

PTFE Lined Butterfly Valve



Product Introduction:

Fluorine-lined butterfly valves are custom-made for severe corrosive conditions. The valve body uses carbon steel or stainless steel as the base with internal fluoroplastic lining such as PTFE. It excels in corrosion resistance against strong acids, alkalis and oxidants, protecting the valve body from chemical erosion. Compact in structure with low flow resistance and high flow capacity, it provides reliable sealing for medium and low pressure applications. Widely used in chemical, pharmaceutical, metallurgical, environmental protection and acid-base conveying systems, it runs stably long-term with low maintenance costs.

Product Features:

- **Excellent corrosion and wear resistance:** FEP lining fully covers wetted parts, resisting acid, alkali and severe corrosive media, ideal for heavy corrosion working conditions.
- **Long-lasting reliable sealing:** Aging and corrosion resistant PTFE with lip elastic sealing structure realizes zero leakage and prolongs service life.
- **Wide application adaptability:** Full fluoroplastic media contact and superior sealing ensure stable operation in various high-demand corrosive fluid systems with low maintenance.

Wafer Type Electric PTFE-Lined Butterfly Valve

Product Description

Wafer-type fluorine-lined electric Butterfly Valve integrates wafer connection, anti-corrosion and electric control, with PTFE lining for acid/alkali resistance, compact installation, widely used in chemical, pharmaceutical and environmental protection for corrosive medium

Main Performance Specifications

Nominal Diameter: DN40~DN500

Nominal Pressure: 1.0MPa~1.6MPa

Medium Temperature: -50°C~160°C

Protection Grade: Ip67

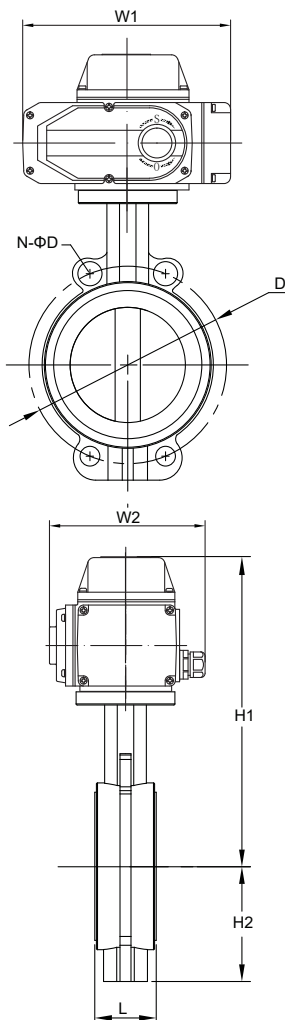
Applicable Media: Strongly corrosive media such as sulfuric acid, hydrofluoric acid, phosphoric acid, chlorine gas, strong alkali and aqua regia.

Manufacturing Standard: GB12237-2021, API 6D

Structural Length Standard: GB/T 12221-2005



Installation Dimension Drawing



Size (mm)	L	D	N-ΦD	H1	H2	W1	W2
40	33	115	4-Φ16	260	60	196	145
50	43	125	4-Φ18	270	70	196	145
65	46	145	4-Φ18	283	80	196	145
80	46	160	8-Φ18	327	89	255	182
100	52	180	8-Φ18	334	105.5	255	182
125	56	210	8-Φ18	357	121	255	182
150	56	240	8-Φ22	372	145	255	182
200	60	295	12-Φ22	420	177	255	182
250	66	355	12-Φ26	518	205	354	273
300	78	410	12-Φ26	535	235	354	273
350	78	470	16-Φ26	581	260	354	273
400	102	525	16-Φ30	630	299	354	273
450	114	585	20-Φ30	682	320	354	273
500	127	650	20-Φ33	710	352.5	354	273

Wafer Type Pneumatic PTFE-Lined Butterfly Valve

Product Description

GRAT wafer fluorine-lined pneumatic Butterfly Valve adopts fluorine lining on valve body and disc for strong acid and alkali corrosion resistance. Compact wafer mounting with pneumatic 90° quick rotation, ideal for corrosive medium delivery in chemical and pharmaceutical industries.

Main Performance Specifications

Nominal Diameter: DN40~DN400

Nominal Pressure: 1.0MPa~1.6MPa

Medium Temperature: -50°C~160°C

Protection Grade: Ip66

Applicable Media: Strongly corrosive media such as sulfuric acid, hydrofluoric acid, phosphoric acid, chlorine gas, strong alkali and aqua regia.

