



INVESTMENT CASTING BALL VALVE



POV FLUID CONTROL TECHNOLOGY (WUHU) CO.,LTD

POV INVESTMENT CASTING BALL VALVE INDEX

General Introduction	1
1. PO9-G SERIES: GB TYPE 2-WAY FLANGE BALL VALVE (PN16-PN40)	7
1.1. PO9-GM Series: MANUAL TYPE BALL VALVE	12
1.2. PO9-GE Series: MOTORIZED BALL VALVE WITH POE ACTUATOR	15
1.3. PO9-GQ Series: MOTORIZED BALL VALVE WITH POQ HIGH-PERFORMANCE ACTUATOR	19
1.3.1. PO9-GQ-B: COMMON ON-OFF TYPE	20
1.3.2. PO9-GQ-G: REGULATING TYPE	22
1.3.3. PO9-GQ-Y: INTELLIGENT INTEGRATED TYPE	24
1.3.4. PO9-GQ-S: SUPER INTELLIGENT TYPE	26
1.4. PO9-GP Series: PNEUMATIC BALL VALVE WITH PISTON TYPE ACTUATOR	29
1.4.1. PO9-GP-O : PNEUMATIC DOUBLE ACTING COMMON ON-OFF TYPE	30
1.4.2. PO9-GP-S : PNEUMATIC SINGLE ACTING EMERGENCY SHUT-OFF TYPE	32
1.4.3. PO9-GP-P : PNEUMATIC COMMON ON-OFF TYPE EXPLOSION-PROOF	34
1.4.4. PO9-GP-R : PNEUMATIC REGULATING TYPE NON-EX / EXPLOSION-PROOF TYPE	36
1.4.5. PO9-GP-I : PNEUMATIC INTELLIGENT REGULATING TYPE NON-EX /EX-PROOF TYPE	38
1.4.6. PO9-GP-D: PNEUMATIC ACTUATOR C/W MANUAL OVERRIDE	41
1.5. PO9-GT Series: BEACON TYPE BALL VALVE WITH ACTUATOR	44
1.6. PO9-GV Series: V-NOTCH TYPE BALL VALVE WITH ACTUATOR	48
2. PO9-A SERIES: ASME TYPE 2-WAY FLANGE BALL VALVE (CL150-300LBS)	52
2.1. PO9-AM Series: MANUAL TYPE BALL VALVE	56
2.2. PO9-AE Series: MOTORIZED BALL VALVE WITH POE ACTUATOR	58
2.3. PO9-AQ Series: MOTORIZED BALL VALVE WITH POQ HIGH-PERFORMANCE ACTUATOR	61
2.3.1. PO9-AQ-B: COMMON ON-OFF TYPE	62
2.3.2. PO9-AQ-G: REGULATING TYPE	64
2.3.3. PO9-AQ-Y: INTELLIGENT INTEGRATED TYPE	66
2.3.4. PO9-AQ-S: SUPER INTELLIGENT TYPE	68
2.4. PO9-AP Series: PNEUMATIC BALL VALVE WITH PISTON TYPE ACTUATOR	70
2.4.1. PO9-AP-O: PNEUMATIC DOUBLE ACTING COMMON ON-OFF TYPE	71
2.4.2. PO9-AP-S: PNEUMATIC SINGLE ACTING EMERGENCY SHUT-OFF TYPE	73
2.4.3. PO9-AP-P: PNEUMATIC COMMON ON-OFF TYPE EXPLOSION-PROOF	75
2.4.4. PO9-AP-R: PNEUMATIC REGULATING TYPE NON-EX / EXPLOSION-PROOF TYPE	77
2.4.5. PO9-AP-I: PNEUMATIC INTELLIGENT REGULATING TYPE NON-EX /EX-PROOF TYPE	79
2.4.6. PO9-AP-D: PNEUMATIC ACTUATOR C/W MANUAL OVERRIDE	81
2.5. PO9-AT Series: BEACON TYPE BALL VALVE WITH ACTUATOR	83
2.6. PO9-AV Series: V-NOTCH TYPE BALL VALVE WITH ACTUATOR	87

POV INVESTMENT CASTING BALL VALVE INDEX

3. PO9-J SERIES: JIS TYPE 2-WAY FLANGE BALL VALVE (JIS10K)	91
3.1. PO9-JM Series: MANUAL TYPE BALL VALVE	96
3.2. PO9-JE Series: MOTORIZED BALL VALVE WITH POE ACTUATOR	98
3.3. PO9-JQ Series: MOTORIZED BALL VALVE WITH POQ HIGH-PERFORMANCE ACTUATOR	101
3.3.1. PO9-JQ-B: COMMON ON-OFF TYPE	102
3.3.2. PO9-JQ-G: REGULATING TYPE	104
3.3.3. PO9-JQ-Y: INTELLIGENT INTEGRATED TYPE	106
3.3.4. PO9-JQ-S: SUPER INTELLIGENT TYPE	108
3.4. PO9-JP Series: PNEUMATIC BALL VALVE WITH PISTON TYPE ACTUATOR	110
3.4.1. PO9-JP-O : PNEUMATIC DOUBLE ACTING COMMON ON-OFF TYPE	111
3.4.2. PO9-JP-S : PNEUMATIC SINGLE ACTING EMERGENCY SHUT-OFF TYPE	113
3.4.3. PO9-JP-P : PNEUMATIC COMMON ON-OFF TYPE EXPLOSION-PROOF	115
3.4.4. PO9-JP-R : PNEUMATIC REGULATING TYPE NON-EX / EXPLOSION-PROOF TYPE	117
3.4.5. PO9-JP-I : PNEUMATIC INTELLIGENT REGULATING TYPE NON-EX /EX-PROOF TYPE	119
3.4.6. PO9-JP-D: PNEUMATIC ACTUATOR C/W MANUAL OVERRIDE	121
3.5. PO9-JT Series: BEACON TYPE BALL VALVE WITH ACTUATOR	123
3.6. PO9-JV Series: V-NOTCH TYPE BALL VALVE WITH ACTUATOR	126
4. PO9-D SERIES: DIN TYPE 2-WAY FLANGE BALL VALVE (PN16)	129
4.1. PO9-DM Series: MANUAL TYPE BALL VALVE	133
4.2. PO9-DE Series: MOTORIZED BALL VALVE WITH POE ACTUATOR	135
4.3. PO9-DQ Series: MOTORIZED BALL VALVE WITH POQ HIGH-PERFORMANCE ACTUATOR	138
4.3.1. PO9-DQ-B: COMMON ON-OFF TYPE	139
4.3.2. PO9-DQ-G: REGULATING TYPE	141
4.3.3. PO9-DQ-Y: INTELLIGENT INTEGRATED TYPE	143
4.3.4. PO9-DQ-S: SUPER INTELLIGENT TYPE	145
4.4. PO9-DP Series: PNEUMATIC BALL VALVE WITH PISTON TYPE ACTUATOR	147
4.4.1. PO9-DP-O: PNEUMATIC DOUBLE ACTING COMMON ON-OFF TYPE	148
4.4.2. PO9-DP-S: PNEUMATIC SINGLE ACTING EMERGENCY SHUT-OFF TYPE	150
4.4.3. PO9-DP-P: PNEUMATIC COMMON ON-OFF TYPE EXPLOSION-PROOF	152
4.4.4. PO9-DP-R: PNEUMATIC REGULATING TYPE NON-EX / EXPLOSION-PROOF TYPE	154
4.4.5. PO9-DP-I: PNEUMATIC INTELLIGENT REGULATING TYPE NON-EX /EX-PROOF TYPE	156
4.4.6. PO9-DP-D: PNEUMATIC ACTUATOR C/W MANUAL OVERRIDE	158
4.5. PO9-DT Series: BEACON TYPE BALL VALVE WITH ACTUATOR	160
4.6. PO9-DV Series: V-NOTCH TYPE BALL VALVE WITH ACTUATOR	163

HIGH QUALITY

POV VALVE has been offering a wide variety of engineered products from Shanghai, China.

By focusing on technical superiority along with guaranteed quality, POV products are now sold in most of the major markets throughout the world.

By the High Quality Investment Ball valve, POV VALVE brand ball valve with actuators and accessories are now in widely market of following field.

-
- Chemical and Petrochemical
 - Food and Beverage
 - Marine
 - Mining
 - Oil and Gas
 - Pulp and Paper
 - Water and Wastewater
 - Pharmacy
 - Petroleum refining
 - Desalination of sea water
 - Ship Ballast System
 - Desulphurization Processes
 - Powder Conveying
 - HVAC



POV investment casting type ball valve series adopts silica sol precision casting, with high platform design. The connection between actuator and ball valve does not need support and connecting shaft. It can be used as switch cutoff function and flow regulation function. Fire protection design and anti-static design are adopted.

POV Ball valve body adopts two-piece structure, flange connection type and floating ball. Full bore design meets the requirements of pipeline pigging and has the maximum flow capacity.

The surface of carbon steel valve body is treated with black phosphating, which can resist corrosion and rust.

The stainless steel valve body adopts the full Silica Sol precision casting process and is treated by solution annealing to ensure that the valve has higher mechanical performance.

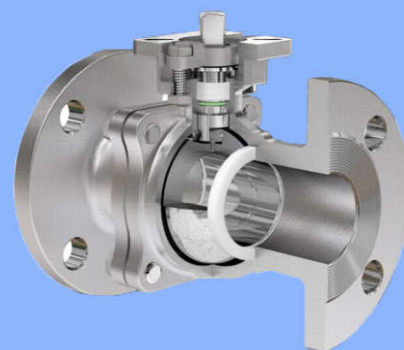
POV Ball valve is mainly used to cut off or regulate the medium flow in the pipeline, and can be applied to water, steam, oil, nitric acid, acetic acid, oxidizing medium, urea and other media. The valve can be equipped with a variety of automatic control schemes, including electric control, pneumatic control, intelligent control, emergency shutdown system, manual control and flammable and explosive environment. It is widely used in the automation control system of paper, petrochemical, chemical, metallurgy, electric power, environmental protection, petroleum, light industry and other industrial departments.

FEATURES

1 INVESTMENT CASTING:

POV Ball Valve is manufactured by investment casting process, which is an industrial process based on lost-wax casting, with the advantages of :

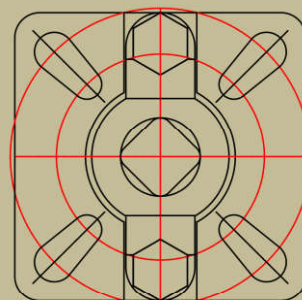
- Excellent surface finish
- High dimensional accuracy
- Extremely intricate parts are castable
- No flash or parting lines
- Effective utilization of metal
- Fewer environmental hazards from the foundry process



2 DIRECT-MOUNT PLATFORM:

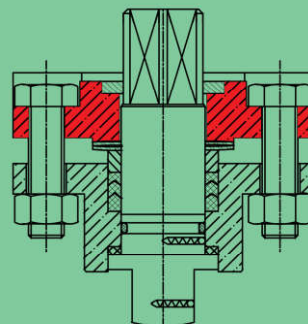
The Ball valve is design with direct-mount platform according to the ISO5211 standard, which can be directly installed with various actuators, or with extension Bracket/Stem.

The direct-mount platform normally have two sizes of ISO5211 flange size available.



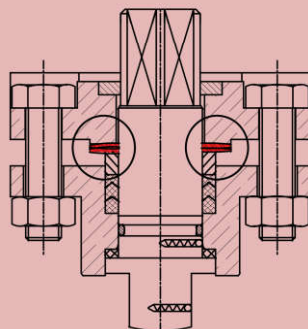
3 SINKING TYPE GLAND:

The Sinking type Gland is Designed to be directly fasten by two bolts&nuts, to avoid the leakage of stem. The gland can be adjusted at site without the dismantle of actuator.



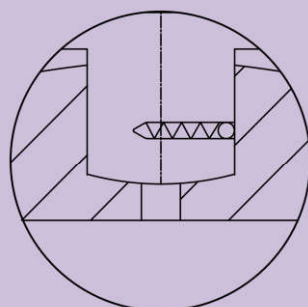
4 BELLEVILLE WASHER:

Design of Pre-load Belleville Washer between Gland and Packing Provide Compensated Thrust to Packing when Micro Leakage Occur at Stem Position.



5 PRESSURE BALANCE DESIGN:

The design of pressure balance cavity to protect the valve inside and prevent block of valve.



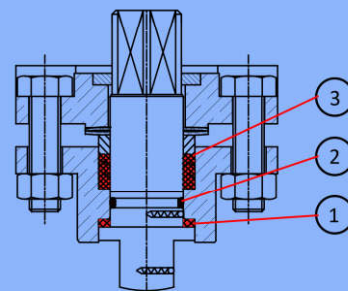
6 TRIPLE PACKING LAYERS IN TRIPLE LAY STEM SEAL:

During rotation of valve rod, O ring can reduce valve rod's direct friction upon valve body, and it can also exert further sealing auxiliary function upon valve rod. If pipeline medium is gas, O ring has better sealing effect than PTFE.

Stem Seal No.1: Thrust Washer

Stem Seal No.2: O-ring

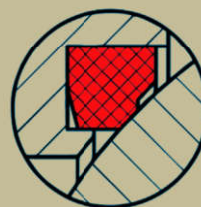
Stem Seal No.3: PTFE Triple Packing Layers



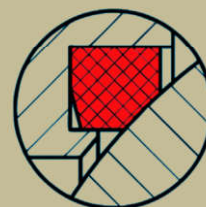
7 SPECIAL SEAT DESIGN:

Under low pressure, the bottom face is main sealing.
Under high pressure, the seal is on both side of seat.

LOW PRESSURE

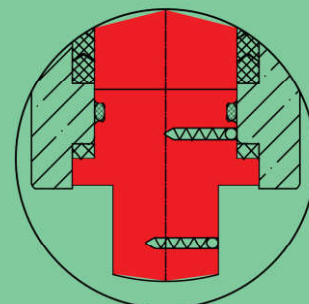


HIGH PRESSURE



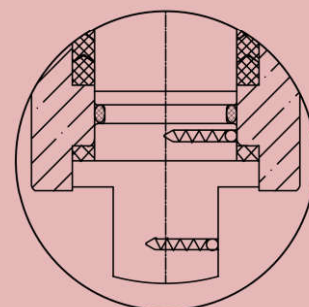
8 BLOW-OUT PROOF STEM:

Blow-out proof stem is inserted from valve body with t-type shoulder to prevent from pushing out by high pressure from valve inside chamber.



9 ANTI-STATIC DEVICE:

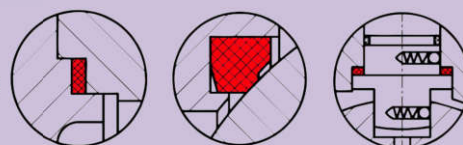
Double anti-static device on body and ball to ensure electrical continuity between valve body, stem and body, eliminating the possibility of static electrical charges creating sparks within the valve.



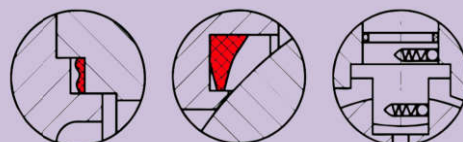
10 FIRE SAFETY DESIGN:

In case of fire on the site, after valve seat is burnt or evaporated under high temperature, auxiliary metal valve seat processed on valve body can exert sealing function.

BEFORE FIRE



AFTER FIRE



VALVE STANDARDS

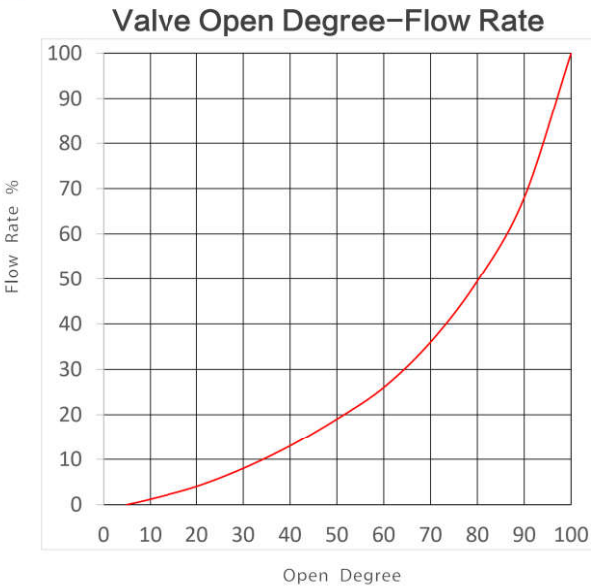
	GB Standard	ASME Standard	JIS Standard	DIN Standard
Design Standard	GB/T 12237	API 608	JIS BS 5351	DIN 3357
Inspection Standard	GB/T 13927	API 598	JIS B 2003	EN 12266
Face-to-Face Standard	GB/T 12221	ASME B16.10	JIS B 2002	DIN 3202-F4
Flange Standard	HG/T 20592、 GB/T 9113、EN 1092-1、 JB/T 79.1	ASME B16.5	JIS B 2220	EN 1092-1
Pressure-Temperature Standard	GB/T 26640	ASME B16.34	ASME B16.34	ASME B16.34
Fire Safe Standard	API 607/API 6FA	API 607/API 6FA	API 607/API 6FA	API 607/API 6FA

FLOW CHARACTERISTIC

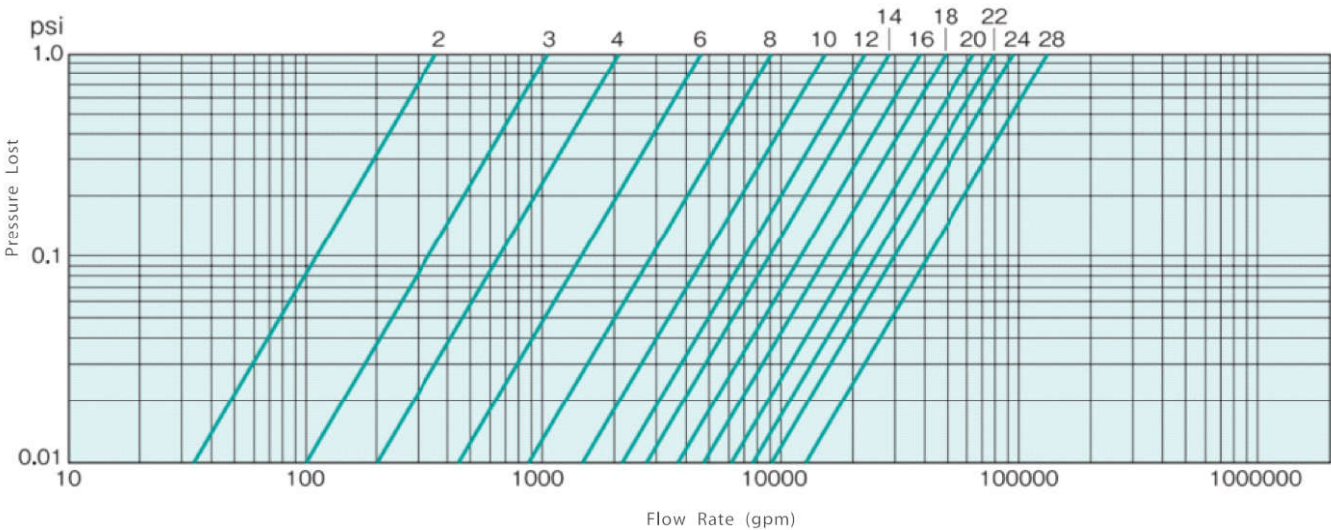
The advantage of POV Investment casting type ball valve is that in any given diameter size of all types of valves, its flow is the largest, and the fluid is very little affected by fluctuating vibration.

As long as the flow rate (%) given in the figure is multiplied by the relevant data in the pressure loss / flow table, the relevant data when the valve is opened can be obtained.

