

product overview

Q647 pneumatic fixed ball valve is assembled by fixed ball Valve and pneumatic actuator. Pneumatic fixed ball valve is Matched with electric valve positioner to adjust the pressure, flow, temperature, liquid level and other parameters. Equipped with travel limit switch, solenoid valve, pressure reducing valve and 0.4-0.7MPa air source, it can realize switch operation and send out two pairs of passive contact signals to indicate the switch of the valve.

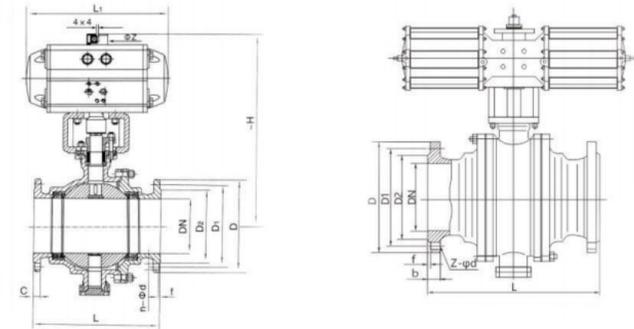


Actuator technical parameters

Actuator model	AT, AW series single and double acting pneumatic actuators
Gas supply pressure	0.4-0.7MPa
Air source interface	G1/4", G1/8", G3/8", G1/2"
Ambient temperature	-30~70°C
Action form	Single-acting actuator: air-to-dose (B) - valve position open when air is lost (FO); air-to-open (K) - valve position closed when air is lost (FC) Double-acting actuator: air-to-close (B) - valve position is maintained when air is lost (FL); air-to-open (K) - valve position is maintained when air is lost (RL)
Available accessories	Positioner, solenoid valve, air filter pressure reducer, position-holding valve, travel switch, valve position transmitter, hand wheel mechanism, etc.

Main technical parameters and performance

Nominal diameter DN (mm)	50	65	80	100	125	150	200	250	300	350	400	500	600	700
Nominal pressure (MPa)	PN1.0, 2.4, 0.6, 4.10, 0MPa; ANSI 150 300 600 900LB													
Valve body type	Two-section cast body													
Valve core type	"O" type ball valve core													
Sealing packing	V-type PTFE packing, PTFE-impregnated asbestos packing, asbestos textile packing, graphite packing													
Connection Type	Flange													
Flow characteristics	Approximate fast-opening type													
Leakage	According to GB/T4213-92, less than rated KV0.01% (soft seal: zero leakage)													
Adjustable range	250:1													
Basic error	With positioner: less than ±2% of full stroke													
Dead zone	With positioner: less than ±2% of full stroke													
Proper temperature	PTFE ≤ 150°C; PPL ≤ 250°C; Metal seal ≥ 300°C													
Configuring the actuator	AT, AW series single and double acting pneumatic actuators													
Control method	Switch two-position control, 4~20mA analog control													



Installation connection dimensions

Nominal diameter DN (mm)	50	65	80	100	125	150	200	250	300	350	400	500	600	700		
L	216	241	283	305	356	394	457	533	610	686	762	914	1067	1245		
H	With AT		325	335	365	400	420	440	470	With AW actuator						
H			260	293	323	383	468	510	655	With AW actuator						
H1			102	114	127	152	184	219	273	360	395	430	470	580	700	800
L1	With AT		190	210	247	276	348	378	524	With AW actuator						
PN1.6MPa Flange size																
D	165	185	200	220	250	285	340	405	460	520	580	715	840	910		
D1	125	145	160	180	210	240	295	355	410	470	525	585	770	840		
D2	99	118	132	156	184	211	266	319	370	429	480	609	720	794		
Z-f d	4-18	4-18	8-18	8-18	8-18	8-22	12-22	12-26	12-26	16-26	16-30	20-33	20-36	24-36		

Main parts materials

Nominal diameter (mm)		DN50-700				
Nominal pressure (MPa)		1.6	2.5	4.0		
Nominal pressure (MPa)	Strength test	2.4	3.8	6.0		
	Sealing test	1.8	2.8	4.4		
The main parts	Valve body	WC6	ZG1Cr18Ni9Ti	ZG0Cr18Ni12Mo2Ti		
	Sphere	2Cr13	1Cr18Ni9Ti	1Cr18Ni12MoTi		
	Valve stem	2Cr13	1Cr18Ni9Ti	1Cr18Ni12MoTi		
	Sealing ring	Reinforced PTFE Para-polystyrene Carbide				
	Filler	Polytetrafluoroethylene, flexible graphite				
Applicable working conditions	Applicable media	Water, steam, oil	Nitric Acid	Acetic acid		
	Proper temperature	-28°C ~ +300°C				
Actuator	Model	AW series, AT (DA/SR) series, etc.				
	Air pressure	0.4-0.7MPa				
Implementation Standards	Design and manufacturing	GB12237	GB12221	GB9113	GB9131	GB13927
	Structure length	GB12237	GB12221	GB9113	GB9131	GB13927