

PTFE-lined Ball Valve



Product Introduction:

Fluorine-lined ball valves are specially developed for highly corrosive environments. With carbon steel/stainless steel bodies lined with PTFE and FEP fluoroplastics, they offer outstanding resistance to strong acids, alkalis and oxidants to avoid body corrosion. Featuring reliable sealing, low flow resistance and flexible operation, they fit medium and low pressure conditions for stable fluid delivery. Widely used in chemical, pharmaceutical, metallurgy, environmental protection and acid-base conveying fields, they enjoy long service life and low

Product Features:

- **Durable sealing performance:** Adopts unique lip-type elastic sealing structure to reduce wear effectively and greatly extend service life.
- **Superior anti-corrosion and wear resistance:** Equipped with FEP lining layer, it withstands almost all corrosive media except molten alkali metals and elemental fluorine.
- **Outstanding safety performance:** The ball and valve stem are integrally cast or forged, eliminating impact risks of valve stem caused by pressure fluctuation and ensuring operational safety fundamentally.
- **Easy operation and maintenance:** Full-bore floating ball structure realizes leak-tight shutoff across full pressure range, facilitating pipeline pigging and system maintenance.

Flanged Electric Fluorine-Lined Ball Valve

Product Description

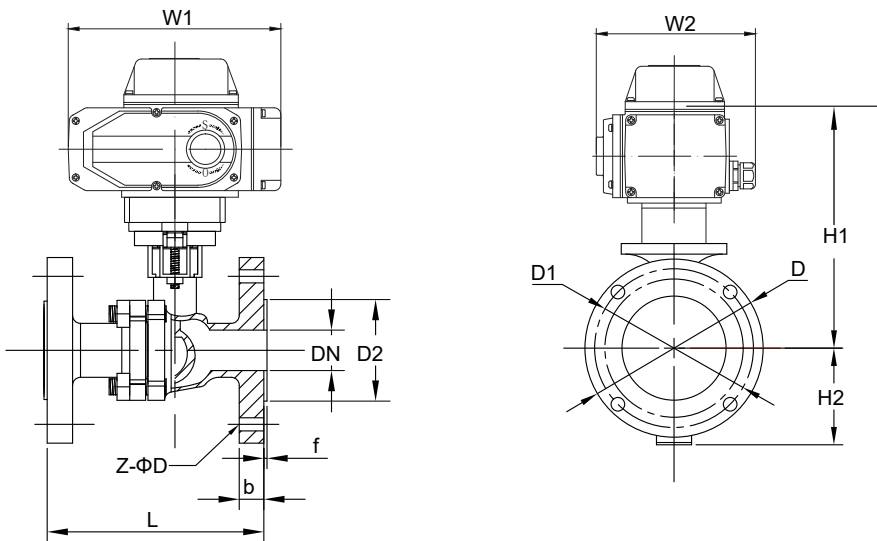
Flanged electric fluorine-lined ball valve features tight sealing and precise electric control. Fluorine lining resists strong corrosion, runs smoothly, ideal for chemical and electroplating pipelines.

Main Performance Specifications

- Nominal Diameter: DN15~DN100
- Nominal Pressure: 1.0MPa~1.6MPa
- Medium Temperature: -15°C~+120°C
- Protection Class: Ip67
- Applicable Media: Acids, alkalis, salts, chlorine gas, steam, raw water, mineral slurry, paper pulp, aqua regia, oxidants, reducing agents and corrosive chemical liquids
- Manufacturing Standard: GB12237-2021, API 6D
- Face-to-Face Standard: GB/T 12221-2005
- Inspection Standard: API 598
- Flange Standard: JB/T 79-2015, GB/T 9124.1-2019, GB/T 9124.2-2019, ANSI B16.5, JIS B2239



Installation Dimension Drawing



Size (mm)	L	D	D1	D2	b	f	Z-ΦD	H1	H2	W1	W2
15	130	95	65	45	16	2.5	4-Φ14	216	47.5	196	145
20	140	105	75	55	18	2.5	4-Φ14	231	52.5	196	145
25	150	115	85	65	19	3	4-Φ14	236	57.5	196	145
32	165	140	100	78	19	3	4-Φ18	256	70	196	145
40	180	150	110	85	19	3.5	4-Φ18	261	75	196	145
50	200	165	125	100	19	3.5	4-Φ18	271	82.5	196	145
65	220	185	145	120	19	3.5	4-Φ18	303	92.5	255	182
80	260	200	160	135	20	3.5	8-Φ18	358	100	255	182
100	280	220	180	155	21	4	8-Φ18	383	110	255	182

