4000#	0/250	4000#-AMQ	0/25000	4000#-BAX	0/250	4000#-ACG
0/5000	5000#					0/350	5000#-BEF
0/6000	6000#	0/400	6000#-AJE	0/40000	6000#-ATU	0/400	6000#-BEU
						0/500	6000#-BEG
0/10000	10000#			0/60000	10000#-BAY	0/700	10000#-BEH
0/15000	15000#			0/80000	10000#-BAZ		

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.