The V- Notch type ball valve can achieve the equal percentage type flow characteristic as the right figure.



PRESSURE LOST AND FLOW RATE



KV VALUE

Standard Full Bore Ball Valve

KV Value of Full Bore Ball Valve												
Size	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"
	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
KV Value	20	38	72	93	145	230	406	576	940	1404	2050	3590

30° V-Notch Ball Valve

KV Value of Full Bore Ball Valve with 30° V-Notch												
Size		V-Notch	10% Open	20% Open	30% Open	40% Open	50% Open	60% Open	70% Open	80% Open	90% Open	100% Open
1/2"	DN15	30°	0.00	0.00	0.14	0.39	0.68	1.17	1.68	2.62	3.64	4.77
3/4"	DN20	30°	0.01	0.01	0.24	0.65	1.14	1.97	2.82	4.41	6.12	8.01
1"	DN25	30°	0.01	0.01	0.36	1.01	1.76	3.04	4.35	6.82	9.46	12.38
1-1/2"	DN40	30°	0.02	0.02	0.82	1.99	3.54	5.73	8.46	11.88	16.55	20.63
2"	DN50	30°	0.00	0.00	2.39	4.93	8.51	13.19	19.91	27.78	36.41	36.49
3"	DN80	30°	0.02	1.63	5.28	10.39	17.69	27.02	38.9	53.41	73.31	89.80
4"	DN100	30°	0.07	3.81	9.58	18.65	31.42	48.45	70.73	98.53	136.57	152.40
6"	DN150	30°	0.03	3.67	15.01	34.03	60.66	93.55	138.42	196.19	260.65	334.83

60° V-Notch Ball Valve

KV Value of Full Bore Ball Valve with 60° V-Notch												
Size		V-Notch	10% Open	20% Open	30% Open	40% Open	50% Open	60% Open	70% Open	80% Open	90% Open	100% Open
1/2"	DN15	60°	0.01	0.01	0.24	0.66	1.15	1.99	2.84	4.45	6.18	8.09
3/4"	DN20	60°	0.01	0.01	0.40	1.11	1.94	3.34	4.78	7.49	10.39	13.60
1"	DN25	60°	0.03	0.15	0.48	1.42	2.39	4.41	6.12	11.25	15.11	21.01
1-1/2"	DN40	60°	0.01	0.01	1.07	2.93	5.42	8.81	13.67	20.45	30.08	39.58
2"	DN50	60°	0.04	0.06	2.24	5.97	10.45	16.98	27.12	41.02	61.26	70.18
3"	DN80	60°	0.03	1.94	7.00	14.96	25.85	41.29	63.31	92.44	136.31	164.70
4"	DN100	60°	0.06	4.88	12.99	25.82	44.20	71.83	115.01	183.78	294.88	347.49
6"	DN150	60°	0.08	5.61	23.08	54.11	97.27	158.45	250.56	378.23	566.31	676.77

UNIT WEIGHT

Standard Ball Valve

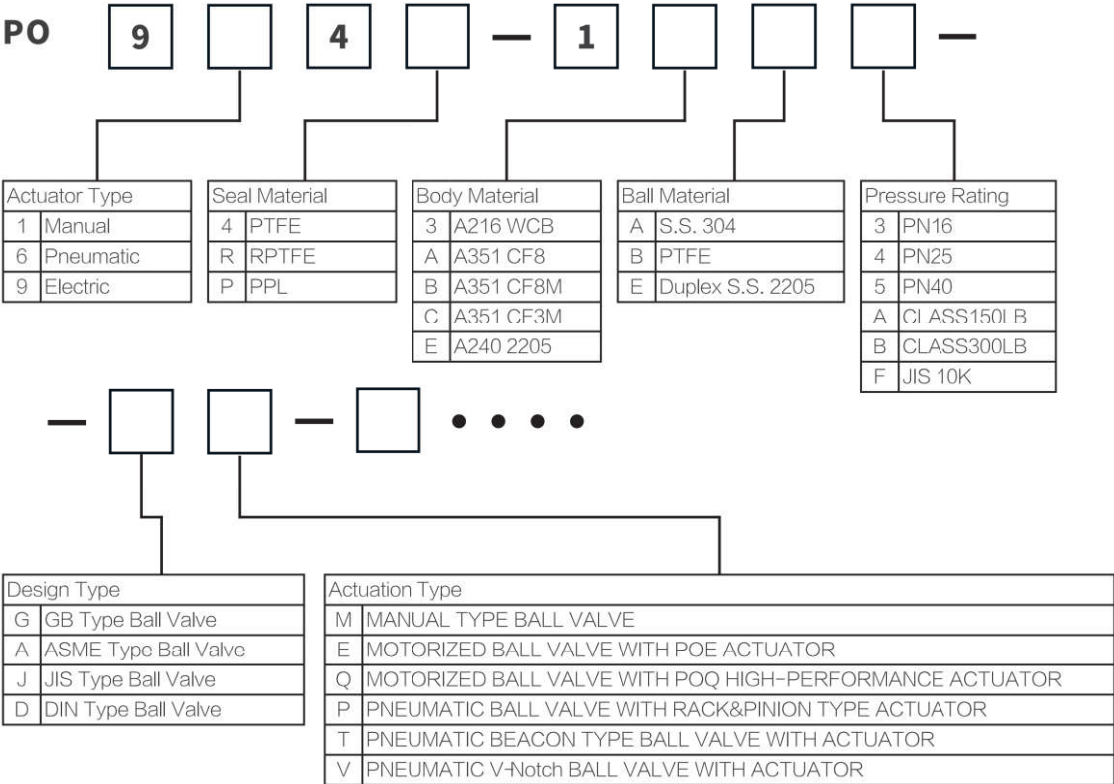
Unit Weight for Standard Ball Valve PN16 -Bare shaft												
Size	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"
	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
Weight / Kg	2.2	3	3.8	5.6	7.3	10	13.6	16.6	28.6	42	56.6	100

TORQUE

Size	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"
	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
PN16	10	15	15	22	27	36	72	128	170	270	396	630
PN25-PN40	10	15	15	22	27	36	102	153	210	-	-	-
CL150LBS	8	9	15	20	29	44	83	108	165	-	-	-
CL300LBS	8	9	17	26	36	53	118	135	202	-	-	-

Note: The above data is only for reference for standard ball valve under 10 bars differential pressure.
For actuator sizing, a safety factor minimum of 30% is already included.

GENERAL VALVE ORDERING CODE

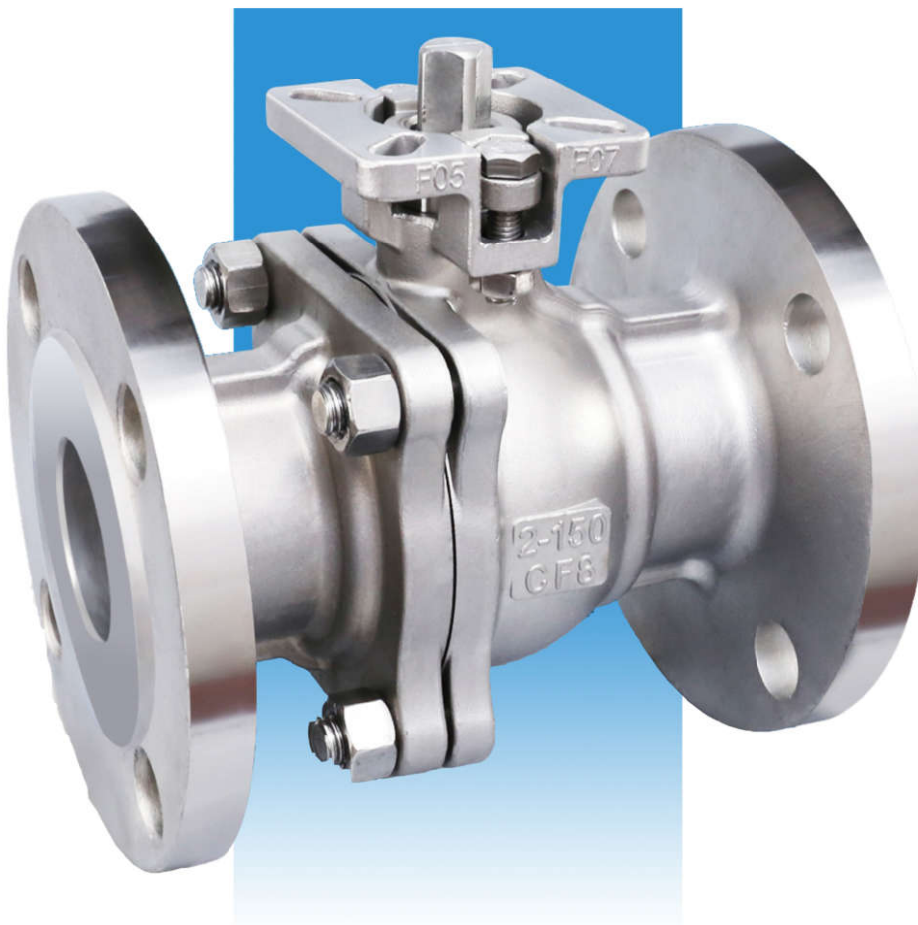


PO9-G SERIES: GB TYPE 2-WAY FLANGE BALL VALVE (PN16-PN40)

DESCRIPTION

GB type flange standard ball valve is the most commonly used flange ball valve. The standard size of HG flange is the same as that of European standard EN1092-1 and can be replaced with each other.

POV flange ball valve can be equipped with handle, electric actuator and pneumatic actuator for on-off control and regulating control. It can realize a variety of functions, such as pipeline emergency shut-off control, accurate flow control, remote control, intelligent control, Modbus/Profibus/Hart control, Bluetooth/GPRS control, manual override, V-port valve core high-precision flow control. Please consult POV technical department for specific functions.



TECHNICAL PARAMETERS

- Nominal Diameter : DN15 – DN200
- Pressure Rating : PN1.6MPa、PN2.5MPa、PN4.0MPa
- End Connection : RF Flange
- Flange Standard : HG/T 20592、GB/T9113、EN 1092-1、JB/T79.1
- Valve Structure : 2-Pieces Split Body/ Full Bore/ Floating type
- Main Material : WCB、CF8、CF8M、CF3M、Duplex 2205
- Seal Material : PTFE -30℃ ~140℃
RPTFE -30℃ ~180℃
PPL -30℃ ~280℃
- Applicable Medium : Water、Liquid、Gas、Oil、Powder、Steam、Acid and Alkali corrosive medium
- Fire Safe Design : According to Standard API607、API 6FA
- Mounting for Actuation : ISO 5211 Direct Mounting Pad
- Casting Process : Investment Casting with High Precision
- Functional Safety Certificate : SIL 3 as per IEC 61508 Parts 1-2 and 4-7:2010
- Stem Type : Blow-out Proof Design
- Leakage Class : Zero Leakage
- Port Design : O-Type port, 30° & 60° V-Notch Optional Control Ball for High Accurate Control

STANDARDS

Design Standard	GB/T12237
Inspection Standard	GB/T13927
Face-to-Face Standard	GB/T12221
End Connection Standard	HG/T 20592、GB/T9113、EN 1092-1、JB/T79.1
Pressure-Temperature Standard	GB/T 26640
Fire Safe Standard	API607、API 6FA

PERFORMANCE

Nominal Pressure	PN1.6Mpa	PN2.5Mpa	PN4.0Mpa
Shell Testing Pressure	2.4Mpa	3.8Mpa	6.0Mpa
Seal Testing Pressure (Hydraulic)	1.8Mpa	2.8Mpa	4.4Mpa
Seal Testing Pressure (Air)	0.5~0.7Mpa		
Applicable Medium	Water、Liquid、Gas、Oil、Powder、Steam、Acid and Alkali		
Applicable Temperature	-30℃ ~280℃		

GENERAL VALVE ORDERING CODE

PO

9

4

—

1

—

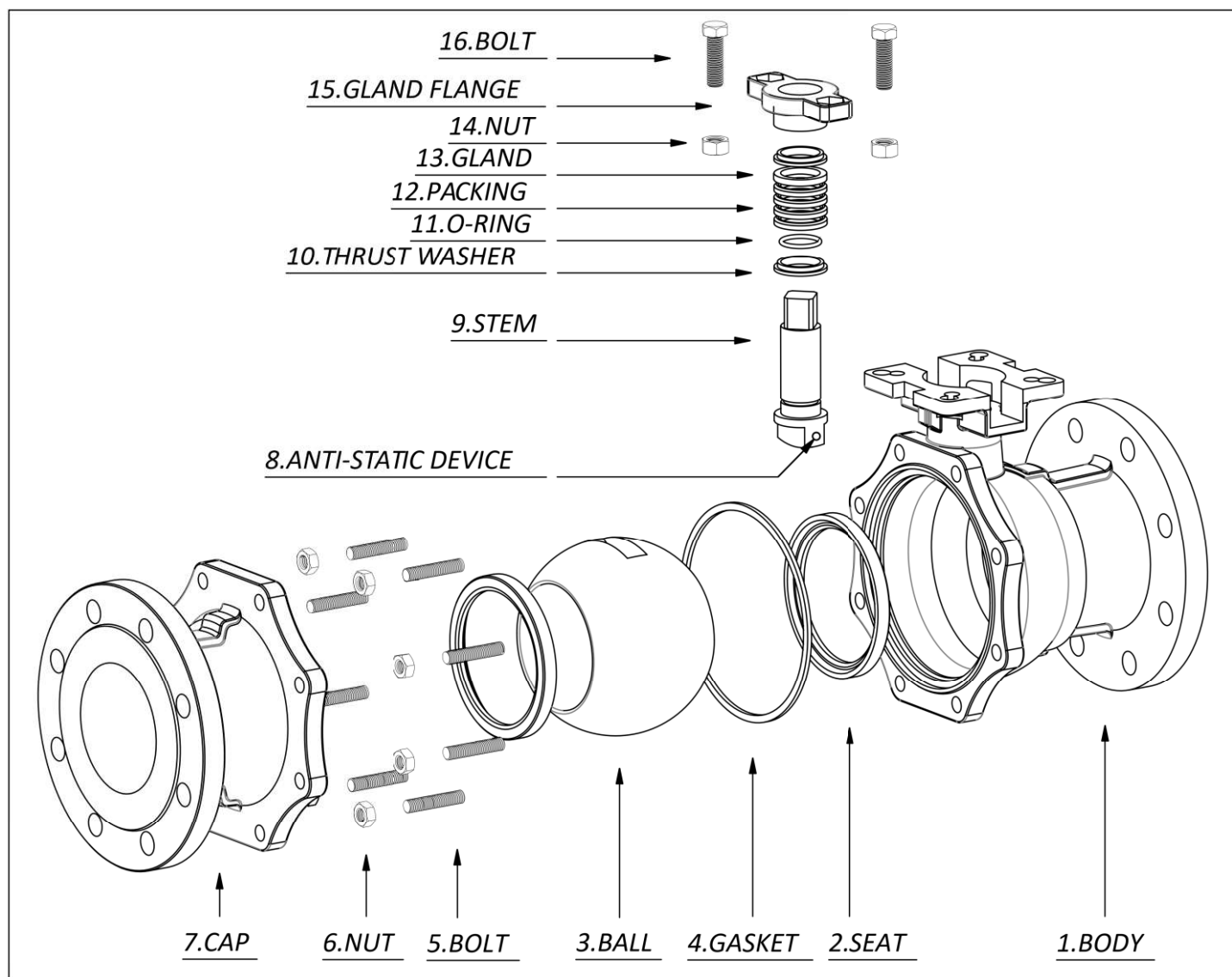
Actuator Type	Seal Material	Body Material	Ball Material	Pressure Rating
1 Manual	4 PTFE	3 A216 WCB	A S.S. 304	3 PN16
6 Pneumatic	R RPTFE	A A351 CF8	B PTFE	4 PN25
9 Electric	P PPL	B A351 CF8M	E Duplex S.S. 2205	5 PN40
		C A351 CF3M		
		E A240 2205		

—

G

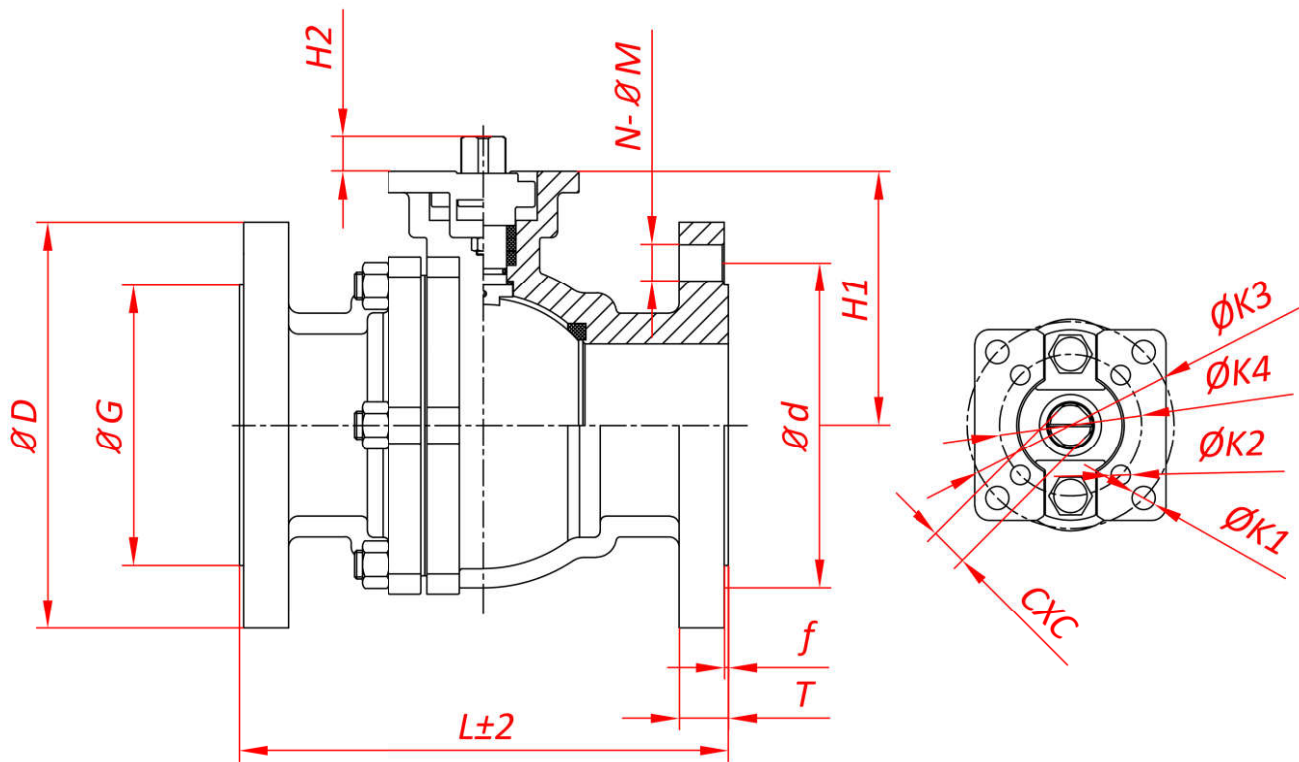
Actuation Type
M MANUAL TYPE BALL VALVE
E MOTORIZED BALL VALVE WITH POE ACTUATOR
Q MOTORIZED BALL VALVE WITH POQ HIGH-PERFORMANCE ACTUATOR
P PNEUMATIC BALL VALVE WITH RACK&PINION TYPE ACTUATOR
T PNEUMATIC BEACON TYPE BALL VALVE WITH ACTUATOR
V PNEUMATIC V-Notch BALL VALVE WITH ACTUATOR

