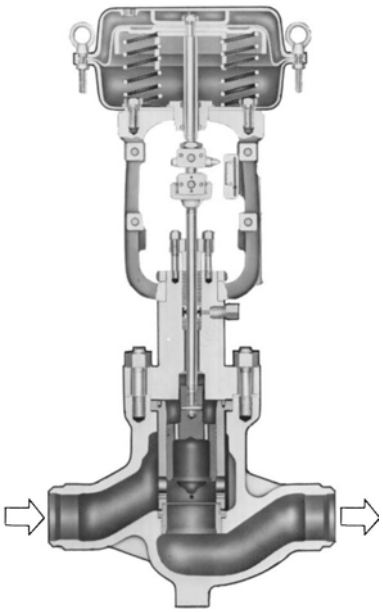
CV 3000 Series
Model HPC
Pressure Balanced High-Pressure Cage type Control Valves

OVERVIEW

Model HPC pressure balanced high-pressure cage type control valves are designed for high temperature, high pressure services. The compact valve body, having S-shape flow passage that features low pressure loss and a stabilizer that regulates turbulent flow around the cage, allows a large flow capacity and rangeability.

The valve plug is structured in a pressure -balanced type that permits flow control of a high differential pressure with a small actuating force. The actuator integrated with simplest mechanisms utilizes a compact yet powerful diaphragm actuator loaded with multiple springs.

The HPC Valves are widely applicable for reliable control of high temperature, high pressure or high differential pressure process lines where dynamic stability, low noise, and cavitation resistance are required.



SPECIFICATIONS

Body

Type

Straight through, cast globe valve

Nominal size

1½, 2, 3, 4, 6, 8 in.

Pressure rating

- JIS 63K
- ANSI Class 900, 1500, 2500
- JPI Class 900, 1500, 2500

End connection

- Flanged end;
  RF, RJ
- Welded end;
  SW (1½, 2, 3 in.), BW (3 to 8 in.)

Material

For combining the valve body, trim materials and the operating temperature ranges, refer to Table 1.

Bonnet

- Plain bonnet (–5 to 230 °C)
- Extension bonnet (230 to 566 °C)

Note)Take are not to exceed the operating temperature ranges specified for respective materials.

Gland type

Bolted gland

Packing/grease

Grease provided; When asbestos yarn, graphite packing, and others is used.

Gasket

Type; Combination of saw-tooth type and flat type
Material; Stainless steel (SUS316) or others

Trim

Valve plug

Pressure balanced type metal seat

Cage (split cage)

Equal percentage cage (%V), Linear cage (LV)

Material

For combining the valve body, trim materials and the operating temperature ranges, refer to Table 2.

Actuator

Type

Single acting diaphragm actuator
(Type HA or VA5)
Single acting piston actuator (Type PSA6)
Double acting piston actuator (Type VP)

Action

Direct or reverse action

Diaphragm

Type HA ; Cloth embedded ethylene propylene rubber
Type VA ; Cloth embedded chloroprene rubber

Spring range

40 to 200 kPa {0.4 to 2.0 kgf/cm²} or
80 to 240 kPa {0.8 to 2.4 kgf/cm²}
(Type HA, or VA5)
200 to 340 kPa {2.0 to 3.5 kgf/cm²} or
200 to 390 kPa {2.0 to 4.0 kgf/cm²} (Type PSA6)

Supply pressure

Diaphragm actuator
Type HA 270 to 390 kPa {2.8 to 4.0 kgf/cm² }
Type VA5 270 kPa {2.8 kgf/cm²}
Spring type Piston actuator
Type PSA6 400 to 490 kPa {4.0 to 5.0 kgf/cm²}
Piston actuator
Type VP 290 to 490 kPa {3.0 to 5.0 kgf/cm²}

Note)Permissible differential pressure varies depending on spring range and air supply pressure.

Air Connection

Rc¼, ¼NPT internal thread

Note) When type VA or VP, Rc¼ adapter or ¼NPT adapterisprovidedonRc½ internal thread (also providing Rc $^{3}/_{8}$ adapter is possible).

Ambient temperature

–30 to 70 °C

Valve action

Direct action (Direct action actuator is combined.)
Reverse action (Reverse action actuator is combined).

Optional accessories (provided upon request)

Positioner*, pressure regulator with filter, manual operating device*, limit switch, solenoid valve, motion transmitter, volume booster, air lock relay, and others.

Notes 1) For the optional items, refer to specification sheets and installation drawings of respective accessories.
2) Accessories with an asterisk mark (*) are selected from among the following types depending on the actuators to be combined.

Table 1.

Actuator	Positioner		Manual handwheel	
	P/P	I/P	Top	Side
HA3,4	HTP	HEP/AVP	THM	SHM
VA5	HTP	HEP/AVP	THM	SHM
PSA6	HTP/VPP	HEP/AVP	—	SHM
VA5,6	VPP	HEP/AVP	—	SHM

Additional specifications (provided upon request)

- Special inspection
- Flow characteristics inspection, material inspection (Material certificate), non-destructiveinspection,steam
- With drain plug
- Double gland
- Water prohibitive treatment
- Copper prohibitive treatment
- Stainless steel (SUS304) atmosphere-exposed nuts and bolts
- Special air piping and joint
- Stand-/dust-preventive measure
- Saline damage countermeasure
- Cold-area use specification
- Tropical-area use specification

Performance

Rated Cv value

Refer to Table 3.

Flow characteristics

Refer to Figure 1 and 2.

