

Hard-sealed Ball Valve



Product Introduction:

Metal-seated ball valve is a high-strength control valve with metal-to-metal sealing structure. Hardened valve core and seat deliver superior wear, high temperature and pressure resistance. It features stable sealing, low leakage, moderate operating torque and flexible operation. Made of carbon steel and stainless steel, it suits steam, high-temperature oil, gas and particle-laden media, ideal for severe working conditions in petroleum, chemical, power and metallurgy industries with long service life and low maintenance cost.

Product Features:

- **Enhanced sealing performance:** Optimized non-threaded flange sealing surface reaches Class V sealing level for reliable sealing and zero flange leakage.
- **Smooth anti-blocking flow:** Built-in shear structure cuts sundries effectively to keep pipelines unobstructed.
- **Accurate high-temperature regulation:** Extended stem improves heat dissipation; integrated stem and ball core keeps rotation error $\leq 0.5\%$ to eliminate mechanical backlash.
- **Outstanding heat resistance:** Stellite hardfaced seal withstands up to 350°C for stable operation under high-temperature harsh conditions.

Wafer Type Electric Hard-Seated Ball Valve

Product Description

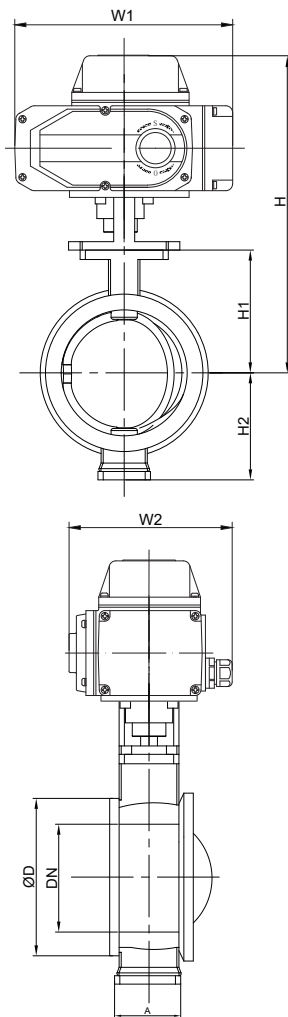
Compact wafer electric hard-seal ball valve, easy installation without extra flanges. High pressure & wear resistant, fast on-off and zero leakage. Ideal for steam and high-temperature oil in power, metallurgy and heating systems.

Main Performance Specifications

- Nominal Diameter: DN15~DN350
- Nominal Pressure: 1.6MPa~6.4MPa
- Medium Temperature: ≤450°C
- Protection Class: Ip67
- Applicable Media: Slurry (mineral, coal, pulp), water, oil, gas
- Manufacturing Standard: GB/T 12237-2021
- Face-to-Face Standard: GB/T 12221-2005
- Inspection Standard: GB/T 13927-2022



Installation Dimension Drawing



Size		A	φD	H1	H2	H	W1	W2
mm	in							
15	1/2"	62	54	74	75	390	196	145
20	3/4"	62	54	74	75	390	196	145
25	1"	62	54	74	75	390	196	145
32	1-1/4"	62	78	80	75	400	196	145
40	1-1/2"	62	82	85	75	405	196	145
50	2"	75	100	87	95	430	196	145
65	2-1/2"	80	120	105	115	498	255	182
80	3"	100	131	115	125	520	255	182
100	4"	115	158	125	125	530	255	182
125	5"	130	180	140	155	570	255	182
150	6"	160	216	153	165	600	255	182
200	8"	200	260	200	195	680	255	182
250	10"	240	325	225	225	730	255	182

Hydrostatic test pressure for valve body shall be 1.5 times the maximum working pressure.
Sealing test pressure shall be 1.1 times the maximum working pressure.
Test Medium: Water

Flanged Electric Hard-Seated Ball Valve

Product Description

Flanged electric hard-seal ball valve features sturdy high-pressure connection for large pipes. High temp & wear resistant, smooth operation with zero leakage. Ideal for steam and hot gas, reliable for petrochemical, power and metallurgy.

