

ATKOMATIC

4000 & 5000 Series

Bronze, Pilot-piston, Pressure 5 to 500 psig (0.4 to 34.5 bar)
Medium Pressure Valve Configurable for Variety of Fluid Applications



Features

- Pressures to 500 psig (0.4 to 34.5 bar)
- Full ported valves
- Pilot operated: require a minimum pressure differential of 5 psig (0.4 bar)
- For use with any gas or liquid (max. viscosity of 200 SSU), including steam and cryogenics, that is not harmful to bronze
- Pipe sizes of 1/4" through 1 1/2" NPT for 4000 Series and 2" through 3" NPT in 5000 Series (British BSPT ports available)
- Cv from 1.4 to 71
- Available in normally open and normally closed versions
- Fluid temperatures from -423° F to +500° F (-253° C to +260° C)
- Optional seat materials of PTFE, PCTFE, Buna N, Viton®, EPR, or metal (316 stainless steel pilot and/or brass piston seat) depending on fluid type and pressure
- Body seal materials of PTFE, Viton®, Buna N, or EPR.
- Bronze valve material (naval M Bronze)
- Removable 316 stainless steel body inserts (stainless steel trim) 4000 Series only
- Coil housings available in NEMA 1 (standard), NEMA 4 (waterproof), NEMA 7 (explosion-proof for hazardous locations), and combination NEMA 4 & 7
- Manual opening and throttling devices are available as options
- Class B coils are available for media temperatures of 0° F (-18° C) through +220° F (104° C) (available on both normally closed and normally open valves)
- Class H coils are available: recommended for media temperatures of -423° F (-253° C) through +500° F(+260° C) (available on both normally closed and normally open valves)

Circle Seal Controls

2301 Wardlow Circle • P.O. Box 3300 • Corona, CA 92880

Phone (951) 270-6200 Fax (951) 270-6201

www.circlesealcontrols.com • am_sales@circlesealcontrols.com • ind_sales@circlesealcontrols.com

atkomatic solenoid

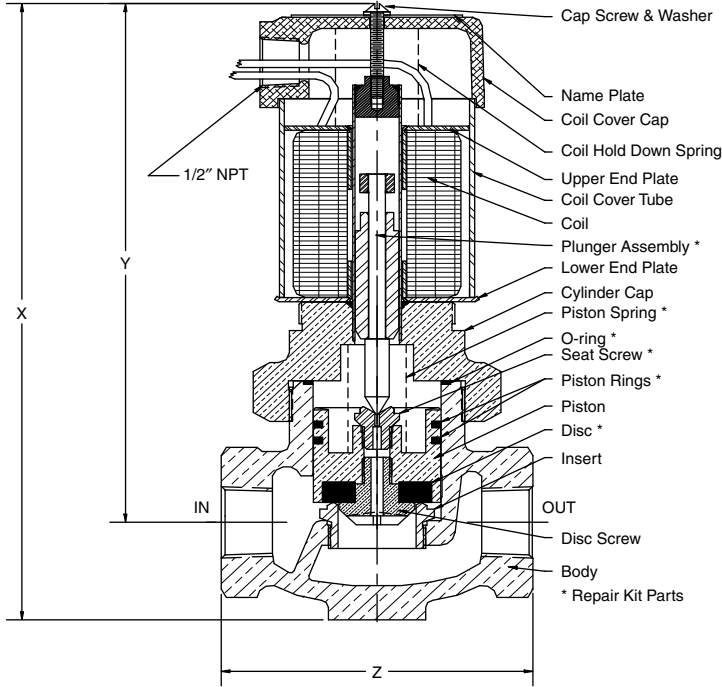
4000 & 5000 Series

Operational Pressures (5 psid minimum pressure differential)

