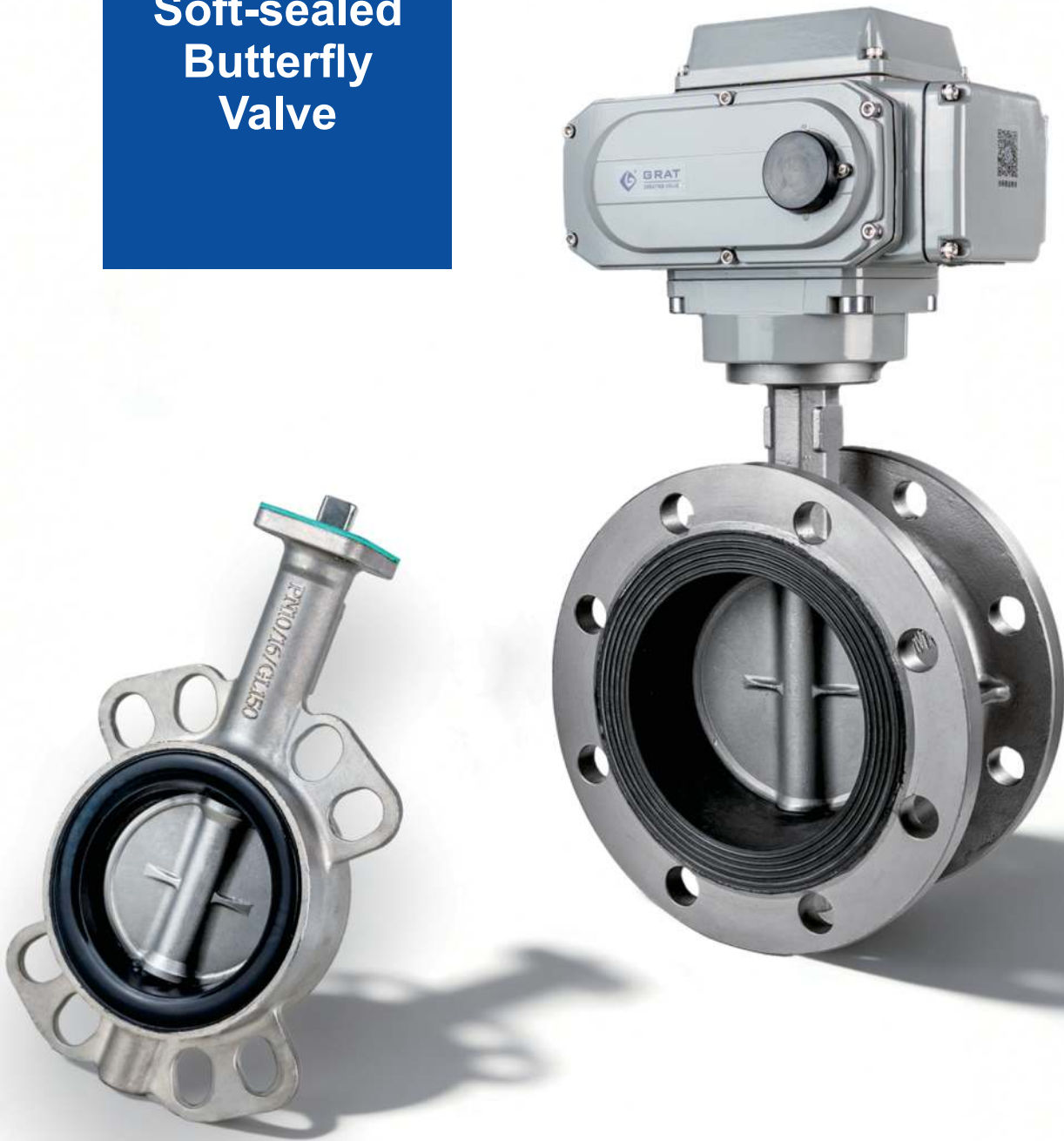


Soft-sealed Butterfly Valve



Product Description:

As the most widely used Butterfly Valve, it is suitable for conveying and controlling liquid media such as water and oil. The high-strength frame disc ensures large flow area, low flow resistance and high circulation efficiency. The baked-paint valve body has excellent rust and corrosion resistance; replacing the seal seat material can adapt to different working media. With bidirectional sealing, it can be flexibly installed in any direction, not limited by medium flow or space.

