

ATKOMATIC

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

8,000 Series

**Stainless Steel, Pilot-Piston, 5 to 4000 PSIG
High Pressure Valve Configurable for Variety of Fluid Applications**

Features

- Pressure to 4000 psig depending on fluid and coil type
- Pilot operated—require a minimum pressure differential of 5 psig
- Full ported valves
- Available in normally open and normally closed versions
- Fluid temperatures of -423° F through +500° F
- 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
- Will handle fluids with viscosity up to 200 SUS
- Suitable for use with wide variety of fluid including: air, gasses, liquids, hydraulic fluids, steam, cryogenic fluids, and corrosive fluids
- Removable 316 SS body inserts (stainless steel trim)
- Optional pilot and piston seat materials of Teflon®, Kel-F, Buna-N, Viton®, EPR, or 316 stainless steel depending on fluid type and pressure
- Body seal materials of Teflon®, Viton®, Buna-N, or EPR
- Pipe ports of 1/4", through 2" NPT (1 1/2" max in 4000 psi version); British BSPT ports available
- C_v from 1.1 through 45
- Class H coils standard
- Can use a class H double wound coil (requires use with a relay to drop put primary coil winding after valve actuation) depending on pressure (for operation up to 4000 psi)
- 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

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

8,000 Series

Stainless Steel, Pilot-Piston, 5 to 4000 PSIG
 High Pressure Valve Configurable for Variety of Fluid Applications

Operational Pressures

(5 psid 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.
Single wound coils normally closed 1/4" through 2" 8000-8710							
1500	1500	1500	1000	1500	500	300	250
Single wound coils normally open 1/4" through 2" 8001-8711							
1500	800	1000	350	700	300	250	250
Double wound coils normally closed only 1/4" through 1 1/2" 8004-8604							
4000	4000	4000	2500	4000	2000	300	300

Note: Normally open valves are rated for intermittent duty only on 8000 series.

Note: Rubber seats are limited to 500 psi.

8,000 Series

Stainless Steel, Pilot-Piston, 5 to 4000 PSIG

High Pressure Valve Configurable for Variety of Fluid Applications

Dimensions, Shipping Weights, and C_v Flow Factors

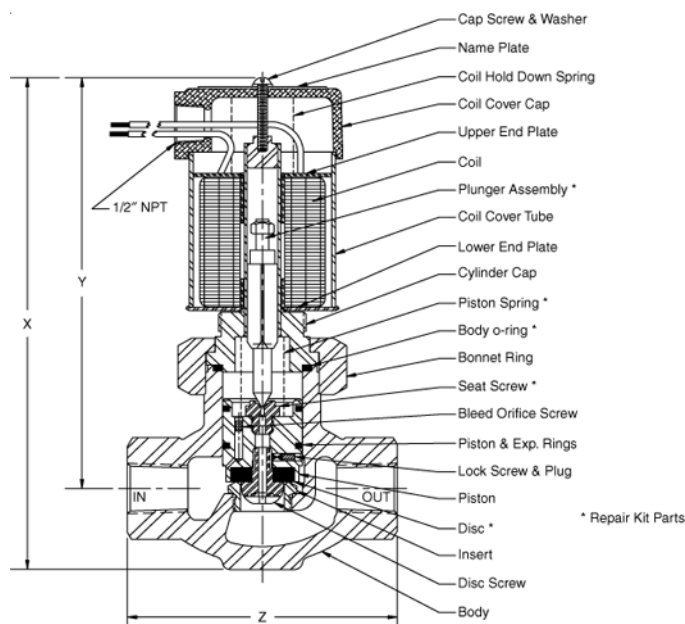
8000 Series Normally Closed, Single and Double Wound Coils

Catalog Num. Prefix		Pipe Size	Main Seat Orifice Dia	X	Y	Z	Shipping Weight (lbs.)	Cv
Single Wound Coil	Double Wound Coil							
8000	8004	1/4"	3/8"	7"	6 1/8"	3"	6	1.1
8100	8104	3/8"	3/8"	7"	6 1/8"	3"	6	2.5
8200	8204	1/2"	3/4"	8 1/2"	7 3/8"	4 5/8"	9	5.1
8300	8304	3/4"	3/4"	8 1/2"	7 3/8"	4 5/8"	9	7.5
8400	8404	1"	1"	9 3/16"	7 11/16"	5 1/4"	14	12.5
8510	8504	1 1/4"	1 1/2"	9 1/2"	7 5/8"	5 7/8"	20	19.5
8610	8604	1 1/2"	1 1/2"	9 1/2"	7 5/8"	5 7/8"	20	21.0
8710	N/A	2"	2"	11 7/8"	9 1/2"	7"	28	45.0