Main Performance Specifications

Nominal Size: DN15~DN350

Nominal Pressure: 1.6MPa~6.4MPa

Medium Temperature: $\leq 450^{\circ}\text{C}$

Protection Class: Ip67

Applicable Media: Mineral slurry, coal slurry, pulp, water, oil, gas

Manufacturing Standard: GB/T 12237-2021

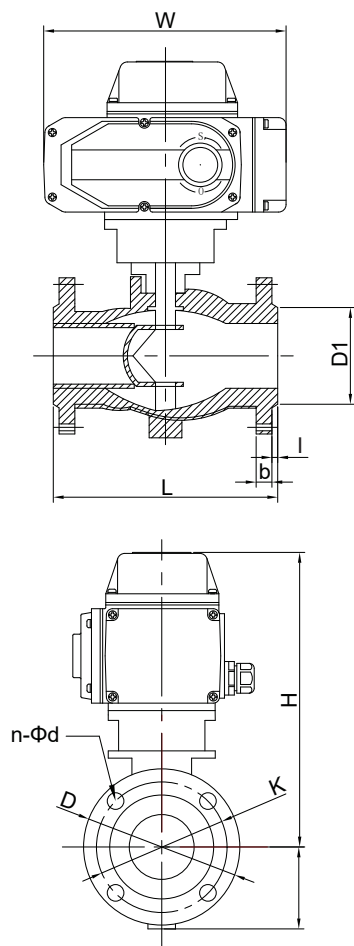
Face-to-Face Standard: GB/T 12221-2005

Test Standard: GB/T 13927-2022

Flange Standard: GB/T 9124.1-2019, GB/T 9124.2-2019, GB17241.6-2008



Installation Dimension Drawing



Size		D1	D2	d	K	D	M	B	F	L	H1	H2	W1	W2
mm	in													
15	1/2"	15	28	45	65	95	4- Φ 14	14	2	102	290	55	196	145
20	3/4"	15	28	55	75	105	4- Φ 14	14	2	102	300	60	196	145
25	1"	20	40	66	85	115	4- Φ 14	14	2	102	310	65	196	145
32	1-1/4"	25	46	78	100	135	4- Φ 18	16	2	114	320	75	196	145
40	1-1/2"	32	54	85	110	145	4- Φ 18	16	2	114	330	80	196	145
50	2"	40	65	100	125	160	4- Φ 18	16	2	124	340	85	196	145
65	2-1/2"	50	80	120	145	180	4- Φ 18	18	2	145	350	100	196	145
80	3"	65	100	135	160	195	8- Φ 18	20	2	165	360	105	196	145
100	4"	80	110	155	180	215	8- Φ 18	20	2	194	420	115	196	145
125	5"	100	135	185	210	245	8- Φ 18	22	3	210	430	130	255	184
150	6"	125	165	210	240	280	8- Φ 23	24	3	229	450	150	255	184
200	8"	160	205	265	295	335	12- Φ 23	26	3	243	480	175	255	184
250	10"	210	260	320	355	405	12- Φ 26	30	3	297	520	220	255	184
300	12"	250	322	375	410	460	12- Φ 26	30	3	340	600	250	255	184
350	14"	300	365	435	470	520	16- Φ 26	34	3	422	630	280	255	184

Wafer Type Pneumatic Hard-Seated Ball Valve

Product Description

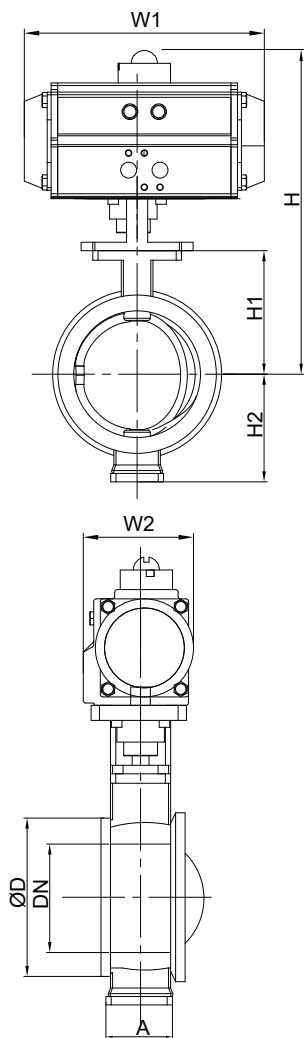
Wafer-type pneumatic hard-seal ball valve: space-saving, easy to assemble/disassemble, fast & responsive pneumatic operation. High-pressure, wear-resistant hard-seal with excellent sealing, suitable for steam and high-temperature fluids, ideal for chemical and thermal systems.

