

ATKOMATIC

 **CIRCLE SEAL CONTROLS, INC.**
A division of CIRCOR International, Inc.

50,000 Series

Stainless Steel, Direct Lift, 0 to 3000 PSIG, High Temperature
High Pressure Valve Configurable for Variety of Fluid Applications

Features

- Designed for high temperature fluids – up to 750° F
- Direct lift valve
- Barstock construction
- Mounted with coil oriented down to minimize convection heating of coil from hot media
- Flow orifices of 1/16", 3/32", 1/8", and 3/16"
- C_v from .093 to .72
- Available with NPT pipe ports or welded pipe stubs as "standard" catalog items
- Normally Closed and Normally Open versions available
- Available in pipe size from 1/8 through 1" NPT or 1/8 through 1" tube stubs
- Pressures up to 3000 psig
- Stainless steel construction on all pressure containing parts – 316 for machined parts and CF8M for cast parts.
- Plunger material is 416 stainless that is treated for increased corrosion resistance
- Will handle fluids with viscosity up to 150 SUS
- Suitable for use with wide variety of fluid including: air, gasses, liquids, hydraulic fluids, steam, cryogenic fluids, and corrosive fluids
- Stellite seat (Cobalt alloy for wear and corrosion resistance)
- Extended stem to reduce heat transfer from fluid to coil (two lengths available depending on fluid temperature)
- Class H coils are standard

2301 Wardlow Circle, P.O. Box 3300
Corona, California 92878
tel 909-270-6200
fax 909-270-6201
www.circle-seal.com
am_sales@circle-seal.com
ind_sales@circle-seal.com

50,000 Series

Operational Pressures (No minimum pressure differential)

Orifice Size	Gases		Liquids to 40 SUS		Liquids over 40 SUS	
	A.C.	D.C.	A.C.	D.C.	A.C.	D.C.
Normally Closed, Extended Stem 50800-50850						
1/16"	2500	2500	2500	2500	2500	2500
3/32"	2500	2500	2000	2000	2000	2000
1/8"	1200	1200	900	900	900	900
3/16"	500	500	350	350	350	350
Normally Closed, Short Stem 50900-50950						
1/16"	3000	3000	3000	3000	3000	3000
3/32"	3000	3000	2500	2500	2500	2500
1/8"	1200	1200	1000	1000	1000	1000
3/16"	600	600	450	450	450	450
Normally Open, Extended Stem 50801-50851						
1/16"	2500	2500	2000	2000	2000	2000
3/32"	1200	1200	1000	1000	1000	1000
1/8"	400	400	350	350	350	350
3/16"	250	250	150	150	150	150
Normally Open, Short Stem 50901-50951						
1/16"	3000	3000	3000	3000	3000	3000
3/32"	1600	1600	1200	1200	1200	1200
1/8"	400	400	350	350	350	350
3/16"	250	250	150	150	150	150

NOTE: Normally open valves are rated for intermittent duty only on 50,000 series valves.

NOTE: Normally open 50,000 series valves are not available with 50 Hz coils for operational pressures above 1500 psi.

