

ATKOMATIC

3000 Series

Bronze, Direct Lift Medium Pressure Valve to 1500 psig (104 bar)
Configurable for Variety of Fluid Applications



Features

- Direct acting valve
- Pressure to 1500 psig (104 bar) depending on fluid and orifice size
- Available in normally open and normally closed versions
- Bronze valve material (naval M bronze) % plunger is electroless nickel plated 416 stainless
- For use with any gas or liquid (max. viscosity of 200 SSU), including steam and cryogenic, that is not harmful to bronze
- Fluid temperatures from -423° to $+500^{\circ}$ F (-253° C to $+260^{\circ}$ C)
- Optional 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 sizes of $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, and 1" NPT
- British BSPT ports available
- Flow orifice sizes of $\frac{1}{16}$, $\frac{3}{32}$, $\frac{1}{8}$, & $\frac{3}{16}$ "
- Cv from 0.093 to 0.72
- Coils housings available in NEMA 1 (standard), NEMA 4 (waterproof), NEMA 7 (explosion-proof for hazardous locations), and combination NEMA 4 & 7
- Class B coils are available for media temperatures of 0° through 220° F
- Class H coils are available: recommended for media temperatures of -423° through $+500^{\circ}$ F (-253° C to $+260^{\circ}$ C) (is standard on normally open version)

Circle Seal Controls

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atkomatic solenoid

3000 Series

Operational Pressures (No minimum pressure differential)

Normally Closed 3000–3400 & 3008–3408 Metal Seats

ORIFICE SIZE	GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
	AC	DC	AC	DC	AC	DC	AC	DC
1/16	1000*	1000*	1000*	1000	1000*	500	250	250
3/32	1000*	500	800	350	500	150	250	250
1/8	500	200	400	125	250	60	250	125
3/16	175	50	125	35	125	20	165	35

Normally Closed 3000–3400 & 3008–3408 Soft Seats (Buna N, Viton®, EPR, Teflon®, & Kel-F®)

ORIFICE SIZE	GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
	AC	DC	AC	DC	AC	DC	AC	DC
1/16	1000*	1000*	1000*	765	1000*	500	250	250
3/32	1000*	425	675	300	425	170	250	250
1/8	425	170	350	100	200	50	250	100
3/16	150	40	100	30	100	17	140	30

Normally Open 3001–3401 Metal Seats

ORIFICE SIZE	GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
	AC	DC	AC	DC	AC	DC	AC	DC
1/16	1000*	800	1000	350	700	300	250	250
3/32	500	250	300	150	275	90	250	250
1/8	225	100	200	50	125	35	200	150
3/16	65	25	40	15	25	10	50	25

Normally Open 3001–3401 Soft Seats (Buna N, Viton®, EPR, Teflon®, & Kel-F®)

ORIFICE SIZE	GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
	AC	DC	AC	DC	AC	DC	AC	DC
1/16	1000*	680	1000	300	600	250	250	250
3/32	425	200	250	125	230	75	200	200
1/8	190	85	170	40	100	30	170	125
3/16	65	20	35	12	20	8	40	20

* 1500 psi for 1/4, 3/8, and 1/2" sizes only

NOTE: Normally open 3001 Series valves are subject to the intermittent operation restrictions described on page 8.

NOTE: Rubber seats are limited to 500 psi

Normally Open 3007–3407 Soft Seats (Buna N, Viton®, EPR, Teflon®, & Kel-F®)

ORIFICE SIZE	GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
	AC	DC	AC	DC	AC	DC	AC	DC
1/16	1000	1000	1000	765	1000	500	250	250
3/32	1000	425	675	300	425	170	250	250
1/8	425	170	350	100	200	50	250	100
3/16	150	40	100	30	100	17	140	30

