



**KV series ball valve** is a type of valve with a spherical body that controls the flow of the medium by rotating a hole inside the sphere. It features a simple structure, convenient operation, and flexible switching. It can be quickly opened and closed, swiftly cutting off the flow of the medium, with low fluid resistance and good flow regulation performance. Additionally, it has good sealing performance, making it suitable for high pressure, high temperature, and corrosive medium applications.

## KVP Pneumatic Actuated True Union Ball Valve

### Description

- **Material:** UPVC, CPVC, PPH, PVDF
- **Size:** 1/2" – 4"; 20 mm – 110 mm; DN15 – DN100
- **Standard:** ANSI, DIN, JIS, CNS
- **Joint:** Socket End, Thread End (NPT, BSPF, PT), Socket Fusion, Butt welding
- **Working pressure:** 150 psi
- **Operation temperature:**
  - UPVC (5 °C to 55 °C)
  - PPH & CPVC (5 °C to 90 °C)
  - PVDF (-20 °C to 120 °C)
- **Color:**
  - **Body Color:** UPVC (dark gray), CPVC (light gray), PPH (beige), and PVDF (ivory white)

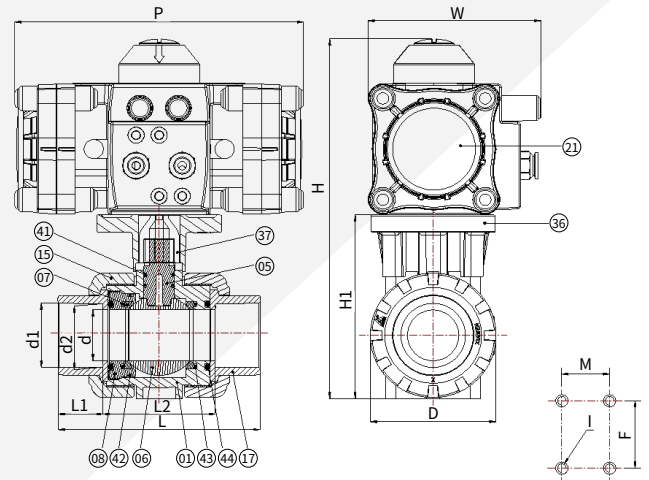


### Feature

- Light weight plastic actuator with corrosion resistance
- PPS adaptor with a large contact area
- Nano-modified raw material to improve the pressure resistance and impact resistance
- Adding anti-UV absorbers and antioxidants to improve weathering and aging resistance
- 100% working pressure testing

## Material List

S/N	Part	Specification	Qty.
44	O-ring	EPDM/VITON	2
43	O-ring	EPDM/VITON	2
42	O-ring	EPDM/VITON	1
41	O-ring	EPDM/VITON	2
37	Adaptor	PP+Fiber	1
36	Bracket	PP+Fiber	1
21	Pneumatic Actuator	PA6+30%GF	1
17	Union end	UPVC/CPVC/PPH/PVDF	2
15	Nut	UPVC/CPVC/PPH/PVDF	2
08	Liner	UPVC/CPVC/PPH/PVDF	1
07	Seat seal	TPV/PTFE	2
06	Ball	UPVC/CPVC/PPH/PVDF	1
05	Stem	UPVC/CPVC/PPH/PVDF	1
01	Body	UPVC/CPVC/PPH/PVDF	1



## UPVC

Unit: mm

Size	d	d1				d2				D	L		L1		L2	P	W	H	H1	F	M	I
		ANSI	DIN	JIS	CNS	ANSI	DIN	JIS	CNS		ANSI/JIS/CNS	DIN	ANSI/JIS/CNS	DIN								
1/2" (15)	15	21.54	20.30	22.40	22.40	21.23	20.10	21.73	21.90	54.00	104.80	92.00	22.30	16.00	60.00	150.00	90.00	186.00	90.00	31.00	-	M6
3/4" (20)	20	26.87	25.30	26.45	26.40	26.57	25.10	25.69	25.90	63.00	113.00	100.00	25.50	19.00	62.00	150.00	90.00	195.00	99.00	33.00	-	M6
1" (25)	25	33.65	32.30	32.55	34.50	33.27	32.10	31.70	33.90	73.50	127.20	114.00	28.60	22.00	70.00	150.00	90.00	208.00	112.00	40.00	-	M6
1-1/4" (32)	32	42.42	40.30	38.60	42.50	42.04	40.10	37.65	41.90	84.50	142.00	130.00	32.00	26.00	78.00	180.00	106.00	244.00	131.00	52.00	-	M8
1-1/2" (40)	40	48.56	50.30	48.70	48.60	48.11	50.10	47.74	47.90	98.00	157.00	151.00	35.00	32.00	87.50	180.00	106.00	258.00	145.00	52.00	-	M8
2" (50)	50	60.63	63.30	60.80	60.60	60.17	63.10	59.78	59.90	118.00	171.00	161.00	38.00	32.00	95.00	180.00	106.00	278.00	165.00	70.00	-	M8
2-1/2" (65)	63	73.38	75.30	76.60	76.70	72.85	75.10	75.68	75.90	150.00	238.50	228.50	47.00	32.00	144.50	223.00	125.00	340.00	213.00	84.00	45.00	M10
3" (80)	75	89.31	90.40	89.60	89.70	88.70	90.10	88.55	88.90	169.00	268.00	258.00	51.00	32.00	166.00	249.00	134.00	370.00	232.00	84.00	45.00	M10
4" (100)	97	114.76	110.40	114.70	115.00	114.10	110.10	113.60	113.80	211.00	318.00	308.00	61.00	32.00	196.00	249.00	134.00	412.00	274.00	121.00	49.00	M12

## Pneumatic Actuated Acting Type: DA (Double Acting), NC (Normally Closed), NO (Normally Open)

Size	Control Pressure (Bar)	NAMUR standard Air Interface	Opening cylinder volume (L)	Closing cylinder volume (L)
1/2"	4 – 8	G1/4"	0.1	0.2
3/4"	4 – 8	G1/4"	0.1	0.2
1"	4 – 8	G1/4"	0.1	0.2
1-1/4"	4 – 8	G1/4"	0.2	0.3
1-1/2"	4 – 8	G1/4"	0.2	0.3
2"	4 – 8	G1/4"	0.2	0.3
2-1/2"	4 – 8	G1/4"	0.3	0.5
3"	4 – 8	G1/4"	0.3	0.5
4"	4 – 8	G1/4"	0.5	0.8

The air consumption depends on the air pressure, switch stroke, the volume and frequency of action. Caculation is as follows:

$L/\text{min} = \text{cylinder volume} (\text{open cylinder volume} + \text{close cylinder volume}) \times [\text{supplied air pressure (kPa)} \div 101.3] \times \text{times/min.}$