

ATKOMATIC

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

30,800 Series

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

Features

- Stainless steel construction on all wetted parts – 316 for machined parts and CF8M for cast parts
- Plunger material is 416 stainless that is treated for increased corrosion resistance
- Semi-direct lift action for operation down to zero pressure differential
- Operation up to 3000 psig
- Media temperatures from -423° F to +500° F
- 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
- Optional seat materials of Teflon®, Kel-F, Buna-N, Viton®, EPR, or metal (316 pilot seat and/or 316 piston seat) depending on fluid type and pressure
- Body seal materials of Teflon®, Viton®, Buna-N, or EPR
- Heaviest duty and most rugged construction
- Removable 316 SS body inserts (stainless steel trim)
- Available in Normally Closed configuration from 1/4" to 2" ports
- Available in Normally Open configuration from 1/4" to 1 1/2" ports
- British BSPT ports are available
- Full ported valves
- C_v from 2.5 to 45 in Normally Closed valves
- C_v from 2.5 to 21.5 in Normally Open valves
- Class H coils are standard
- Coils housings available in NEMA 1 (standard), NEMA 4 (waterproof), NEMA 7 (explosion-proof for hazardous locations), and combination NEMA 4 and 7
- Manual opening device is available as an option
- Valve position indicator option is available

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30,800 Series

Operational Pressures (No minimum pressure differential)

Gases		Liquids to 40 SUS		Liquids over 40 SUS		Steam	
A.C.	D.C.	A.C.	D.C.	A.C.	D.C.	A.C.	D.C.
Normally Closed 1/4" through 1 1/2" 31800-31860							
3000	1500	3000	1000	3000	1000	300	300
Normally Closed, 1 1/4" through 2" with threaded cylinder cap 31851-31871							
1500	1500	1500	1000	1500	1000	300	300
Normally Open 1/4" through 1" 32800-32860							
3000	2000	3000	1500	3000	1250	300	300
Normally Open 1 1/4" through 1 1/2" with threaded cylinder cap 32851-32871							
1500	1500	1500	1000	1500	1000	300	300

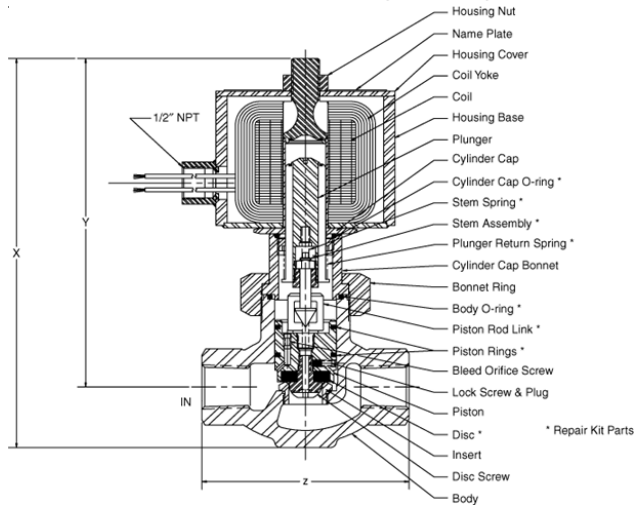
NOTE: Normally open valves are rated for intermittent duty only on 30000 series valves and are not recommended for cryogenic service above 50 psig.

NOTE: Normally open 30000 series valves are not available with 50 Hz coils for operational pressures above 1500 psi.

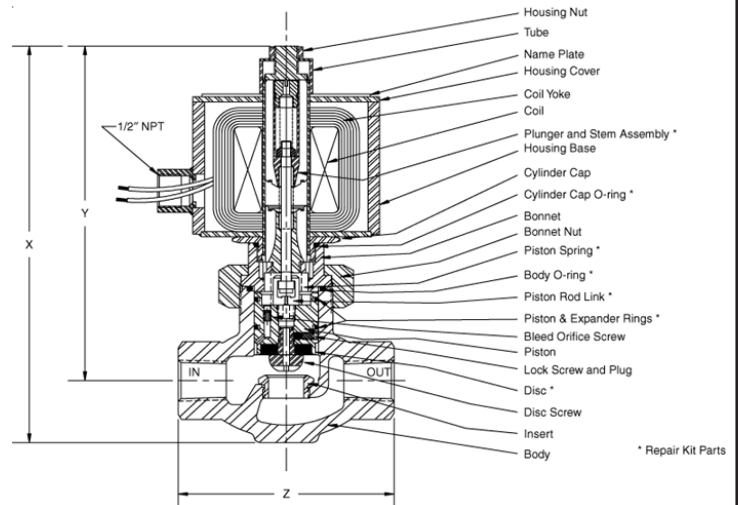
NOTE: Rubber seats are limited to 500 psi

