

Mark 2000

Angle Seat On/Off Control Valves

NEW!

The Mark 2000 is an externally piloted angle-seat valve with self-adjusting packing gland, intermediate relief and wiper. The angle-seat construction of the body makes possible extremely high flow rates, particularly in comparison to conventional globe valves.

The compact size and light weight design makes this valve ideal for OEM machinery and other applications where space is at a premium.

All trim components and body are stainless steel for maximum corrosion resistance. However, the MK2000 is economical enough to use on general utility services as well. Whether steam, water, air or chemicals and process gases, the MK2000 provides unparalleled flexibility for on/off service.



FEATURES

- Actuator can be rotated 360°
- Fast Response
- Maintenance-free actuator with long service life
- Self-adjusting packing glands
- Lower life-cycle costs
- Compact design with high flow rates
- Low air consumption due to small actuator volume
- Water-hammer free design
- Stainless Steel body trim for wide variety of media
- Compact space saving actuator design
- Position indicator (open/closed) standard
- Optional solenoid available

APPLICATIONS & INDUSTRIES

- Dyeing and washing machines
- KEG washing and filling machines
- Test benches, presses
- Paint spray systems
- Textile
- Brewing
- Automotive
- Automotive/Chemical
- Gas turbine test benches
- Aerospace
- "Clean in place" systems
- Concrete and cement industry



Jordan Valve

Jordan Valve, a Division of Richards Industries

3170 Wasson Road • Cincinnati, Ohio 45209

Telephone 513-533-5600 • Fax 513-871-0105

Toll-Free Telephone: 800-543-7311 (U. S. A. & Canada)

E-Mail: info@richardsind.com • URL: www.jordanvalve.com

SPECIFICATIONS

Description: In the “NCA” configuration, the medium enters the MK2000 under the seat such that the valve closes against the pressure of the flow. This ‘closing against the flow’ eliminates water hammer damage associated with liquid service (or condensate hammer in steam lines), but is also ideally suited for gas service as well.

The “NCW” configuration ‘closes with flow’ and is primarily used on gas service. This option is used more frequently in larger valves as the pressure drop capability in the “NCA” configuration lowers.

- The MK2000 is normally closed, with flow under the seat. When air pressure is supplied to the actuator (i.e. when the solenoid is energized open), the piston is driven up to open the valve.
- When the solenoid is closed and the actuator is vented, the springs push the disc to the seat to close.

Sizes: 1/2” (DN15) to 2” (DN50)

Body Material: 316 SST

Trim Material: 304 SST (Stem)

End Connection: NPT (consult factory for other options)

Seat Material: PTFE

Packing Material: Spring loaded, PTFE-V-Rings

Actuator Housing

- Nickel plated brass — 50mm
- Aluminum — 80mm

Actuator Supply Material: Air, neutral gas, clear neutral liquids

Actuator Supply Pressure: 29 - 145 psi (2 - 106 bar)

* Differential pressures based on 87 psi pressure (6 bar)

Pressure Range: 0 - 362 psi, max (0 - 25 bar)

Temperature Media: -40° to +397°F (-40° to +200°C)

DIFFERENTIAL PRESSURE CHART — PSI (BAR)

Ordering Schematic	Size	NCA	NCW
2K2050SSE5NCA	1/2"	232 (16)	X
2K2075SSE6NCA	3/4"	290 (20)	X
2K2100SSE6NCA	1"	145 (10)	X
2K2125SSE6NCA	1-1/4"	101 (7)	X
2K2150E6NCA	1-1/2"	87 (6)	X
2K2150A8NCW	1-1/2"	X	290 (20)
2K2200E6NCA	2"	43 (3)	X
2K2200A8NCW	2"	x	174 (12)

