

# ATKOMATIC

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

## 30,400 Series

Bronze, Semi-Direct Lift, 0 to 1500 PSIG Medium Pressure Valve,  
Configurable for Variety of Fluid Applications

### Features

- Semi-direct lift action for operation down to zero pressure differential
- Operation up to 1500 psig
- Media temperatures from -423° F to +500° F
- Will handle fluids with viscosity up to 150 SUS
- Bronze valve material (Naval M Bronze)
- Suitable for use with wide variety of fluid including: air, gasses, liquids, hydraulic fluids, steam, cryogenic fluids, and fluids not harmful to bronze
- Heaviest duty and most rugged construction
- Optional seat materials of Teflon®, Kel-F, Buna-N, Viton®, EPR, or metal (316 SS pilot and/or brass piston seat) depending on fluid type and pressure
- Body seal materials of Teflon®, Viton®, Buna-N, or EPR
- Removable 316 SS body inserts (stainless steel trim)
- Available in normally closed configuration from 1/4" to 3" NPT ports
- Available in normally open configuration from 1/4" to 1 1/2" NPT ports
- British BSPT ports available
- Full ported valves
- Normally Closed  $C_v$  from 2.7 to 71
- Normally Open  $C_v$  from 2.7 to 21
- 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 and throttling devices are available as options (requires aluminum piston on 2 1/2" & 3")
- Valve position indicator option is available

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

# 30,400 Series

## Operational Pressures

(No minimum pressure differential)

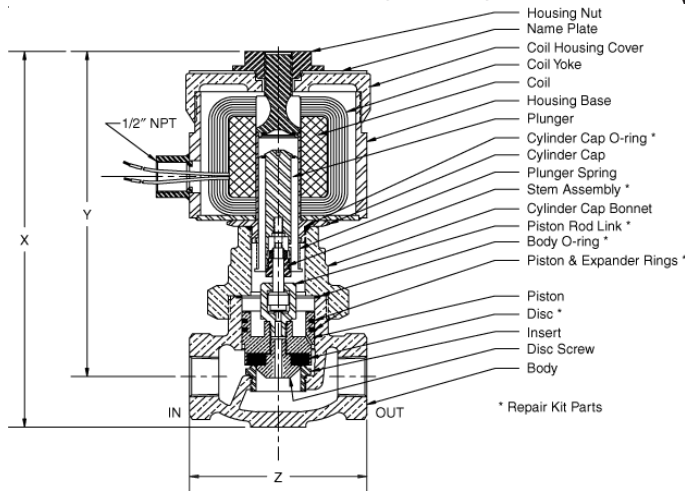
Gases		Liquids to 40 SUS		Liquids over 40 SUS		Steam	
A.C.	D.C.	A.C.	D.C.	A.C.	D.C.	A.C.	D.C.
<b>Normally Closed, 1/4" through 1/2"</b>							
1500	1500	1500	1000	1500	1000	200	200
<b>Normally Closed, 3/4" through 1 1/2"</b>							
1000	1000	1000	1000	1000	1000	200	200
<b>Normally Closed, 2" through 3"</b>							
500	500	500	350	500	350	200	100
<b>Normally Open, 1/4" through 1/2"</b>							
1500	1500	1500	1500	1500	1250	200	200
<b>Normally Open, 3/4" through 1 1/2"</b>							
1000	1000	1000	1000	1000	1000	200	200

**NOTE:** Normally Open valves are rated for intermittent duty only on 30,000 Series valves and are not recommended for cryogenic service above 50 psig.

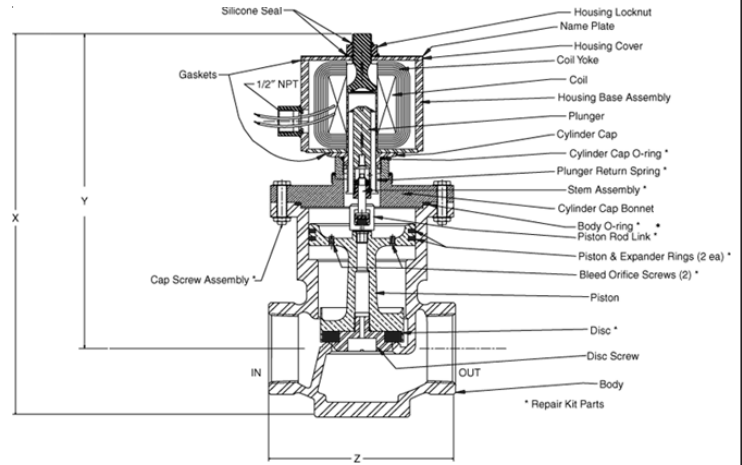
**NOTE:** Rubber seats are limited to 500 psi.