3000 Series

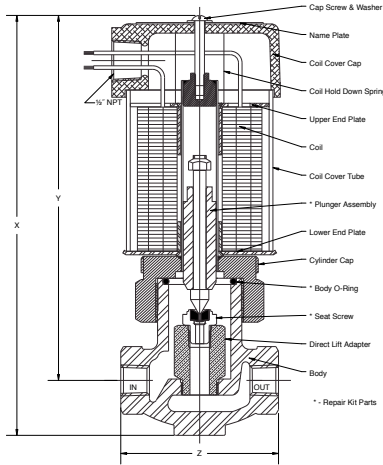
Dimensions and Shipping Weights

3000 Series Normally Closed Bronze

CATALOG NUM. PREFIX			PIPE SIZE	X	Y	Z	SHIPPING WEIGHT (lbs)
CLASS B COIL	CLASS H COIL						
3000	3008		1/4"	7 ⁵ / ₁₆ "	6 ¹ / ₂ "	2 ¹ / ₁₆ "	5
3100	3108		3/8"	7 ⁵ / ₁₆ "	6 ¹ / ₂ "	2 ¹ / ₁₆ "	5
3200	3208		1/2"	7 ⁵ / ₁₆ "	6 ¹ / ₂ "	3"	6
3300	3308		3/4"	7 ¹⁵ / ₁₆ "	6 ⁵ / ₈ "	3 ³ / ₄ "	7
3400	3408		1"	7 ¹⁵ / ₁₆ "	6 ⁵ / ₈ "	3 ³ / ₄ "	7

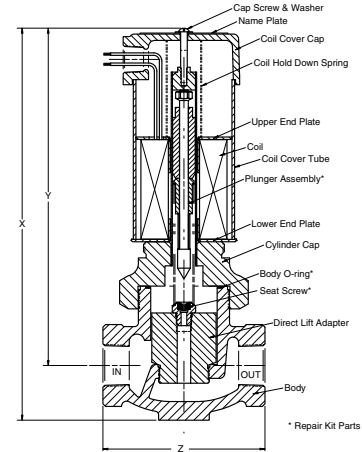
3000 Series Normally Open Bronze

CATALOG NUM. PREFIX			PIPE SIZE	X	Y	Z	SHIPPING WEIGHT (lbs)
CLASS H COIL							
3001/3007			1/4"	9 ³ / ₃₂ "	8 ³ / ₁₆ "	2 ¹ / ₁₆ "	7
3101/3107			3/8"	9 ³ / ₃₂ "	8 ³ / ₁₆ "	2 ¹ / ₁₆ "	7
3201/3207			1/2"	9 ³ / ₁₆ "	8 ³ / ₁₆ "	3"	7
3301/3307			3/4"	9 ¹ / ₂ "	8 ¹ / ₄ "	3 ³ / ₄ "	8
3401/3407			1"	9 ¹ / ₂ "	8 ¹ / ₄ "	3 ³ / ₄ "	8



Cv Flow Factors

ORIFICE SIZE	Cv
1/16	0.093
3/32	0.22
1/8	0.44
3/16	0.72



Normally closed 1/4" 3000 valve, shown with a NEMA 1 coil housing and a soft seat

Normally open 1/4" 3001 valve, shown with a NEMA 1 coil housing and a soft seat

How to Order

3 x 0 x - x x x x x x x x x x

PIPE THREAD SIZE

0 1/4"	3 3/4"
1 3/8"	4 1"
2 1/2"	

PLUNGER/ORIFICE STYLE & COIL TYPE & NORMAL POSITION OF VALVE

- 0 Class B molded coil, normally closed valve
- 1 Class H molded coil, normally open valve
- 8 Class H molded coil, normally closed valve

VOLTAGE AC/60 Hz

- 0 AC/50 Hz or DC voltage
- 1 24 VAC 2 100 VAC 3 115 VAC
- 4 200 VAC 5 230 VAC 6 460 VAC

VOLTAGE AC/50 Hz

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

VOLTAGE DC

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

CONNECTION TYPE

- P NPT
- J British pipe thread

COIL HOUSING

- E Explosion-proof
- W Waterproof
- S Standard
- C Water- & explosion-proof

FLUID MEDIA TYPE

- 1 Gas
- 2 Liquid up to 40 SUS
- 3 Liquid 40 SUS to 200 SUS
- 4 Steam
- 5 Cryogenic

SEAL MATERIAL

- A Teflon®
- B Buna N
- C Viton®
- D EPR

SEAT MATERIAL

- A Teflon®
- B Buna N
- C Viton®
- D EPR
- E Kel-F®
- F Stainless

ORIFICE SIZE

1 1/16	2 3/32	3 1/8
4 3/16	5 5/16	6 3/8

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