MAIN PARTS STRUCTURE AND MATERIAL



Part Number	Part Name	WCB Type	CF8 Type	CF8M Type	2205 Type1
1	BODY	WCB	CF8	CF8M	Duplex S.S. 2205
2	SEAT	PTFE, RPTFE, PPL			
3	BALL	304	304	316	Duplex S.S. 2205
4	GASKET	PTFE	PTFE	PTFE	PTFE
5	BOLT	A194 7	A194 8	A194 8	A194 8
6	NUT	A193 B7	A193 B8	A193 B8	A193 B8
7	CAP	WCB	CF8	CF8M	CF8M
8	ANTISTATIC DEVICE	304	304	304	304
9	STEM	304	304	316	316
10	THRUST WASHER	304	304	304	304
11	O-RING	VITON	VITON	VITON	VITON
12	PACKING	PTFE	PTFE	PTFE	PTFE
13	PACKING GLAND	304	304	304	304
14	NUT	SS304	SS304	SS316	SS316
15	GLAND FLANGE	WCB	CF8	CF8M	CF8M
16	BOLT	SS304	SS304	SS316	SS316

DIMENSIONS OF BARE SHAFT BALL VALVE (PN16-PN40)



DIMENSIONS OF BARE SHAFT BALL VALVE IN RATING PN16

PN16 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	d	G	T	f	C	K1	K2	K3	K4	ISO5211	ISO5211	H1	H2	N-M
	DN15	130	108	95	65	45	16	2	9	7	6	50	42	F05	F04	52	9	4-14
	DN20	130	117	105	75	58	18	2	9	7	6	50	42	F05	F04	56.5	9	4-14
	DN25	140	127	115	85	68	18	2	11	7	6	50	42	F05	F04	65	11	4-14
	DN32	165	140	140	100	78	18	2	11	7	6	50	42	F05	F04	73.5	11	4-18
	DN40	165	165	150	110	88	18	2	14	9	7	70	50	F07	F05	81.5	14	4-18
	DN50	203	178	165	125	102	20	2	14	9	7	70	50	F07	F05	89	14	4-18
	DN65	222	190	185	145	122	18	2	17	11	9	102	70	F10	F07	116	17	8-18
	DN80	241	203	200	160	138	20	2	17	11	9	102	70	F10	F07	127	17	8-18
	DN100	305	229	220	180	158	20	2	17	11	9	102	70	F10	F07	149.5	17	8-18
	DN125	356	-	250	210	188	22	2	22	13	11	125	102	F12	F10	173	22	8-18
	DN150	394	-	285	240	212	22	2	27	17	13	140	125	F14	F12	208	27	8-22
	DN200	457	-	340	295	268	24	2	36	17	13	140	125	F14	F12	256	36	12-22

DIMENSIONS OF BARE SHAFT BALL VALVE IN RATING PN25

PN25 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	d	G	T	f	C	K1	K2	K3	K4	ISO5211	ISO5211	H1	H2	N-M
	DN15	130	108	95	65	45	16	2	9	7	6	50	42	F05	F04	52	9	4-14
	DN20	130	117	105	75	58	18	2	9	7	6	50	42	F05	F04	56.5	9	4-14
	DN25	140	127	115	85	68	18	2	11	7	6	50	42	F05	F04	65	11	4-14
	DN32	165	140	140	100	78	18	2	11	7	6	50	42	F05	F04	73.5	11	4-18
	DN40	165	165	150	110	88	18	2	14	9	7	70	50	F07	F05	81.5	14	4-18
	DN50	203	178	165	125	102	20	2	14	9	7	70	50	F07	F05	89	14	4-18
	DN65	222	-	185	145	122	22	2	17	11	9	102	70	F10	F07	116	17	8-18
	DN80	241	-	200	160	138	24	2	17	11	9	102	70	F10	F07	127	17	8-18
	DN100	305	-	235	190	162	24	2	17	11	9	102	70	F10	F07	138	17	8-22

DIMENSIONS OF BARE SHAFT BALL VALVE IN RATING PN40

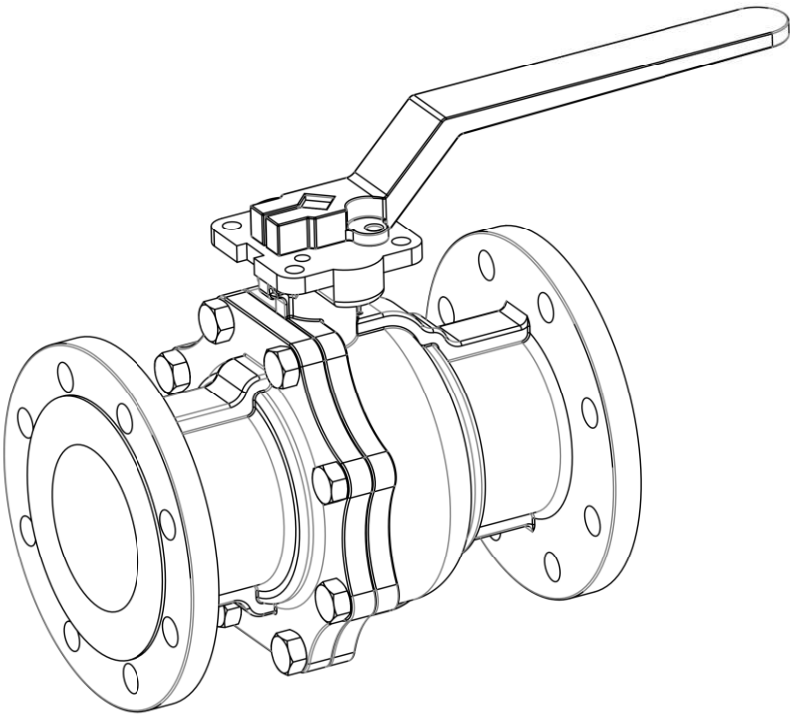
PN40 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	d	G	T	f	C	K1	K2	K3	K4	ISO5211	ISO5211	H1	H2	N-M
	DN15	130	108	95	65	45	16	2	9	7	6	50	42	F05	F04	52	9	4-14
	DN20	130	117	105	75	58	18	2	9	7	6	50	42	F05	F04	56.5	9	4-14
	DN25	140	127	115	85	68	18	2	11	7	6	50	42	F05	F04	65	11	4-14
	DN32	165	140	140	100	78	18	2	11	7	6	50	42	F05	F04	73.5	11	4-18
	DN40	165	165	150	110	88	18	2	14	9	7	70	50	F07	F05	81.5	14	4-18
	DN50	203	178	165	125	102	20	2	14	9	7	70	50	F07	F05	89	14	4-18
	DN65	222	-	185	145	122	22	2	17	11	9	102	70	F10	F07	116	17	8-18
	DN80	241	-	200	160	138	24	2	17	11	9	102	70	F10	F07	127	17	8-18
	DN100	305	-	235	190	162	24	2	17	11	9	102	70	F10	F07	138	17	8-22

PO9-G SERIES:
GB TYPE 2-WAY FLANGE BALL VALVE (PN16-PN40)

PO9-GM Series:
MANUAL TYPE BALL VALVE

DESCRIPTION

Manual flange ball valve, with the handle as the driving device, opens or closes the valve. The precision casting handle has high precision, and the stainless steel material can keep long-term corrosion free and not stuck. The handle position can be locked in the open or closed position by the lock to prevent misoperation.



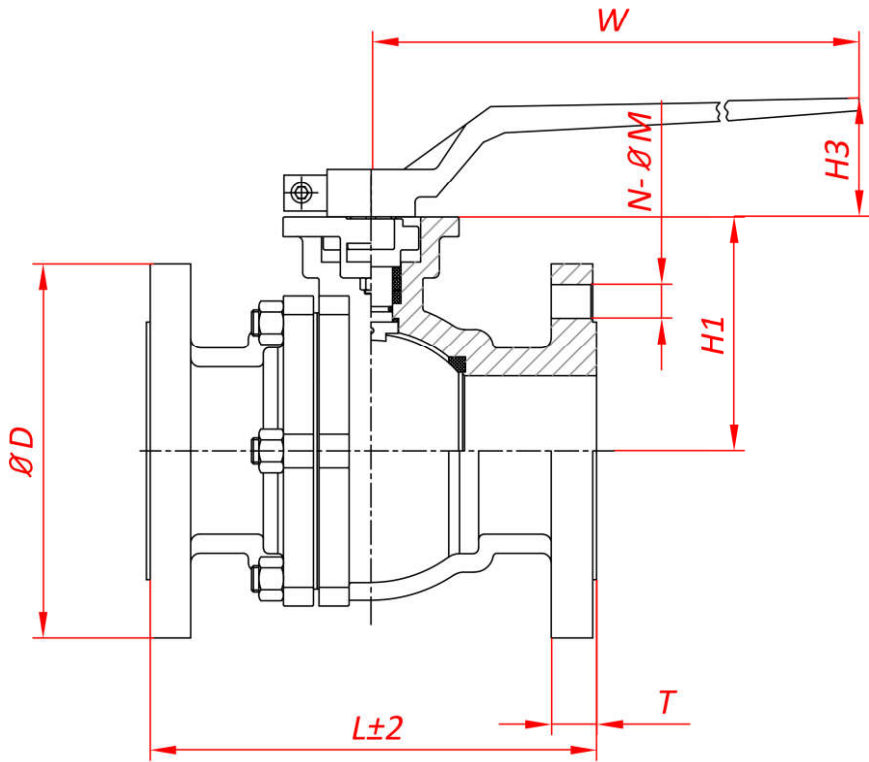
ORDERING CODE

PO 9 1 4 - 1 - G M

Seal Material		Body Material		Ball Material		Pressure Rating	
4	PTFE	3	A216 WCB	A	S.S. 304	3	PN16
R	RPTFE	A	A351 CF8	B	PTFE	4	PN25
P	PPL	B	A351 CF8M	E	Duplex S.S. 2205	5	PN40
		C	A351 CF3M				
		E	A240 2205				

PO9-GM Series:
MANUAL TYPE BALL VALVE

DIMENSIONS



DIMENSIONS OF MANUAL TYPE BALL VALVE IN RATING PN16

PN16 PRESSURE RATING	Size	L (Mid Seire)	L (Short Series)	D	T	N-M	H1	H3	W
	DN15	130	108	95	16	4-14	52	40	143
	DN20	130	117	105	18	4-14	56.5	40	143
	DN25	140	127	115	18	4-14	65	40	180
	DN32	165	140	140	18	4-18	73.5	40	180
	DN40	165	165	150	18	4-18	81.5	45	224
	DN50	203	178	165	20	4-18	89	45	224
	DN65	222	190	185	18	8-18	116	50	290
	DN80	241	203	200	20	8-18	127	50	290
	DN100	305	229	220	20	8-18	149.5	50	290
	DN125	356	-	250	22	8-18	173	92	600
	DN150	394	-	285	22	8-22	208	92	600
	DN200	457	-	340	24	12-22	256	92	600

PO9-GM Series:
MANUAL TYPE BALL VALVE

DIMENSIONS OF MANUAL TYPE BALL VALVE IN RATING PN25

PN25 PRESSURE RATING	Size	L (Mid Seires)	L (Short Series)	D	T	N-M	H1	H3	W
	DN15	130	108	95	16	4-14	52	40	143
	DN20	130	117	105	18	4-14	56.5	40	143
	DN25	140	127	115	18	4-14	65	40	180
	DN32	165	140	140	18	4-18	73.5	40	180
	DN40	165	165	150	18	4-18	81.5	45	224
	DN50	203	178	165	20	4-18	89	45	224
	DN65	222	-	185	18	8-18	116	50	290
	DN80	241	-	200	20	8-18	127	50	290
	DN100	305	-	220	20	8-18	149.5	50	290

DIMENSIONS OF MANUAL TYPE BALL VALVE IN RATING PN40

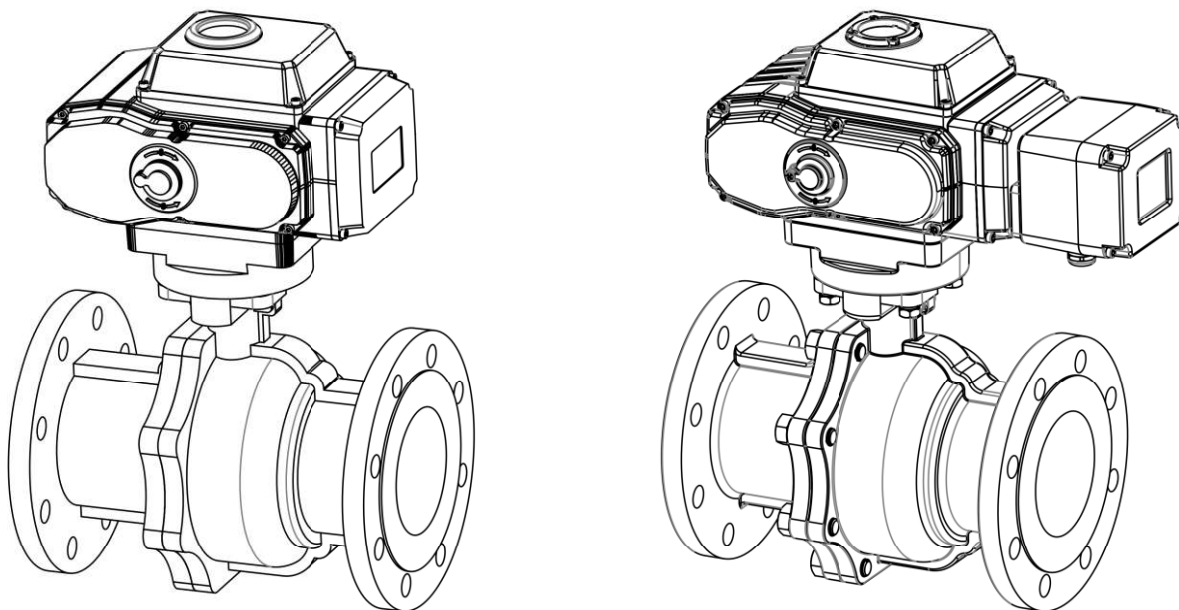
PN40 PRESSURE RATING	Size	L (Mid Seires)	L (Short Series)	D	T	N-M	H1	H3	W
	DN15	130	108	95	16	4-14	52	40	143
	DN20	130	117	105	18	4-14	56.5	40	143
	DN25	140	127	115	18	4-14	65	40	180
	DN32	165	140	140	18	4-18	73.5	40	180
	DN40	165	165	150	18	4-18	81.5	45	224
	DN50	203	178	165	20	4-18	89	45	224
	DN65	222	-	185	18	8-18	116	50	290
	DN80	241	-	200	20	8-18	127	50	290
	DN100	305	-	220	20	8-18	149.5	50	290

PO9-G SERIES: GB TYPE 2-WAY FLANGE BALL VALVE (PN16-PN40)

PO9-GE Series: MOTORIZED BALL VALVE WITH POE ACTUATOR

DESCRIPTION

The POV Motorized Ball Valve are controlled by POE series fine and small electric actuators. The actuator has small volume, high integration, good protection and stable performance. It can be operated on site or controlled remotely. It is suitable for ball valve control with 90 degree rotation. The control functions include switch control, proportional position regulating control, intelligent control, etc. It can be operated manually due to its high voltage and flexible switching time.



ORDERING CODE

PO 9 6 4 — 1 — G E —

Seal Material	
4	PTFE
R	RPTFE
P	PPL

Body Material	
3	A216 WCB
A	A351 CF8
B	A351 CF8M
C	A351 CF3M
E	A240 2205

Ball Material	
A	S.S. 304
B	PTFE
E	Duplex S.S. 2205

Pressure Rating	
3	PN16
4	PN25
5	PN40

—

Actuator Control Model	
SN	ON-OFF Type
RN	Potentiometer Type
ZN	Regulating Type
FN	Intelligent Type

Voltage	
1	AC220V
2	AC110V
3	AC24V (Only available with SN and RN type)
4	DC24V
5	AC380V (Only available with SN and FN type)
6	Others (Special Customized Voltage)

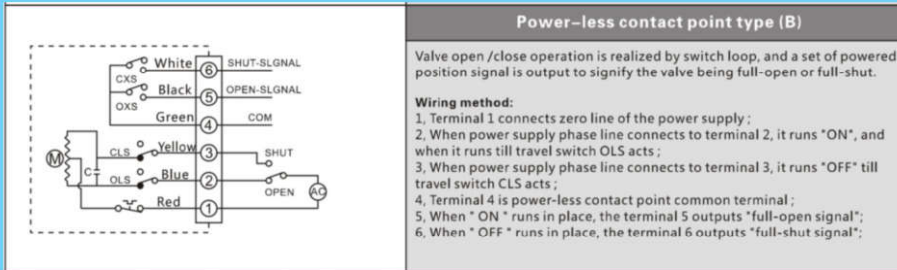
Example: PO9644-1AA3-GE-ZN1 : Motorized Ball Valve, CF8 Body, SS304 Ball, PTFE Seat, PN16, with Electric actuator POE-ZN Regulating type.

PO9-GE Series: MOTORIZED BALL VALVE WITH POE ACTUATOR

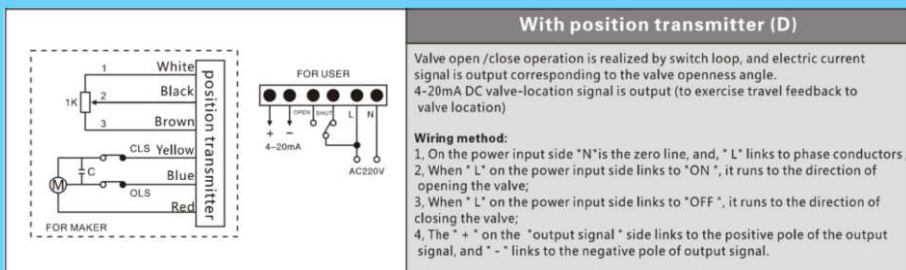
FUNCTION

The POE Type actuator can be controlled by 4 models, as below model code:

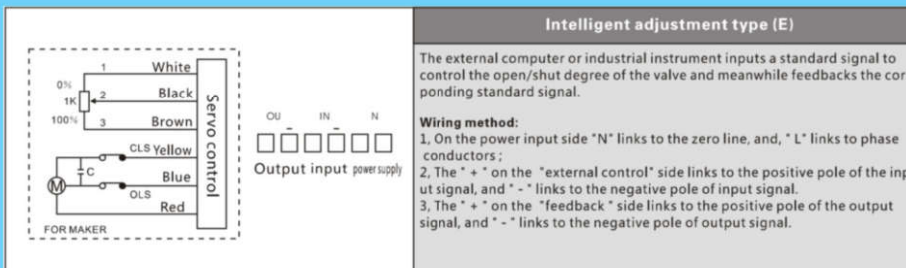
1. SN Type: Open and Close the valve according to remote signal, with feedback of Open and Close position.



2. RN Type: Open and Close the valve according to remote signal, with Potentiometer to feedback position by 1-5K resistance.



3. ZN Type: Proportionally open valve in position 0 ° to 90 ° according to digital signal 4-20mA, and feedback 4-20mA position signal.