Product Features:

- **Reliable structure:** Pinless design avoids pin falling off during long-term operation, ensuring stability and reducing maintenance costs;
- **Flexible installation:** Bidirectional sealing allows arbitrary installation direction, adapting to complex pipeline layouts;
- **Durable sealing:** Stainless steel and NBR oil-resistant rubber seal pair offers excellent wear/oil resistance, extending service life;
- **High cost-performance:** Compact, light, easy to install/maintain, long service life, lower comprehensive operating cost than similar products.

Wafer Type Electric Soft-sealed Butterfly Valve

Product Description

Wafer mounting, compact, lightweight and space-saving. Soft seal seat provides excellent tightness and low leakage. Electric actuator enables quick operation. Suitable for medium and low pressure, widely applied in water supply & drainage, HVAC for flow and pressure control.

Main Performance Specifications

Nominal Diameter: DN40 ~ Dn800

Nominal Pressure: 0.1MPa ~ 2.5MPa

Medium Temperature: -20°C ~ 120°C

Ingress Protection: IP67

Applicable Media: Water, oil, gas, corrosive media, etc.

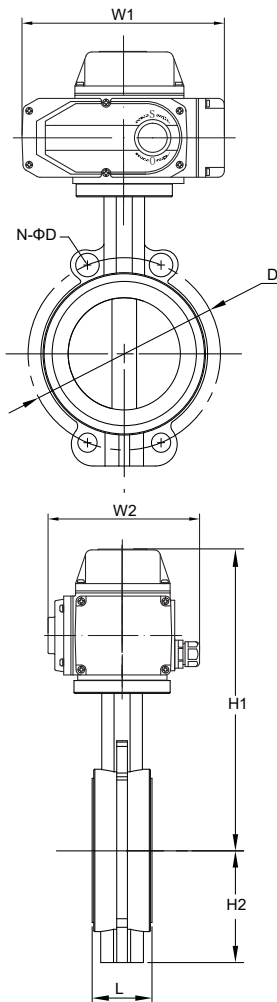
Manufacturing Standard: GB/T 12238-2008

Structure Length Standard: GB/T 12221-2005

Inspection Standard: GB/T 13927-2022



Installation Dimension Drawing



Size (mm)	L	D	N-φD	H2	H1	W1	W2
40	33	125	4-φ18	48	210	138	76
50	42.6	125	4-φ18	70	314	160	137
65	45.6	145	4-φ18	76	327	160	137
80	45.6	160	8-φ18	89	333	160	137
100	51.6	180	4-φ22	104	385	196	145
125	55.6	210	4-φ22	120	400	196	145
150	55.6	240	4-φ23	139	442	255	182
200	59.6	295	4-φ23	175	480	255	182
250	67.6	355	4-φ28	203	522	255	182
300	77.6	410	4-φ28	242	537	255	182
350	77	470	4-φ28	277.5	555	354	273
400	86.5	525	4-φ30	309	590	354	273
450	105.6	585	4-φ30	337	610	354	273
500	131.8	650	4-φ33	361	670	354	273
600	152	770	4-φ36	459	1110	520	470
700	163	840	4-φ36	527	1180	520	470
800	188	950	4-φ39	594	1220	520	470

Flanged Electric Soft-sealed Butterfly Valve

Product Description

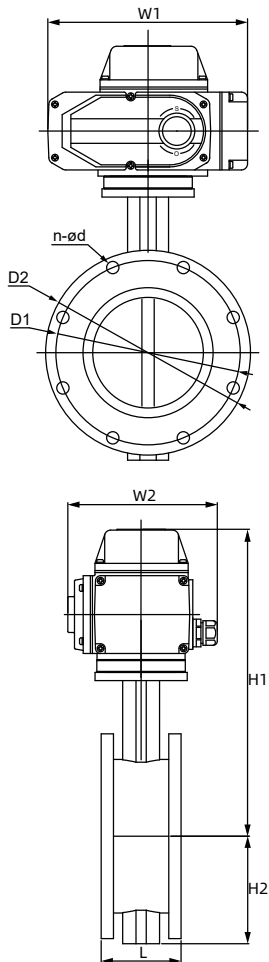
Flange-connected, firm, tight, high pressure-bearing. Soft seal seat: reliable, wear & corrosion resistant. Precise, easy-operate electric actuator. For medium-high pressure, large-diameter pipelines; used in chemical, power, metallurgical industries for medium control.