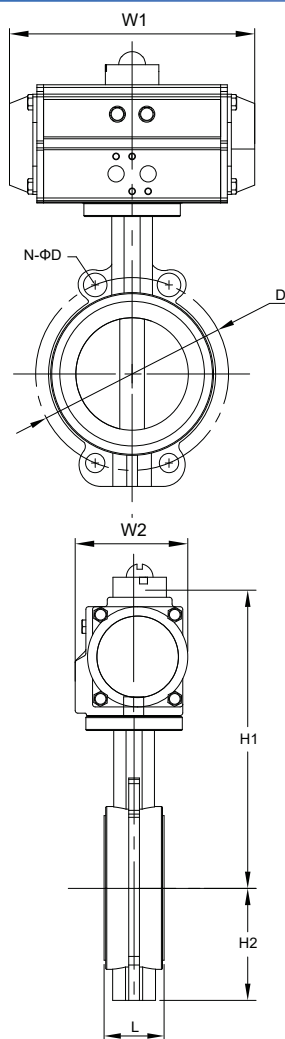
Manufacturing Standards: GB 12237-2021, API 6D

Structural Length Standard: GB 12221-2005

Inspection Standard: API 598



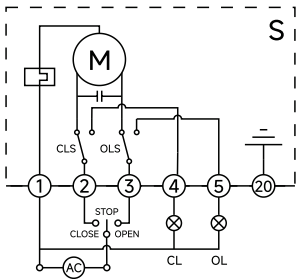
Installation Dimension Drawing



Size (mm)	L	D	N-ΦD	H2	Double-acting			Single action		
					H1	W1	W2	H1	W1	W2
40	33	115	4-Φ16	60	246	147	72	262	168	83
50	43	125	4-Φ18	70	272	168	83	284	184	95
65	46	145	4-Φ18	80	297	184	95	314	262	109
80	46	160	8-Φ18	89	328	204	103	352	268	122
100	52	180	8-Φ18	105.5	353	262	109	411	301	142
125	56	210	8-Φ18	121	376	262	109	434	301	142
150	56	240	8-Φ22	145	407	268	122	466	390	152
200	60	295	12-Φ22	177	487	301	144	529	458	174
250	66	355	12-Φ26	205	565	390	152	623	525	206
300	78	410	12-Φ26	235	607	458	174	665	532	226
350	78	470	16-Φ26	260	686	525	206	746	602	260
400	102	525	16-Φ30	299	735	525	206	795	602	260

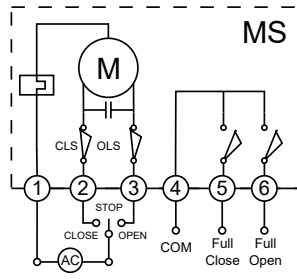
Note: For pneumatic valves, the matching actuator model and relevant dimensions may vary depending on service medium, valve torque and control method.

Circuit Diagram



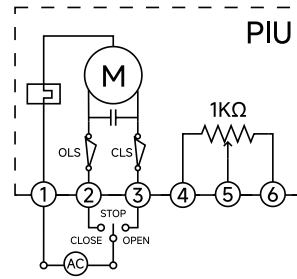
S

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.



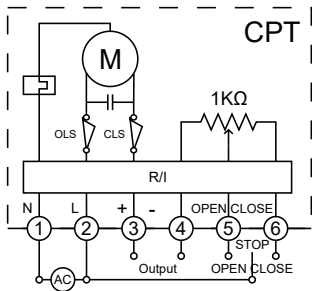
MS

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



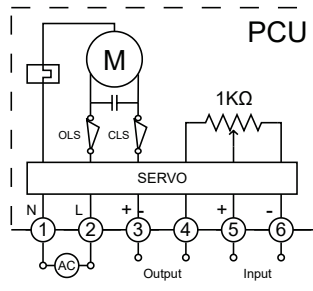
PIU

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



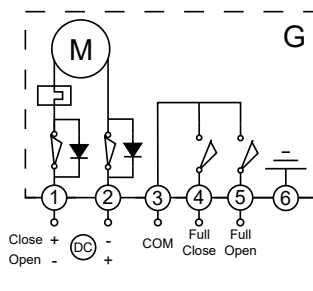
PCU

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.