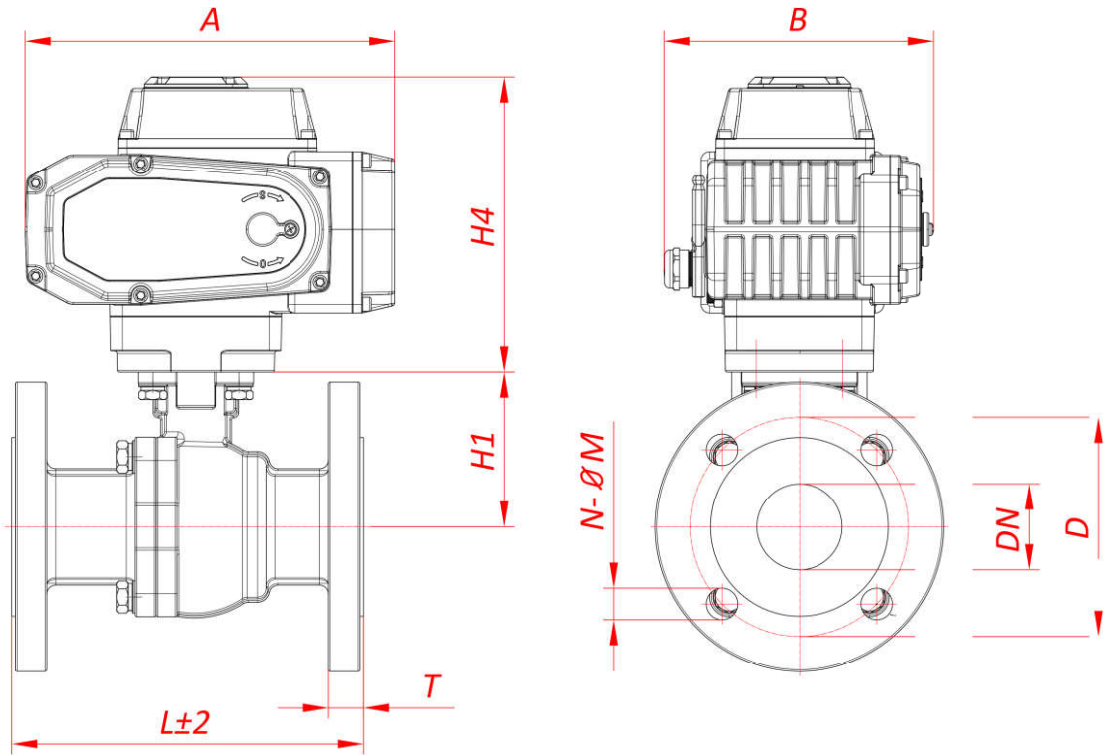


4. FN Type: Intelligent type can be equipped with LED screen, Control button, Over-torque protection, ESD protection.
 - a. Non-intrusive design, explosion and water proof, capacitance touch screen control, LED fully menu display.
 - b. Perfect electric potential breakdown, over torque and ESD protection functions.
 - c. Adjustment type/on-off type is in common use, 220VAC /380VAC is in common use.
 - d. Output signal: Adjustment type DC4-20mA (DC1-5V), 0-20mA and other special specifications can customized, on-off type passive stem node signal.



PO9-GE Series:
MOTORIZED BALL VALVE WITH POE ACTUATOR

DIMENSIONS



DIMENSIONS OF MOTORIZED BALL VALVE WITH POE ACTUATOR IN RATING PN16

PN16 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H4	A	B	POE Model
	DN15	130	108	95	16	4-14	52	137.5	165	140.5	POE-05
	DN20	130	117	105	18	4-14	56.5	137.5	165	140.5	POE-05
	DN25	140	127	115	18	4-14	65	137.5	165	140.5	POE-05
	DN32	165	140	140	18	4-18	73.5	137.5	165	140.5	POE-05
	DN40	165	165	150	18	4-18	81.5	168.5	211.5	154	POE-10
	DN50	203	178	165	20	4-18	89	168.5	211.5	154	POE-10
	DN65	222	190	185	18	8-18	116	203	259	186	POE-20
	DN80	241	203	200	20	8-18	127	203	259	186	POE-20
	DN100	305	229	220	20	8-18	149.5	203	259	186	POE-40
	DN125	356	—	250	22	8-18	173	203	259	186	POE-60
	DN150	394	-	285	22	8-22	208	229.5	283.5	193	POE-100
	DN200	457	-	340	24	12-22	256	229.5	283.5	193	POE-200

PO9-GE Series:
MOTORIZED BALL VALVE WITH POE ACTUATOR

DIMENSIONS OF MOTORIZED BALL VALVE WITH POE ACTUATOR IN RATING PN25

PN25 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H4	A	B	POE Model
	DN15	130	108	95	16	4-14	52	137.5	165	140.5	POE-10
	DN20	130	117	105	18	4-14	56.5	137.5	165	140.5	POE-10
	DN25	140	127	115	18	4-14	65	137.5	165	140.5	POE-10
	DN32	165	140	140	18	4-18	73.5	137.5	165	140.5	POE-10
	DN40	165	165	150	18	4-18	81.5	168.5	211.5	154	POE-20
	DN50	203	178	165	20	4-18	89	168.5	211.5	154	POE-20
	DN65	222	-	185	18	8-18	116	203	259	186	POE-40
	DN80	241	-	200	20	8-18	127	203	259	186	POE-40
	DN100	305	-	220	20	8-18	149.5	203	259	186	POE-60

DIMENSIONS OF MOTORIZED BALL VALVE WITH POE ACTUATOR IN RATING PN40

PN40 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H4	A	B	POE Model
	DN15	130	108	95	16	4-14	52	137.5	165	140.5	POE-10
	DN20	130	117	105	18	4-14	56.5	137.5	165	140.5	POE-10
	DN25	140	127	115	18	4-14	65	137.5	165	140.5	POE-10
	DN32	165	140	140	18	4-18	73.5	137.5	165	140.5	POE-10
	DN40	165	165	150	18	4-18	81.5	168.5	211.5	154	POE-20
	DN50	203	178	165	20	4-18	89	168.5	211.5	154	POE-20
	DN65	222	-	185	18	8-18	116	203	259	186	POE-20
	DN80	241	-	200	20	8-18	127	203	259	186	POE-20
	DN100	305	-	220	20	8-18	149.5	203	259	186	POE-40

PO9-G SERIES: GB TYPE 2-WAY FLANGE BALL VALVE (PN16-PN40)

PO9-GQ Series: MOTORIZED BALL VALVE WITH POQ HIGH-PERFORMANCE ACTUATOR

DESCRIPTION

The POV Motorized Ball Valves are controlled by our POQ series high-performance electric actuators. The actuator has powerful performance and numerous functions, and is applicable to a variety of working conditions and requirements. The maximum torque can reach 20000 nm.

The actuator can be equipped with a variety of Controlbus functions, including MODBUS, PROFIBUS, Hart, etc. it supports Bluetooth control and remote GPRS Remote control. It can not only set, debug and adjust the switch of the electric ball valve, but also obtain the position information, status information and fault information of the electric valve. Limit switch, torque switch, overheat protection, manual clutch and other devices can be configured internally, and explosion-proof configuration can be selected, which is applicable to a variety of working conditions.



ORDERING CODE

PO 9 6 4 — 1 — G Q —

Seal Material	Body Material	Ball Material	Pressure Rating
4 PTFE	3 A216 WCB	A S.S. 304	3 PN16
R RPTFE	A A351 CF8	B PTFE	4 PN25
P PPL	B A351 CF8M	E Duplex S.S. 2205	5 PN40
	C A351 CF3M		
	E A240 2205		

Actuator Control Model	Voltage	Explosion-Proof Grade	Operation Function
B Common ON-OFF Type	1 AC220V	0 NA	K1 ON-OFF
G Common Regulating Type	2 AC110V	1 EXd II CT5	K2 Regulating
Y Intelligent Integrated Type	3 AC24V		K3 Potentiometer
S Super Intelligent Type	4 DC24V		K4 ON-OFF c/w 4-20mA Feedback
	5 AC380V		K5 ControlBus Modbus-RTU Type
	6 Others		K6 ControlBus Modbus-TCP/IP Type
			K7 ControlBus Profibus-DP Type
			K8 ControlBus Hart Type
			K9 ControlBus FF Type

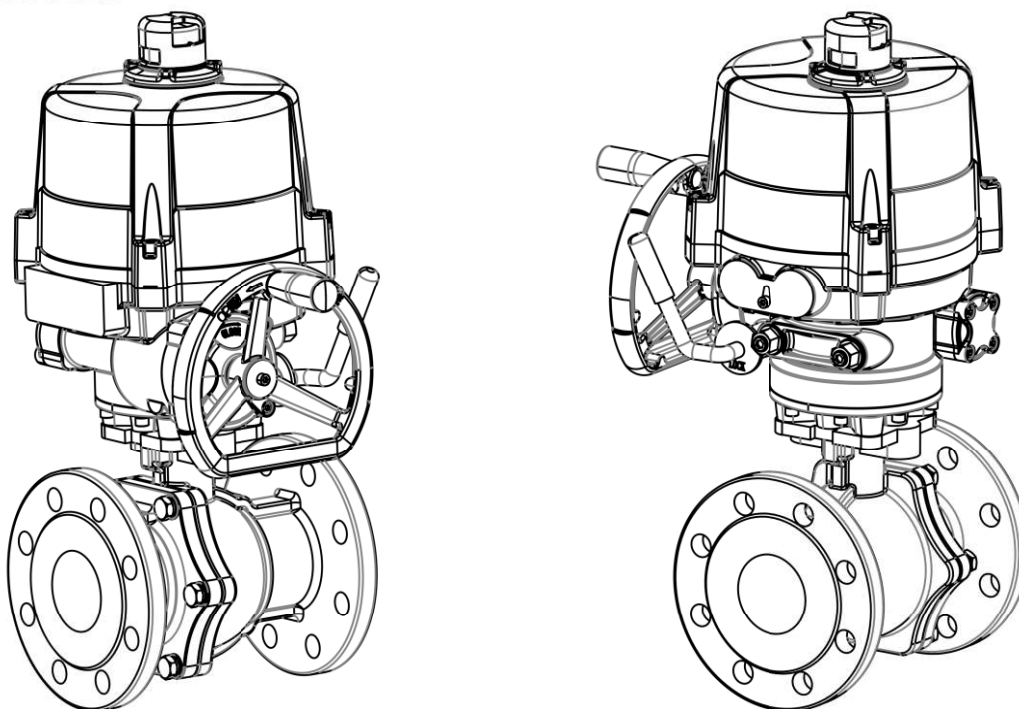
Example: PO9644-1AA3-GQ-S51K2 : Motorized Ball Valve, CF8 Body, SS304 Ball, PTFE Seat, PN16, with Electric actuator POQ Super Intelligent type, Regulating type, Power supply AC380V, Explosion-proof Exd II CT5

PO9-GQ Series:
MOTORIZED BALL VALVE WITH POQ HIGH-PERFORMANCE ACTUATOR

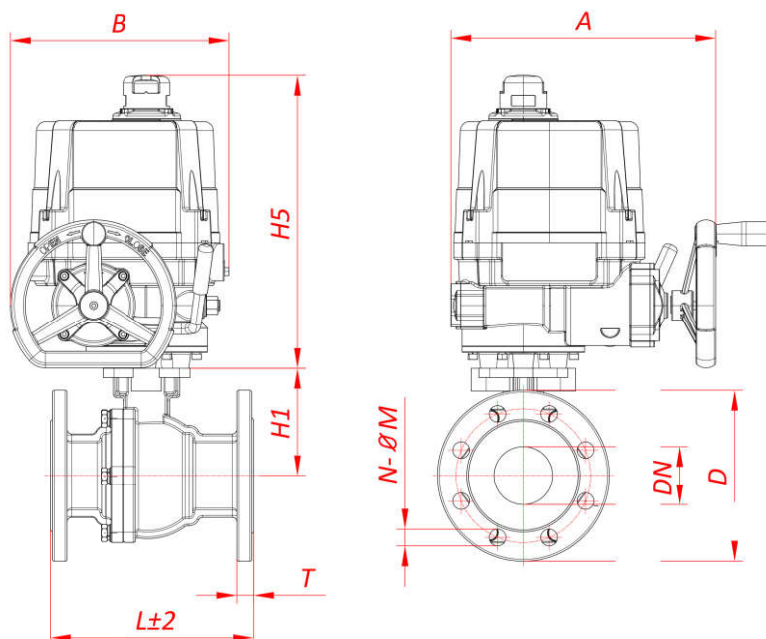
PO9-GQ-B : COMMON ON-OFF TYPE

FEATURES

- Protection IP67 Nema 4 and 6
- Optionnal Explosion-proof type Exd II CT5
- Position Indicator on the top
- Epoxy polyester powder coating on alu-alloy shell
- Integrated declutchable gear for manual override
- Torque switch and Limit Switch 2x SPDT ON/OFF
- Common Open and Close the valve according to remote signal, with feedback of Open and Close position
- Support multiple voltage designs includes: Single Phase: 24V、110V、220V、230V、240V 50/60Hz/ 3-Phases: 220V、380V、415V、440V 50/60Hz / DC24V



DIMENSIONS



PO9-GQ-B : COMMON ON-OFF TYPE

PO9-GQ

DIMENSIONS OF MOTORIZED BALL VALVE WITH POQ ACTUATOR IN RATING PN16

PN16 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POQ Model
	DN15	130	108	95	16	4-14	52	137.5	165	140.5	POQ-006
	DN20	130	117	105	18	4-14	56.5	137.5	165	140.5	POQ-006
	DN25	140	127	115	18	4-14	65	137.5	165	140.5	POQ-006
	DN32	165	140	140	18	4-18	73.5	137.5	165	140.5	POQ-006
	DN40	165	165	150	18	4-18	81.5	168.5	211.5	154	POQ-010
	DN50	203	178	165	20	4-18	89	168.5	211.5	154	POQ-010
	DN65	222	190	185	18	8-18	116	203	259	186	POQ-020
	DN80	241	203	200	20	8-18	127	203	259	186	POQ-020
	DN100	305	229	220	20	8-18	149.5	203	259	186	POQ-050
	DN125	356	-	250	22	8-18	173	203	259	186	POQ-060
	DN150	394	-	285	22	8-22	208	229.5	283.5	193	POQ-100
	DN200	457	-	340	24	12-22	256	229.5	283.5	193	POQ-200

DIMENSIONS OF MOTORIZED BALL VALVE WITH POQ ACTUATOR IN RATING PN25

PN25 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POQ Model
	DN15	130	108	95	16	4-14	52	137.5	165	140.5	POQ-010
	DN20	130	117	105	18	4-14	56.5	137.5	165	140.5	POQ-010
	DN25	140	127	115	18	4-14	65	137.5	165	140.5	POQ-010
	DN32	165	140	140	18	4-18	73.5	137.5	165	140.5	POQ-010
	DN40	165	165	150	18	4-18	81.5	168.5	211.5	154	POQ-020
	DN50	203	178	165	20	4-18	89	168.5	211.5	154	POQ-020
	DN65	222	-	185	18	8-18	116	203	259	186	POQ-050
	DN80	241	-	200	20	8-18	127	203	259	186	POQ-050
	DN100	305	-	220	20	8-18	149.5	203	259	186	POQ-060

DIMENSIONS OF MOTORIZED BALL VALVE WITH POQ ACTUATOR IN RATING PN40

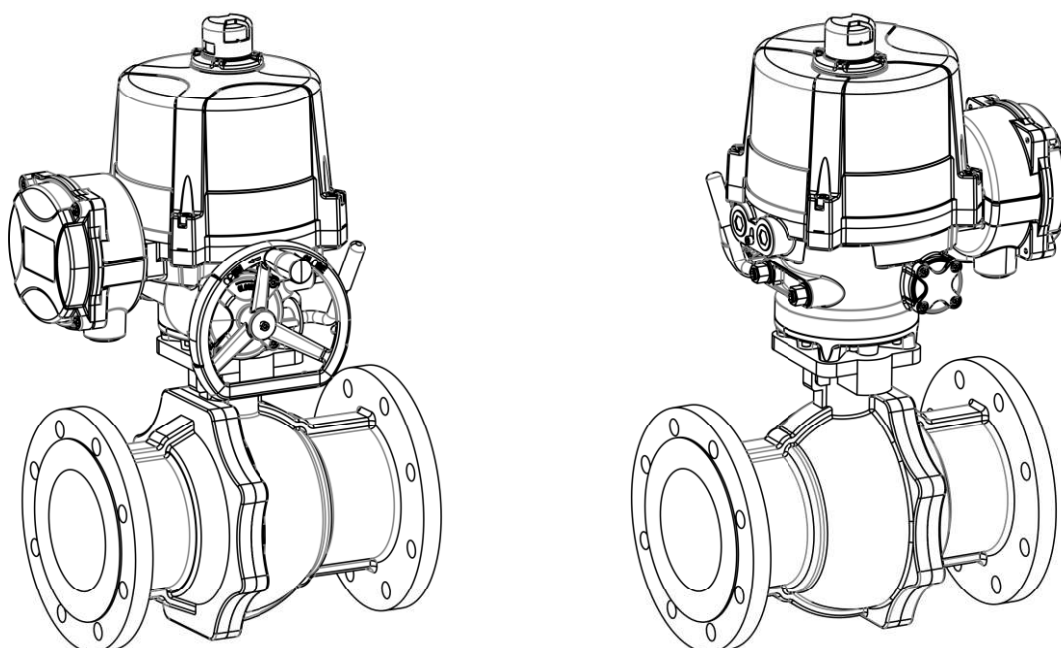
PN40 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POQ Model
	DN15	130	108	95	16	4-14	52	137.5	165	140.5	POQ-10
	DN20	130	117	105	18	4-14	56.5	137.5	165	140.5	POQ-10
	DN25	140	127	115	18	4-14	65	137.5	165	140.5	POQ-10
	DN32	165	140	140	18	4-18	73.5	137.5	165	140.5	POQ-10
	DN40	165	165	150	18	4-18	81.5	168.5	211.5	154	POQ-20
	DN50	203	178	165	20	4-18	89	168.5	211.5	154	POQ-20
	DN65	222	-	185	18	8-18	116	203	259	186	POQ-20
	DN80	241	-	200	20	8-18	127	203	259	186	POQ-20
	DN100	305	-	220	20	8-18	149.5	203	259	186	POQ-40

PO9-GQ Series: MOTORIZED BALL VALVE WITH POQ HIGH-PERFORMANCE ACTUATOR

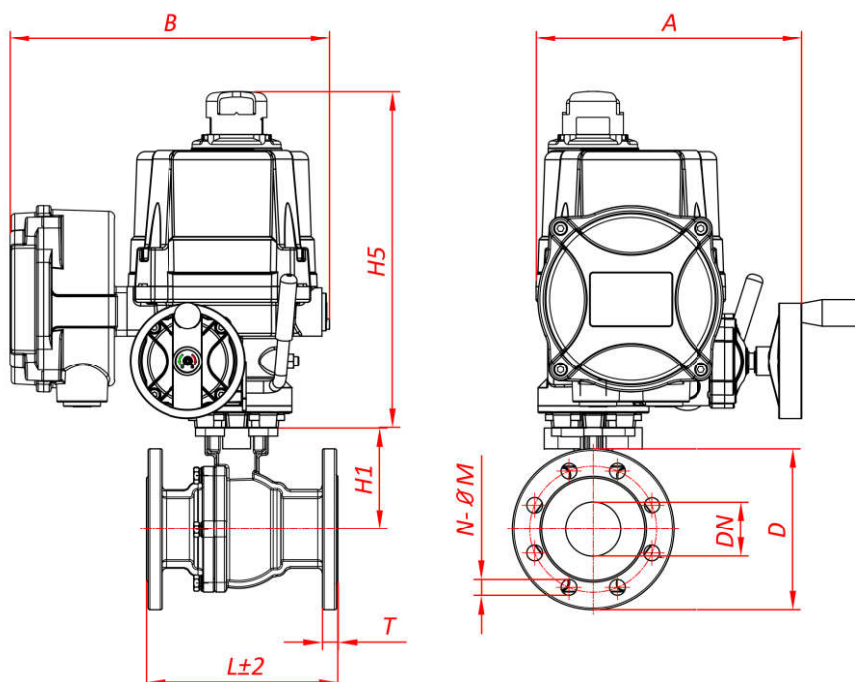
PO9-GQ-G : REGULATING TYPE

FEATURES

- Protection IP67 Nema 4 and 6
- Optionnal Explosion-proof type Exd II CT5
- Position Indicator on the top
- Epoxy polyester powder coating on alu-alloy shell
- Integrated declutchable gear for manual override
- Torque switch and Limit Switch 2x SPDT ON/OFF
- Proportionally Open the valve in position 0° to 90° according to digital signal 4-20mA, and feedback 4-20mA position signal
- Support multiple voltage designs includes: Single Phase: 24V、110V、220V、230V、240V 50/60Hz/ 3-Phases: 220V、380V、415V、440V 50/60Hz / DC24V