Main Performance Specifications

Nominal Diameter: DN50 ~ Dn800
 Nominal Pressure: 0.1MPa ~ 2.5MPa
 Medium Temperature: -20°C ~ 120°C
 Protection Grade: IP67
 Applicable Media: Water, oil, gas, corrosive media, etc.
 Manufacturing Standard: GB/T 12238-2008
 Face-to-Face Dimension Standard: GB/T 12221-2005
 Inspection Standard: GB/T 13927-2022
 Flange Standard: GB/T 9124.1-2019, GB/T 9124.2-2019, GB/T 17241.6-2008



Installation Dimension Drawing



Size (mm)	D1	D2	N-ΦD	L	H2	H1	W1	W2
50	125	165	4-Φ18	108	70	288	196	145
65	145	185	4-Φ18	112	76	301	196	145
80	160	200	4-Φ18	114	89	313	196	145
100	180	220	8-Φ18	127	104	328	196	145
125	210	250	8-Φ18	140	120	348	196	145
150	240	285	8-Φ23	140	132	368	196	145
200	295	340	8-Φ23	152	167	435	255	182
250	350	350	12-Φ23	165	202	474	255	182
300	400	445	12-Φ23	178	239	502	255	182
350	460	505	16-Φ23	190	265	537	255	182
400	515	565	16-Φ28	216	308	640	354	273
450	565	615	20-Φ28	222	341	662	354	273
500	620	670	20-Φ28	229	381	700	354	273
600	725	780	20-Φ31	267	476	803	354	273
700	840	895	24-Φ34	292	520	866	354	273
800	950	1015	24-Φ37	318	591	949	354	273

Wafer Type Pneumatic Soft-sealed Butterfly Valve

Product Description

Wafer pneumatic soft-seal Butterfly Valve is compact, lightweight and space-saving with wafer installation. Its pneumatic actuator enables fast response and quick opening/closing for continuous operation. The soft seal seat offers tight shutoff, low leakage and corrosion resistance, ideal for medium-low pressure water supply, drainage and HVAC systems with frequent operation.

Main Performance Specifications

Nominal Diameter: DN40~DN400

Nominal Pressure: 0.1MPa~2.5MPa

Medium Temperature: -20°C~120°C

Protection Class: Ip66

Applicable Media: Water, oil, gas, corrosive media, etc.