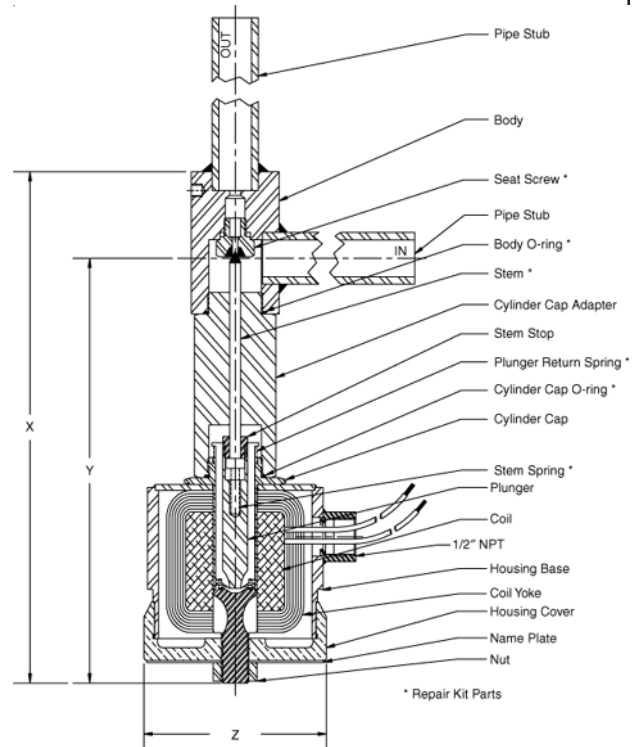
50,000 Series

Dimensions and Shipping Weights

Catalog Num. Prefix	Pipe Size	X	Y	Z	Shipping Weight (lbs)
50,800 Series Normally Closed (extended stem for fluid temperatures of 500° to 750° F)					
50800	1/8"	10"	8 1/8"	4 1/16"	14
50810	1/4"	10"	8 1/8"	4 1/16"	14
50820	3/8"	10"	8 1/8"	4 1/16"	14
50830	1/2"	10"	8 1/8"	4 1/16"	14
50840	3/4"	10"	8 1/8"	4 1/16"	14
50850	1"	10"	8 1/8"	4 1/16"	14
50,900 Series Normally Closed (standard stem for fluid temperatures up to 500° F)					
50900	1/8"	7 1/2"	5 3/4"	4 1/16"	10
50910	1/4"	7 1/2"	5 3/4"	4 1/16"	10
50920	3/8"	7 1/2"	5 3/4"	4 1/16"	10
50930	1/2"	7 1/2"	5 3/4"	4 1/16"	10
50940	3/4"	7 1/2"	5 3/4"	4 1/16"	10
50950	1"	7 1/2"	5 3/4"	4 1/16"	10
50,801 Series Normally Open (extended stem for fluid temperatures of 500° to 750° F)					
50801	1/8"	11 1/8"	9 1/4"	4 1/16"	16
50811	1/4"	11 1/8"	9 1/4"	4 1/16"	16
50821	3/8"	11 1/8"	9 1/4"	4 1/16"	16
50831	1/2"	11 1/8"	9 1/4"	4 1/16"	16
50841	3/4"	11 1/8"	9 1/4"	4 1/16"	16
50851	1"	11 1/8"	9 1/4"	4 1/16"	16
50,901 Series Normally Open (standard stem for fluid temperatures up to 500° F)					
50901	1/8"	8 5/8"	6 7/8"	4 1/16"	12
50911	1/4"	8 5/8"	6 7/8"	4 1/16"	12
50921	3/8"	8 5/8"	6 7/8"	4 1/16"	12
50931	1/2"	8 5/8"	6 7/8"	4 1/16"	12
50941	3/4"	8 5/8"	6 7/8"	4 1/16"	12
50951	1"	8 5/8"	6 7/8"	4 1/16"	12

Cv Flow Factors

Orifice	Cv
1/16"	.093
3/32"	.22
1/8"	.44
3/16"	.72



50840 Valve – (shown with optional 3/4" tube stubs)

50,000 Series

How to Order

50 X X X - X X X X X X

STEM TYPE

- 8 Extended Length
- 9 Standard Length

CONNECTION SIZE

- 0 1/8"
- 1 1/4"
- 2 3/8"
- 3 1/2"
- 4 3/4"
- 5 1"

VALVE NORMAL POSITION

- 0 Normally Closed
- 1 Normally Open

VOLTAGE AC/60 Hz

- 0 AC/50 Hz or DC Voltage
- 1 100 VAC
- 2 115 VAC
- 3 200 VAC
- 4 230 VAC
- 5 460 VAC

VOLTAGE AC/50 Hz

- 0 AC/60 Hz or DC Voltage
- 1 110 VAC
- 2 220 VAC

COIL HOUSING

- E Explosion-proof
- S Standard
- W Waterproof
- C Combined Water- & Explosion-proof

FLUID MEDIA TYPE

- 1 Gas
- 2 Liquid up to 40 SUS
- 3 Liquid from 41 to 150 SUS
- 4 Steam
- 5 Cryogenic

ORIFICE SIZE

- 1 1/16"
- 2 3/32"
- 3 1/8"
- 4 3/16"

CONNECTION TYPE

- A 6" Stubs
- J British Pipe Thread
- P NPT

VOLTAGE DC

- 0 AC Voltage
- 1 12 VDC
- 2 24 VDC
- 3 48 VDC
- 4 125 VDC
- 5 250 VDC