



KINGSTON

Manufacturing reliable industrial valves for industry since 1908.

KN Series Solenoid Valve

Model KN Series

Internally Piloted Industrial Solenoid Valve



Description

The KN Series internally piloted liquid control valve offers the same dependable performance, quality, and value you've come to expect in a Kingston valves. Superior durability and versatility in a wide range of industrial liquid control applications continues to make Kingston your first choice in industrial valves.

Model	Inlet Size	Outlet Size	Dimensions (inches)		Pressure Range (PSIG)	Approx. Shipping Wt
			Height (A)	Width (B)		
KN	3/4" NPT	3/4" NPT	5"	3-1/4"	20-200	2 lb.
	1" NPT	1" NPT	4-1/2"	4-3/8"		5.76 lb.
	1-1/4" NPT	1-1/4" NPT	5-1/2"	5"		5 lb.
	1-1/2" NPT	1-1/2" NPT	8"	6"		7.5 lb.
	2" NPT	2" NPT	9"	7"		9.5 lb.
	2-1/2" NPT	2-1/2" NPT	10"	11-5/8"		32 lb.
3" NPT	3" NPT	30 lb.				

Features

High Performance Flow Characteristics

The Kingston KN Series Solenoid Control Valves produce exceptional flow rate performance. With a low pressure loss profile, its flow characteristics allow for additional capacity to move downstream and increase energy efficiency by easing the stress on system pumps.

Reverse Flow/Fail Closed Feature

The Kingston KN Series Solenoid Control Valves are offered in both forward (fail open) and reverse (fail closed) flows. This feature allows designers to build in added safety and redundancy.

Pressure Regulation

The Kingston KN Series Solenoid Control Valves are offered with the PRS option allowing in-valve pressure control capability. With flow control and pressure regulator built in, designers and manufacturers can reduce overall system parts count and increase ease of maintenance.

Diaphragm Reliability

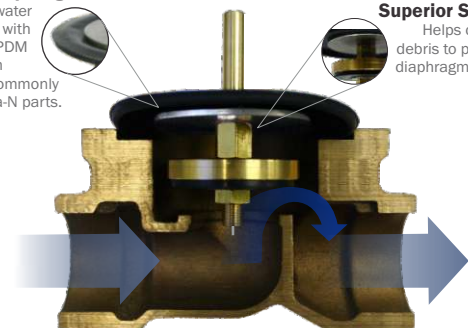
Advanced two-piece internal assembly offers diaphragm protection by shielding diaphragm from flow path.

EPDM Diaphragm

Recycled water protection with durable EPDM diaphragm outlasts commonly used Buna-N parts.

Superior Shield™

Helps deflect debris to prevent diaphragm tears.

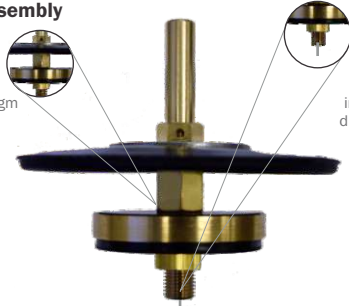


Debris Tolerance

Advanced porting design with self-cleaning metering rod system ensures that only “clean” water enters the diaphragm chamber, protecting the diaphragm for longer life.

Two-Piece Assembly

Two-piece internal assembly offers diaphragm protection by removing diaphragm from flow path.



Cleaning Rod

Self-Cleaning metering rod prevents debris from entering inlet orifice to upper diaphragm chamber.

Stop Water Hammer

Stop hammering in its tracks. Kingston internally piloted diaphragm design creates a buffer that prevents the violent, potentially damaging vibrations often associated with direct acting solenoid valves.

NEMA 4X Solenoid

NEMA 4X rated electrical components add the flexibility to design these multi-function valves into the most demanding industrial environments.

Normally Closed



Standard KN

Electric Diaphragm Valve



DW Series

Electric Diaphragm Valve w/ Dirty Water Feature



DWIB Series

Electric Diaphragm Valve DW w/ Internal Bleed Features



PRS Series

Electric Diaphragm Valve DWIB w/ Pressure Reg. System

Reverse Flow



RF Series

Electric Diaphragm Valve Reverse Flow/Fail Closed Feature (1 to 2" Only)



PRSRF Series

Electric Diaphragm Valve DWIB w/ Pressure Reg. System Reverse Flow/Fail Closed Feature (1 to 2" Only)

Reclaimed Water



KN 1000

Electric Diaphragm Valve DWIB w/ HCR™ Premium Diaphragm Copper Tubing & Purple Cross Handle