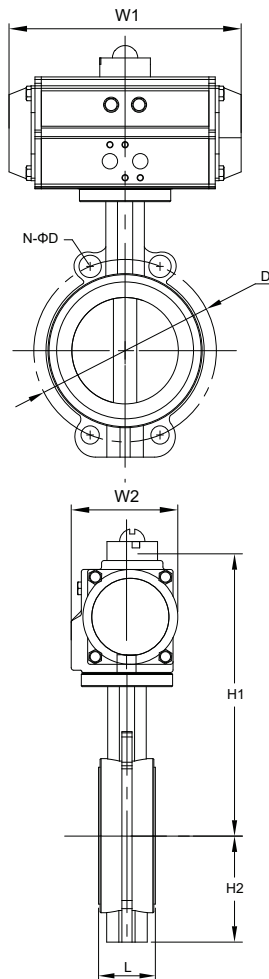
Manufacturing Standard: GB/T 12238-2008

Structure Length Standard: GB/T 12221-2005

Inspection Standard: GB/T 13927-2022



Installation Dimension Drawing



Size (mm)	L	D	N-φD	H2	双作用			单作用		
					H1	W1	W2	H1	W1	W2
40	33	125	4-φ18	48	232	147	72	248	168	83
50	42.6	125	4-φ18	70	335	168	83	347	184	95
65	45.6	145	4-φ18	76	360	184	95	364	262	109
80	45.6	160	8-φ18	89	375	204	103	399	268	122
100	51.6	180	4-φ22	104	426	262	109	484	301	142
125	55.6	210	4-φ22	120	441	262	109	499	301	142
150	55.6	240	4-φ23	139	477	268	122	536	390	152
200	59.6	295	4-φ23	175	547	301	144	589	458	174
250	67.6	355	4-φ28	203	606	390	152	664	525	206
300	77.6	410	4-φ28	242	646	458	174	704	532	226
350	77	470	4-φ28	277.5	660	525	206	720	602	260
400	86.5	525	4-φ30	309	695	525	206	755	602	260

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

Flanged Pneumatic Soft-sealed Butterfly Valve

Product Description

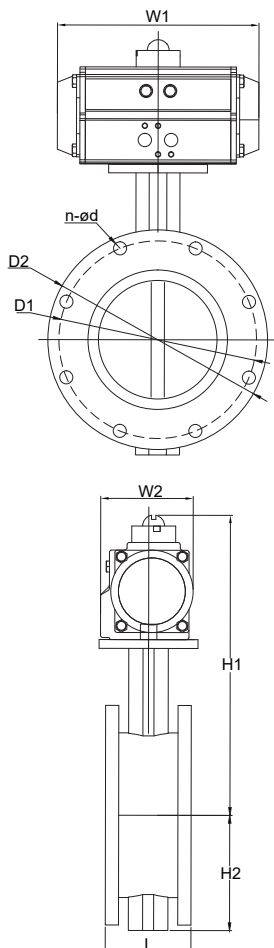
Flanged pneumatic soft-seal Butterfly Valve adopts rigid flange mounting with stable installation and higher pressure resistance than wafer type. It delivers precise control and zero leakage via high-torque actuator and soft seal seat, suitable for medium/high pressure large-diameter pipelines with corrosive media, widely applied in chemical, power and metallurgical industries.

Main Performance Specifications

Nominal Diameter: DN50~DN400
 Nominal Pressure: 0.1MPa~2.5MPa
 Medium Temperature: -20°C~120°C
 Protection Grade: Ip67
 Applicable Media: Water, oil, gas, corrosive media, etc.
 Manufacturing Standard: GB/T 12238-2008
 Structural Length Standard: GB 12221-2005
 Inspection Standard: GB/T 13927-2022
 Flange Standard: GB/T 9124.1-2019, GB/T 9124.2-2019, GB/T 17241.6-2008



Installation Dimension Drawing



Size (mm)	D1	D2	n- Φ d	L	H2	Double-acting			Single-acting		
						H1	W1	W2	H1	W1	W2
50	125	165	4- Φ 18	108	70	290	168	83	290	168	83
65	145	185	4- Φ 18	112	76	302	184	95	302	184	95
80	160	200	4- Φ 18	114	89	311	204	103	319	262	109
100	180	220	8- Φ 18	127	104	319	262	109	345	268	122
125	210	250	8- Φ 18	140	120	319	262	109	377	301	142
150	240	285	8- Φ 23	140	132	335	268	122	377	301	142
200	295	340	8- Φ 23	152	167	377	301	144	394	390	152
250	350	395	12- Φ 23	165	202	394	390	152	419	458	174
300	400	445	12- Φ 23	178	239	419	458	174	452	525	206
350	460	505	16- Φ 23	190	265	420	525	206	445	532	226
400	515	565	16- Φ 28	216	308	452	525	206	512	602	260

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

Wafer Type Explosion-Proof Electric Soft-sealed Butterfly Valve

Product Description

Wafer explosion-proof electric soft-seal Butterfly Valve is compact and lightweight. With explosion-proof electric actuator, it operates safely in flammable and explosive environments. It provides tight sealing, low leakage and precise control, suitable for medium-low pressure pipelines in petroleum, chemical and other explosion-proof working conditions.

