

Varnasan

CONTROL VALVE TECHNOLOGIES

PNEUMATIC ACTUATED GLOBE CONTROL VALVE V10P - V10T Series

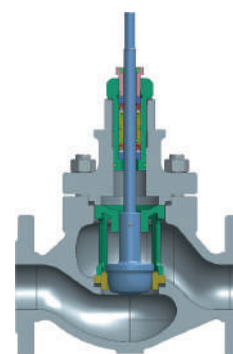
V10P Series

The V10P Series single-seat control valve adopts the top guided unbalanced structure, featured by high strength, heavy load, S type flow channel, low pressure drop loss, high flow coefficient, wide adjustable range, high flow characteristic precision, etc.

This kind of control valve is suitable for applications with relatively low differential pressure with tight shut-off. It is suitable for controlling medium flow or pressure. The cage adopts the press-in type seat design, which solves the problems of difficult disassembly and high leakage of the traditional thread screw-in type seat and prolongs the service life.

The flow to open design is adopted, and the medium flow direction tends to the opening direction of the valve with good controllability of small opening and low flow characteristic distortion.

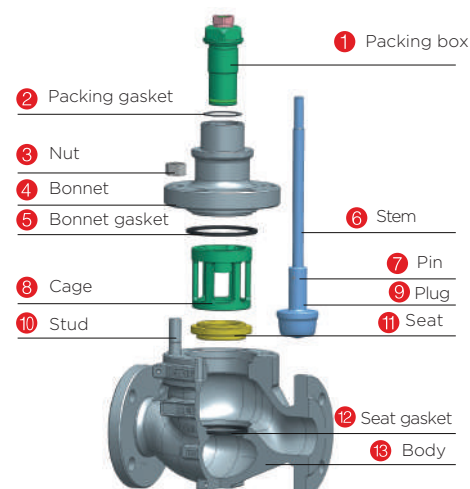
Special cages with noise reduction and anti-cavitation functions can be offered according to the requirements in different service conditions.



V10P Series General Features

- Trim features : Top guided, unbalanced trim, quick disassembly cage structure
- Body type : Straight-through type, angle type.
- Bonnet type : Standard type, heat dissipation type, cryogenic type, bellows
- Flow characteristic: Equal percentage, linear, quick open
- Shut-off class : ASME B16.104 V (standard metal seat)
ASME B16.104 VI (shut-off soft seat)
- Pipe connection type : Flange type, butt welding type
- Applicable temperature range : -29°C / +230°C
- Actuator type : Pneumatic diaphragm actuator
Pneumatic piston actuator
Electric actuator