Main Performance Specifications

- Nominal Size: DN15~DN350
- Nominal Pressure: 1.6MPa~6.4MPa
- Medium Temperature: ≤450°C
- Protection Class: Ip66
- Applicable Media: Mineral slurry, coal slurry, pulp, water, oil, gas
- Manufacturing Standard: GB/T 12237-2021
- Face-to-Face Standard: GB/T 12221-2005
- Inspection Standard: GB/T 13927-2022



Installation Dimension Drawing



Size		A	φD	H1	H2	Double-acting			Single-acting		
mm	in					H1	W1	W2	H1	W1	W2
15	1/2"	62	54	74	75	186	147	72	186	147	72
20	3/4"	62	54	74	75	186	147	72	202	168	83
25	1"	62	54	74	75	202	168	83	214	184	95
32	1-1/4"	62	78	80	75	208	168	83	229	204	103
40	1-1/2"	62	82	85	75	225	184	95	242	262	109
50	2"	75	100	87	95	236	204	103	260	268	122
65	2-1/2"	80	120	105	115	262	262	109	320	301	142
80	3"	100	131	115	125	288	268	122	347	390	152
100	4"	115	158	125	125	340	301	142	382	458	174
125	5"	130	180	140	155	355	301	142	397	458	174
150	6"	160	216	153	165	385	390	152	443	525	206
200	8"	200	260	200	195	457	458	174	515	532	226

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

Flanged Pneumatic Hard-Seated Ball Valve

Product Description

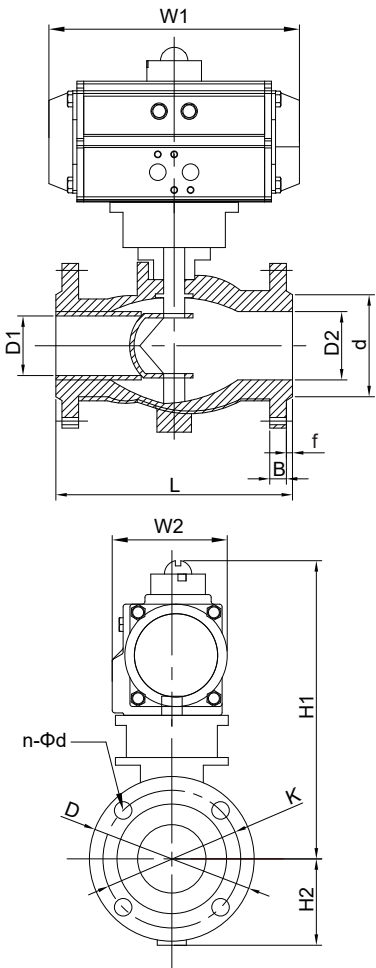
Flanged pneumatic hard-seal valve: stable flange connection, fast response, wear-resistant, zero leakage. Suitable for petrochemical and heating fields for precise control.

Main Performance Specifications

Nominal Diameter: DN15~DN350
Nominal Pressure: 1.6MPa~6.4MPa
Medium Temperature: ≤450°C
Protection Class: Ip66
Applicable Media: Slurry, pulp, water, oil, gas
Manufacturing Standard: GB/T (GB/T 12237-2021)
Face-to-Face Dimension Standard: GB/T (GB/T 12221-2005)
Inspection Standard: GB/T (GB/T 13927-2022)
Flange Standard: GB/T 9124.1-2019, GB/T 9124.2-2019, GB17241.6-2008



Installation Dimension Drawing



Size		D1	D2	d	K	D	n-φd	B	F	L	H2	Double-acting			Single-acting		
mm	in											H1	W1	W2	H1	W1	W2
15	1/2"	15	28	45	65	95	4-Φ14	14	2	102	55	276	147	72	276	147	72
20	3/4"	15	28	55	75	105	4-Φ14	14	2	102	60	286	147	72	302	168	83
25	1"	20	40	66	85	115	4-Φ14	14	2	102	65	312	168	83	324	184	95
32	1-1/4"	25	46	78	100	135	4-Φ18	16	2	114	75	322	168	83	343	204	103
40	1-1/2"	32	54	85	110	145	4-Φ18	16	2	114	80	344	184	95	361	262	109
50	2"	40	65	100	125	160	4-Φ18	16	2	124	85	363	204	103	387	268	122
65	2-1/2"	50	80	120	145	180	4-Φ18	18	2	145	100	381	262	109	439	301	142
80	3"	65	100	135	160	195	8-Φ18	20	2	165	105	391	268	122	450	390	152
100	4"	80	110	155	180	215	8-Φ18	20	2	194	115	493	301	142	535	458	174
125	5"	100	135	185	210	245	8-Φ18	22	3	210	130	497	301	142	539	458	174
150	6"	125	165	210	240	280	8-Φ23	24	3	229	150	534	390	152	592	525	206
200	8"	160	205	265	295	335	12-Φ23	26	3	243	175	589	458	174	647	532	226
250	10"	210	260	320	355	405	12-Φ26	30	3	297	220	662	525	206	722	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 Hard-Seated Ball Valve

