

# ATKOMATIC

## 16000 Series

Stainless Steel, Direct Lift, Pressure 0 to 6000 psig (414 bar)  
High Pressure Valve Configurable for a Variety of Fluid Applications



### Features

- Direct acting valve
- Pressure to 6000 psig 414 bar depending on coil type, fluid and orifice size
- Available in normally open and normally closed versions
- 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
- Media temperature from  $-423^{\circ}\text{F}$  to  $+500^{\circ}\text{F}$  ( $-253^{\circ}\text{C}$  to  $+260^{\circ}\text{C}$ )
- Suitable for use with wide variety of fluid including: air, gasses, liquids, hydraulic fluids, steam, cryogenic fluids, and corrosive fluids
- Optional seat materials of PTFE, PCTFE, Buna N, Viton<sup>®</sup>, EPR, or 316 stainless steel depending on fluid type and pressure
- Body seal materials of PTFE, Viton<sup>®</sup>, Buna N, or EPR.
- Pipe sizes from  $\frac{1}{4}$ " through 1" NPT (British BSBT ports available)
- Flow orifices of  $\frac{1}{16}$ ",  $\frac{3}{32}$ ",  $\frac{1}{8}$ ", or  $\frac{3}{16}$ "
- Cv from 0.093 to 0.72
- 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
- Coil housings available in NEMA 1 (standard), NEMA 4 (waterproof), NEMA 7 (explosion-proof for hazardous locations), and combination NEMA 4 & 7

### Circle Seal Controls

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atkomatic solenoid

# 16000 Series

## Operational Pressures (No minimum pressure differential)

Single wound coils, metal seats, normally closed 16000–16400

ORIFICE SIZE	GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
	AC	DC	AC	DC	AC	DC	AC	DC
1/16	2500	1500	1,800	900	1500	500	300	300
3/32	1000	500	800	350	500	170	300	300
1/8	500	190	400	125	250	60	300	125
3/16	175	55	125	35	125	20	125	35

Single wound coils, PTFE - PCTFE, soft seats, normally closed 16000–16400

ORIFICE SIZE	GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
	AC	DC	AC	DC	AC	DC	AC	DC
1/16	500	500	500	500	500	340	300	300
3/32	500	425	500	300	425	150	300	300
1/8	425	160	340	100	210	40	300	100
3/16	150	50	100	30	100	12	100	30

Single wound coils, metal seats, normally open 16001–16401

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

Single wound coils, soft seats, normally open 16001–16401

ORIFICE SIZE	GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
	AC	DC	AC	DC	AC	DC	AC	DC
1/16	1500	680	850	300	600	250	300	300
3/32	425	200	250	130	230	75	300	150
1/8	200	85	170	40	100	30	170	40
3/16	55	20	85	12	20	8	85	12

Double wound coils, metal seats 16004–16404

ORIFICE SIZE	GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
	AC	DC	AC	DC	AC	DC	AC	DC
1/16	6000	4000	6000	3500	5000	2500	300	300
3/32	3500	2000	3000	1500	3000	1000	300	300
1/8	2000	800	1500	600	1,200	400	300	300
3/16	700	250	600	200	500	175	300	200

Double wound coils, soft seats 16004–16404

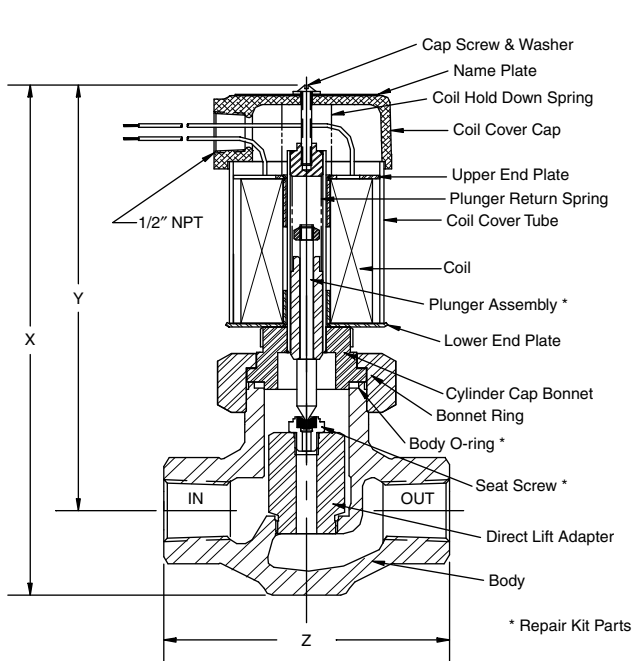
ORIFICE SIZE	GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
	AC	DC	AC	DC	AC	DC	AC	DC
1/16	6000	4000	5500	3000	4,250	2,100	300	300
3/32	3000	1,700	2,600	1,300	2,250	850	300	300
1/8	1,700	680	1,275	500	1000	425	300	300
3/16	600	200	500	170	425	150	300	170

Note: Normally open valves are rated for intermittent duty only on 16000 Series valves.

