

ATKOMATIC

30800 Series

Stainless Steel, Semi-direct Lift, Pressure 0 to 3000 psig (207 bar)
High Pressure Valve Configurable for a Variety of Fluid Applications



atkomatic solenoid

Features

- 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
- Semi-direct lift action for operation down to zero pressure differential
- Operation up to 3000 psig (207 bar)
- Media temperatures from -423°F to $+500^{\circ}\text{F}$ (-253°C to $+260^{\circ}\text{C}$)
- Will handle fluids with viscosity up to 150 SUS
- Suitable for use with wide variety of fluid including: air, gasses, liquids, hydraulic fluids, steam, cryogenic fluids, and corrosive fluids
- Optional seat materials of Teflon[®], PCTFE, Buna N, Viton[®], EPR, or metal (316 pilot seat and/or 316 piston seat) depending on fluid type and pressure
- Body seal materials of Teflon[®], Viton[®], Buna N, or EPR
- Heaviest duty and most rugged construction
- Removable 316 stainless steel body inserts (stainless steel trim)
- Available in normally closed configuration from $\frac{1}{4}$ " to 2" ports
- Available in normally open configuration from $\frac{1}{4}$ " to $1\frac{1}{2}$ " ports
- British BSPT ports are available
- Full ported valves
- Cv from 2.5 to 45 in normally closed valves
- Cv from 2.5 to 21.5 in normally open valves
- Class H coils are standard
- Coil 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
- Valve position indicator option is available

Circle Seal Controls

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30800 Series

Operational Pressures (No minimum pressure differential)

Normally closed, 1/4"-1", 31800-31860

GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
3000	1500	3000	1000	3000	1000	300	300

Normally closed, 1 1/4"-2" with threaded cylinder cap, 31851-31871

GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
1500	1500	1500	1000	1500	1000	300	300

Normally open, 1/4"-1", 32800-32860

GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
3000	2000	3000	1500	3000	1,250	300	300

Normally open, 1 1/4"-2" with threaded cylinder cap, 32851-32871

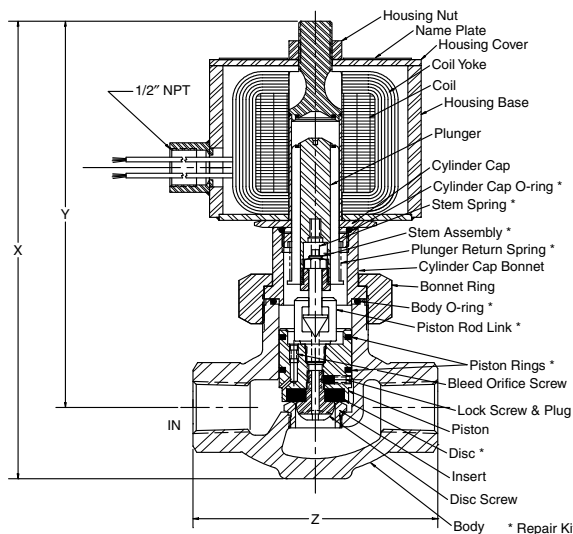
GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
1500	1500	1500	1000	1500	1000	300	300

Note: Normally open valves are rated for intermittent duty only on 30000 Series valves and are not recommended for cryogenic service above 50 psig.

Note: Normally open 30000 Series valves are not available with 50 Hz coils for operational pressures above 1500 psi.

Note: Buna N, Viton® and EPR seats are limited to 500 psi

Dimensions, Shipping Weights, and Cv Flow Factors



Normally closed 3/4" 31830 valve, shown with NEMA 1 coil housing, AC coil and a metal seat

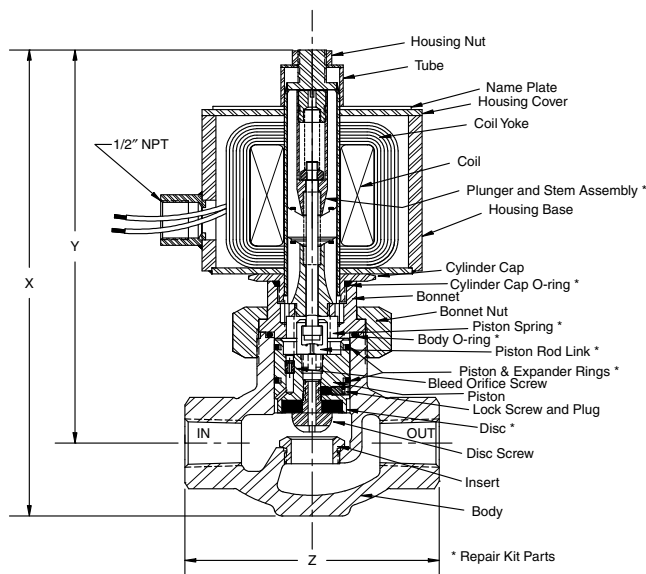
30800 Series Normally Closed Stainless Steel