Main Performance Specifications

Nominal Diameter: DN40~DN500

Nominal Pressure: 0.1MPa~2.5MPa

Medium Temperature: -20°C~120°C

Protection Grade: Ip67

Applicable Media: Water, oil, gas, corrosive media, etc.

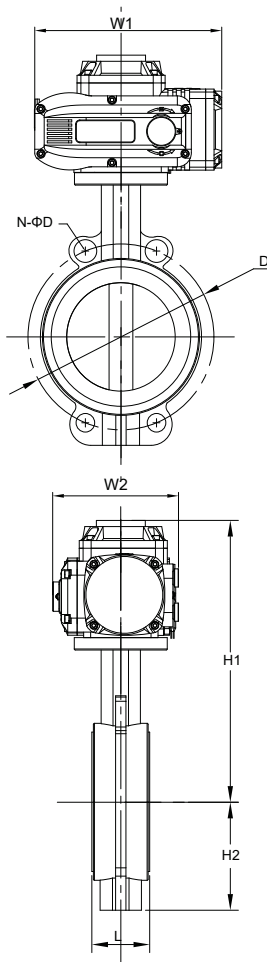
Manufacturing Standard: GB/T 12238-2008

Structural Length Standard: GB 12221-2005

Inspection Standard: GB/T 13927-2022



Installation Dimension Drawing



Size (mm)	L	D	N-φD	H2	H1	W2	W1
40	33	125	4-φ18	48	276	217	150
50	42.6	125	4-φ18	70	398	217	150
65	45.6	145	4-φ18	76	375	217	150
80	45.6	160	8-φ18	89	381	217	150
100	51.6	180	4-φ22	104	414	217	150
125	55.6	210	4-φ22	120	429	217	150
150	55.6	240	4-φ23	139	465	217	150
200	59.6	295	4-φ23	175	536	268	180
250	67.6	355	4-φ28	203	562	268	180
300	77.6	410	4-φ28	242	561	268	180
350	77	470	4-φ28	277.5	562	268	180
400	86.5	525	4-φ30	309	613	354	273
450	105.6	585	4-φ30	337	633	354	273
500	131.8	650	4-φ33	361	693	354	273

Flanged Explosion-Proof Electric Soft-Sealed Butterfly Valve

Product Description

Flanged explosion-proof electric soft-seal Butterfly Valve has rigid flange connection for stable installation and high pressure resistance. Its flameproof anti-static actuator ensures safe use in hazardous environments. With wear-resistant soft seal and high torque drive, it fits high-pressure large-diameter explosion-proof pipelines for oil, chemical and coal mining

Main Performance Specifications

Nominal Diameter: DN50~DN800

Nominal Pressure: 0.1MPa~2.5MPa

Medium Temperature: -20°C~120°C

Protection Grade: Ip67

Applicable Media: Water, oil, gas, corrosive media, etc.

Manufacturing Standard: GB/T 12238-2008

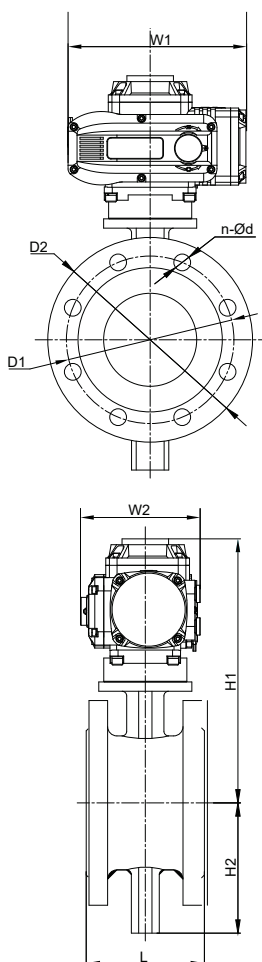
Structural Length Standard: GB/T 12221-2005