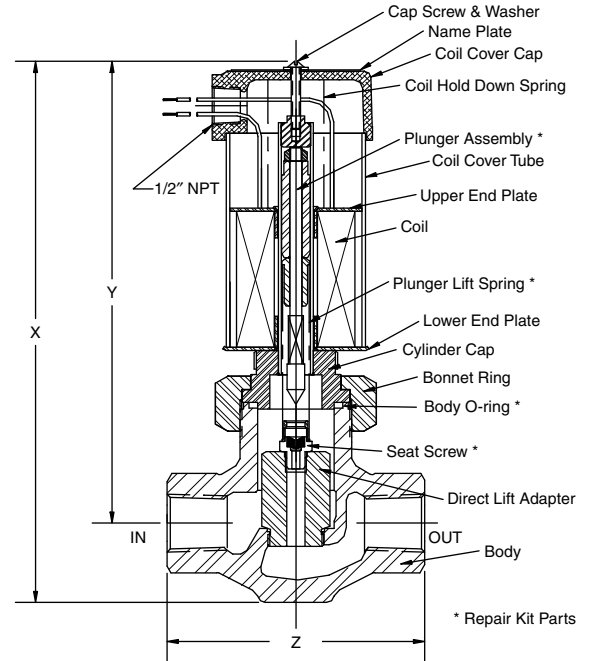
Note: Buna N, Viton® and EPR seats are limited to 500 psig (34.5 barg).

# 16000 Series

## Dimensions and Shipping Weights



Normally closed 16200 1/2" valve, shown with a NEMA 1 coil housing and a soft seat



Normally open 16201 1/2" valve, shown with a NEMA 1 coil housing and a soft seat

### 16000 Series Normally Closed, Single and Double Wound Coils

CATALOG NUM. PREFIX		PIPE SIZE	X	Y	Z	SHIPPING WEIGHT (lbs)
SINGLE WOUND COIL	DOUBLE WOUND COIL					
16000	16004	1/4"	7"	6 1/8"	3"	6
16100	16104	3/8"	7"	6 1/8"	3"	6
16200	16204	1/2"	8 1/2"	7 3/8"	4 3/8"	9
16300	16304	3/4"	8 1/2"	7 3/8"	4 3/8"	9
16400	16404	1"	9 3/16"	7 1/16"	5 1/4"	14

### 16000 Series Normally Open, Single Wound Coils Only

CATALOG NUM. PREFIX	PIPE SIZE	X	Y	Z	SHIPPING WEIGHT (lbs)
16001	1/4"	8 1/8"	7 3/16"	3"	6
16101	3/8"	8 1/8"	7 3/16"	3"	6
16201	1/2"	9 5/8"	8 1/2"	4 5/8"	9
16301	3/4"	9 5/8"	8 1/2"	4 3/8"	9
16401	1"	10 3/16"	8 13/16"	5 1/4"	14

### Cv Flow Factors

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

# 16000 Series

## How to Order

16 x 0 x - x x x x x x x x x x

### CONNECTION SIZE

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

### COIL TYPE & NORMAL

#### (DE-ENERGIZED) VALVE POSITION

- 0 Single wound Class H molded coil & normally closed
- 4 Double wound Class H fiberglass coil & normally closed
- 1 Single wound Class H molded coil & normally open

### VOLTAGE AC/60 Hz

- 0 AC/50 Hz or DC voltage
- 1 24 VAC      4 200 VAC
- 2 100 VAC    5 230 VAC
- 3 115 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      4 72 VDC
- 2 24 VDC      5 125 VDC
- 3 32 VDC      6 250 VDC

### 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 200 SUS
- 4 Steam
- 5 Cryogenic

### SEAL MATERIAL

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

### SEAT MATERIAL

- A PTFE
- B Buna N
- C Viton®
- D EPR
- E PCTFE
- F Metal 316

### ORIFICE SIZE

- 1 1/16"
- 2 3/32"
- 3 1/8"
- 4 3/16"

### CONNECTION TYPE

- P NPT
- J British pipe thread

Viton® is a registered trademark of DuPont Dow Elastomers.  
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