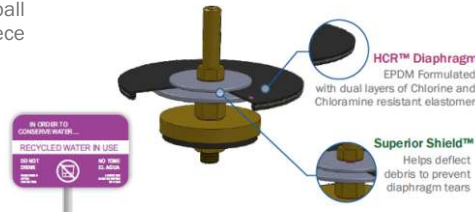


Recycled Water Features

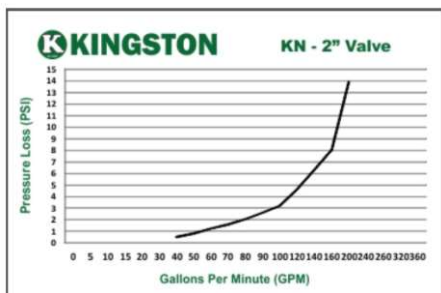
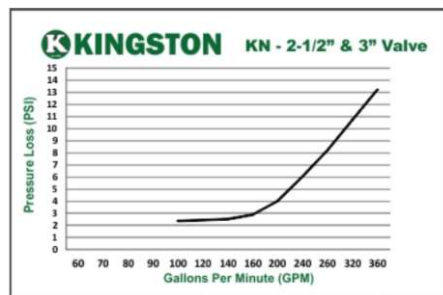
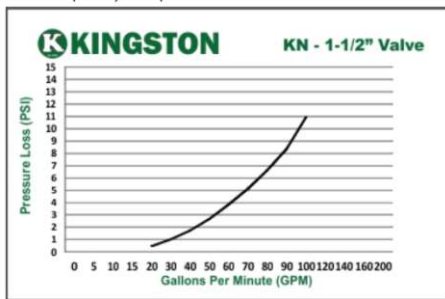
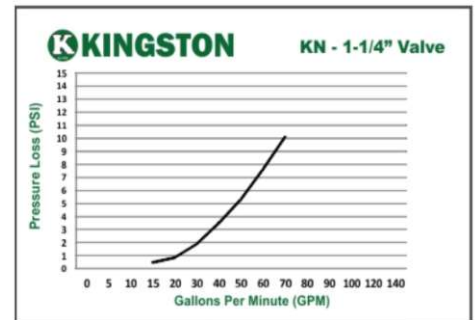
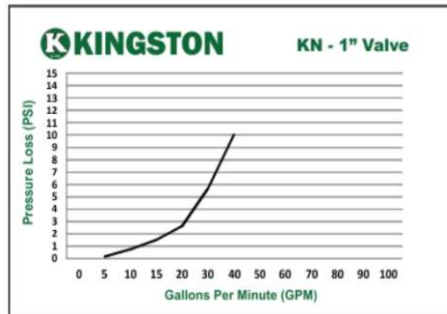
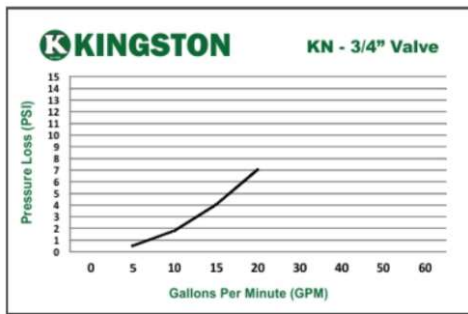
The Kingston KN1000 Valve is manufactured with top-quality components, including heavy duty cooper tubing, precision ball valve adjustment, dirty water filter system, and two-piece diaphragm assembly with SuperiorShield™

Premium Diaphragm Durability

The KN1000 Valve is equipped with a two-piece diaphragm assembly, including a specially-designed HCR™ Diaphragm formulated to outlast the harshest of chemicals typically found in recycled water systems.



Flow Capacity Information



Pressure Loss (PSI)

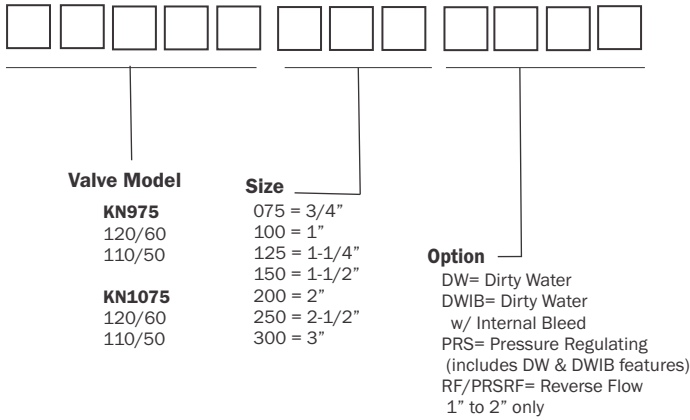
GPM	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
0							
5	0.45	0.16					
10	1.75	0.75					
15	4	1.5	0.48				
20	7	2.6	0.85	0.45			
30		5.7	1.9	1			
40		10	3.5	1.7	0.53		
50			5.3	2.65	0.82		
60			7.6	3.8	1.2		
70			10.1	5.1	1.6		
80				6.6	2.05		
90				8.3	2.6		
100				10.9	3.2	2.38	2.38
120					4.6	2.45	2.45
140					6.3	2.5	2.5
160					8	2.9	2.9
200					13.9	4	4
240						6	6
260						8.2	8.2
320						10.7	10.7
360						13.2	13.2

Expert Technical Support

Knowledgeable technical support resource provides quick response times. No-charge customer service is available by calling 1-800-210-2525.

Ordering Information

Kingston Solenoid Valves Part Number Codes



Product Notes

Storm Manufacturing reserves all rights. Product specifications and designs are subject to change without notice.

The information contained herein by Storm Manufacturing Group (SMG) is provided in good faith and as a product guide only. Further, SMG makes no representation as to the completeness or accuracy of the information contained herein. Any person or persons using the information contained herein must exercise their own judgement and consider all local, regional, national and global safety standards in evaluating valve selection options. Final application design and integration of Kingston Products are the sole responsibility of the end user.

NEMA 4X Solenoid Specifications

NEMA 4X 110/120 VAC (KN975)

In-rush current: 95 mA (10.5 VA)
Holding current: 0.45 mA (7.2 VA)

Operating Ranges

Flow: 5 to 360 gpm
Pressure: 20 to 150 psi
Temperature: -20 to 200F

Notes

KN 1000 Valve

Premium reclaimed water valve includes DWIB, HCR Diaphragm and purple cross handle standard. No options to add

Reverse Flow

Standard RF includes DW option, RF available in PRS

Reclaimed Water

Handle options available for Reclaimed Water applications



www.KingstonValves.com
KINGSTON