Product Description

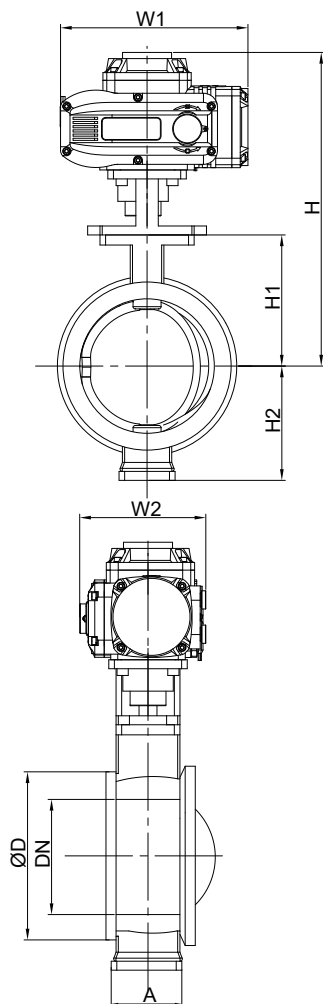
Compact wafer explosion-proof electric hard-seal ball valve, easy to install. High temp & pressure resistant with tight seal. Safe for flammable media, perfect for oil, gas and chemical hazardous environments.

Main Performance Specifications

- Nominal Diameter: DN15~DN350
- Nominal Pressure: 1.6MPa~6.4MPa
- Medium Temperature: ≤450°C
- Protection Class: Ip67
- Applicable Media: Mineral slurry, coal slurry, paper pulp, water, oil products and gas
- Manufacturing Standard: GB/T 12237-2021
- Face-to-Face Dimension Standard: GB/T 12221-2005
- Inspection Standard: GB/T 13927-2022



Installation Dimension Drawing



Size		A	φD	H1	H2	H	W1	W2
mm	in							
15	1/2"	62	54	74	75	420	217	150
20	3/4"	62	54	74	75	420	217	150
25	1"	62	54	74	75	420	217	150
32	1-1/4"	62	78	80	75	430	217	150
40	1-1/2"	62	82	85	75	435	217	150
50	2"	75	100	87	95	459	217	150
65	2-1/2"	80	120	105	115	522	268	180
80	3"	100	131	115	125	544	268	180
100	4"	115	158	125	125	554	268	180
125	5"	130	180	140	155	594	268	180
150	6"	160	216	153	165	624	268	180
200	8"	200	260	200	195	704	268	180
250	10"	240	325	225	225	754	268	180

Flanged Explosion-Proof Electric Hard-Seated Ball Valve

Product Description

Flanged explosion-proof ball valve: pressure-resistant flange connection, wear-resistant hard seal, precise operation, suitable for flammable media.

Main Performance Specifications

Nominal Diameter: DN15~DN350

Nominal Pressure: 1.6MPa~6.4MPa

Medium Temperature: $\leq 450^{\circ}\text{C}$

Protection Class: Ip67

Applicable Media: Mineral slurry, coal slurry, paper pulp, water, oil products, gas