Exploded Picture



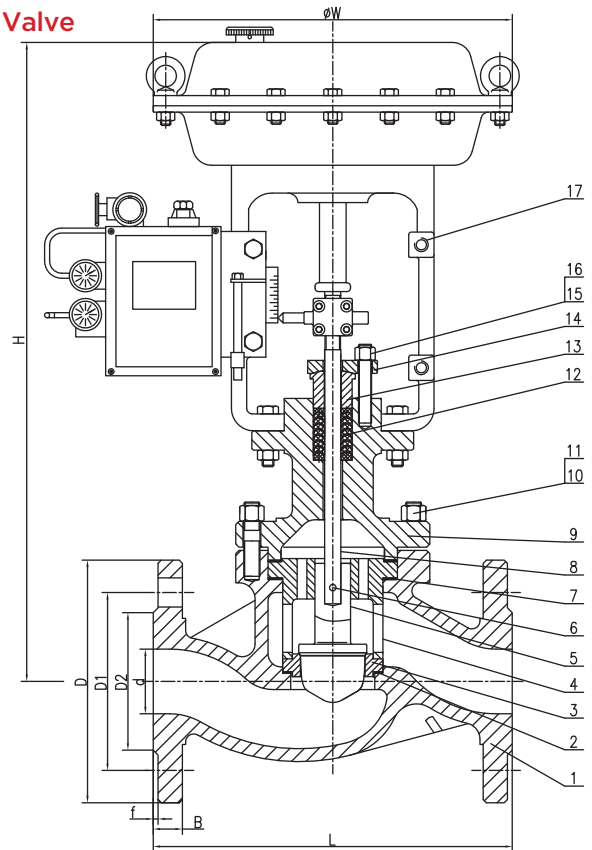


PNEUMATIC ACTUATED GLOBE CONTROL VALVE V10P - V10T Series

Dimensions Of V10p Series Pneumatic Actuated Globe Control Valve

NO	PART TIME	BILL OF MATERIAL
1	BODY	ASTM A216 WCB
2	SEAT GASKET	SS304+Grafit
3	SEAT	ASTM A276 SS304
4	CAGE	ASTM A351 CF8
5	PLUG	ASTM A276 SS304
6	PIN	ASTM A276 SS304
7	BONNET GASKET	SS304+Grafit
8	STEM	ASTM A276 SS304
9	BONNET	ASTM A216 WCB
10	BOLT	ASTM A193 B7
11	NUT	ASTM A194 2H
12	PACKING	V-PTFE
13	GLAND	ASTM A276 410
14	GLAND FLANGE	ASTM A216 WCB
15	BOLT	ASTM A193 B7
16	NUT	ASTM A194 2H
17	DIAPHRAGM ACTUATOR	MONTAJ

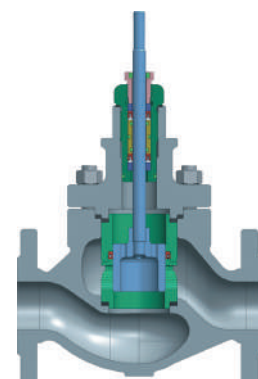
DN	PN	DIMENSION(MM)								
		L	øD	øD1	øD2	B	f	n-ød	øW	H
20	40	181	105	75	58	18	2	4-ø14	290	415
25	40	184	115	85	68	18	2	4-ø14	290	430
32	40	222	140	100	78	18	2	4-ø18	290	455
40	40	222	150	110	88	18	2	4-ø18	290	455
50	40	254	165	125	102	20	2	4-ø18	290	460



V10T Series

The V10T Series cage single-seat control valve adopts the cage guided structure and pressure balanced plug. It is suitable for applications with relatively high differential pressure. The balanced seal ring replaces the upper seat to change the traditional cage double-seat valve structure into the cage single-seat structure. This improvement has greatly enhanced the shut-off class of the cage valve. The plug makes use of the pressure balanced structure, the opening and closing force is low and the media under service conditions with high differential pressure can be controlled through relatively low actuator thrust. It is widely used for fluid control on pipelines of middle and low temperature and middle and low pressure that require good dynamic stability.

With such features as good sealing performance, high allowable differential pressure, cage guiding, large guiding area, good stability and compact structure, it can realize fast replacement of trims on the line with high maintenance efficiency, saving manpower and time. The balanced plug structure makes sure that the actuator thrust required is the lowest.