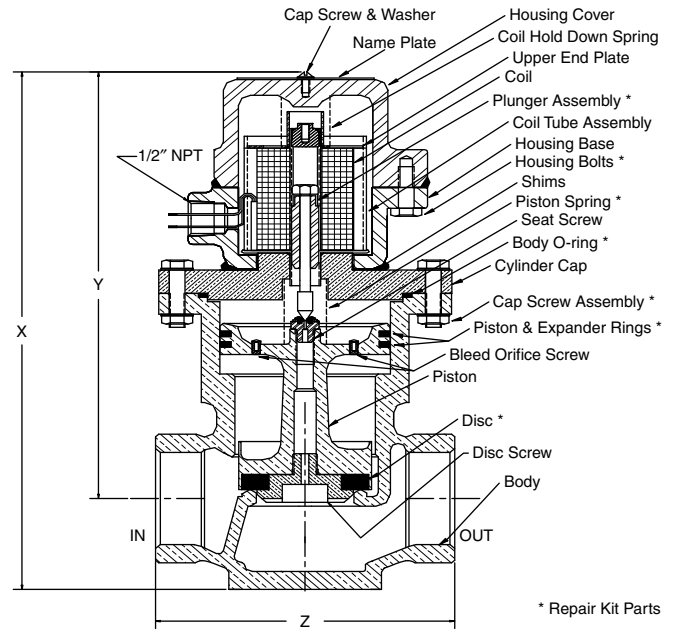
GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
500	500	500	500	500	300	200	200

Note: Normally open valves are rated for intermittent duty only unless other operational parameters are at their nominal values.

Dimensions, Shipping Weights, and Cv Flow Factors



Normally closed 1" 4408 valve, shown with a NEMA 1 coil housing and a metal pilot seat



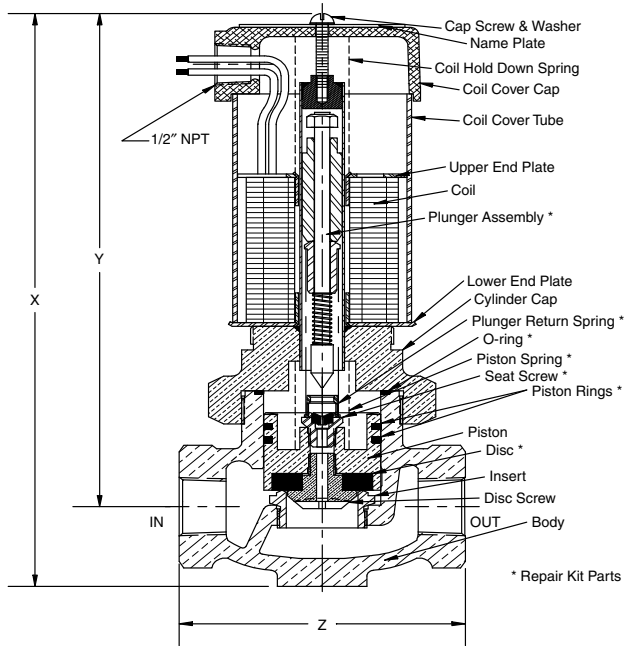
Normally closed 2" 5700 Valve, shown with a NEMA 7 explosion-proof coil housing and a soft pilot seat