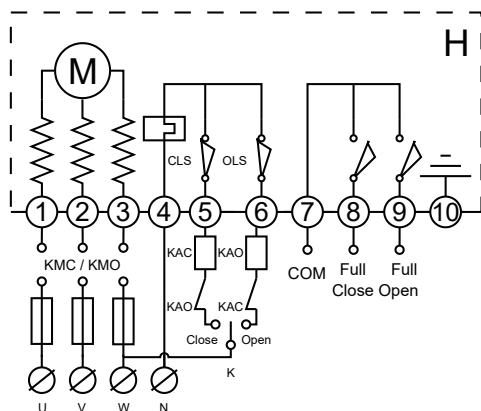
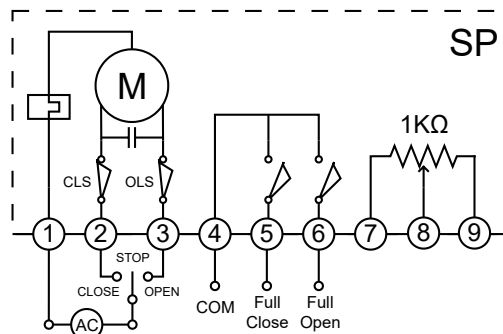


G

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.

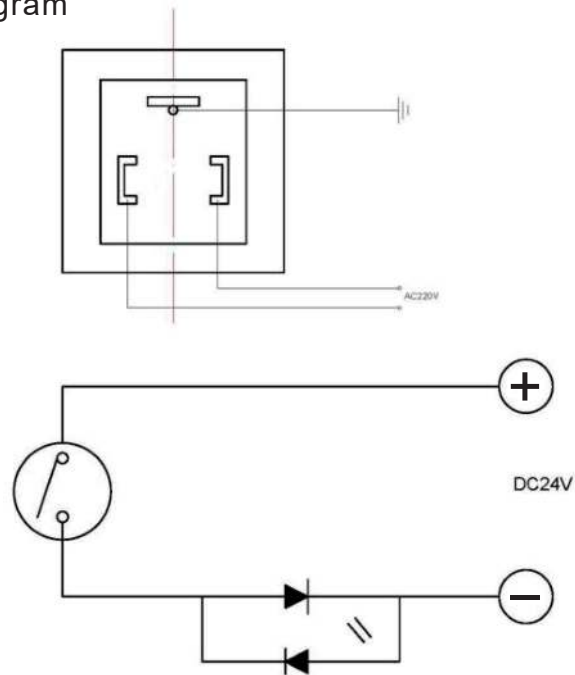


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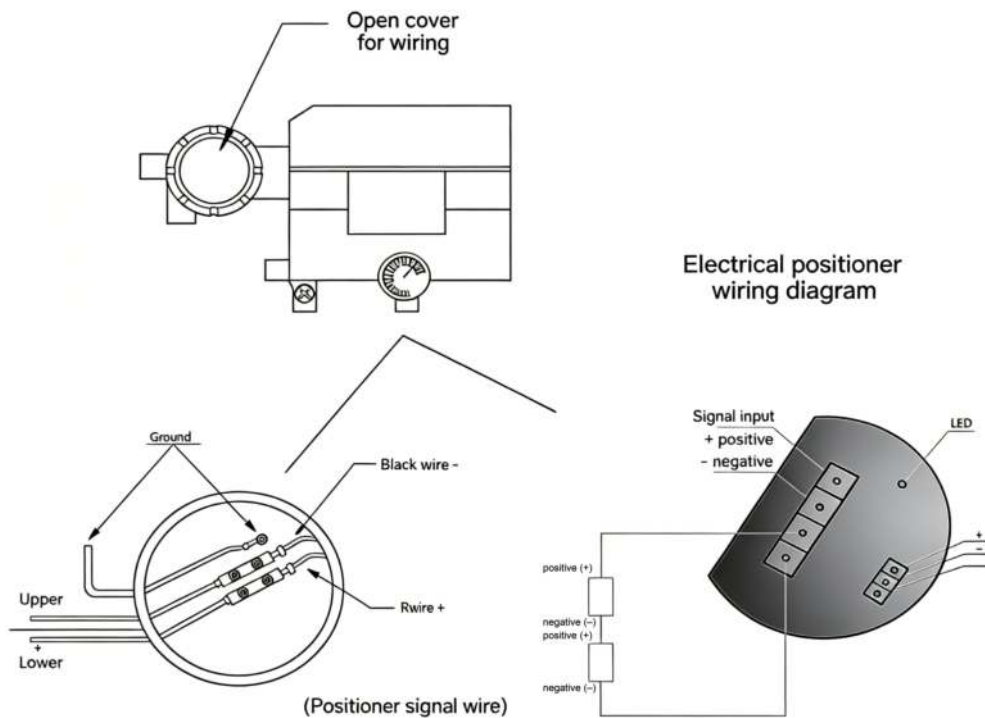
Three-phase AC switching signals are output through an external three-phase power phase-reversing circuit to control opening/closing operations, accompanied by a set of passive contact signals for fully open/fully closed position indication.

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



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