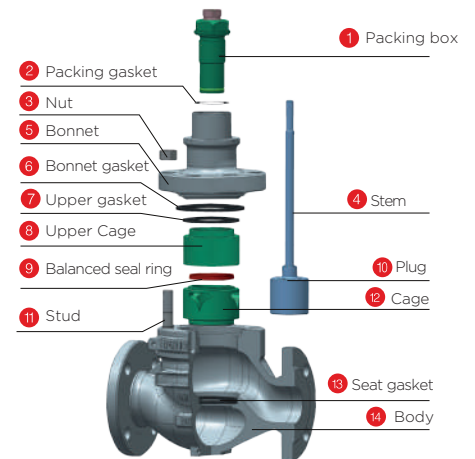




PNEUMATIC ACTUATED GLOBE CONTROL VALVE V10P - V10T Series

V10T Series General Features

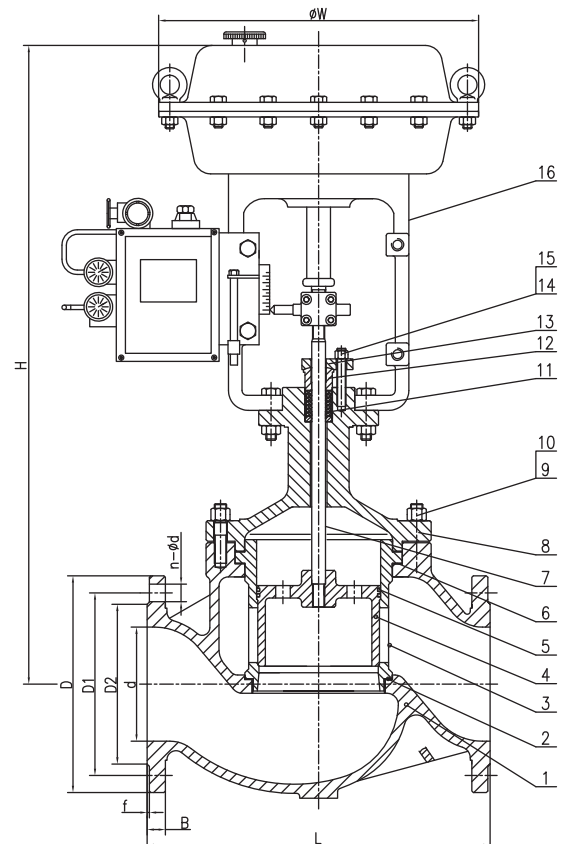
- Trim features : Top guided, unbalanced trim, quick disassembly cage structure
- Body type : Straight-through type, angle type.
- Bonnet type : Standard type, heat dissipation type, cryogenic type, bellows
- Flow characteristic: Equal percentage, linear, quick open
- Shut-off class : ASME B16.104 V (standard metal seat)
 ASME B16.104 VI (shut-off soft seat)
- Pipe connection type : Flange type, butt welding type
- Applicable temperature range : -29°C / +230°C
- Actuator type : Pneumatic diaphragm actuator
 Pneumatic piston actuator
 Electric actuator



Dimensions Of V10t Series Pneumatic Actuated Globe Control Valve

NO	PART TIME	BILL OF MATERIAL
1	BODY	ASTM A216 WCB
2	SEAT GASKET	SS304+Graphite
3	CAGE	ASTM A276 SS304
4	PLUG	ASTM A276 SS304
5	BALANCE SEALING RING	Viton
6	BONNET GASKET	SS304+Graphite
7	STEM	ASTM A276 SS304
8	BONNET	ASTM A216 WCB
9	STUD	ASTM A193 B7
10	NUT	ASTM A194 2H
11	PACKING	V-PTFE
12	GLAND	ASTM A276 410
13	GLAND FLANGE	ASTM A216 WCB
14	STUD	ASTM A193 B7
15	NUT	ASTM A194 2H
16	DIAPHRAGM ACTUATOR	Assembly

DN	PN	DIMENSION(MM)								
		L	øD	øD1	øD2	B	f	n-ød	øW	H
65	40	276	185	145	122	22	2	8-ø18	365	610
80	40	298	200	160	138	24	2	8-ø18	365	620
100	40	352	235	190	162	24	2	8-ø22	365	630
150	40	451	300	250	218	28	2	8-ø26	475	855





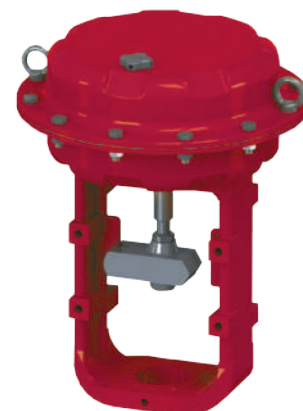
PNEUMATIC ACTUATED GLOBE CONTROL VALVE

V10P - V10T Series

VL1000

The VL1000 Series pneumatic actuator is a multi-spring diaphragm actuator with such features as light weight, small volume, stable output force, etc. Through acting on the diaphragm inside the actuator, the air supply conquers the reverse action force of the spring and makes upward and downward linear movement. When there is no air pressure, the compression spring releases pressure and pushes the push shaft of the actuator to move upwards or downwards. The actuators of this series can be classified into direct action type and reverse action type.