Flanged Pneumatic Fluorine-Lined Ball Valve

Product Description

Flanged pneumatic fluorine-lined ball valve features firm leak-proof flange connection and fast pneumatic operation. Its fluorine lining withstands strong acids, alkalis and heavy corrosion, ideal for chemical fluid delivery and electroplating wastewater treatment, a reliable choice for corrosive medium pipelines.

Main Performance Specifications

Nominal Diameter: DN15~DN100

Nominal Pressure: 1.0MPa~1.6MPa

Medium Temperature: -15°C~+120°C

Protection Class: Ip67

Applicable Media: Acids, alkalis, salts, chlorine gas, steam, raw water, mineral slurry, paper pulp, aqua regia, oxidants, reducing agents and corrosive chemical liquids

Manufacturing Standard: GB12237-2021, API 6D

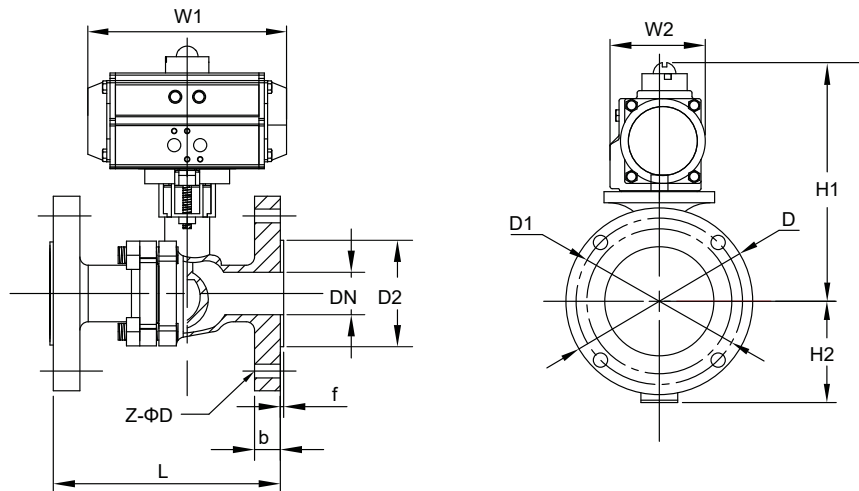
Face-to-Face Standard: GB/T 12221-2005

Inspection Standard: API 598

Flange Standard: JB/T 79-2015, GB/T 9124.1-2019, GB/T 9124.2-2019, ANSI B16.5, JIS B2239



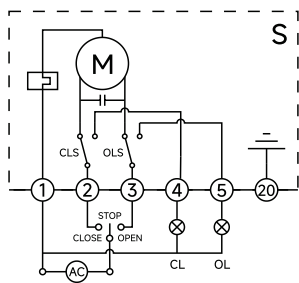
Installation Dimension Drawing



Size (mm)	L	D	D1	D2	b	f	n-Φd	H2	Double-acting			Single-acting		
									H1	W1	W2	H1	W1	W2
15	130	95	65	45	16	2.5	4-Φ14	47.5	202	147	72	202	147	72
20	140	105	75	55	18	2.5	4-Φ14	52.5	217	147	72	233	168	83
25	150	115	85	65	19	3	4-Φ14	57.5	238	168	83	250	184	95
32	165	140	100	78	19	3	4-Φ18	70	258	168	83	279	204	103
40	180	150	110	85	19	3.5	4-Φ18	75	275	184	95	292	262	109
50	200	165	125	100	19	3.5	4-Φ18	82.5	294	204	103	318	268	122
65	220	185	145	120	19	3.5	4-Φ18	92.5	312	262	109	370	301	142
80	260	200	160	135	20	3.5	8-Φ18	100	383	268	122	442	390	152
100	280	220	180	155	21	4	8-Φ18	110	450	301	142	492	458	174

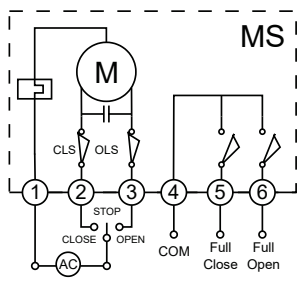
Note: For pneumatic valves, the matching actuator model and relevant dimensions may vary depending on service medium, valve torque and control method.