X - Not currently available, contact factory

SOLENOID OPTIONS



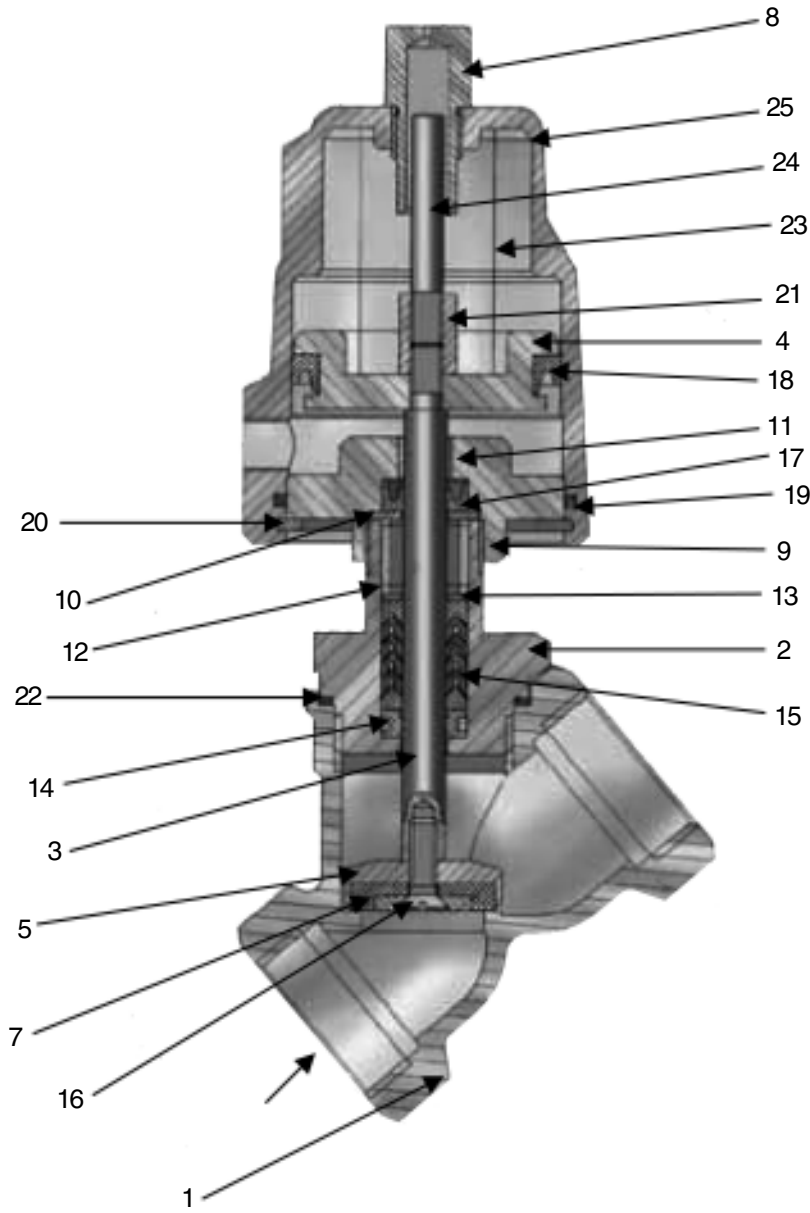
Solenoid Options: 125VAC or 24VDC available for mounting to 50mm or 80mm actuators.

For 50mm, select 1/8” size
For 80mm, select 1/4” size

These solenoids are 3/2 way valves which enable air supply to completely exhaust from the actuator to allow quick movement of the main valve.

Model No.	Size	Voltage
2K2-16914	1/8"	125VAC
2K2-16915	1/4"	125VAC
2K2-16916	1/8"	24VDC
2K2-16917	1/4"	24VDC