Inspection Standard: GB/T 13927-2022

Flange Standard: GB/T 9124.1-2019, GB/T 9124.2-2019, GB/T 17241.6-2008

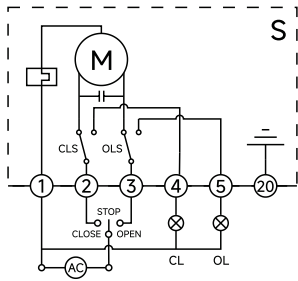


Installation Dimension Drawing



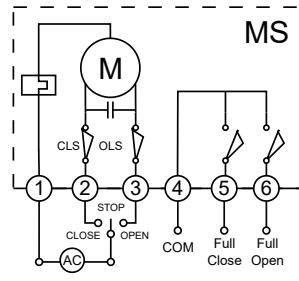
Size (mm)	D1	D2	n-Ød	L	H2	H1	W1	W2
50	125	165	4-Φ18	108	70	315.5	217	150
65	145	185	4-Φ18	112	76	329.5	217	150
80	160	200	4-Φ18	114	89	341.5	217	150
100	180	220	8-Φ18	127	104	356.5	217	150
125	210	250	8-Φ18	140	120	408.5	268	180
150	240	285	8-Φ23	140	132	429.5	268	180
200	295	340	8-Φ23	152	167	459	268	180
250	350	395	12-Φ23	165	202	498	268	180
300	400	445	12-Φ23	178	239	526	268	180
350	460	505	16-Φ23	190	265	561	268	180
400	515	565	16-Φ28	216	308	640	354	273
450	565	615	20-Φ28	222	341	662	354	273
500	620	670	20-Φ28	229	381	700	354	273
600	725	780	20-Φ31	267	476	803	354	273
700	840	895	24-Φ34	292	520	866	354	273
800	950	1015	24-Φ37	318	591	949	354	273

Circuit Diagram



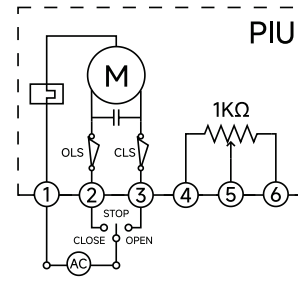
S

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.



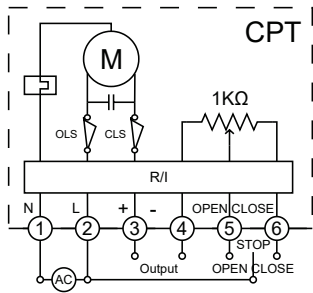
MS

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



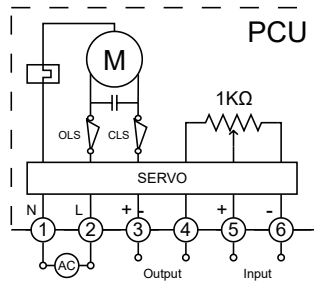
PIU

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



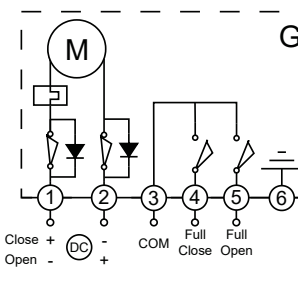
PCU

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.

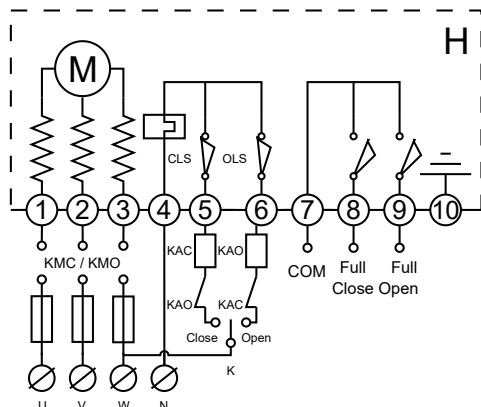
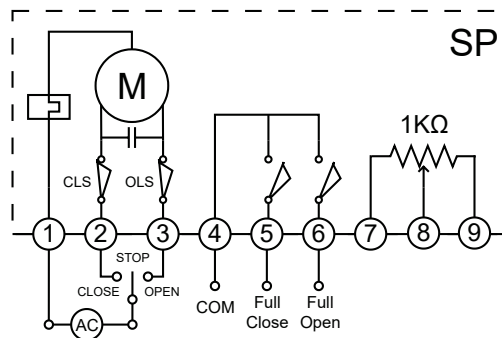


G

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.