Manufacturing Standard: GB/T 12237-2021

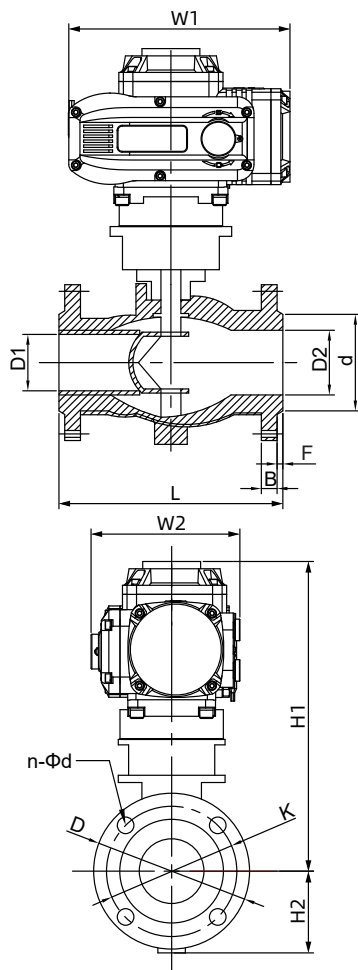
Face-to-Face Standard: GB/T 12221-2005

Inspection Standard: GB/T 13927-2022

Flange Standard: GB/T 9124.1-2019, GB/T 9124.2-2019, GB17241.6-2008

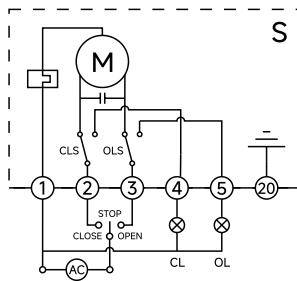


Installation Dimension Drawing



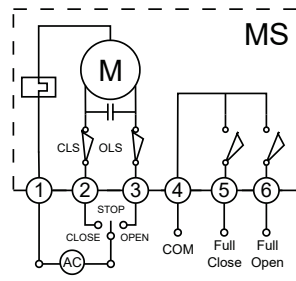
Size		D1	D2	d	K	D	n-φd	B	F	L	H1	H2	W1	W2
mm	in													
15	1/2"	15	28	45	65	95	4-Φ14	14	2	102	320	55	217	150
20	3/4"	15	28	55	75	105	4-Φ14	14	2	102	330	60	217	150
25	1"	20	40	66	85	115	4-Φ14	14	2	102	340	65	217	150
32	1 1/4"	25	46	78	100	135	4-Φ18	16	2	114	350	75	217	150
40	1 1/2"	32	54	85	110	145	4-Φ18	16	2	114	360	80	217	150
50	2"	40	65	100	125	160	4-Φ18	16	2	124	369	85	217	150
65	2 1/2"	50	80	120	145	180	4-Φ18	18	2	145	412	100	268	180
80	3"	65	100	135	160	195	8-Φ18	20	2	165	390	105	268	180
100	4"	80	110	155	180	215	8-Φ18	20	2	194	450	115	268	180
125	5"	100	135	185	210	245	8-Φ18	22	3	210	454	130	268	180
150	6"	125	165	210	240	280	8-Φ23	24	3	229	474	150	268	180
200	8"	160	205	265	295	335	12-Φ23	26	3	243	504	175	268	180
250	10"	210	260	320	355	405	12-Φ26	30	3	297	544	220	268	180
300	12"	250	322	375	410	460	12-Φ26	30	3	340	624	250	268	180

Circuit Diagram



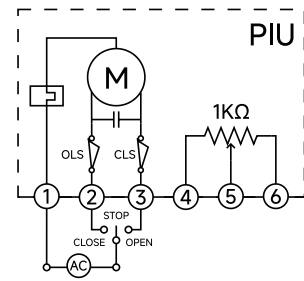
S

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.



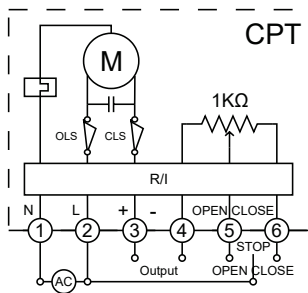
MS

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



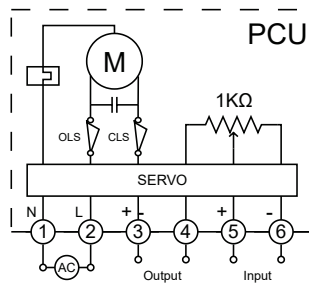
PIU

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



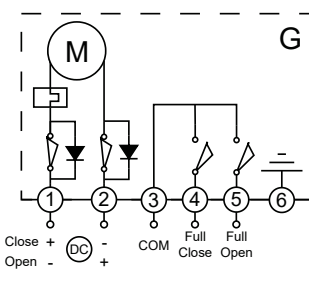
PCU

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.

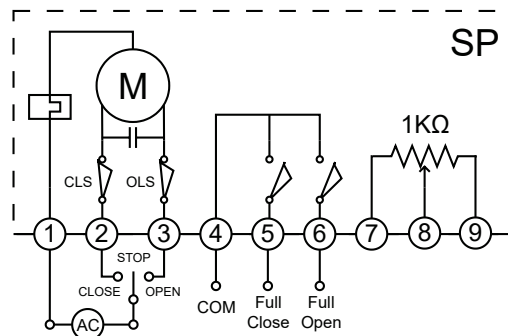


G

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.

