

# 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  $-423^{\circ}\text{F}$  to  $+500^{\circ}\text{F}$  ( $-253^{\circ}\text{C}$  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 PTFE, 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 PTFE, 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

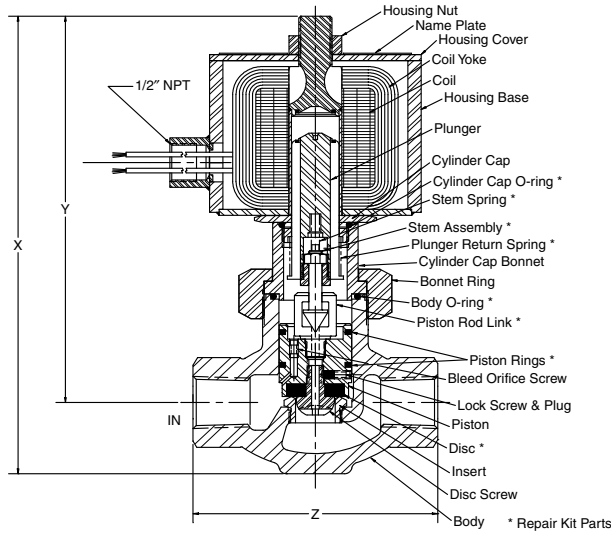
GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
1500	1500	1500	1000	1500	1000	300	300

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

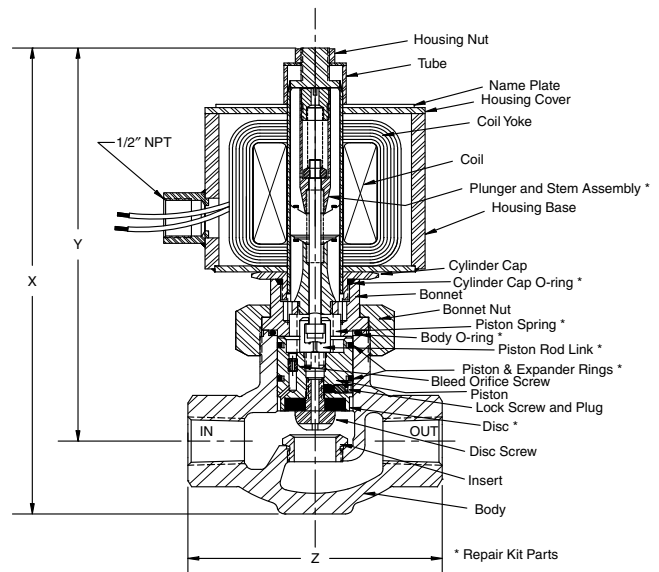
### 30800 Series Normally Closed Stainless Steel

CATALOG NUM.	PIPE SIZE	MAIN SEAT ORIFICE	X	Y	Z	SHIPPING WEIGHT (lbs)	Cv
31800	1/4"	3/16"	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 7/16"	4 3/8"	13	5.1
31830	3/4"	3/4"	8 1/16"	7 7/16"	4 7/8"	13	7.5
31840	1"	1"	9 1/2"	8 3/8"	5 1/4"	19	12.5
31850	1 1/4"	1 1/2"	10 1/2"	8 3/8"	7 3/8"	50	21.0
31860	1 1/2"	1 1/2"	10 1/2"	8 3/8"	7 3/8"	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 1 3/16"	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"	3/16"	8 3/8"	7 3/8"	3"	10	1.1
32810	3/8"	3/8"	8 3/8"	7 3/8"	3"	10	2.5
32820	1/2"	3/4"	9 1/2"	8"	4 3/8"	13	5.1
32830	3/4"	3/4"	9 1/2"	8"	4 3/8"	13	7.3
32840	1"	1"	10 1/2"	8 3/8"	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*

**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** 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 N disc  
**I** Metal pilot & Viton® disc  
**J** Metal pilot & EPR disc  
**K** Metal pilot & PCTFE disc

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