# **А**ткоматіс

# 30400 Series

Bronze, Semi-direct Lift, Pressure 0 to 1500 psig (104 bar) Medium Pressure Valve, Configurable for Variety of Fluid Applications



#### Features

<u>i catales</u>	
<ul> <li>Semi-direct lift action for operation down to zero pressure differential</li> </ul>	<ul> <li>Removable 316 stainless steel body inserts (stainless steel trim)</li> </ul>
Operation up to 1500 psig (104 bar)	Available in normally closed configuration from ¼ <sup>"</sup>
<ul> <li>Media temperatures from –423° F to +500° F (-253°</li> </ul>	to 3 <sup>°</sup> NPT ports
C to +260° C)	• Available in normally open configuration from 1/4" to
<ul> <li>Will handle fluids with viscosity up to 150 SUS</li> </ul>	1½″ NPT ports
<ul> <li>Bronze valve material (naval M bronze)</li> </ul>	<ul> <li>British BSPT ports available</li> </ul>
• Suitable for use with wide variety of fluid including:	Full ported valves
air, gasses, liquids, hydraulic fluids, steam, cryogenic	Normally closed Cv from 2.7 to 71
fluids, and fluids not harmful to bronze	Normally open Cv from 2.7 to 21
<ul> <li>Heaviest duty and most rugged construction</li> </ul>	Class H coils are standard
Optional seat materials of Teflon <sup>®</sup> , Kel-F <sup>®</sup> , Buna N,	Coils housings available in NEMA 1 (standard),
Viton <sup>®</sup> , EPR, or metal (316 stainless steel pilot and/	NEMA 4 (waterproof), NEMA 7 (explosion-proof for
or brass piston seat) depending on fluid type and	hazardous locations), and combination NEMA 4 & 7
pressure	Manual opening and throttling devices are available
Body seal materials of Teflon <sup>®</sup> , Viton <sup>®</sup> , Buna N, or EPR	as options (requires aluminum piston on $2\frac{1}{2}$ & 3")
	<ul> <li>Valve position indicator option is available</li> </ul>

#### **Circle Seal Controls**

2301 Wardlow Circle • P.O. Box 3300 • Corona, CA 92880 Phone (951) 270-6200 Fax (951) 270-6201 www.circle-seal.com • am\_sales@circle-seal.com • ind\_sales@circle-seal.com

# 30400 Series

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

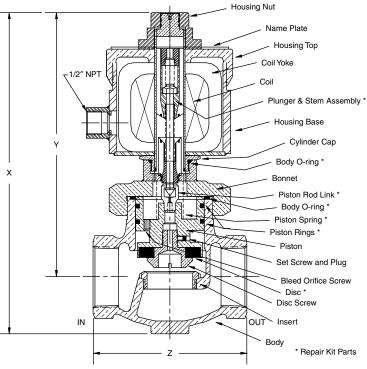
Normally closed, 1/4"-1/2"

	, -						
GA	SES	LIQUIDS	TO 40 SUS	LIQUIDS O	/ER 40 SUS	STE	AM
AC	DC	AC	DC	AC	DC	AC	DC
1500	1500	1500	1000	1500	1000	200	200
Normally	closed, ¾	~1½″					
GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
1000	1000	1000	1000	1000	1000	200	200
Normally	closed, 2 <sup>"</sup>	-3″					
GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
500	500	500	350	500	350	200	100
Normally	open, ¼″–	1/2″					
GASES		LIQUIDS	FO 40 SUS	LIQUIDS O	/ER 40 SUS	STE	AM
AC	DC	AC	DC	AC	DC	AC	DC
1500	1500	1500	1500	1500	1,250	200	200
Normally	open, ¾″–	11⁄2″					
GASES		LIQUIDS TO 40 SUS		LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
1000	1000	1000	1000	1000	1000	200	200

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: Rubber seats are limited to 500 psi.

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



Normally open 1½<sup>"</sup> 32460 valve, shown with explosion-proof NEMA 7 coil, housing and AC coil.