30,800 Series

Dimensions, Shipping Weights, and C_v Flow Factors



Normally Closed 3/4" 31830 Valve – (shown with NEMA 1 coil housing, AC coil and a metal seat)



Normally Open 3/4" 32830 Valve – (shown with NEMA 1 coil housing, AC coil and a soft pilot seat)

30,800 Series Normally Closed Stainless Steel

Catalog Num. Prefix	Pipe Size	Main Seat Orifice Dia	X	Y	Z	Shipping Weight (lbs.)	Cv
31800	1/4"	3/8"	8 1/16"	7 1/16"	3"	10	1.1
31810	3/8"	3/8"	8 1/16"	7 1/16"	3"	10	2.5
31820	1/2"	3/4"	8 11/16"	7 9/16"	4 5/8"	13	5.1
31830	3/4"	3/4"	8 11/16"	7 9/16"	4 5/8"	13	7.5
31840	1"	1"	9 1/2"	8 1/16"	5 1/4"	19	12.5
31850	1 1/4"	1 1/2"	10 1/2"	8 3/8"	7 5/8"	50	21.0
31860	1 1/2"	1 1/2"	10 1/2"	8 3/8"	7 5/8"	50	21.5
31851	1 1/4"	1 1/2"	10 3/16"	8 3/8"	5 7/8"	22	21.0
31861	1 1/2"	1 1/2"	10 3/16"	8 3/8"	5 7/8"	22	21.5
31871	2"	2"	12 3/8"	9 13/16"	7"	32	45.0

Note: 1 1/4" & 1 1/2" valve models 31850 and 31860 are rated for 3000 psig, constructed with a flanged body & cylinder cap and models 31851, 31861, and 31871 are constructed with a threaded cylinder cap & body and are rated for 1500 PSI.

30,800 Series Normally Open Stainless Steel

Catalog Num. Prefix	Pipe Size	Main Seat Orifice Dia	X	Y	Z	Shipping Weight (lbs.)	Cv
32800	1/4"	3/8"	8 5/8"	7 5/8"	3"	10	1.1
38810	3/8"	3/8"	8 5/8"	7 5/8"	3"	10	2.5
32820	1/2"	3/4"	9 1/2"	8"	4 5/8"	3	5.1
32830	3/4"	3/4"	9 1/2"	8"	4 5/8"	13	7.3
32840	1"	1"	10 1/16"	8 9/16"	5 1/4"	19	12.5
32851	1 1/4"	1 1/2"	10 1/2"	8 1/2"	5 7/8"	22	21.0
32861	1 1/2"	1 1/2"	10 1/2"	8 1/2"	5 7/8"	22	21.5

30,800 Series

3 x 8 x x - x x x x x x x x x x x x

NORMAL POSITION OF VALVE (DE-ENERGIZED)

- 1 Normally Closed
- 2 Normally Open

CONNECTION SIZES

- 0 1/4"
- 1 3/8" 4 1" 7 2"
- 2 1/2" 5 1 1/4" 8 2 1/2"
- 3 3/4" 6 1 1/2" 9 3"

BODY STYLE

- 0 Threaded cylinder cap on 1/4"-1" and flanged cylinder cap on 1 1/4"-1 1/2" (3000psi)
- 1 Screwed cylinder cap on 1/14"-2" (1500psig)

VOLTAGE AC/60 Hz

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

VOLTAGE AC/50 Hz

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

VOLTAGE DC

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

CONNECTION TYPE

- P NPT
- J British Pipe Thread

MAX. OPERATING PRESS (psig)

- A 75 F 300 K 1200
- B 100 G 350 L 1500
- C 150 H 500 M 3000
- D 200 I 750 N 2000
- E 250 J 1000 O 50

OPTIONS

- P Position indicator
- M Manual opening

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 SUS to 150 SUS
- 4 Steam
- 5 Cryogenic

SEAL MATERIAL

- A Teflon® B Buna-N
- C Viton® D EPR

SEAT/PILOT MATERIAL

- A TFE pilot & TFE disc
- B Buna pilot & Buna disc
- C Viton® pilot & Viton® disc
- D EPR pilot & EPR disc
- E Kel-F pilot & Kel-F disc
- F Metal pilot & Metal disc
- G Metal pilot & TFE disc
- H Metal pilot & Buna disc
- I Metal pilot & Viton® disc
- J Metal pilot & EPR disc
- K Metal pilot & Kel-F disc