CATALOG NUM.	PIPE SIZE	MAIN SEAT ORIFICE	X	Y	Z	SHIPPING WEIGHT (lbs)	Cv
31800	1/4"	3/8"	8 1/16"	7 1/16"	3"	10	1.1
31810	3/8"	3/8"	8 1/16"	7 1/16"	3"	10	2.5
31820	1/2"	3/4"	8 1/16"	7 9/16"	4 5/8"	13	5.1
31830	3/4"	3/4"	8 1/16"	7 9/16"	4 5/8"	13	7.5
31840	1"	1"	9 1/2"	8 1/16"	5 1/4"	19	12.5
31850	1 1/4"	1 1/2"	10 1/2"	8 3/8"	7 5/8"	50	21.0
31860	1 1/2"	1 1/2"	10 1/2"	8 3/8"	7 5/8"	50	21.5
31851	1 1/4"	1 1/2"	10 3/16"	8 3/8"	5 7/8"	22	21.0
31861	1 1/2"	1 1/2"	10 3/16"	8 3/8"	5 7/8"	22	21.5
31871	2"	2"	12 3/8"	9 13/16"	7"	32	45.0

Note: 1 1/4" & 1 1/2" valve models 31850 and 31860 are rated for 3000 psig, constructed with a flanged body & cylinder cap and models 31851, 31861, and 31871 are constructed with a threaded cylinder cap & body and are rated for 1500 psi.

30800 Series Normally Open Stainless Steel

CATALOG NUM.	PIPE SIZE	MAIN SEAT ORIFICE	X	Y	Z	SHIPPING WEIGHT (lbs)	Cv
32800	1/4"	3/8"	8 5/8"	7 5/8"	3"	10	1.1
32810	3/8"	3/8"	8 5/8"	7 5/8"	3"	10	2.5
32820	1/2"	3/4"	9 1/2"	8"	4 5/8"	13	5.1
32830	3/4"	3/4"	9 1/2"	8"	4 5/8"	13	7.3
32840	1"	1"	10 1/16"	8 9/16"	5 1/4"	19	12.5
32851	1 1/4"	1 1/2"	10 1/2"	8 1/2"	5 7/8"	22	21.0
32861	1 1/2"	1 1/2"	10 1/2"	8 1/2"	5 7/8"	22	21.5



Normally open 3/4" 32830 valve, shown with NEMA 1 coil housing, AC coil and a soft pilot seat

30800 Series

How to Order

PED3 x **8** x x - x x x x x x x x x x x x

PED CERTIFICATION (optional, otherwise blank)

NORMAL POSITION OF VALVE (DE-ENERGIZED)
1 Normally closed
2 Normally open

CONNECTION SIZES
0 ¼"
1 ⅜" **4** 1" **7** 2"
2 ½" **5** 1¼" **8** 2½"
3 ¾" **6** 1½" **9** 3"

BODY STYLE
0 Threaded cylinder cap on ¼"-1" and flanged cylinder cap on 1¼"-1½" (3000 psig)
1 Screwed cylinder cap on 1¼"-2" (1500 psig)

VOLTAGE AC/60 Hz
0 AC/50 Hz or DC voltage
1 100 VAC **3** 200 VAC **5** 460 VAC
2 115 VAC **4** 230 VAC

VOLTAGE AC/50 Hz
0 AC/60 Hz or DC voltage
1 110 VAC **2** 220 VAC

VOLTAGE DC
0 AC voltage
1 12 VDC **3** 48 VDC **5** 250 VDC
2 24 VDC **4** 125 VDC

CONNECTION TYPE
P NPT
J British pipe thread

MAX. OPERATING PRESS (psig)
A 75 **F** 300 **K** 1,200
B 100 **G** 350 **L** 1500
C 150 **H** 500 **M** 3000
D 200 **I** 750 **N** 2000
E 250 **J** 1000 **O** 50

OPTIONS
P Position indicator
M Manual opening

COIL HOUSING
A ATEX approved 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 PCTFE pilot & PCTFE 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 & PCTFE disc

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