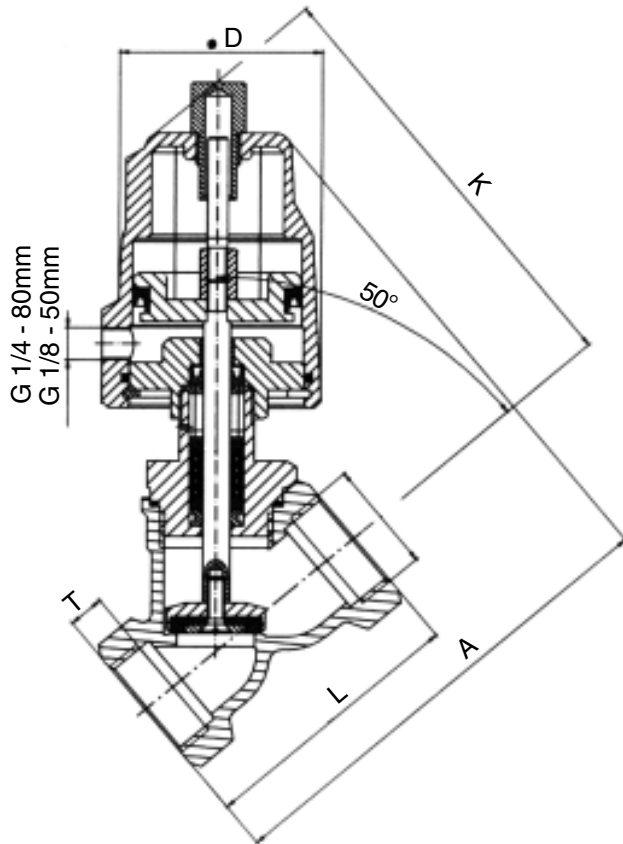
BILL OF MATERIAL



Part Number	Description	Part Number	Description
1	Body	14	Packing Wiper
2	Bonnet	15	V-Ring Packing
3	Stem	16	Seat Retaining Bolt
4	Piston	17	Actuator/Stem Seal
5	Valve Disc	18	Actuator/Piston Seal
6	N/A	19	O-Ring
7	Seat	20	Clip Ring
8	Actuator Housing	21	Stem Nut
9	Flange	22	O-Ring
10	Disc	23	Spring
11	Bushing	24	Position Indicator
12	Packing Spring	25	Cover
13	Packing Ring		

MK2000 ANGLE-SEAT VALVES

DIMENSIONS



Actuator — 50mm (1.97")						
Size	Dimensions - inches (mm)					Weight lb (kg)
	A	D	K	L	T	
1/2"	5.31 (135)	2.44 (62)	5.51 (140)	2.60 (65)	0.47 (12)	2.87 (1,3)
3/4"	5.71 (145)	2.44 (62)	5.51 (140)	2.95 (75)	0.51 (13)	3.10 (1,4)
1"	5.90 (150)	2.44 (62)	5.71 (145)	3.54 (90)	0.59 (15)	3.53 (1,6)
1-1/4"	6.10 (155)	2.44 (62)	5.83 (148)	4.33 (110)	0.67 (17)	4.90 (2,2)
1-1/2"	6.30 (160)	2.44 (62)	6.10 (155)	4.72 (120)	0.75 (19)	5.50 (2,5)
2"	6.89 (175)	2.44 (62)	6.38 (162)	5.91 (150)	0.83 (21)	7.70 (3,5)

Actuator — 80mm (3.15")						
Size	Dimensions - inches (mm)					Weight lb (kg)
	A	D	K	L	T	
1-1/2"	8.27 (210)	3.70 (94)	7.68 (195)	4.72 (120)	0.75 (19)	7.50 (3,4)
2"	9.06 (230)	3.70 (94)	8.07 (205)	5.91 (150)	0.83 (21)	10.2 (4,6)

ORDERING SCHEMATIC

1	—	2	—	3	/	4	5	6	7
2K		2		100		SS	E	6	NCA

1	Model	
2K	Standard	

2	Series	
2	2000	

3	Size	
050	1/2" (DN15)	
075	3/4" (DN20)	
100	1" (DN25)	
125	1-1/4" (DN32)	
150	1-1/2" (DN40)	
200	2" (DN50)	

1 Only available with actuator size 8

2 Only available with 1/2" valve

3 Only available with 1-1/2" & 2" sizes, NCW

4 Only available with 1-1/2" & 2" sizes w/80mm actuator

4	Material	
SS	Stainless Steel	

5	Actuator Material	
E	Electroless Nickel Plated Brass	
A ¹	Aluminum	

6	Actuator Size	
5 ²	50mm (1.97")	
6	50mm (1.97") — 2 springs	
8 ³	80mm (3.15")	

7	Function	
NCA	Normally Closed Against Flow	
NCW ⁴	Normally Closed With Flow	