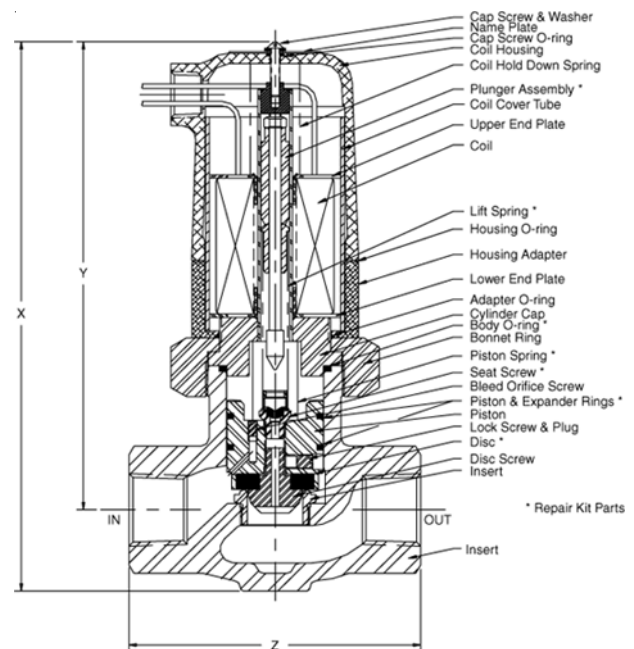
Note: 2" size available in single wound, 1500 psi max. only.

8000 Series Normally Open Single Wound Coils Only

Catalog Num. Prefix	Pipe Size	Main Seat Orifice Dia	X	Y	Z	Shipping Weight (lbs.)	Cv
8001	1/4"	3/8"	8 1/8"	7 5/16"	3"	6	1.1
8101	3/8"	3/8"	8 1/8"	7 5/16"	3"	6	2.5
8201	1/2"	3/4"	9 5/8"	8 1/2"	4 5/8"	9	5.1
8301	3/4"	3/4"	9 5/8"	8 1/2"	4 5/8"	9	7.5
8401	1"	1"	10 5/16"	8 13/16"	5 1/4"	14	12.5
5411	1 1/4"	1 1/2"	10 11/16"	8 13/16"	5 7/8"	20	19.5
8611	1 1/2"	1 1/2"	10 11/16"	8 13/16"	5 7/8"	20	21.0
8711	2"	2"	13"	10 5/8"	7"	28	45.0



Normally Closed 1/2" 8200 Valve—
shown with a NEMA 1 coil housing
and a metal pilot seat



Normally Open 1" 8401 Valve—
shown with a NEMA 4
waterproof coil housing and a
soft pilot seat

8,000 Series

How to Order

8 X X X - X X X X X X X X X X X X

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"

PRODUCT PREFIX

- 0 When a double wound coil is specified and for 1/4", 3/8", 1/2", 3/4" and 1" single wound coils.
 - 1 For 1-1/4", 1-1/2", and 2" single wound coils.
- This field conveys no meaning and is used only to match historic catalog numbers

NORMAL POSITION OF VALVE COIL TYPE (DE-ENERGIZED)

- 1 Normally Closed valve & single wound coil
- 2 Normally Open valve & single wound coil
- 3 Normally Closed valve & double wound coil

VOLTAGE AC/60 Hz

- 0 AC/50 Hz or DC Voltage
- 1 24 VAC 3 115 VAC 5 230 VAC
- 2 100 VAC 4 200 VAC

VOLTAGE AC/50 Hz

- 0 AC/60 Hz or DC Voltage
- 1 24 VAC 3 220 VAC
- 2 110 VAC 4 380 VAC

VOLTAGE DC

- 0 AC Voltage
- 1 12 VDC 3 32 VDC 5 125 VDC
- 2 24 VDC 4 72 VDC 6 250 VDC

CONNECTION TYPE

- P NPT
- J British Pipe Thread

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

MAX. OPERATING PRESS (psig)

- | | | |
|-------|-------|--------|
| A 50 | F 300 | K 1000 |
| B 75 | G 400 | L 1500 |
| C 100 | H 500 | M 2000 |
| D 150 | I 600 | N 2500 |
| E 200 | J 750 | O 3000 |
| | | P 4000 |

Viton® is a registered trademark of DuPont Dow Elastomers.
Teflon® is a registered trademark of DuPont.

For ordering wizard go to
www.circle-seal.com/atkomatic/product_selection_wizard.htm
 or request disk from 909-270-6315