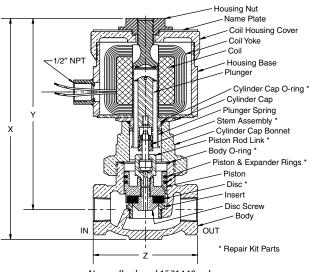
#### 30400 Series Normally Open Bronze

CATALOG NUM. PREFIX	PIPE SIZE	MAIN SEAT ORIFICE	х	Y	z	SHIPPING WEIGHT <i>(Ibs)</i>	Cv
32400	1⁄4″	3/8″	85⁄8″	7¾″	211/16″	10	1.4
32410	3/8″	3/8″	85⁄8″	7¾″	211/16″	10	2.7
32420	1⁄2″	1⁄2″	8¾″	713/16″	3″	10	3.5
32430	3⁄4″	1″	93⁄8″	81/16″	4″	12	8.4
32440	1″	1″	9¾″	81/16″	4″	12	9.5
32450	1¼″	11⁄2″	10½″	81⁄8″	51/16″	26	19.5
32460	11⁄2″	11⁄2″	10½″	81⁄8″	51⁄16″	26	21.0

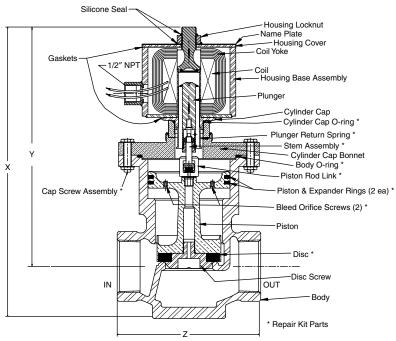
#### 66 ATKOMATIC Solenoid Valves

### 30400 Series

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



Normally closed 1" 31440 valve, shown with explosion-proof NEMA 7 coil. Housing an AC coil, and a soft pilot seat.



Normally closed 2" 31570 valve, shown with NEMA 4 coil. Housing an AC coil, and a soft pilot seat.

#### **30400 Series Normally Closed Bronze**

CATALOG NUM. PREFIX	PIPE SIZE	MAIN SEAT ORIFICE	х	Y	z	SHIPPING WEIGHT <i>(Ibs)</i>	Cv
31400	1⁄4″	3/8″	71⁄8″	7″	211/16″	10	1.4
31410	3/8″	3/8″	71⁄8″	7″	211/16″	10	2.7
31420	1⁄2″	1⁄2″	8″	71⁄16″	3″	10	3.5
31430	3⁄4″	1″	85⁄8″	7¾″	4″	12	8.4
31440	1″	1″	8⁵⁄8″	7¾″	4″	12	9.5
31450	1¼″	11⁄2″	101⁄/8″	8¼″	51/16″	26	19.5
31460	11⁄2″	11⁄2″	101⁄/8″	8¼″	51/16″	26	21.0
31570	2″	2″	13³⁄16″	105/16″	61⁄8″	38	43.0
31580	21⁄2″	3″	14¼″	103⁄/8″	81⁄2″	76	63.0
31590	3″	3″	14¼″	103⁄8″	81⁄2″	76	71.0

## 30400 Series

#### How to Order

<b>3</b> <u>x</u> <u>x</u> <u>x</u> <b>0</b> – <u>x</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u> NORMAL POSITION OF VALVE (DE-ENERGIZED) 1 Normally closed 2 Normally open VALVE MATERIAL & CYLINDER CAP STYLE 4 Bronze & threaded cylinder cap 5 Bronze & flanged cylinder cap	OPTIONS P Position indicator M Manual opening T Manual throttling COIL HOUSING E Explosion-proof S Standard W Waterproof
CONNECTION SIZES         0 $\frac{1}{4}$ "         1 $\frac{3}{8}$ "       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       3"         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       5       460 VAC         2       115 VAC       4       230 VAC       5       460 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         CONNECTION TYPE         P       NPT         J       British pipe thread         MAX. OPERATING PRESSURE (psig)         A       75       E       250       I       750         B       100       F       300       J	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 Kel-F® pilot & Kel-F® disc F Metal pilot & TFE disc H Metal pilot & Buna N disc I Metal pilot & Buna N disc J Metal pilot & EPR disc K Metal pilot & EPR disc K Metal pilot & EPR disc

Note: For PED applications, the 30400 Series is only approved for room temperature applications and at a lower pressure. Please consult the factory.

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