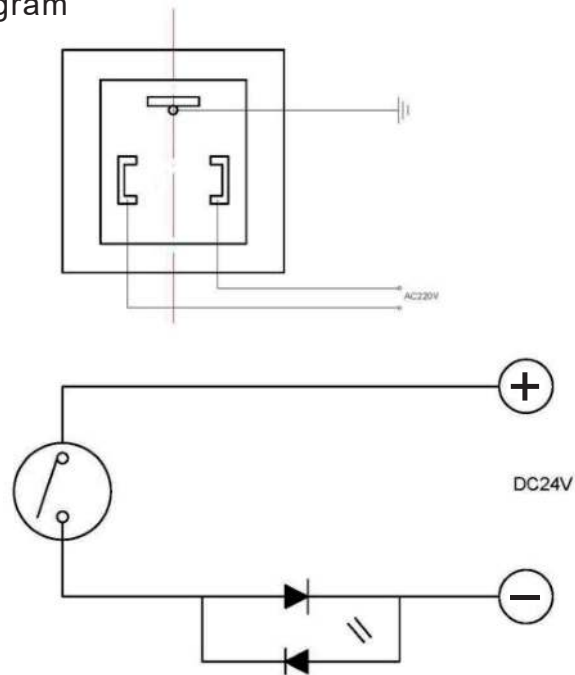


H

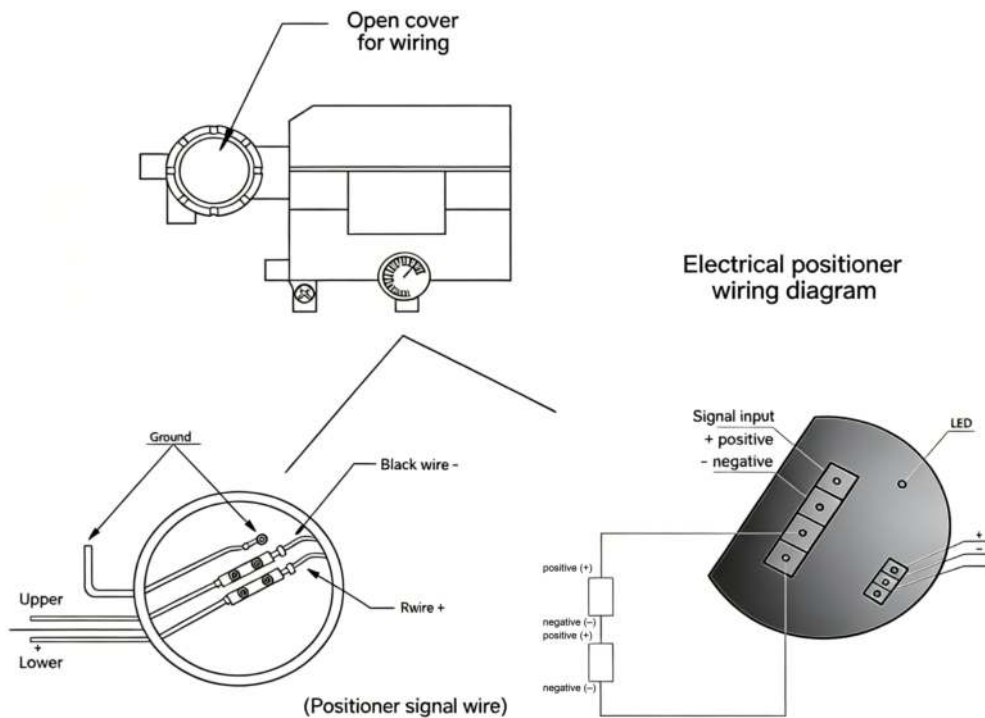
Three-phase AC switching signals are output through an external three-phase power phase-reversing circuit to control opening/closing operations, accompanied by a set of passive contact signals for fully open/fully closed position indication.

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