Circuit Diagram



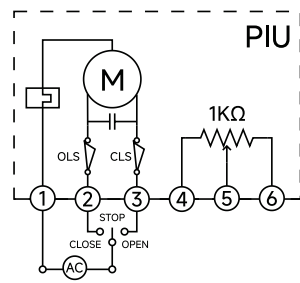
S

Switching Action Mode:
Switching operations (open/close) are achieved via AC switching signals, and a set of active position signals indicating fully open/fully closed status are output.



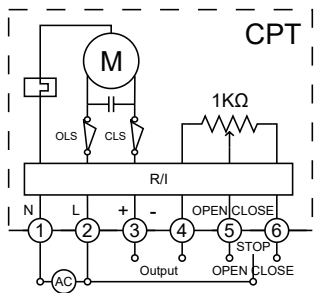
MS

Switching Action Mode: Outputs passive contact signals.
Structure: Equipped with two intermediate position switches.



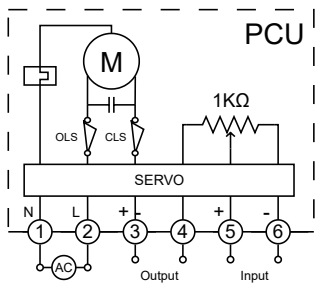
PIU

Switching Action Mode: Outputs 0~1000Ω feedback signal.
Structure: Equipped with 500Ω or 1kΩ potentiometer.



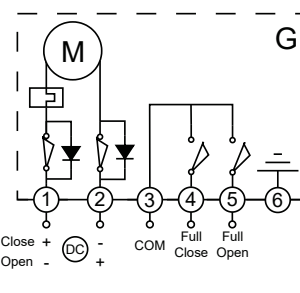
PCU

Regulating Action Mode: Accepts 4~20mA control signal input and outputs 4~20mA valve position feedback signal.
Structure: Integrated with 1kΩ potentiometer and control module (servo amplifier).



CPT

Switching Action Mode: Outputs 4~20mA valve position feedback signal.
Structure: Equipped with 1kΩ potentiometer and R/I converter.

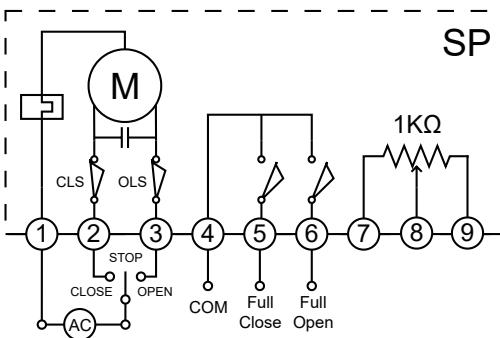


G

DC switching signals are output from the circuit via an external DC power supply to control the opening/closing program, and a set of passive contact signals corresponding to fully open/fully closed positions are provided.

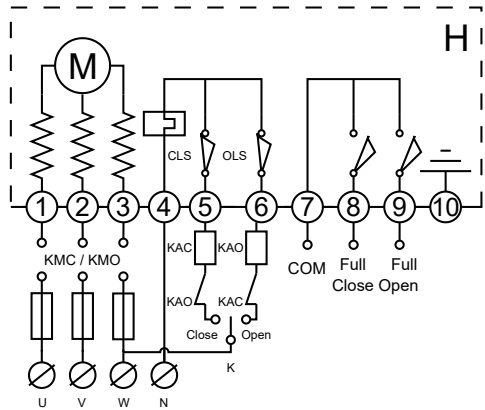
SP

Switching Action Mode: Controls valve opening angle via switching circuit, corresponding to potentiometer resistance value, while enabling intermediate position control function.
Structure: Integrated with potentiometer and intermediate position switch.



