

CIRCLE SEAL

PRESSURE BLANKING VALVE (GAUGE SAVER) 1200 Series

0-3000 PSI 15-300 CUTOUT PRESSURE

PURPOSE — To provide reliable, instant, precise shutoff to protect gauges or other pressure sensitive devices from over pressure. This highly sophisticated design* overcomes O-ring breakaway friction problems characteristic of piston-type units and permits reopening pressure to be the same as cut-out pressure. Gives exceptionally precise operation even at low settings.

OPERATION CHARACTERISTICS

AUTOMATIC CLOSING — Gauge protector isolates gauge from system instantly and automatically if system pressure exceeds top gauge reading.

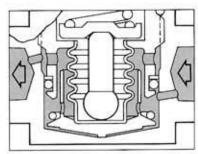
AUTOMATIC GAUGE CUT-IN — Opens automatically to connect gauge to system where system pressure is within pressure range of gauge.

PRECISE OPERATION — No over-range pressure differential. Ultrasensitive bellows operation permits re-opening pressure to be the same as cut-out pressure. The use of contact seals rather than sliding seals eliminates O-ring breakaway friction, insuring precise, unfailing operation.

CUT-OUT PRESSURES - 10 to 300 psi

*Covered by Patent Numbers 2,920,646 and 2,538,364

HOW IT WORKS

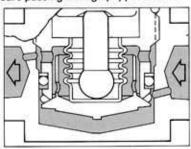


OPEN

Pressure passes through inlet port and poppet, around bellows and through outlet port with virtually no restriction.

CLOSING

Pressure differential across bellows "collapses" bellows allowing Circle Seal O-ring to prevent pressure passing through poppet to outlet.



CLOSED

Pressure differential in excess of closing force holds poppet closed. Circle Seal O-ring seals between conical seats of poppet and end. Pressure differential across Circle Seal O-ring causes it to be forced tightly into seats, sealing without leakage.

REOPENING

When system pressure drops below cutout pressure, pressure differential between system pressure, and entrapped cutout pressure forces unit to reopen instantly.

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PRESSURE BLANKING VALVE (GAUGE SAVER) 1200 Series

TECHNICAL DATA

OPERATING PRESSURE
BURST PRESSURE Over 7500 PSI LEAKAGE Zero BELLOWS MATERIAL Aluminum, Stainless, Brass MOUNTING LIMITATIONS None RE-OPENING PRESSURE (below actual cut-out
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pressure)
70°F 1 PSI Max. or 3% Max
(whichever is greater)
LOWEST RATED TEMP, OF O-RING 3 PSI
or 6% Max. (whichever is greater)
CUT-OUT PRESSURE VARIATION
70°F ±1 PSI Max. or ±3%
(whichever is greater)
LOWEST RATED TEMP.
OF O-RING ±2 PSI Max. or ±5%
(whichever is greater)

CONSTRUCTION DETAILS

Cutout pressures from 15 to 30 psi are obtained by system pressure acting against a metal bellows; for closing pressures above 30 psi, a spring is used in conjunction with the bellows. Cutout pressures are adjustable within limits established by spring rate of bellows or bellows and spring in combination.

Non-destructive testing, such as individual flow test, testing with fluids other than compressed air or hydraulic oil, hydrostatic testing, x-ray, dye penetrant are not normal to our production processing, but are available at extra costs.

1277		(MIL-P-25732)	Hydraulic Fluid (mineral base), Lube Oil, Natural Gas, Nitrogen, Water, Hydraulic Oil (MIL-H-5606).			
1232	0° to 250°F	Viton-A	Air, Steam*, Aromatic Fuels, Kerosene, Chlori- nated Hydrocarbons*, IRFNA*.			
1273	-40° to 240°F	Neoprene	Oxygen, Helium, Air, Hydrogen, Carbon Dioxide.			
	*Use 303 Stainles	ноw т	O ORDER	125	9 A-4BB-A	
	BASIC MOD	EL NUMBER				
BODY MATERIAL PIPE: TUBE: B—Brass T—303 Stainless Steel A—Aluminum A—Aluminum CONNECTIONS—Inlet/Gauge 4BB—¼" Tube, Female AND10050-4 2PP—¼" Pipe Female CUT-OUT PRESSURE—Select alpha code						
CUT-OUT PRESS. CODE		A	В	С	D	
Gauge Press. Range		0-15	0-30	0-60	0-100	
Cut-Out Press. (Nom.)		15 PSI	30 PSI	60 PSI	100 PSI	
Adjustment Range		10-30 PSI	24-38 PSI	39-69 PSI	70-125 PSI	
CUT-OUT PRESS. CODE		E	F	G	н	
Gauge	Press. Range	0-160	0-200	0-250	0-300	
Cut-Out Press. (Nom.)		160 PSI	200 PSI	250 PSI	300 PSI	
Adjustment Range		100-200 PSI	150-300 PSI	150-300 PSI	150-300 PSI	
2.48 (TUBE) 2.44 (PIPE) MEX ACROSS FLATS 75- 1.125- 1.92 MAX.			2.48 (TUBE) 2.44 (PIPE) 1.00 HEX ACROSS FLATS FLATS MAX.			
5	7-				DIA 1.12	

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SERVICE RECOMMENDATIONS

SUITABLE FOR

Air, Alcohol, Ammonia, Helium, Hydrogen,

O-RING

MATERIAL

Buna-N

MODEL

NUMBER

1259

OPERATING

TEMPERATURE

-65° to 250°F

(in this model only).

To isolate gauge regardless of pressure, unscrew adjusting screw until it stops

Cut-Out Pressures

29 PSI and Less

Cut-Out Pressures

Above 29 PSI