# **A** TKOMATIC

# **500 Series**

Bronze, Pilot-piston, Pressure 5 to 300 psig (0.4 to 21 bar) Low Pressure Valve Configurable for Variety of Fluid Applications



#### **Features**

- Pressures to 300 psig (21 bar)
- Fluid temperatures from -100° F to +450° F (-73° C to +232° C)
- For use with any gas or liquid (max. viscosity of 150 SUS), including steam, that is not harmful to bronze
- Pipe sizes from ¼" through 1½" NPT (British BSPT ports available)
- Full ported valves: Cv from 1.4 to 21
- Pilot operated: requires a minimum pressure differential of 5 psig
- Available in normally open and normally closed versions
- Optional pilot and piston seat materials of Teflon®, Kel-F®, Buna N, Viton®, EPR, or metal (316 stainless steel pilot and/or brass piston seat) depending on fluid type and pressure

- Body seal materials of Teflon®, Viton®, Buna N, or EPR.
- Bronze valve material (naval M Bronze)
- Coils housings available in NEMA 1 (standard), NEMA 4 (waterproof), NEMA 7 (explosion-proof for hazardous locations), and combination NEMA 4 & 7
- Manual opening and throttling devices are available as options
- Class B coils are available for media temperatures of 0° F through +220° F (-18° C through +104° C)
- Class H coils are available: recommended for media temperatures of –100° F through +450° F (-73° C through +232° C)
- Treated 416 stainless steel plunge material for increased corrosion resistance

#### **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

# **500 Series**

#### **Operational Pressures** (5 psid minimum pressure differential)

Normally Closed 500-560 1/4"-11/2"

GA:	SES	LIQUIDS 1	TO 40 SUS	LIQUIDS OVER 40 SUS		STEAM	
AC	DC	AC	DC	AC	DC	AC	DC
300	300	300	300	300	100	125	125

Normally Open 501-561 1/4"-11/2"

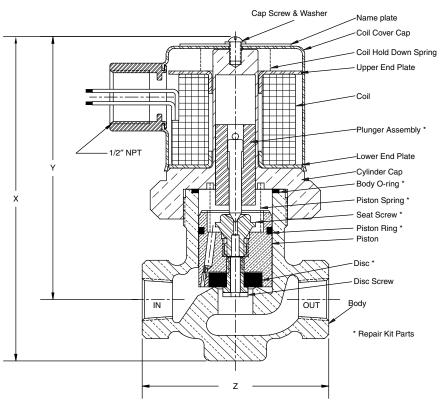
GASES		LIQUIDS TO 40 SUS		LIQUIDS OV	ER 40 SUS	STEAM		
	AC	DC	AC	DC	AC	DC	AC	DC
	300	300	200	200	100	100	125	125

NOTE: Normally open valves are rated for intermittent duty only on 500 Series valves and are not recommended for cryogenic service.

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

#### **Normally Closed**

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CATALOG NI	UM. PREFIX	PIPE SIZE	MAIN SEAT ORIFICE DIA.	X	Y	Z	SHIPPING WEIGHT (lbs)	Cv
500	501	1/4″	1/2″	4¾″	3%″	211/16"	3	1.4
510	511	3/8″	1/2"	4¾"	31/8"	211/16"	3	2.7
520	521	1/2"	1/2"	4¾"	31/8"	3″	4	3.5
530	531	3/4"	1″	5¼″	4″	3¾″	5	7.5
540	541	1″	1″	51/4"	4″	3¾″	5	9.1
550	551	11/4"	11/2"	7″	51/8"	51/16"	13	19.5
560	561	11/2"	11/2"	7″	51/8"	51/16"	13	21.0



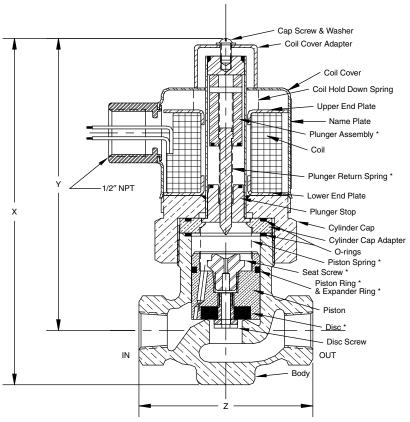
Normally closed  $\ensuremath{\mbox{\sc 4}''}$  500 Valve: shown with a standard NEMA 1 coil housing and a metal pilot seat

# **500 Series**

# Dimensions, Shipping Weights, and Cv Flow Factors

#### **Normally Open**

CATALOG NUM. PREFIX			MAIN SEAT			SHIPPING	SHIPPING	
N.C.	N.O.	PIPE SIZE	ORIFICE DIA.	X	Y	Z	WEIGHT (lbs)	Cv
500	501	1/4″	1/2″	5¾″	413/16"	211/16"	3	1.4
510	511	3/8″	1/2"	5¾″	413/16"	211/16"	3	2.7
520	521	1/2"	1/2"	5¾″	413/16"	3″	4	3.5
530	531	3/4"	1″	61/8"	41/8"	3¾″	5	7.5
540	541	1″	1″	61/8"	47/8"	3¾″	5	9.1
550	551	11⁄4″	11/2"	8″	6″	51/16"	13	19.5
560	561	11/2″	11/2″	8″	6″	51/16"	13	21.0



\* Repair kit parts

Normally open  $\frac{1}{4}$ " 501 Valve: shown with a standard NEMA 1 coil housing and metal pilot seat.

# 500 Series

#### How to Order