DIMENSIONS



PO9-GQ-G : REGULATING TYPE

PO9-GQ

DIMENSIONS OF MOTORIZED BALL VALVE WITH POQ ACTUATOR IN RATING PN16

PN16 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POQ Model
	DN15	130	108	95	16	4-14	52	137.5	280	266	POQ-006
	DN20	130	117	105	18	4-14	56.5	137.5	280	266	POQ-006
	DN25	140	127	115	18	4-14	65	137.5	280	266	POQ-006
	DN32	165	140	140	18	4-18	73.5	137.5	280	266	POQ-006
	DN40	165	165	150	18	4-18	81.5	168.5	280	266	POQ-010
	DN50	203	178	165	20	4-18	89	168.5	280	266	POQ-010
	DN65	222	190	185	18	8-18	116	203	316	315	POQ-020
	DN80	241	203	200	20	8-18	127	203	316	315	POQ-020
	DN100	305	229	220	20	8-18	149.5	203	341	333	POQ-050
	DN125	356	-	250	22	8-18	173	203	341	333	POQ-060
	DN150	394	-	285	22	8-22	208	229.5	415	439	POQ-100
	DN200	457	-	340	24	12-22	256	229.5	458	478	POQ-200

DIMENSIONS OF MOTORIZED BALL VALVE WITH POQ ACTUATOR IN RATING PN25

PN25 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POQ Model
	DN15	130	108	95	16	4-14	52	280	218	266	POQ-010
	DN20	130	117	105	18	4-14	56.5	280	218	266	POQ-010
	DN25	140	127	115	18	4-14	65	280	218	266	POQ-010
	DN32	165	140	140	18	4-18	73.5	280	218	266	POQ-010
	DN40	165	165	150	18	4-18	81.5	316	286	315	POQ-020
	DN50	203	178	165	20	4-18	89	316	286	315	POQ-020
	DN65	222	-	185	22	8-18	116	341	299	333	POQ-050
	DN80	241	-	200	24	8-18	127	341	299	333	POQ-050
	DN100	305	-	235	24	8-22	138	341	299	333	POQ-060

DIMENSIONS OF MOTORIZED BALL VALVE WITH POQ ACTUATOR IN RATING PN40

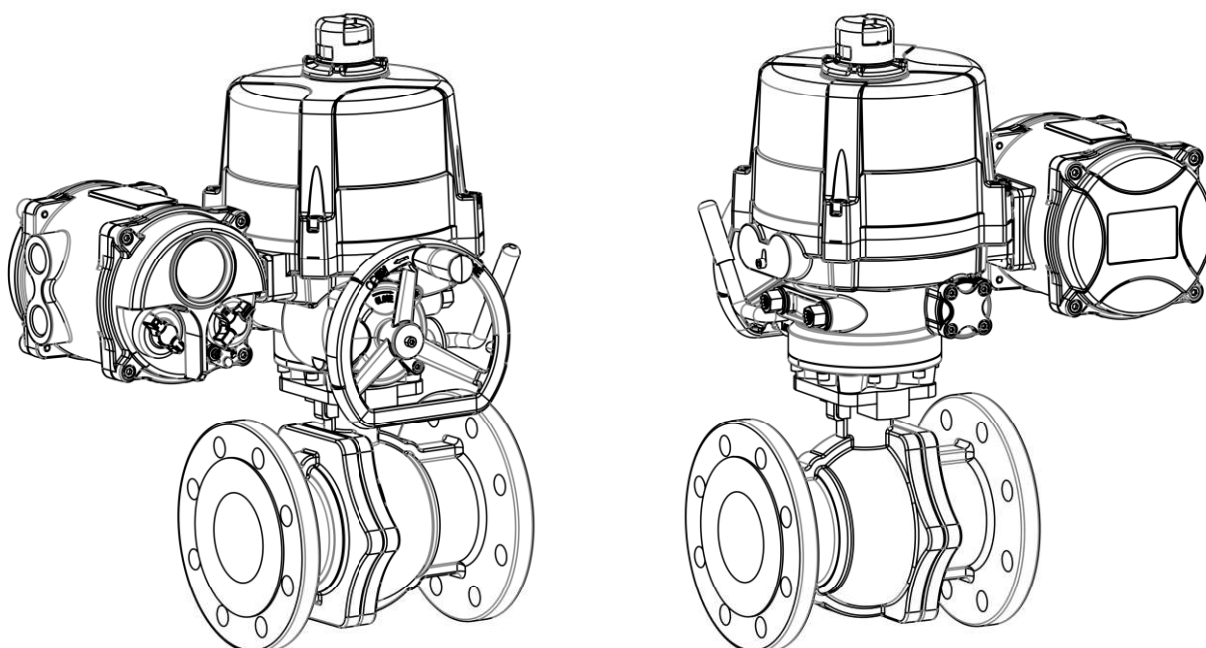
PN40 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POQ Model
	DN15	130	108	95	16	4-14	52	280	218	266	POQ-010
	DN20	130	117	105	18	4-14	56.5	280	218	266	POQ-010
	DN25	140	127	115	18	4-14	65	280	218	266	POQ-010
	DN32	165	140	140	18	4-18	73.5	280	218	266	POQ-010
	DN40	165	165	150	18	4-18	81.5	316	286	315	POQ-020
	DN50	203	178	165	20	4-18	89	316	286	315	POQ-020
	DN65	222	-	185	22	8-18	116	341	299	333	POQ-020
	DN80	241	-	200	24	8-18	127	341	299	333	POQ-020
	DN100	305	-	235	24	8-22	138	341	299	333	POQ-040

PO9-GQ Series: MOTORIZED BALL VALVE WITH POQ HIGH-PERFORMANCE ACTUATOR

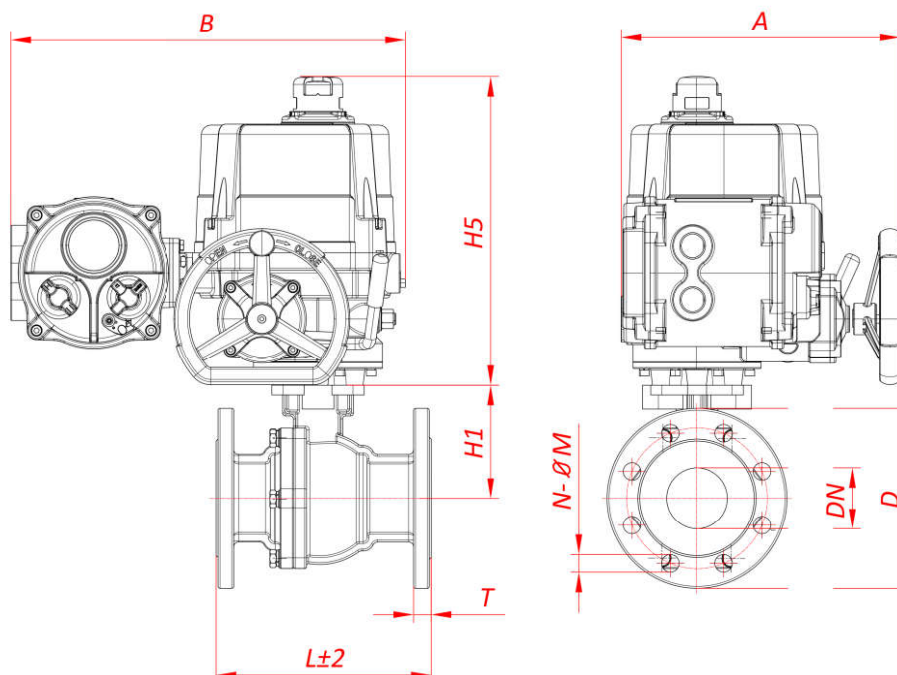
PO9-GQ-Y : INTELLIGENT INTEGRATED TYPE

FEATURES

- Protection IP67 Nema 4 and 6
- Optionnal Explosion-proof type Exd II CT5
- Position Indicator on the top
- Epoxy polyester powder coating on alu-alloy shell
- Integrated declutchable gear for manual override
- ON-OPEN Type or Regulating Type Control Way
- Non-intrusive type, LED screen, Control button, Local/Remote Control, Mechanical Torque switch,
- Support multiple voltage designs includes: Single Phase: 24V、110V、220V、230V、240V 50/60Hz/ 3-Phases: 220V、380V、415V、440V 50/60Hz / DC24V



DIMENSIONS



PO9-GQ-Y : INTELLIGENT INTEGRATED TYPE

PO9-GQ

DIMENSIONS OF MOTORIZED BALL VALVE WITH POQ ACTUATOR IN RATING PN16

PN16 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POQ Model
	DN15	130	108	95	16	4-14	52	280	244	356	POQ-006
	DN20	130	117	105	18	4-14	56.5	280	244	356	POQ-006
	DN25	140	127	115	18	4-14	65	280	244	356	POQ-006
	DN32	165	140	140	18	4-18	73.5	280	244	356	POQ-006
	DN40	165	165	150	18	4-18	81.5	280	244	356	POQ-010
	DN50	203	178	165	20	4-18	89	280	244	356	POQ-010
	DN65	222	190	185	18	8-18	116	316	286	405	POQ-020
	DN80	241	203	200	20	8-18	127	316	286	405	POQ-020
	DN100	305	229	220	20	8-18	149.5	341	299	423	POQ-050
	DN125	356	-	250	22	8-18	173	341	299	423	POQ-060
	DN150	394	-	285	22	8-22	208	415	336	529	POQ-100
	DN200	457	-	340	24	12-22	256	453	382	568	POQ-200

DIMENSIONS OF MOTORIZED BALL VALVE WITH POQ ACTUATOR IN RATING PN25

PN25 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POQ Model
	DN15	130	108	95	16	4-14	52	280	218	356	POQ-010
	DN20	130	117	105	18	4-14	56.5	280	218	356	POQ-010
	DN25	140	127	115	18	4-14	65	280	218	356	POQ-010
	DN32	165	140	140	18	4-18	73.5	280	218	356	POQ-010
	DN40	165	165	150	18	4-18	81.5	316	286	405	POQ-020
	DN50	203	178	165	20	4-18	89	316	286	405	POQ-020
	DN65	222	-	185	22	8-18	116	341	299	423	POQ-050
	DN80	241	-	200	24	8-18	127	341	299	423	POQ-050
	DN100	305	-	235	24	8-22	138	341	299	423	POQ-060

DIMENSIONS OF MOTORIZED BALL VALVE WITH POQ ACTUATOR IN RATING PN40

PN40 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POQ Model
	DN15	130	108	95	16	4-14	52	280	244	356	POQ-010
	DN20	130	117	105	18	4-14	56.5	280	244	356	POQ-010
	DN25	140	127	115	18	4-14	65	280	244	356	POQ-010
	DN32	165	140	140	18	4-18	73.5	280	244	356	POQ-010
	DN40	165	165	150	18	4-18	81.5	316	286	405	POQ-020
	DN50	203	178	165	20	4-18	89	316	286	405	POQ-020
	DN65	222	-	185	22	8-18	116	341	299	423	POQ-020
	DN80	241	-	200	24	8-18	127	341	299	423	POQ-020
	DN100	305	-	235	24	8-22	138	341	299	423	POQ-040

PO9-GQ Series:

MOTORIZED BALL VALVE WITH POQ HIGH-PERFORMANCE ACTUATOR

PO9-GQ-S : SUPER INTELLIGENT TYPE

FEATURES

- Protection IP67 Nema 4 and 6
- Optionnal Explosion-proof type Exd II CT5
- Position Indicator on the top
- Epoxy polyester powder coating on alu-alloy shell
- Integrated declutchable gear for manual override
- ON-OPEN Type or Regulating Type Control Way
- Non-intrusive type, LED screen, Control button, Local/Remote Control, Mechanical Torque switch, Class I Menu
- Support multiple voltage designs includes: Single Phase: 24V、110V、220V、230V、240V 50/60Hz/ 3-Phases: 220V、380V、415V、440V 50/60Hz / DC24V

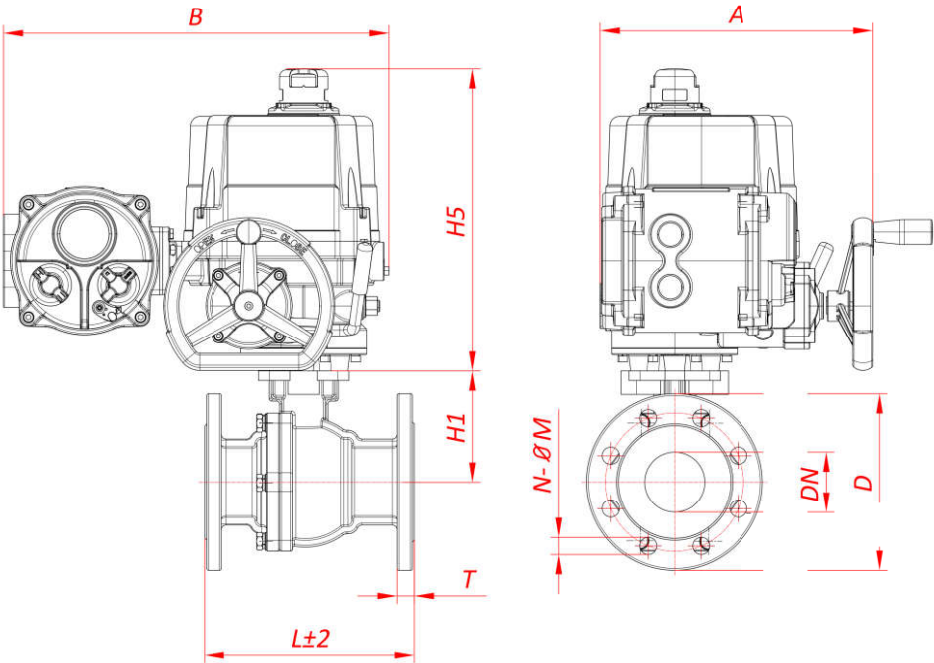


FUNCTIONS

ESD	Equpeed with ESD Function
TERMINALS	6 Terminals for Output signal, available for alarming, Open position, Close position, Over-torques and so on, which more 15 options can be reset with 5 terminals. Optional 4 bistable output contacts
BATTERY	Optional battery support, that is, after the main power supply is powered off, the control system can be awakened.
BLUETOOTH	Optional Bluetooth communication function to realize mobile phone on-site debugging and data download
INTERMITTENT OPERATION	It has the function of intermittent operation to stop the pipeline surge
SETTING MENU	The setting menu includes three levels: basic setting, feedback setting and advanced setting, with independent password protection
DATA RECORD	Optional data recording function, which can access the operation times, operation frequency, operation statistics, alarm records and other data of the actuator
FAULT DIAGNOSIS	With fault diagnosis function, it can diagnose 9 external signals
ELECTRONIC OVER-TORQUE PROTECTION	Optional electronic torque protection, no mechanical contact, good repeatability, torque protection value 30 ~ 100% can be set
LED SCREEN	The dot matrix LCD display screen is adopted, and the display language can be Chinese, English and Russian, with necessary graphics. The human-computer interaction interface is simple, intuitive, more humanized, convenient for debugging, and easy to use.

PO9-GQ-S :
SUPER INTELLIGENT TYPE

DIMENSIONS



DIMENSIONS OF MOTORIZED BALL VALVE WITH POQ ACTUATOR IN RATING PN16

PN16 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POQ Model
	DN15	130	108	95	16	4-14	52	280	266	377	POQ-006
	DN20	130	117	105	18	4-14	56.5	280	266	377	POQ-006
	DN25	140	127	115	18	4-14	65	280	266	377	POQ-006
	DN32	165	140	140	18	4-18	73.5	280	266	377	POQ-006
	DN40	165	165	150	18	4-18	81.5	280	266	377	POQ-010
	DN50	203	178	165	20	4-18	89	280	266	377	POQ-010
	DN65	222	190	185	18	8-18	116	316	307	426	POQ-020
	DN80	241	203	200	20	8-18	127	316	307	426	POQ-020
	DN100	305	229	220	20	8-18	149.5	341	311	444	POQ-050
	DN125	356	—	250	22	8-18	173	341	311	444	POQ-060
	DN150	394	-	285	22	8-22	208	415	336	550	POQ-100
	DN200	457	-	340	24	12-22	256	458	382	589	POQ-200

PO9-GQ-S :
SUPER INTELLIGENT TYPE

DIMENSIONS OF MOTORIZED BALL VALVE WITH POQ ACTUATOR IN RATING PN25

PN25 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POQ Model
	DN15	130	108	95	16	4-14	52	280	266	377	POQ-010
	DN20	130	117	105	18	4-14	56.5	280	266	377	POQ-010
	DN25	140	127	115	18	4-14	65	280	266	377	POQ-010
	DN32	165	140	140	18	4-18	73.5	280	266	377	POQ-010
	DN40	165	165	150	18	4-18	81.5	316	307	426	POQ-020
	DN50	203	178	165	20	4-18	89	316	307	426	POQ-020
	DN65	222	-	185	22	8-18	116	341	311	444	POQ-050
	DN80	241	-	200	24	8-18	127	341	311	444	POQ-050
	DN100	305	-	235	24	8-22	138	341	311	444	POQ-060

DIMENSIONS OF MOTORIZED BALL VALVE WITH POQ ACTUATOR IN RATING PN40

PN40 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POQ Model
	DN15	130	108	95	16	4-14	52	280	266	377	POQ-010
	DN20	130	117	105	18	4-14	56.5	280	266	377	POQ-010
	DN25	140	127	115	18	4-14	65	280	266	377	POQ-010
	DN32	165	140	140	18	4-18	73.5	280	266	377	POQ-010
	DN40	165	165	150	18	4-18	81.5	316	307	426	POQ-020
	DN50	203	178	165	20	4-18	89	316	307	426	POQ-020
	DN65	222	-	185	22	8-18	116	341	311	444	POQ-020
	DN80	241	-	200	24	8-18	127	341	311	444	POQ-020
	DN100	305	-	235	24	8-22	138	341	311	444	POQ-040

PO9-G SERIES: GB TYPE 2-WAY FLANGE BALL VALVE (PN16-PN40)

PO9-GP Series: PNEUMATIC BALL VALVE WITH PISTON TYPE ACTUATOR

DESCRIPTION

GB series ball valves are our POA piston pneumatic actuators driven by compressed gas. The Rack and Pinion in the center of the piston cylinder rotate 90 degrees to drive the valve to open and close.

The design of Rack and Pinion with double piston symmetrical structure enables fast and steady action, high precision, high output torque as well as reverse rotation by simply changing the installation position of the piston.

The connection size is design according to NUMAR standard, which can be fit with various functions of accessories, like limit switch, solenoid valve and positioner. The bottom flange is designed to match ISO5211 and DIN3337 standard.

POV GB Ball valve can provide the ON-OFF, Regulating, Emergency shut-off and various complete function, to achieve the client's complicated requirements of pneumatic ball valves.

