

# ATKOMATIC

## 8000 Series

Stainless Steel, Pilot-piston, Pressure 5 to 4000 psig (0.4 to 276 bar)  
High Pressure Valve Configurable for Variety of Fluid Applications



### Features

- Pressure to 4000 psig depending on fluid and coil type (276 bar)
- Pilot operated: require a minimum pressure differential of 5 psig (0.4 bar)
- Full ported valves
- Available in normally open and normally closed versions
- Fluid temperatures of  $-423^{\circ}\text{F}$  ( $-253^{\circ}\text{C}$ ) through  $+500^{\circ}\text{F}$  ( $+260^{\circ}\text{C}$ )
- 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 stainless steel 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  $\frac{1}{4}$ " through 2" NPT ( $1\frac{1}{2}$ " max. in 4000 psig (276 bar) version); British BSPT ports available
- Cv 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 (276 bar))
- Coils housings available in NEMA 1 (standard), NEMA 4 (waterproof), NEMA 7 (explosion-proof for hazardous locations), and combination NEMA 4 & 7
- Manual opening device is available as an option

### Circle Seal Controls

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atkomatic solenoid

# 8000 Series

## Operational Pressures (5 psid minimum pressure differential)

Single wound coils normally closed 1/4" through 2" 8000-8710

GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
1500 / 104 bar	1500 / 104 bar	1500 / 104 bar	1000 / 69 bar	1500 / 104 bar	500 / 34.5 bar	300 / 21 bar	250 / 17.3 bar

Single wound coils normally open 1/4" through 2" 8001-8711

GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
1500 / 104 bar	800 / 55.2 bar	1000 / 69 bar	350 / 24.2 bar	700 / 48.3 bar	300 / 21 bar	250 / 17.3 bar	250 / 17.3 bar

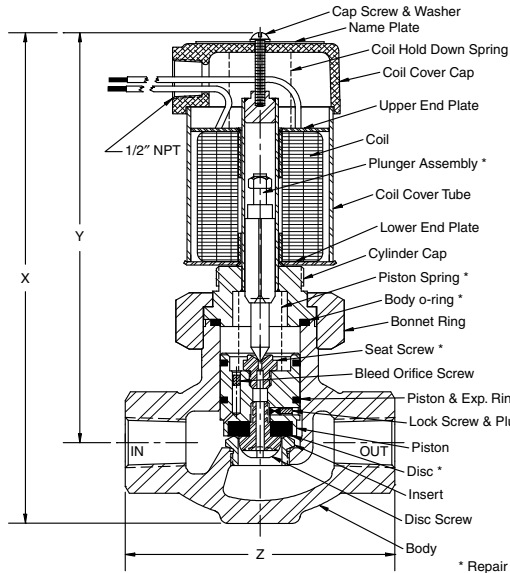
Double wound coils normally closed only 1/4" through 1 1/2" 8004-8604

GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
4000 / 276 bar	3000 / 207 bar	4000 / 276 bar	2500 / 173 bar	4000 / 276 bar	2000 / 138 bar	300 / 21 bar	300 / 21 bar

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

**Note:** Rubber seats are limited to 500 psi (34.5 bar).

## Dimensions, Shipping Weights, and Cv Flow Factors



Normally closed 1/2" 8200 valve, shown with a NEMA 1 coil housing and a metal pilot seat

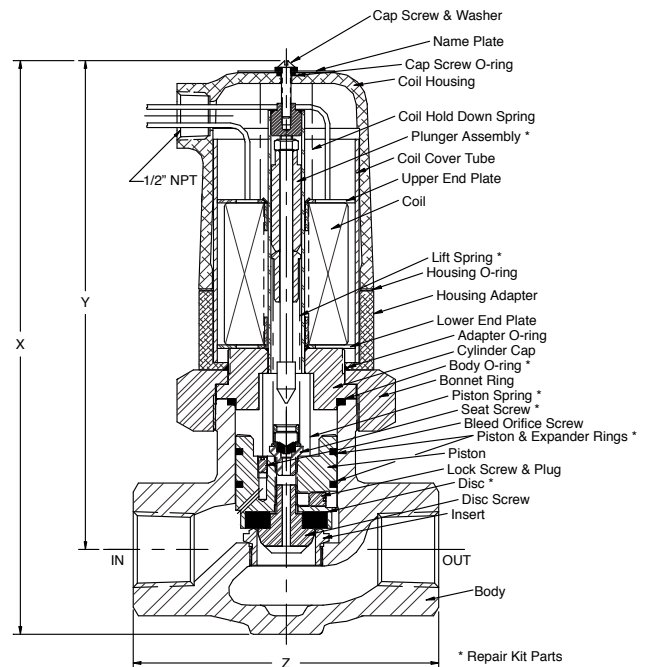
### 8000 Series Normally Closed, Single and Double Wound Coils

CATALOG NUM.	PREFIX	PIPE SIZE	MAIN SEAT ORIFICE	X	Y	Z	SHIPPING WEIGHT (lbs)	Cv
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	—	2"	2"	11 7/8"	9 1/2"	7"	28	45.0

*Note:* 2" size available in single wound, 1500 psi max. only (104 bar).

### 8000 Series Normally Open Single Wound Coils Only

CATALOG NUM. PREFIX	PIPE SIZE	MAIN SEAT ORIFICE	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
8511	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 open 1" 8401 valve, shown with a NEMA 4 waterproof coil housing and a soft pilot seat

# 8000 Series

## How to Order

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**CONNECTION SIZES**

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

**PRODUCT PREFIX**

0 1/4", 3/8", 1/2", 3/4" and 1" single wound coils and double wound coils.  
 1 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)**

0 Normally closed valve & single wound coil  
 1 Normally open valve & single wound coil  
 4 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    6 460 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**

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 N pilot & Buna N 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 N 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

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