# 30,400 Series

## Dimensions, Shipping Weights, and C<sub>v</sub> Flow Factors

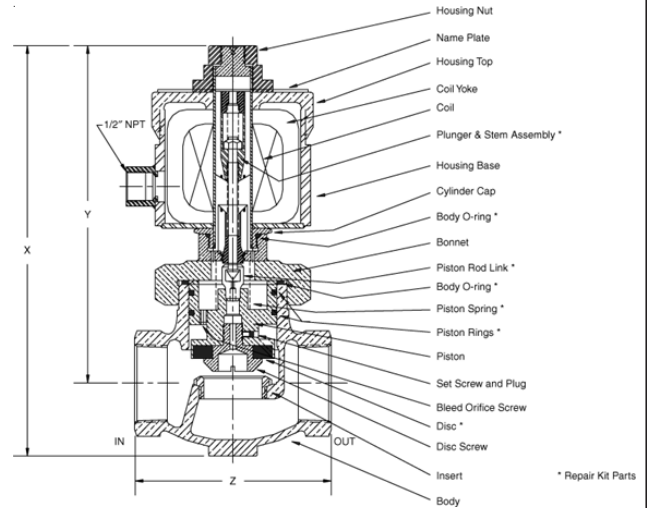


**Normally Closed 1" 31440 Valve – (shown with explosion-proof NEMA 7 coil. Housing an AC coil, and a soft pilot seat)**



**Normally Closed 2" 31570 Valve – (shown with NEMA 4 coil. Housing an AC coil, and a soft pilot seat)**

**Normally Open 1 1/2" 32460 Valve – (shown with explosion-proof NEMA 7 coil, housing and AC coil)**



### 30,400 Series Normally Closed Bronze

Catalog Num. Prefix	Pipe Size	Main Seat Orifice Dia	X	Y	Z	Shipping Weight (lbs.)	C <sub>v</sub>
31400	1/4"	3/8"	7 7/8"	7"	2 11/16"	10	1.4
31410	3/8"	3/8"	7 7/8"	7"	2 11/16"	10	2.7
31420	1/2"	1/2"	8"	7 1/16"	3"	10	3.5
31430	3/4"	1"	8 5/8"	7 3/8"	4"	12	8.4
31440	1"	1"	8 5/8"	7 3/8"	4"	12	9.5
31450	1 1/4"	1 1/2"	10 1/8"	8 1/4"	5 1/16"	26	19.5
31460	1 1/2"	1 1/2"	10 1/8"	8 1/4"	5 1/16"	26	21.0
31570	2"	2"	13 3/16"	10 5/16"	6 1/8"	38	43.0
31580	2 1/2"	3"	14 1/4"	10 3/8"	8 1/2"	76	63.0
31590	3"	3"	14 1/4"	10 3/8"	8 1/2"	76	71.0

### 30,400 Series Normally Open Bronze

Catalog Num. Prefix	Pipe Size	Main Seat Orifice Dia	X	Y	Z	Shipping Weight (lbs.)	C <sub>v</sub>
32400	1/4"	3/8"	8 5/8"	7 3/4"	2 11/16"	10	1.4
32410	3/8"	3/8"	8 5/8"	7 3/4"	2 11/16"	10	2.7
32420	1/2"	1/2"	8 3/4"	7 13/16"	3"	10	3.5
32430	3/4"	1"	9 3/8"	8 1/16"	4"	12	8.4
32440	1"	1"	9 3/8"	8 1/16"	4"	12	9.5
32450	1 1/4"	1 1/2"	10 1/2"	8 7/8"	5 1/16"	26	19.5
32460	1 1/2"	1 1/2"	10 1/2"	8 7/8"	5 1/16"	26	21.0

# 30,400 Series

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## NORMAL POSITION OF VALVE (DE-ENERGIZED)

- 1 Normally Closed
- 2 Normally Open

## VALVE MATERIAL & CYLINDER CAP STYLE

- 4 Bronze and threaded cylinder cap
- 5 Bronze and flanged cylinder cap

## 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"

## 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 PRESSURE (psig)

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

## OPTIONS

- P Position indicator
- M Manual opening
- T Manual throttling

## 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