ORDERING CODE

PO 9 9 4 - 1 - G P -

Seal Material	Body Material	Ball Material	Pressure Rating
4 PTFE	3 A216 WCB	A S.S. 304	3 PN16
R RPTFE	A A351 CF8	B PTFE	4 PN25
P PPL	B A351 CF8M	E Duplex S.S. 2205	5 PN40
	C A351 CF3M		
	E A240 2205		

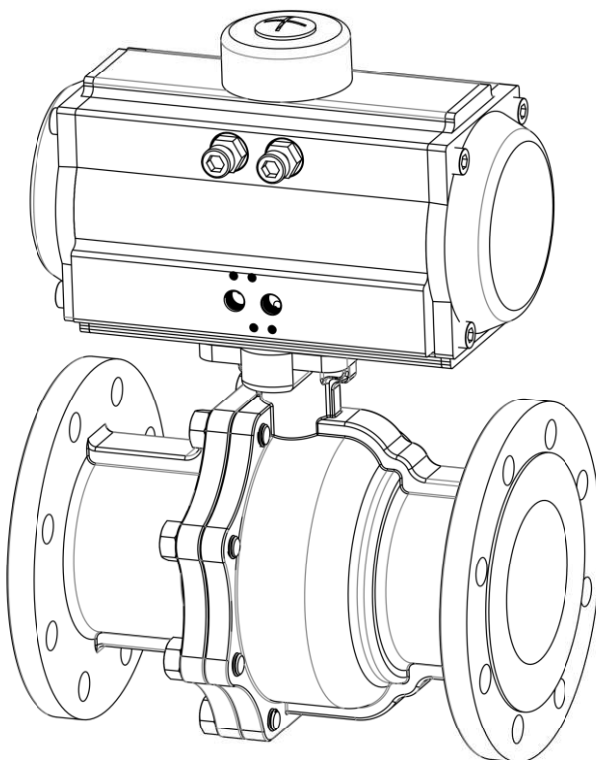
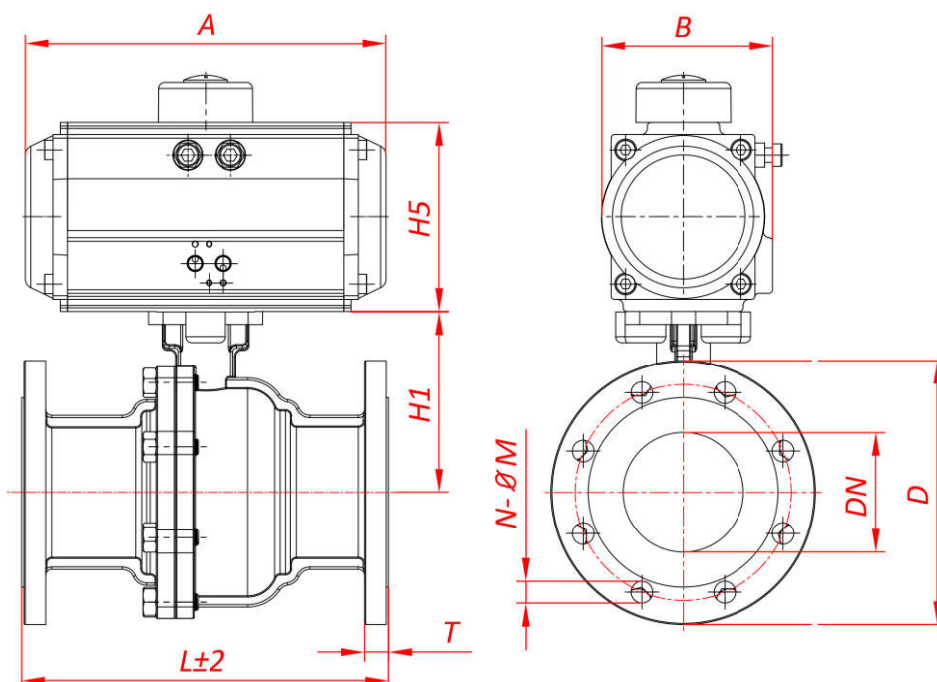
Actuation Type	Acting Type	Explosion-Proof Grade
O Pneumatic Double Acting Common ON-OFF Type	D Double Acting Type	0 NA
S Pneumatic Single Acting Emergency Shut-off Type	O Fail Open	1 EXd II CT6
P Pneumatic Common ON-OFF Type Explosion-Proof	C Fail Close	2 EXd II CT5
R Pneumatic Regulating Type Non-Ex / Explosion-Proof Type		3 EX ia IICT6
I Pneumatic Intelligent Regulating Type Non-Ex / Explosion-Proof Type		
D Pneumatic Actuator c/w Manual Override		

Accessory	Accessory	Accessory	Accessory	Accessory
BLANK NA	BLANK NA	BLANK NA	BLANK NA	BLANK NA
L Limit Switch	S Solenoid Valve	A Air Set	D Dec clutchable Gear	M Mechanical Positioner
				I Intelligent Positioner

Example: PO9944-1AA3-GP-IC0-AI : Pneumatic Ball Valve, CF8 Body, SS304 Ball, PTFE Seat, PN16, with Pneumatic actuator, single acting Fail close type, c/ w Intelligent positioner, Non-explosion-proof, Air set.

**PO9-GP Series:
PNEUMATIC BALL VALVE WITH PISTON TYPE ACTUATOR****PO9-GP-O : PNEUMATIC DOUBLE ACTING COMMON ON-OFF TYPE****FEATURES**

- Double Acting Actuator, Power fail Valve will stay in position
- Position Indicator on the top
- Common ON-OFF Function to Open and Shut-off flow
- Can be directly supplied with air source, or controlled by 5/2 way solenoid valve for remote control
- Fast open/close in 2 seconds

**DIMENSIONS**

PO9-GP-O : PNEUMATIC DOUBLE ACTING COMMON ON-OFF TYPE

PO9-GP

DIMENSIONS OF PNEUMATIC BALL VALVE WITH DOUBLE ACTING ACTUATOR IN RATING PN16

PN16 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POADA Model
	DN15	130	108	95	16	4-14	52	72	145	72	POADA-20
	DN20	130	117	105	18	4-14	56.5	72	145	72	POADA-20
	DN25	140	127	115	18	4-14	65	88	168	83	POADA-40
	DN32	165	140	140	18	4-18	73.5	88	168	83	POADA-40
	DN40	165	165	150	18	4-18	81.5	100	182	95	POADA-80
	DN50	203	178	165	20	4-18	89	110	202	103	POADA-130
	DN65	222	190	185	18	8-18	116	118	262	108	POADA-160
	DN80	241	203	200	20	8-18	127	135	268	120	POADA-200
	DN100	305	229	220	20	8-18	149.5	157	300	142	POADA-300
	DN125	356	-	250	22	8-18	173	174	395	155	POADA-500
	DN150	394	-	285	22	8-22	208	198	462	174	POADA-850
	DN200	457	-	340	24	12-22	256	232	510	206	POADA-1200

DIMENSIONS OF PNEUMATIC BALL VALVE WITH DOUBLE ACTING ACTUATOR IN RATING PN25

PN25 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POADA Model
	DN15	130	108	95	16	4-14	52	88	168	83	POADA-40
	DN20	130	117	105	18	4-14	56.5	88	168	83	POADA-40
	DN25	140	127	115	18	4-14	65	100	182	95	POADA-80
	DN32	165	140	140	18	4-18	73.5	100	182	95	POADA-80
	DN40	165	165	150	18	4-18	81.5	110	202	103	POADA-130
	DN50	203	178	165	20	4-18	89	118	262	108	POADA-160
	DN65	222	-	185	22	8-18	116	135	268	120	POADA-200
	DN80	241	-	200	24	8-18	127	157	300	142	POADA-300
	DN100	305	-	235	24	8-22	138	174	395	155	POADA-500

DIMENSIONS OF PNEUMATIC BALL VALVE WITH DOUBLE ACTING ACTUATOR IN RATING PN40

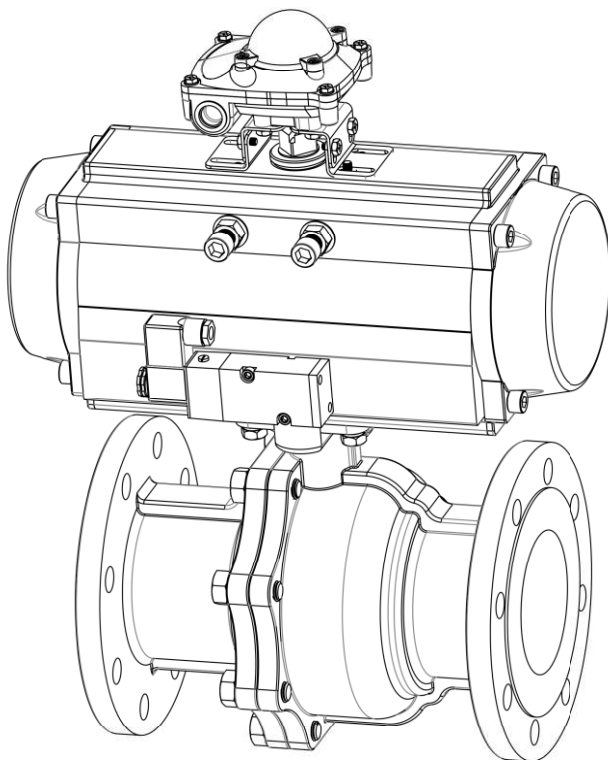
PN40 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	H5	A	B	POADA Model
	DN15	130	108	95	16	4-14	52	88	168	83	POADA-40
	DN20	130	117	105	18	4-14	56.5	88	168	83	POADA-40
	DN25	140	127	115	18	4-14	65	100	182	95	POADA-80
	DN32	165	140	140	18	4-18	73.5	100	182	95	POADA-80
	DN40	165	165	150	18	4-18	81.5	110	202	103	POADA-130
	DN50	203	178	165	20	4-18	89	118	262	108	POADA-160
	DN65	222	-	185	22	8-18	116	135	268	120	POADA-200
	DN80	241	-	200	24	8-18	127	157	300	142	POADA-300
	DN100	305	-	235	24	8-22	138	174	395	155	POADA-500

**PO9-GP Series:
PNEUMATIC BALL VALVE WITH PISTON TYPE ACTUATOR**

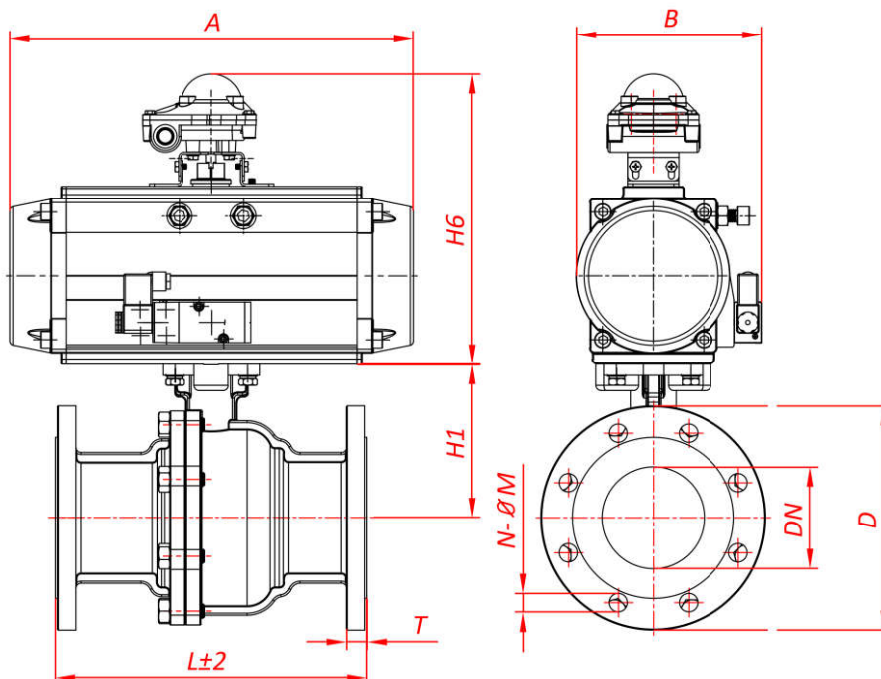
PO9-GP-S : PNEUMATIC SINGLE ACTING EMERGENCY SHUT-OFF TYPE

FEATURES

- Single Acting Actuator, Power fail Valve will open or close automatically
- Position Indicator on the top
- Common ON-OFF Function, with Air-to-open and Spring-to-close, or Air-to-close and Spring-to-open
- Can be directly supplied with air source, or controlled by 5/2 way solenoid valve for remote control
- Fast open/close in 2 seconds



DIMENSIONS



PO9-GP-S :
PNEUMATIC SINGLE ACTING EMERGENCY SHUT-OFF TYPE

DIMENSIONS OF PNEUMATIC BALL VALVE WITH SINGLE ACTING ACTUATOR IN RATING PN16

PN16 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	APPROX. H6	A	B	POE Model
	DN15	130	108	95	16	4-14	52	198	168	105	POASR-40K(B)
	DN20	130	117	105	18	4-14	56.5	198	168	105	POASR-40K(B)
	DN25	140	127	115	18	4-14	65	198	168	105	POASR-40K(B)
	DN32	165	140	140	18	4-18	73.5	210	182	117	POASR-80K(B)
	DN40	165	165	150	18	4-18	81.5	220	202	125	POASR-130K(B)
	DN50	203	178	165	20	4-18	89	228	262	130	POASR-160K(B)
	DN65	222	190	185	18	8-18	116	245	268	142	POASR-200K(B)
	DN80	241	203	200	20	8-18	127	267	300	164	POASR-300K(B)
	DN100	305	229	220	20	8-18	149.5	284	395	177	POASR-500K(B)
	DN125	356	-	250	22	8-18	173	308	462	196	POASR-850K(B)
	DN150	394	-	285	22	8-22	208	342	510	228	POASR-1200K(B)
	DN200	457	-	340	24	12-22	256	367	560	248	POASR-1750K(B)

DIMENSIONS OF PNEUMATIC BALL VALVE WITH SINGLE ACTING ACTUATOR IN RATING PN25

PN25 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	APPROX. H6	A	B	POE Model
	DN15	130	108	95	16	4-14	52	210	182	117	POASR-80K(B)
	DN20	130	117	105	18	4-14	56.5	210	182	117	POASR-80K(B)
	DN25	140	127	115	18	4-14	65	210	182	117	POASR-80K(B)
	DN32	165	140	140	18	4-18	73.5	220	202	125	POASR-130K(B)
	DN40	165	165	150	18	4-18	81.5	228	262	130	POASR-160K(B)
	DN50	203	178	165	20	4-18	89	245	268	142	POASR-200K(B)
	DN65	222	-	185	22	8-18	116	267	300	164	POASR-300K(B)
	DN80	241	-	200	24	8-18	127	284	395	177	POASR-500K(B)
	DN100	305	-	235	24	8-22	138	308	462	196	POASR-850K(B)

DIMENSIONS OF PNEUMATIC BALL VALVE WITH SINGLE ACTING ACTUATOR IN RATING PN40

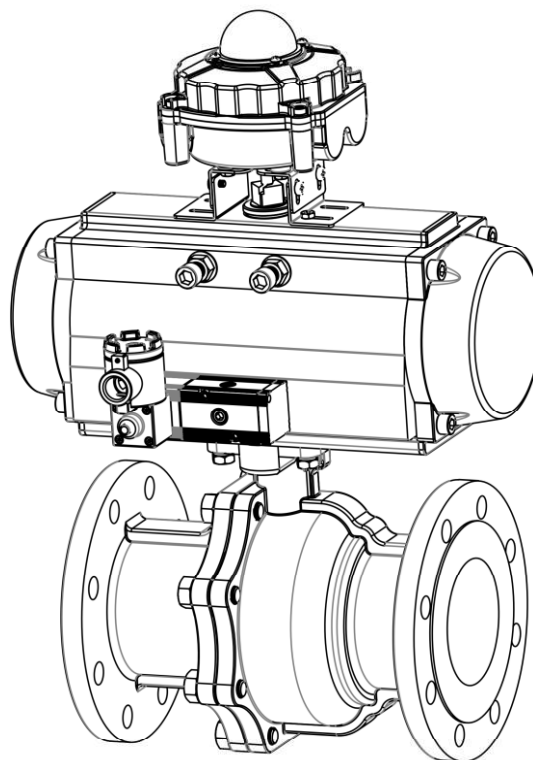
PN40 PRESSURE RATING	Size	L(Mid Seires)	L(Short Series)	D	T	N-M	H1	APPROX. H6	A	B	POE Model
	DN15	130	108	95	16	4-14	52	210	182	117	POASR-80K(B)
	DN20	130	117	105	18	4-14	56.5	210	182	117	POASR-80K(B)
	DN25	140	127	115	18	4-14	65	210	182	117	POASR-80K(B)
	DN32	165	140	140	18	4-18	73.5	220	202	125	POASR-130K(B)
	DN40	165	165	150	18	4-18	81.5	228	262	130	POASR-160K(B)
	DN50	203	178	165	20	4-18	89	245	268	142	POASR-200K(B)
	DN65	222	-	185	22	8-18	116	267	300	164	POASR-300K(B)
	DN80	241	-	200	24	8-18	127	284	395	177	POASR-500K(B)
	DN100	305	-	235	24	8-22	138	308	462	196	POASR-850K(B)

PO9-GP Series:
PNEUMATIC BALL VALVE WITH PISTON TYPE ACTUATOR

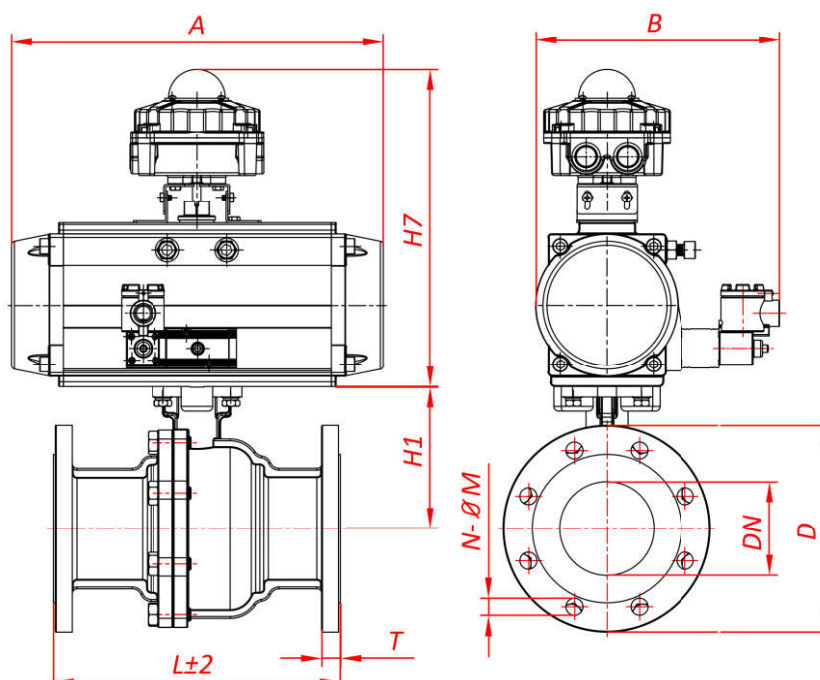
PO9-GP-P : PNEUMATIC COMMON ON-OFF TYPE EXPLOSION-PROOF

FEATURES

- Common ON-OFF Function, with Double acting or Single acting actuator
- Equipped with POT Series Explosion-proof Solenoid valve
- Equipped with POH Series Explosion-proof Limit switch
- Explosion-proof grades are available with ExmbIICT4/ EX d IIB T6/ EX d IIC T6/ EX ia IIC T6
- Available with other brands limit switch and solenoid valve