Normally Closed

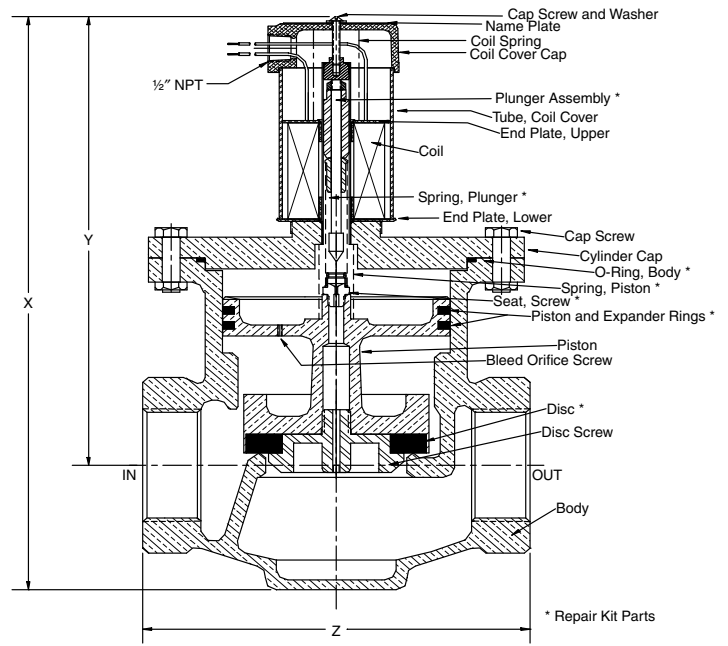
CATALOG NUM. PREFIX		PIPE SIZE	MAIN SEAT ORIFICE	X	Y	Z	SHIPPING WEIGHT (lbs)	Cv
CLASS B COIL	CLASS H COIL							
4000	4008	1/4"	3/8"	7 1/8"	6 1/4"	2 1/16"	6	1.4
4100	4108	3/8"	3/8"	7 1/8"	6 1/4"	2 1/16"	6	2.7
4200	4208	1/2"	1/2"	7 1/8"	6 1/4"	3"	8	3.5
4300	4308	3/4"	1"	8 1/4"	7"	4"	9	8.4
4400	4408	1"	1"	8 1/4"	7"	4"	9	9.5
4500	4508	1 1/4"	1 1/2"	9 13/16"	8"	5 1/16"	15	19.5
4600	4608	1 1/2"	1 1/2"	9 13/16"	8"	5 1/16"	15	21.0
5700	5708	2"	2"	12 3/8"	9 3/4"	6 1/8"	35	43.0
5800	5808	2 1/2"	3"	14 3/8"	10 1/2"	8 1/2"	35	63.0
5900	5908	3"	3"	14 3/8"	10 1/2"	8 1/2"	76	71.0

4000 & 5000 Series

Dimensions, Shipping Weights, and Cv Flow Factors



Normally open 1" 4407 valve, shown with a standard NEMA 1 coil housing and a soft pilot seat



Normally open 2 1/2" 5801 valve, shown with a NEMA 1 coil housing and a metal pilot seat

Normally Open

CATALOG NUM. PREFIX		PIPE SIZE	MAIN SEAT ORIFICE	X	Y	Z	SHIPPING WEIGHT (lbs)	Cv
CLASS B COIL	CLASS H COIL							
4001	4007	1/4"	3/8"	8 1/8"	7 1/4"	2 1/16"	6	1.4
4101	4107	3/8"	3/8"	8 1/8"	7 1/4"	2 1/16"	6	2.7
4201	4207	1/2"	1/2"	8 1/8"	7 1/4"	3"	8	3.5
4301	4307	3/4"	1"	9 7/16"	8 3/16"	4"	9	8.4
4401	4407	1"	1"	9 7/16"	8 3/16"	4"	9	9.5
4501	4507	1 1/4"	1 1/2"	11"	9 3/16"	5 1/16"	15	19.5
4601	4607	1 1/2"	1 1/2"	11"	9 3/16"	5 1/16"	15	21.0
5701	5707	2"	2"	13 3/4"	10 7/8"	6 1/8"	36	43.0
5801	5807	2 1/2"	3"	15 1/2"	11 3/8"	8 1/2"	75	63.0
5901	5907	3"	3"	15 1/2"	11 3/8"	8 1/2"	75	71.0

4000 & 5000 Series

How to Order

x x 0 x - x x x x x x x x x x x

VALVE SERIES

- 4** 4000 Series
(are 1/4" through 1 1/2")
- 5** 5000 Series
(are 2" through 3")

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"

COIL TYPE & NORMAL POSITION OF VALVE

- 0** Class B molded coil & normally closed valve
- 8** Class H molded coil & normally closed valve
- 1** Class B molded coil & normally open valve
- 7** Class H molded coil & normally open valve

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

- 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

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

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** PTFE **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** PCTFE pilot & PCTFE 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 & PCTFE disc

MAX. OPERATING PRESS (psig)

- A** 25 **F** 200
- B** 50 **G** 250
- C** 75 **H** 300
- D** 100 **I** 500
- E** 150