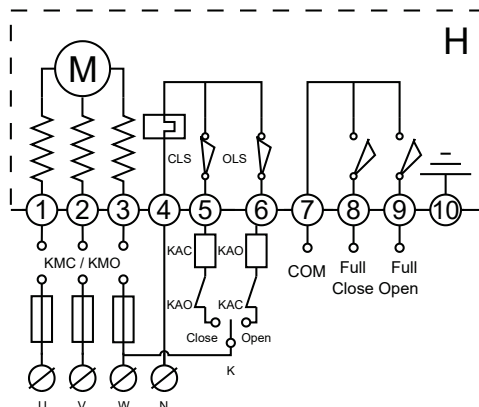
SP

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.



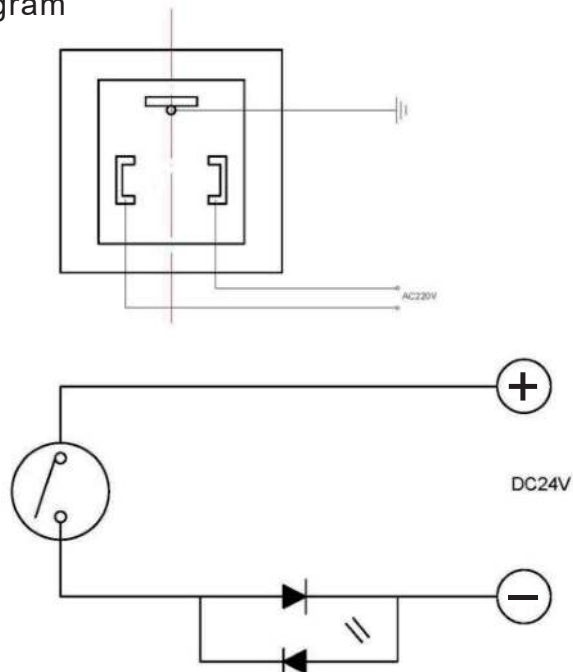
H

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.

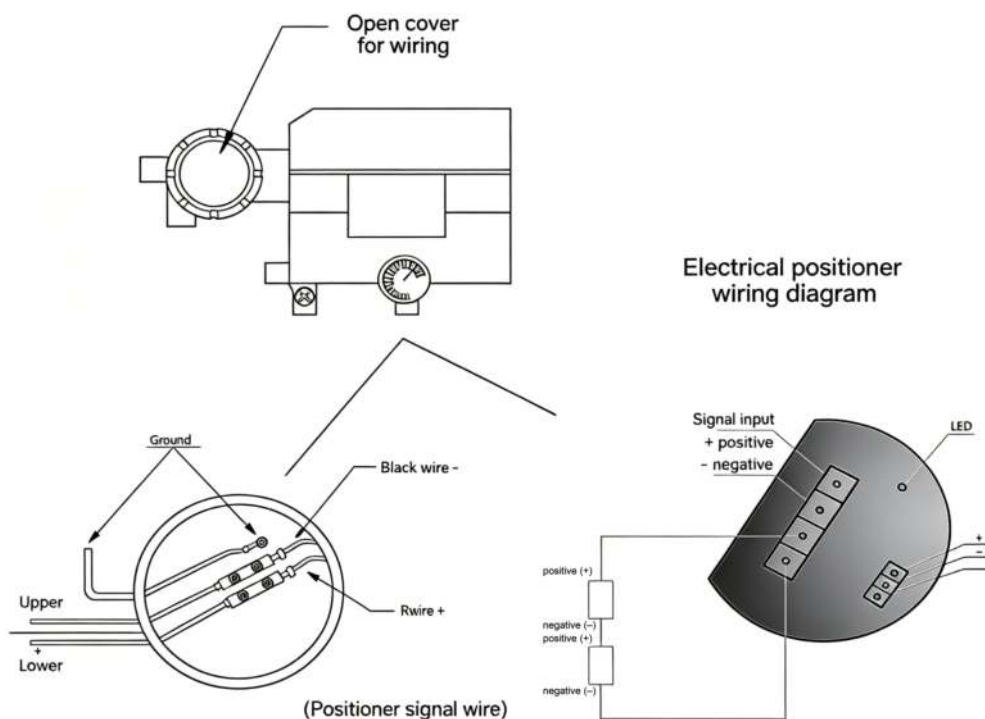


Pneumatic Valve Circuit Diagram

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



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official website