DIMENSIONS



PO9-GP-P :
PNEUMATIC COMMON ON-OFF TYPE EXPLOSION-PROOF

DIMENSIONS OF PNEUMATIC BALL VALVE C/W DOUBLE/SINGLE ACTING ACTUATOR IN RATING PN16

PN16 PRESSURE RATING	Size	L (Mid Seires)	L (Short Series)	D	T	N-M	H1	A	B	H7	POADA Model	A	B	H7	POASR Model
								DOUBLE ACTING TYPE				SINGLE ACTING TYPE			
								145	176	239	POADA-20	168	187	255	POASR-40K(B)
DN15	130	108	95	16	4-14	52	52								
DN20	130	117	105	18	4-14	56.5	56.5	145	176	239	POADA-20	168	187	255	POASR-40K(B)
DN25	140	127	115	18	4-14	65	65	168	187	255	POADA-40	168	187	255	POASR-40K(B)
DN32	165	140	140	18	4-18	73.5	73.5	168	187	255	POADA-40	182	199	267	POASR-80K(B)
DN40	165	165	150	18	4-18	81.5	81.5	182	199	267	POADA-80	202	207	277	POASR-130K(B)
DN50	203	178	165	20	4-18	89	89	202	207	277	POADA-130	262	212	285	POASR-160K(B)
DN65	222	190	185	18	8-18	116	116	262	212	285	POADA-160	268	224	302	POASR-200K(B)
DN80	241	203	200	20	8-18	127	127	268	224	302	POADA-200	300	246	324	POASR-300K(B)
DN100	305	229	220	20	8-18	149.5	149.5	300	246	324	POADA-300	395	259	341	POASR-500K(B)
DN125	356	-	250	22	8-18	173	173	395	259	341	POADA-500	462	278	365	POASR-850K(B)
DN150	394	-	285	22	8-22	208	208	462	278	365	POADA-850	510	310	399	POASR-1200K(B)
DN200	457	-	340	24	12-22	256	256	510	310	399	POADA-1200	560	330	424	POASR-1750K(B)

DIMENSIONS OF PNEUMATIC BALL VALVE C/W DOUBLE/SINGLE ACTING ACTUATOR IN RATING PN25

PN25 PRESSURE RATING	Size	L (Mid Seires)	L (Short Series)	D	T	N-M	H1	A	B	H7	POADA Model	A	B	H7	POASR Model
								DOUBLE ACTING TYPE				SINGLE ACTING TYPE			
								168	187	255	POADA-40	182	199	267	POASR-80K(B)
DN15	130	108	95	16	4-14	52	52								
DN20	130	117	105	18	4-14	56.5	56.5	168	187	255	POADA-40	182	199	267	POASR-80K(B)
DN25	140	127	115	18	4-14	65	65	182	199	267	POADA-80	182	199	267	POASR-80K(B)
DN32	165	140	140	18	4-18	73.5	73.5	182	199	267	POADA-80	202	207	277	POASR-130K(B)
DN40	165	165	150	18	4-18	81.5	81.5	202	207	277	POADA-130	262	212	285	POASR-160K(B)
DN50	203	178	165	20	4-18	89	89	262	212	285	POADA-160	268	224	302	POASR-200K(B)
DN65	222	190	185	18	8-18	116	116	268	224	302	POADA-200	300	246	324	POASR-300K(B)
DN80	241	203	200	20	8-18	127	127	300	246	324	POADA-300	395	259	341	POASR-500K(B)
DN100	305	229	220	20	8-18	149.5	149.5	395	259	341	POADA-500	462	278	365	POASR-850K(B)

DIMENSIONS OF PNEUMATIC BALL VALVE C/W DOUBLE/SINGLE ACTING ACTUATOR IN RATING PN40

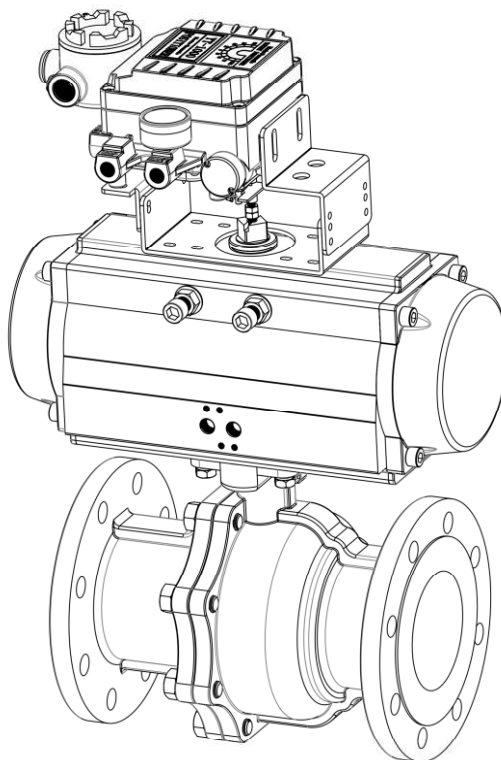
PN40 PRESSURE RATING	Size	L (Mid Seires)	L (Short Series)	D	T	N-M	H1	A	B	H7	POADA Model	A	B	H7	POASR Model
								DOUBLE ACTING TYPE				SINGLE ACTING TYPE			
								168	187	255	POADA-40	182	199	267	POASR-80K(B)
DN15	130	108	95	16	4-14	52	52								
DN20	130	117	105	18	4-14	56.5	56.5	168	187	255	POADA-40	182	199	267	POASR-80K(B)
DN25	140	127	115	18	4-14	65	65	182	199	267	POADA-80	182	199	267	POASR-80K(B)
DN32	165	140	140	18	4-18	73.5	73.5	182	199	267	POADA-80	202	207	277	POASR-130K(B)
DN40	165	165	150	18	4-18	81.5	81.5	202	207	277	POADA-130	262	212	285	POASR-160K(B)
DN50	203	178	165	20	4-18	89	89	262	212	285	POADA-160	268	224	302	POASR-200K(B)
DN65	222	190	185	18	8-18	116	116	268	224	302	POADA-200	300	246	324	POASR-300K(B)
DN80	241	203	200	20	8-18	127	127	300	246	324	POADA-300	395	259	341	POASR-500K(B)
DN100	305	229	220	20	8-18	149.5	149.5	395	259	341	POADA-500	462	278	365	POASR-850K(B)

**PO9-GP Series:
PNEUMATIC BALL VALVE WITH PISTON TYPE ACTUATOR**

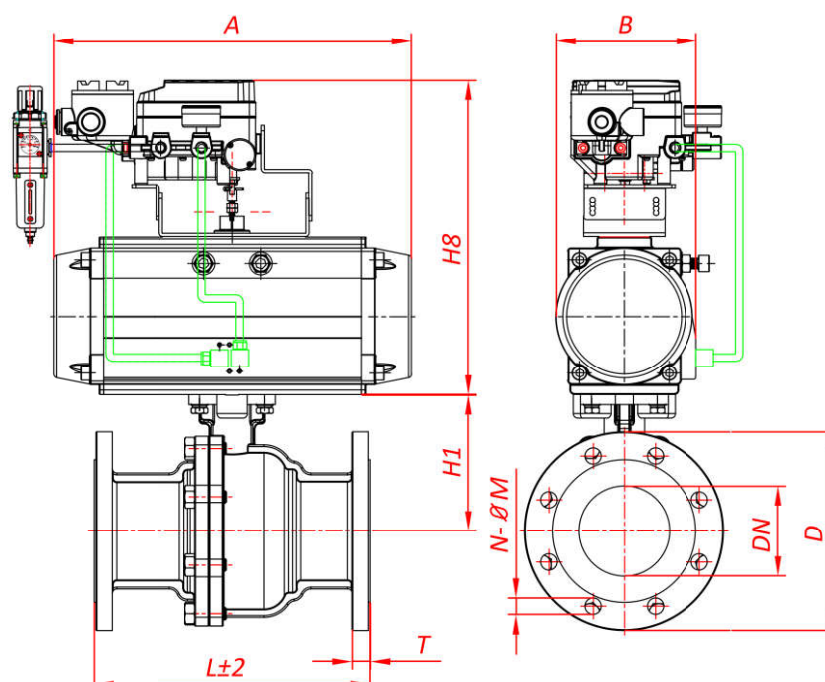
PO9-GP-R : PNEUMATIC REGULATING TYPE NON-EX / EXPLOSION-PROOF TYPE

FEATURES

- Common Regulating type, with Double acting or Single acting actuator
- Equipped with POT-1000R Series Mechanical positioner
- Available with 4–20mA digital signal or 3–15PSI air signal, with optional feedback for 4–20mA signal
- Optional Explosion-proof grades are available with Ex dmb II CT6
- Available with other brands positioner



DIMENSIONS



PO9-GP-R :
PNEUMATIC REGULATING TYPE NON-EX / EXPLOSION-PROOF TYPE

DIMENSIONS OF PNEUMATIC BALL VALVE C/W DOUBLE/SINGLE ACTING ACTUATOR IN RATING PN16

PN16 PRESSURE RATING	Size	L (Mid Seires)	L (Short Series)	D	T	N-M	H1	A	B	H7	POADA Model	A	B	H7	POASR Model
								DOUBLE ACTING TYPE				SINGLE ACTING TYPE			
								145	72	239	POADA-20	168	187	255	POASR-40K(B)
DN15	130	108	95	16	4-14	52	52								
DN20	130	117	105	18	4-14	56.5	56.5	145	72	239	POADA-20	168	187	255	POASR-40K(B)
DN25	140	127	115	18	4-14	65	65	168	83	255	POADA-40	168	187	255	POASR-40K(B)
DN32	165	140	140	18	4-18	73.5	73.5	168	83	255	POADA-40	182	199	267	POASR-80K(B)
DN40	165	165	150	18	4-18	81.5	81.5	182	95	267	POADA-80	202	207	277	POASR-130K(B)
DN50	203	178	165	20	4-18	89	89	202	103	277	POADA-130	262	212	285	POASR-160K(B)
DN65	222	190	185	18	8-18	116	116	262	108	285	POADA-160	268	224	302	POASR-200K(B)
DN80	241	203	200	20	8-18	127	127	268	120	302	POADA-200	300	246	324	POASR-300K(B)
DN100	305	229	220	20	8-18	149.5	149.5	300	142	324	POADA-300	395	259	341	POASR-500K(B)
DN125	356	-	250	22	8-18	173	173	395	155	341	POADA-500	462	278	365	POASR-850K(B)
DN150	394	-	285	22	8-22	208	208	462	174	365	POADA-850	510	310	399	POASR-1200K(B)
DN200	457	-	340	24	12-22	256	256	510	206	399	POADA-1200	560	330	424	POASR-1750K(B)

DIMENSIONS OF PNEUMATIC BALL VALVE C/W DOUBLE/SINGLE ACTING ACTUATOR IN RATING PN25

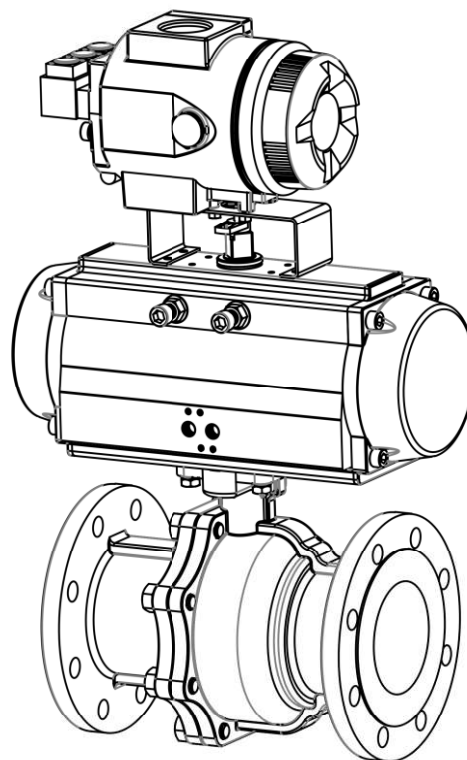
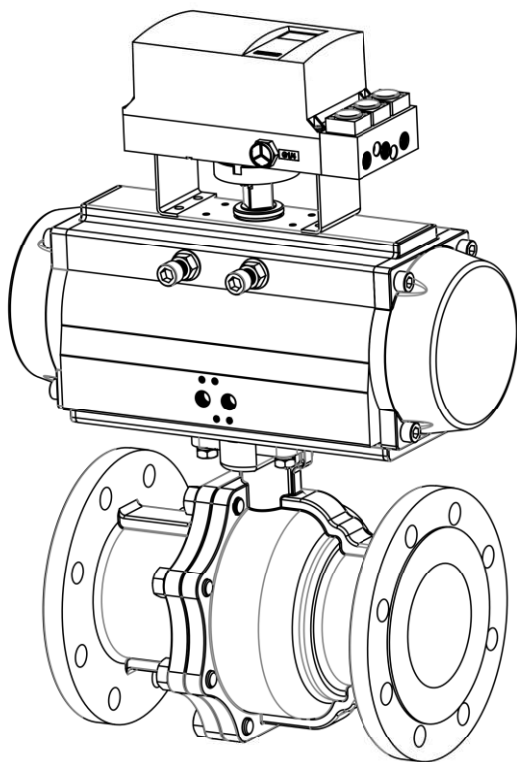
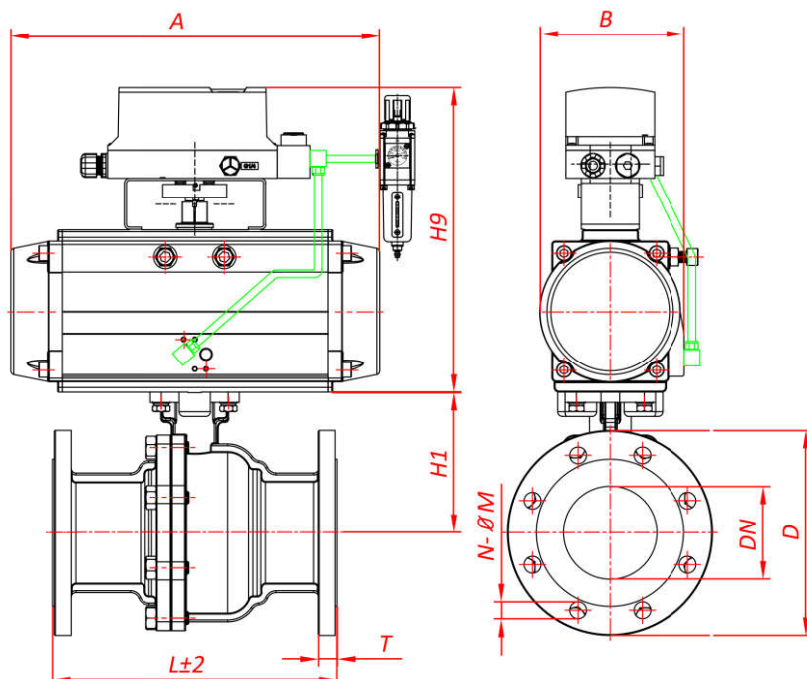
PN25 PRESSURE RATING	Size	L (Mid Seires)	L (Short Series)	D	T	N-M	H1	A	B	H7	POADA Model	A	B	H7	POASR Model
								DOUBLE ACTING TYPE				SINGLE ACTING TYPE			
								168	187	255	POADA-40	182	199	267	POASR-80K(B)
DN15	130	108	95	16	4-14	52	52								
DN20	130	117	105	18	4-14	56.5	56.5	168	187	255	POADA-40	182	199	267	POASR-80K(B)
DN25	140	127	115	18	4-14	65	65	182	199	267	POADA-80	182	199	267	POASR-80K(B)
DN32	165	140	140	18	4-18	73.5	73.5	182	199	267	POADA-80	202	207	277	POASR-130K(B)
DN40	165	165	150	18	4-18	81.5	81.5	202	207	277	POADA-130	262	212	285	POASR-160K(B)
DN50	203	178	165	20	4-18	89	89	262	212	285	POADA-160	268	224	302	POASR-200K(B)
DN65	222	190	185	18	8-18	116	116	268	224	302	POADA-200	300	246	324	POASR-300K(B)
DN80	241	203	200	20	8-18	127	127	300	246	324	POADA-300	395	259	341	POASR-500K(B)
DN100	305	229	220	20	8-18	149.5	149.5	395	259	341	POADA-500	462	278	365	POASR-850K(B)

DIMENSIONS OF PNEUMATIC BALL VALVE C/W DOUBLE/SINGLE ACTING ACTUATOR IN RATING PN40

PN40 PRESSURE RATING	Size	L (Mid Seires)	L (Short Series)	D	T	N-M	H1	A	B	H7	POADA Model	A	B	H7	POADA Model
								DOUBLE ACTING TYPE				SINGLE ACTING TYPE			
								168	187	255	POADA-40	182	199	267	POASR-80K(B)
DN15	130	108	95	16	4-14	52	52								
DN20	130	117	105	18	4-14	56.5	56.5	168	187	255	POADA-40	182	199	267	POASR-80K(B)
DN25	140	127	115	18	4-14	65	65	182	199	267	POADA-80	182	199	267	POASR-80K(B)
DN32	165	140	140	18	4-18	73.5	73.5	182	199	267	POADA-80	202	207	277	POASR-130K(B)
DN40	165	165	150	18	4-18	81.5	81.5	202	207	277	POADA-130	262	212	285	POASR-160K(B)
DN50	203	178	165	20	4-18	89	89	262	212	285	POADA-160	268	224	302	POASR-200K(B)
DN65	222	190	185	18	8-18	116	116	268	224	302	POADA-200	300	246	324	POASR-300K(B)
DN80	241	203	200	20	8-18	127	127	300	246	324	POADA-300	395	259	341	POASR-500K(B)
DN100	305	229	220	20	8-18	149.5	149.5	395	259	341	POADA-500	462	278	365	POASR-850K(B)

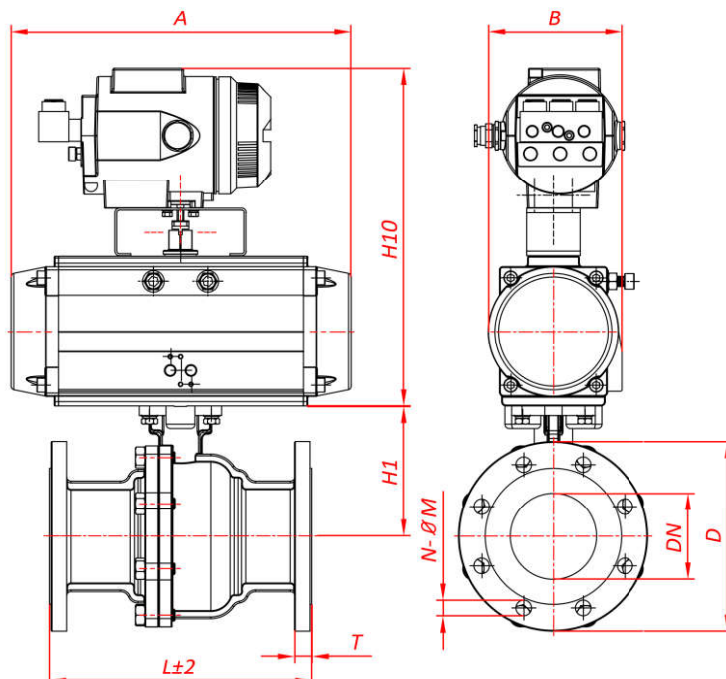
**PO9-GP Series:
PNEUMATIC BALL VALVE WITH PISTON TYPE ACTUATOR****PO9-GP-I : PNEUMATIC INTELLIGENT REGULATING TYPE NON-EX /EX-PROOF TYPE****FEATURES**

- Common Regulating type, with Double acting or Single acting actuator
- Equipped with POT-1000R Series Mechanical positioner
- Available with 4-20mA digital signal or 3-15PSI air signal, with optional feedback for 4-20mA signal
- Optional Explosion-proof grades are available with Ex dmb II CT6
- Available with other brands positioner