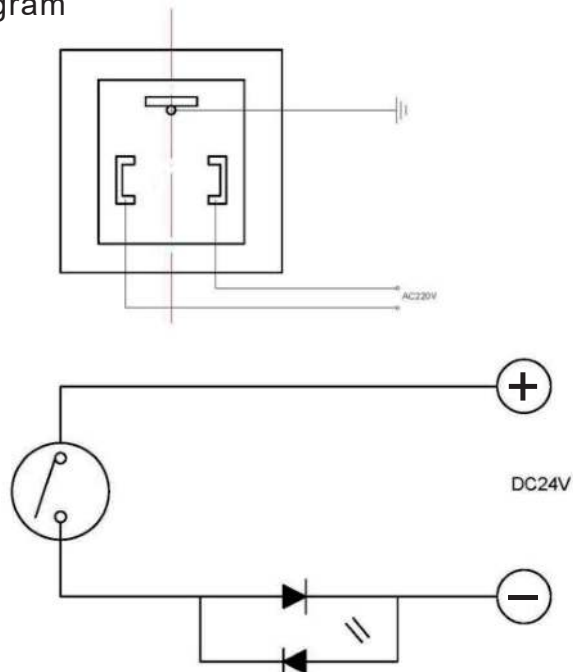
H

Three-phase AC switching signals are output through an external three-phase power phase-reversing circuit to control opening/closing operations, accompanied by a set of passive contact signals for fully open/fully closed position indication.

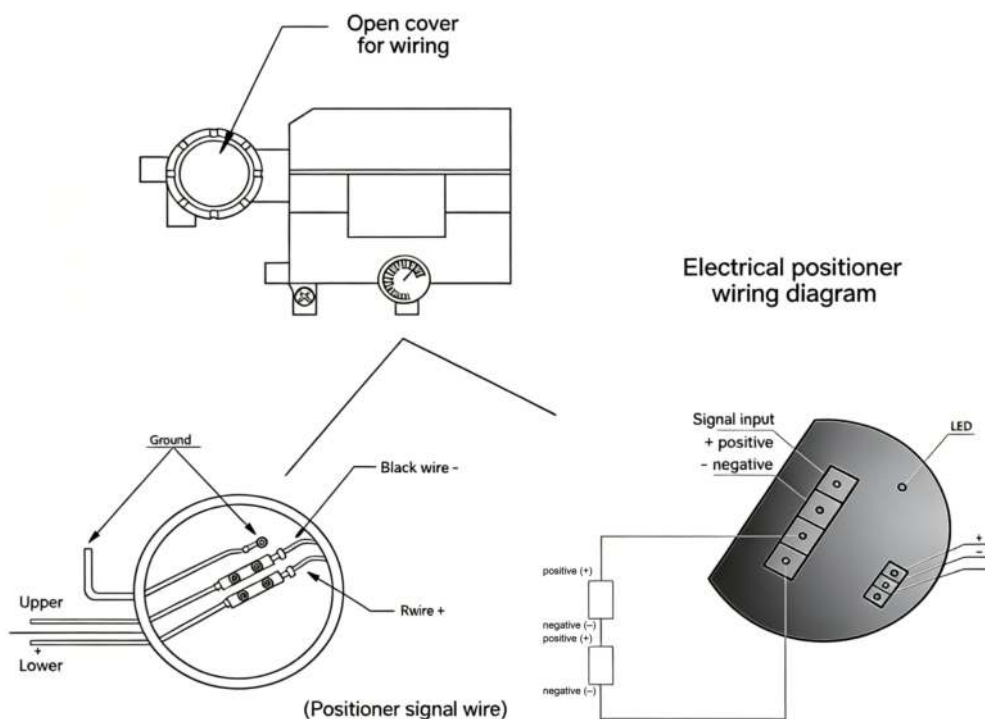


Pneumatic Valve Circuit Diagram

On-off Type Wiring Diagram



Regulating Type Wiring Diagram



Vision: Build more robust industrial automatic control systems

Mission: Make industrial automation technologies simpler and more reliable

Core Values: Simplify complexity, Continuous Innovation, Win-Win Collaboration



Wuhan Grat Control Valve Co., Ltd

TEL: +86-027-60706976

+86-027-60706977

Email: info@gratcv.com

Web: <https://www.gratcv.com>

Co.Addr: No. 62, Guanggu Avenue, Wuhan, Hubei, China.

Fty.Addr: B8-3-2, OVU, Wuhan, Hubei, China.



official website