# ΑτκοΜΑΤΙΟ

# **30800 Series**

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



### **Features**

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Stainless steel construction on all wetted parts: 316	Heaviest duty and most rugged construction
for machined parts and CF8M for cast parts	Removable 316 stainless steel body inserts (stainless
Plunger material is 416 stainless that is treated for	steel trim)
increased corrosion resistance	Available in normally closed configuration from ¼
Semi-direct lift action for operation down to zero	to 2 <sup>"</sup> ports
pressure differential	• Available in normally open configuration from 1/4" to
<ul> <li>Operation up to 3000 psig (207 bar)</li> </ul>	1½" ports
<ul> <li>Media temperatures from –423° F to +500° F (-253° C</li> </ul>	British BSPT ports are available
to +260° C)	Full ported valves
<ul> <li>Will handle fluids with viscosity up to 150 SUS</li> </ul>	<ul> <li>Cv from 2.5 to 45 in normally closed valves</li> </ul>
• Suitable for use with wide variety of fluid including:	<ul> <li>Cv from 2.5 to 21.5 in normally open valves</li> </ul>
air, gasses, liquids, hydraulic fluids, steam, cryogenic	<ul> <li>Class H coils are standard</li> </ul>
fluids, and corrosive fluids	Coil housings available in NEMA 1 (standard),
<ul> <li>Optional seat materials of Teflon<sup>®</sup>, PCTFE, Buna N,</li> </ul>	NEMA 4 (waterproof), NEMA 7 (explosion-proof for
Viton <sup>®</sup> , EPR, or metal (316 pilot seat and/or 316	hazardous locations), and combination NEMA 4 & 7
piston seat) depending on fluid type and pressure	<ul> <li>Manual opening device is available as an option</li> </ul>
<ul> <li>Body seal materials of Teflon<sup>®</sup>, Viton<sup>®</sup>, Buna N, or EPR</li> </ul>	<ul> <li>Valve position indicator option is available</li> </ul>

# enoir

### **Circle Seal Controls**

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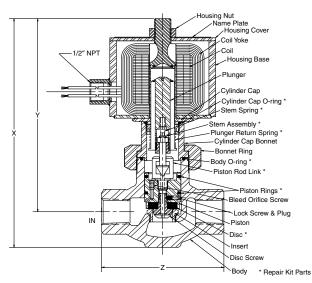
# 30800 Series

### **Operational Pressures** (No minimum pressure differential)

Normally closed, ¼″–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, 1¼ <sup>"</sup> -2 <sup>"</sup> with threaded cylinder cap, 31851–31871								
GAS	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, ¼″–1″, 32800–32860								
GASES		LIQUIDS	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, 1¼–2 <sup>″</sup> 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<sup>®</sup> and EPR seats are limited to 500 psi

### Dimensions, Shipping Weights, and Cv Flow Factors

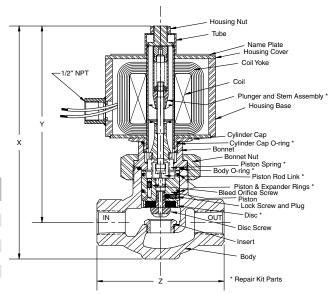


Normally closed ¾" 31830 valve, shown with NEMA 1 coil housing, AC coil and a metal seat

### **30800 Series Normally Closed Stainless Steel**

CATALOG NUM. PREFIX	PIPE SIZE	MAIN SEAT ORIFICE	х	Y	z	SHIPPING WEIGHT <i>(Ibs)</i>	Cv
31800	1⁄4″	∛8″	8¼6″	7҄%б″	3″	10	1.1
31810	⅔″	¾″	81⁄16″	7½6″	3″	10	2.5
31820	1⁄2″	3⁄4″	8¹¼6″	7%6″	4%″	13	5.1
31830	3⁄4″	3⁄4″	8¹¼6″	7%6″	4%″	13	7.5
31840	1″	1″	91⁄2″	81⁄16″	5¼″	19	12.5
31850	11⁄4″	11⁄2″	10½″	8%″	7%″	50	21.0
31860	11⁄2″	11⁄2″	10½″	8%″	7%″	50	21.5
31851	1¼″	11⁄2″	10¾6″	8%″	5%″	22	21.0
31861	11⁄2″	11⁄2″	10¾6″	8%″	5%″	22	21.5
31871	2″	2″	12%″	9 <sup>1</sup> ¾6″	7″	32	45.0

Note:  $1\frac{3}{4}$  %  $1\frac{1}{2}$  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. PREFIX	PIPE SIZE	MAIN SEAT ORIFICE	x	Y	Z	SHIPPING WEIGHT <i>(Ibs)</i>	Cv
32800	1⁄4″	∛%″	8%″	7%″	3″	10	1.1
32810	⅔″	∛%″	8%″	7%″	3″	10	2.5
32820	1⁄2″	3⁄4″	9½″	8″	4%″	13	5.1
32830	3⁄4″	3⁄4″	9½″	8″	4%″	13	7.3
32840	1″	1″	101⁄16″	8%6″	5¼″	19	12.5
32851	1¼″	11⁄2″	10½″	81⁄2″	5%″	22	21.0
32861	11⁄2″	11⁄2″	10½″	81⁄2″	5%″	22	21.5
32830 32840 32851	3⁄4″ 1″ 1½″	3⁄4″ 1″ 11⁄2″	9½″ 10‰″ 10½″	8″ 8%6″ 8½″	4%″ 5¼″ 5%″	13 19 22	7.3 12.5 21.0

Normally open ¾″ 32830 valve, shown with NEMA 1 coil housing, AC coil and a soft pilot seat

## **30800 Series**

### How to Order

<b>PED3</b> $x$ <b>8</b> $x$ $x - x$ $x$ $x$ $x$ $x$ (optional, otherwise blank) <i>NORMAL POSITION</i> <i>OF VALVE (DE-ENERGIZED)</i> 1 Normally closed 2 Normally open <i>CONNECTION SIZES</i> 0 $\frac{1}{8''}$ 4 1" 7 2" 2 $\frac{1}{2}$ 5 $\frac{1}{4''}$ 8 $\frac{2}{2}$ 3 $\frac{3}{4''}$ 6 $\frac{1}{2}$ 9 $\frac{3}{3'}$ <i>BODY STYLE</i> 0 Threaded cylinder cap on $\frac{1}{4''} - \frac{1}{2''}$ (3000 psig) 1 Screwed cylinder cap on $\frac{1}{4''} - \frac{1}{2''}$ (3000 psig) 1 Screwed cylinder cap on $\frac{1}{4''} - \frac{1}{2''}$ (1500 psig) 1 Screwed cylinder cap on $\frac{1}{4''} - \frac{1}{2''}$ (1500 psig) 4 AC/50 Hz or DC voltage 1 100 VAC 3 200 VAC 5 460 VAC 2 115 VAC 4 230 VAC <i>VOLTAGE AC/50 Hz</i> 0 AC/60 Hz or DC voltage	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         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
VOLTAGE AC/50 Hz         0       AC/60 Hz or DC voltage         1       110 VAC       2       220 VAC         VOLTAGE DC	•