**DIMENSIONS****PNEUMATIC INTELLIGENT REGULATING TYPE WITH NON-EXPLOSION-PROOF POSITIONER**

PO9-GP-I :
PNEUMATIC INTELLIGENT REGULATING TYPE NON-EX /EX-PROOF TYPE

PNEUMATIC INTELLIGENT REGULATING TYPE WITH EXPLOSION-PROOF POSITIONER



DIMENSIONS OF PNEUMATIC BALL VALVE C/W DOUBLE/SINGLE ACTING ACTUATOR IN RATING PN16

	Size	L (Mid Seires)	L (Short Series)	D	T	N-M	H1	A	B	H9	H10	POADA Model	A	B	H9	H10	POADA Model
								DOUBLE ACTING TYPE					SINGLE ACTING TYPE				
PN16 PRESSURE RATING	DN15	130	108	95	16	4-14	52	145	72	219	282	POADA-20	168	83	235	298	POASR-40K(B)
	DN20	130	117	105	18	4-14	56.5	145	72	219	282	POADA-20	168	83	235	298	POASR-40K(B)
	DN25	140	127	115	18	4-14	65	168	83	235	298	POADA-40	168	83	235	298	POASR-40K(B)
	DN32	165	140	140	18	4-18	73.5	168	83	235	298	POADA-40	182	95	247	310	POASR-80K(B)
	DN40	165	165	150	18	4-18	81.5	182	95	247	310	POADA-80	202	103	257	320	POASR-130K(B)
	DN50	203	178	165	20	4-18	89	202	103	257	320	POADA-130	262	108	265	328	POASR-160K(B)
	DN65	222	190	185	18	8-18	116	262	108	265	328	POADA-160	268	120	282	345	POASR-200K(B)
	DN80	241	203	200	20	8-18	127	268	120	282	345	POADA-200	300	142	304	367	POASR-300K(B)
	DN100	305	229	220	20	8-18	149.5	300	142	304	367	POADA-300	395	155	321	384	POASR-500K(B)
	DN125	356	-	250	22	8-18	173	395	155	321	384	POADA-500	462	174	345	408	POASR-850K(B)
	DN150	394	-	285	22	8-22	208	462	174	345	408	POADA-850	510	206	379	442	POASR-1200K(B)
	DN200	457	-	340	24	12-22	256	510	206	379	442	POADA-1200	560	226	404	467	POASR-1750K(B)

INVESTMENT CASTING BALL VALVE



PO9-GP

PO9-GP-I :
PNEUMATIC INTELLIGENT REGULATING TYPE NON-EX /EX-PROOF TYPE

DIMENSIONS OF PNEUMATIC BALL VALVE C/W DOUBLE/SINGLE ACTING ACTUATOR IN RATING PN25

	Size	L (Mid Seires)	L (Short Series)	D	T	N-M	H1	A	B	H9	H10	POADA Model	A	B	H9	H10	POADA Model
								DOUBLE ACTING TYPE				POADA-20	SINGLE ACTING TYPE				POASR-40K(B)
PN25 PRESSURE RATING	DN15	130	108	95	16	4-14	52	168	83	235	298	POADA-20	182	95	247	298	POASR-40K(B)
	DN20	130	117	105	18	4-14	56.5	168	83	235	298	POADA-20	182	95	247	298	POASR-40K(B)
	DN25	140	127	115	18	4-14	65	182	95	247	310	POADA-40	182	95	247	298	POASR-40K(B)
	DN32	165	140	140	18	4-18	73.5	182	95	247	320	POADA-40	202	103	257	310	POASR-80K(B)
	DN40	165	165	150	18	4-18	81.5	202	103	257	320	POADA-80	262	108	265	320	POASR-130K(B)
	DN50	203	178	165	20	4-18	89	262	108	265	328	POADA-130	268	120	282	328	POASR-160K(B)
	DN65	222	190	185	18	8-18	116	268	120	282	345	POADA-160	300	142	304	345	POASR-200K(B)
	DN80	241	203	200	20	8-18	127	300	142	304	367	POADA-200	395	155	321	367	POASR-300K(B)
	DN100	305	229	220	20	8-18	149.5	395	155	321	384	POADA-300	462	174	345	384	POASR-500K(B)

DIMENSIONS OF PNEUMATIC BALL VALVE C/W DOUBLE/SINGLE ACTING ACTUATOR IN RATING PN40

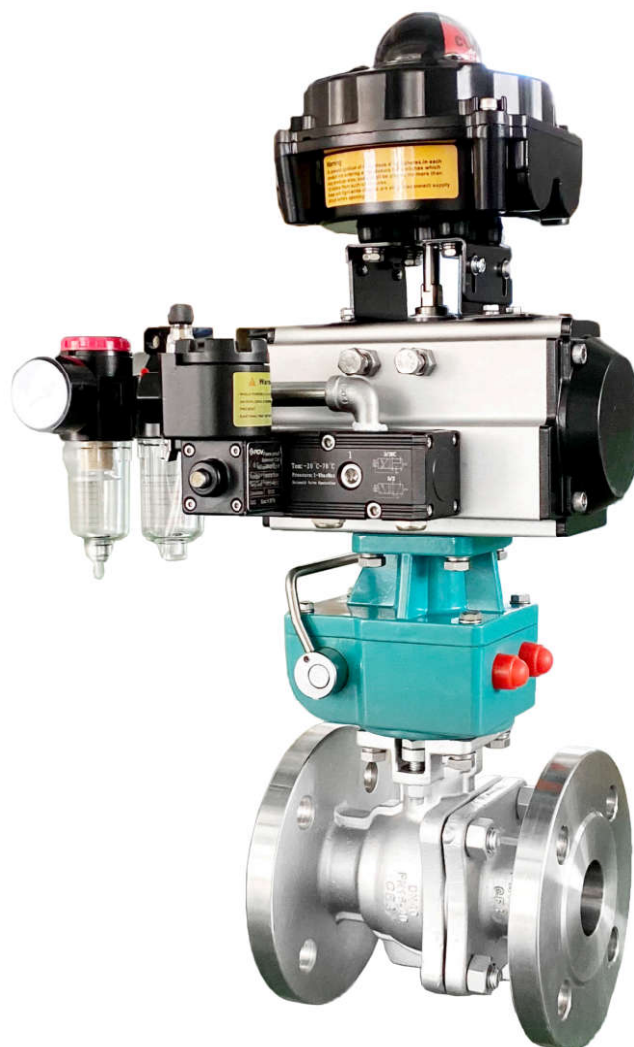
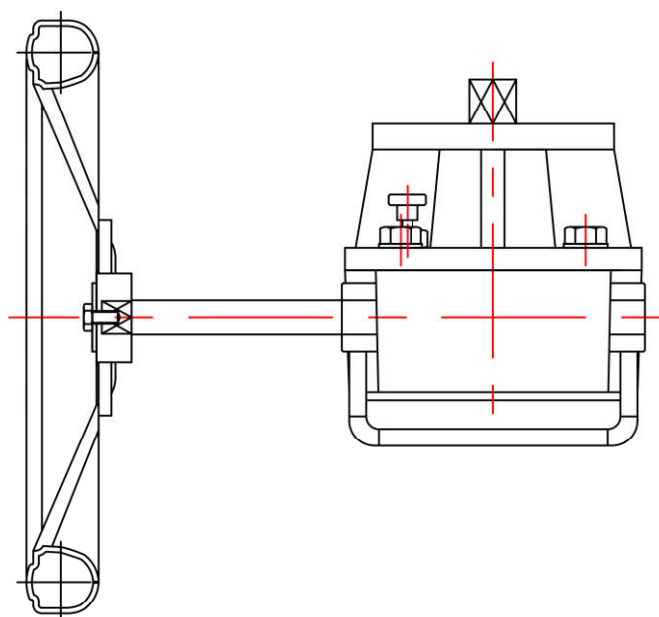
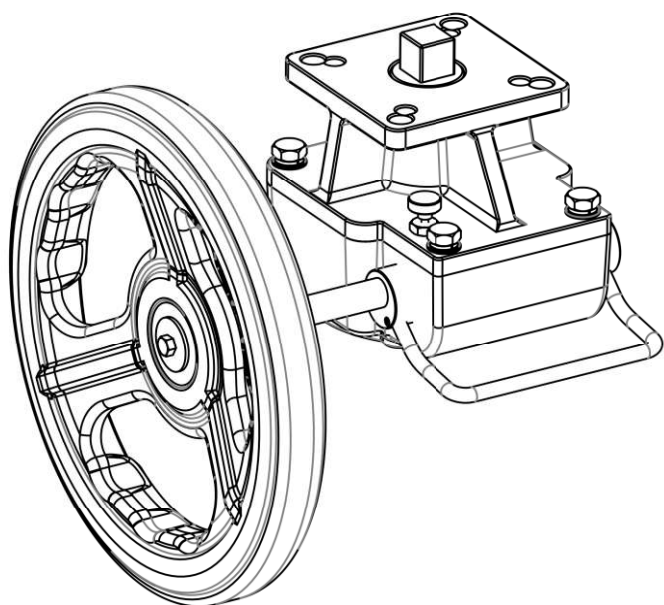
	Size	L (Mid Seires)	L (Short Series)	D	T	N-M	H1	A	B	H9	H10	POADA Model	A	B	H9	H10	POADA Model
								DOUBLE ACTING TYPE				POADA-20	SINGLE ACTING TYPE				POASR-40K(B)
PN40 PRESSURE RATING	DN15	130	108	95	16	4-14	52	168	83	235	298	POADA-20	182	95	247	298	POASR-40K(B)
	DN20	130	117	105	18	4-14	56.5	168	83	235	298	POADA-20	182	95	247	298	POASR-40K(B)
	DN25	140	127	115	18	4-14	65	182	95	247	310	POADA-40	182	95	247	298	POASR-40K(B)
	DN32	165	140	140	18	4-18	73.5	182	95	247	320	POADA-40	202	103	257	310	POASR-80K(B)
	DN40	165	165	150	18	4-18	81.5	202	103	257	320	POADA-80	262	108	265	320	POASR-130K(B)
	DN50	203	178	165	20	4-18	89	262	108	265	328	POADA-130	268	120	282	328	POASR-160K(B)
	DN65	222	190	185	18	8-18	116	268	120	282	345	POADA-160	300	142	304	345	POASR-200K(B)
	DN80	241	203	200	20	8-18	127	300	142	304	367	POADA-200	395	155	321	367	POASR-300K(B)
	DN100	305	229	220	20	8-18	149.5	395	155	321	384	POADA-300	462	174	345	384	POASR-500K(B)

PO9-GP Series: PNEUMATIC BALL VALVE WITH PISTON TYPE ACTUATOR

PO9-GP-D: PNEUMATIC ACTUATOR C/W MANUAL OVERRIDE

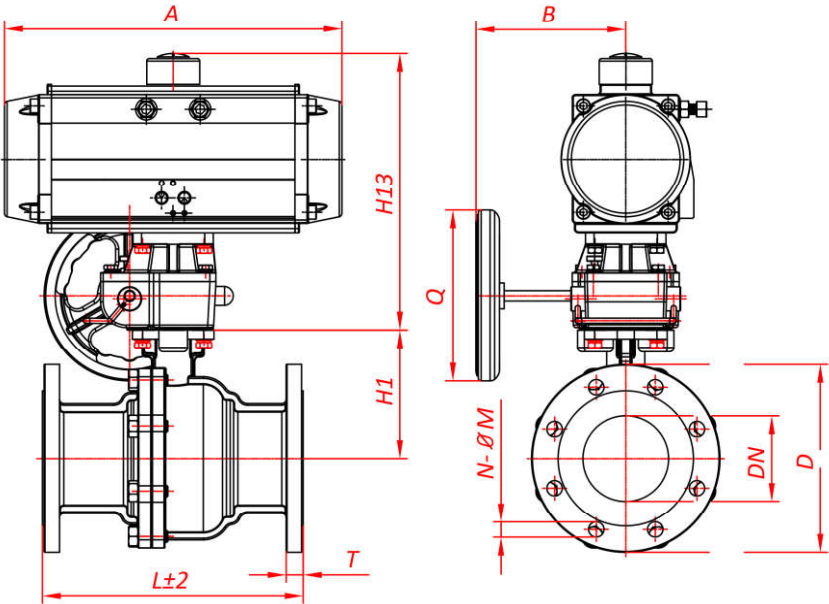
FEATURES

- Double acting or Single acting actuator
- Available with ON-OFF Type or Regulating Type
- POD Series Declutchable gear for emergency manual override when power fail

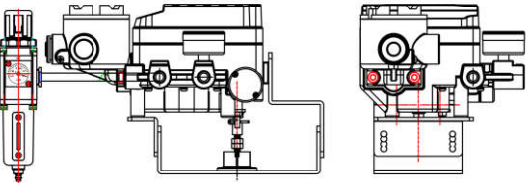


PO9-GP-D:
PNEUMATIC ACTUATOR C/W MANUAL OVERRIDE

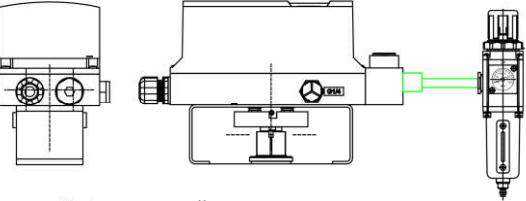
DIMENSIONS



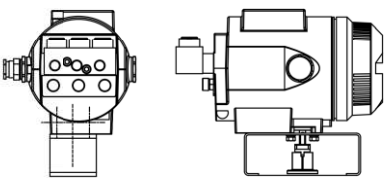
Positioner - Mechanical - Non-Ex/ Ex Type



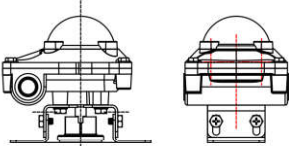
Positioner - Intelligent - Non-Ex Type



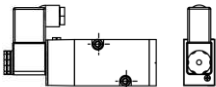
Positioner - Intelligent - Ex Type



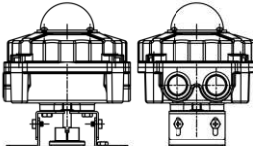
Limit Switch - Non-Ex Type



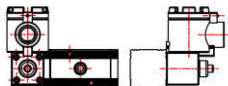
Solenoid Valve - Non-Ex Type



Limit Switch - Ex Type



Solenoid Valve - Ex Type



DIMENSIONS OF PNEUMATIC BALL VALVE C/W DOUBLE/SINGLE ACTING ACTUATOR IN RATING PN16

	Size	L (Mid Seires)	L (Short Series)	D	T	N-M	H1	A	B	H11	Q	POADA Model	A	B	H11	Q	POADA Model
								DOUBLE ACTING TYPE					SINGLE ACTING TYPE				
PN16 PRESSURE RATING	DN15	130	108	95	16	4-14	52	145	125.5	173	180	POADA-20	168	125.5	189	180	POASR-40K(B)
	DN20	130	117	105	18	4-14	56.5	145	125.5	173	180	POADA-20	168	125.5	189	180	POASR-40K(B)
	DN25	140	127	115	18	4-14	65	168	125.5	189	180	POADA-40	168	125.5	189	180	POASR-40K(B)
	DN32	165	140	140	18	4-18	73.5	168	125.5	189	180	POADA-40	182	125.5	201	180	POASR-80K(B)
	DN40	165	165	150	18	4-18	81.5	182	125.5	201	180	POADA-80	202	125.5	211	180	POASR-130K(B)
	DN50	203	178	165	20	4-18	89	202	125.5	211	180	POADA-130	262	156.2	229	200	POASR-160K(B)
	DN65	222	190	185	18	8-18	116	262	156.2	229	200	POADA-160	268	156.2	246	200	POASR-200K(B)
	DN80	241	203	200	20	8-18	127	268	156.2	246	200	POADA-200	300	185	284.5	280	POASR-300K(B)
	DN100	305	229	220	20	8-18	149.5	300	185	284.5	280	POADA-300	395	238.9	338.5	320	POASR-500K(B)
	DN125	356	-	250	22	8-18	173	395	185	301.5	280	POADA-500	462	238.9	362.5	320	POASR-850K(B)
	DN150	394	-	285	22	8-22	208	462	238.9	362.5	320	POADA-850	510	281	397	400	POASR-1200K(B)
	DN200	457	-	340	24	12-22	256	510	238.9	396.5	320	POADA-1200	560	281	422	400	POASR-1750K(B)

**PO9-GP-D:
PNEUMATIC ACTUATOR C/W MANUAL OVERRIDE**
**DIMENSIONS OF PNEUMATIC BALL VALVE C/W DOUBLE/SINGLE ACTING ACTUATOR IN RATING
PN25**

	Size	L (Mid Series)	L (Short Series)	D	T	N-M	H1	A	B	H11	Q	POADA Model	A	B	H11	Q	POADA Model
								DOUBLE ACTING TYPE				POADA-20	SINGLE ACTING TYPE				POASR-80K(B)
PN25 PRESSURE RATING	DN15	130	108	95	16	4-14	52	168	125.5	189	180	POADA-20	182	125.5	201	180	POASR-80K(B)
	DN20	130	117	105	18	4-14	56.5	168	125.5	189	180	POADA-20	182	125.5	201	180	POASR-80K(B)
	DN25	140	127	115	18	4-14	65	182	125.5	201	180	POADA-40	182	125.5	201	180	POASR-80K(B)
	DN32	165	140	140	18	4-18	73.5	182	125.5	201	180	POADA-40	202	125.5	211	180	POASR-130K(B)
	DN40	165	165	150	18	4-18	81.5	202	125.5	211	180	POADA-80	262	125.5	229	180	POASR-160K(B)
	DN50	203	178	165	20	4-18	89	262	125.5	229	200	POADA-130	268	156.2	246	200	POASR-200K(B)
	DN65	222	190	185	18	8-18	116	268	156.2	246	200	POADA-160	300	156.2	284.5	200	POASR-300K(B)
	DN80	241	203	200	20	8-18	127	300	156.2	284.5	280	POADA-200	395	185	338.5	280	POASR-500K(B)
	DN100	305	229	220	20	8-18	149.5	395	185	301.5	280	POADA-300	462	238.9	362.5	320	POASR-850K(B)

**DIMENSIONS OF PNEUMATIC BALL VALVE C/W DOUBLE/SINGLE ACTING ACTUATOR IN RATING
PN40**

	Size	L (Mid Series)	L (Short Series)	D	T	N-M	H1	A	B	H11	Q	POADA Model	A	B	H11	Q	POADA Model
								DOUBLE ACTING TYPE				POADA-20	SINGLE ACTING TYPE				POASR-80K(B)
PN40 PRESSURE RATING	DN15	130	108	95	16	4-14	52	168	125.5	189	180	POADA-20	182	125.5	201	180	POASR-80K(B)
	DN20	130	117	105	18	4-14	56.5	168	125.5	189	180	POADA-20	182	125.5	201	180	POASR-80K(B)
	DN25	140	127	115	18	4-14	65	182	125.5	201	180	POADA-40	182	125.5	201	180	POASR-80K(B)
	DN32	165	140	140	18	4-18	73.5	182	125.5	201	180	POADA-40	202	125.5	211	180	POASR-130K(B)
	DN40	165	165	150	18	4-18	81.5	202	125.5	211	180	POADA-80	262	125.5	229	180	POASR-160K(B)
	DN50	203	178	165	20	4-18	89	262	125.5	229	200	POADA-130	268	156.2	246	200	POASR-200K(B)
	DN65	222	190	185	18	8-18	116	268	156.2	246	200	POADA-160	300	156.2	284.5	200	POASR-300K(B)
	DN80	241	203	200	20	8-18	127	300	156.2	284.5	280	POADA-200	395	185	338.5	280	POASR-500K(B)
	DN100	305	229	220	20	8-18	149.5	395	185	301.5	280	POADA-300	462	238.9	362.5	320	POASR-850K(B)