Diaphragm effective area(cm ²)	Travel
360	16
360	25
560	40
900	60
1400	100



Product Selection Table

NO	NOMINAL DIAMETER		Kv (m ³ /h)	ACTUATOR DIAMETER (cm ²)	WORKING TEMP (°C)	RATED STROKE (mm)
1	DN 15	V10P	4	360	-29 / +230	16
2	DN 20		6,3	360	-29 / +230	16
3	DN 25		10	360	-29 / +230	16
4	DN 32		16	360	-29 / +230	25
5	DN 40		25	360	-29 / +230	25
6	DN 50		40	360	-29 / +230	25
7	DN 65	V10T	63	560	-29 / +230	40
8	DN 80		100	560	-29 / +230	40
9	DN 100		160	560	-29 / +230	40
10	DN 150		250	900	-29 / +230	60

Codes

MATERIAL NO.	MATERIAL DESCRIPTION
V-IGV-19-06F015D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN25 DN15 V10P Series Globe Valve
V-IGV-19-06F020D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN25 DN20 V10P Series Globe Valve
V-IGV-19-06F025D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN25 DN25 V10P Series Globe Valve
V-IGV-19-06F032D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN25 DN32 V10P Series Globe Valve
V-IGV-19-06F040D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN25 DN40 V10P Series Globe Valve
V-IGV-19-06F050D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN25 DN50 V10P Series Globe Valve
V-IGV-19-06F065D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN25 DN65 V10T Series Globe Valve
V-IGV-19-06F080D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN25 DN80 V10T Series Globe Valve
V-IGV-19-06F100D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN25 DN100 V10T Series Globe Valve
V-IGV-19-06F150D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN25 DN150 V10T Series Globe Valve

V-IGV-19-07F015D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN40 DN15 V10P Series Globe Valve
V-IGV-19-07F020D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN40 DN20 V10P Series Globe Valve
V-IGV-19-07F025D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN40 DN25 V10P Series Globe Valve
V-IGV-19-07F032D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN40 DN32 V10P Series Globe Valve
V-IGV-19-07F040D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN40 DN40 V10P Series Globe Valve
V-IGV-19-07F050D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN40 DN50 V10P Series Globe Valve
V-IGV-19-07F065D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN40 DN65 V10T Series Globe Valve
V-IGV-19-07F080D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN40 DN80 V10T Series Globe Valve
V-IGV-19-07F100D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN40 DN100 V10T Series Globe Valve
V-IGV-19-07F150D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A216 WCB PN40 DN150 V10T Series Globe Valve

V-IGV-22-07F015D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A351 CF8M PN40 DN15 V10P Series Globe Valve
V-IGV-22-07F020D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A351 CF8M PN40 DN20 V10P Series Globe Valve
V-IGV-22-07F025D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A351 CF8M PN40 DN25 V10P Series Globe Valve
V-IGV-22-07F032D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A351 CF8M PN40 DN32 V10P Series Globe Valve
V-IGV-22-07F040D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A351 CF8M PN40 DN40 V10P Series Globe Valve
V-IGV-22-07F050D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A351 CF8M PN40 DN50 V10P Series Globe Valve
V-IGV-22-07F065D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A351 CF8M PN40 DN65 V10T Series Globe Valve
V-IGV-22-07F080D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A351 CF8M PN40 DN80 V10T Series Globe Valve
V-IGV-22-07F100D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A351 CF8M PN40 DN100 V10T Series Globe Valve
V-IGV-22-07F150D-P2	VL1000 Diaphragm Type Pneumatic Actuator Controlled Flanged A351 CF8M PN40 DN150 V10T Series Globe Valve