Inherent rangeability

50 : 1

Permissible differential pressure

Refer to Table 4, 5 and 6.

Seat leakage rate

IEC534-4-1982 or JIS B2007-1993

Standard

Class III : Leakage-less than 0.1% of maximum valve capacity.

Hysteresis error

With positioner; Within 1% F.S.

Linearity

With positioner; Within ± 1% F.S.

Face-to-face dimensions

Refer to Figure 3, 4, 5, 6 and Table 7.

External dimensions

Refer to Figure 3, 4, 5, 6 and Table 8.

Weight

Refer to Table 9.

Installation position

Refer to Figure 7.

Finish

Blue (Munsell 10B5/10) or silver, or other specified colors.

Table 2. Combining the valve body, trim material and operating temperature ranges (°C)

Trim material \ Body material	JIS	SCPH2	SCPH21	SCPH32	SCPH61	SCS13A	SCS14A
	ASTM	A216 WCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M
Valve plug	Cage	Seat ring					
SUS 630	SUS 630 (*2 SCS24)	SUS 360 (*3 SCS 24)	–5 to 425	–5 to 425	–5 to 425	–5 to 425	—	—
SUS 304 Atomlloy treatment	SUS 304 Atomlloy treatment (*2 SCS 13A atomlloy treatment)	SUS 316 Stellite (*3 SCS 14A Stellite)	–5 to 425	–5 to+500	–5 to 500	–5 to 500	–5 to 500	–5 to 500
SUS 316 Stellite	SUS 304 Atmlloy treatment (*2 SCS 13A atomlloy treatment)	SUS 316 Stellite face (*3 SCS 14A Stellite)	–5 to 425	–5 to 500	–5 to 500	–5 to 500	–5 to 500	–5 to 500
SUS 316 Stellite face	SUS 316 Stellite face + Atomlloy treatment (SCS 14A Stellite + Atomlloy treatment)	SUS 316 Stellite face (*3 SCS 14A Stellite face)	–5 to 425	–5 to 550	–5 to 556	–5 to 556	–5 to 550	–5 to 550

Notes : 1) " " shows standard combination of valve body and trim materials.
2) Connection size 3 in. (80mm) over, used mold of this material
3) Connection size 4 in. (100mm) over, used mold of this material
4) Bonnet materials are all cast materials.

Table 3. Cv value and travel

Nominal size (inch)			1½			2			3			4			6			8		
Port size (inch)			1	1¼	1½	1¼	1½	2	2	2½	3	2½	3	4	4	5	6	5	6	8
Rated Cv value	Equal percentage cage	JIS 63K ANSI 900, 1500 JPI 900, 1500	12	17	25	17	25	52	52	78	110	78	110	180	180	270	375	270	375	650
		ANSI 2500 JPI 2500	—	12	17	12	17	31	31	52	78	52	78	125	125	180	270	180	270	470
	Linear cage	JIS 63K ANSI 900, 1500 JPI 900, 1500	12	20	30	20	30	62	62	90	135	90	135	210	210	330	485	330	485	700
		ANSI 2500 JPI 2500	—	12	20	12	20	43	43	62	90	62	90	150	150	210	330	210	330	520
Rated travel (mm)			25						38						50			75		

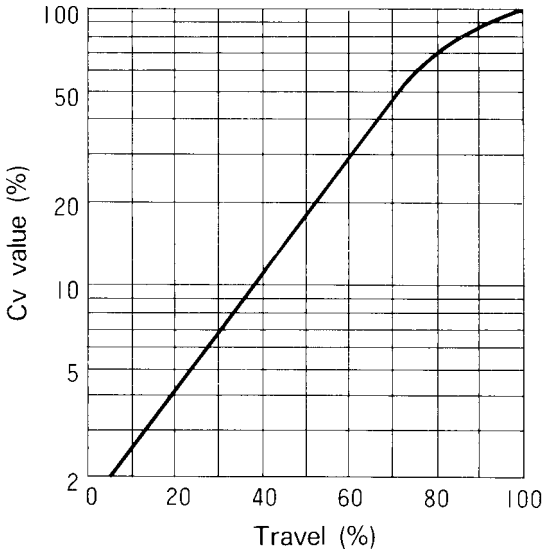


Figure 1. Equal percentage characteristics

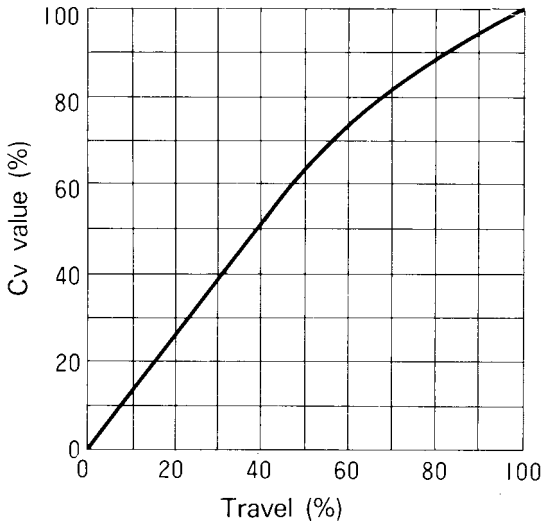


Figure 2. Linear characteristics

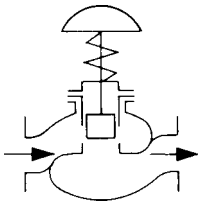
Flow characteristics

Note) The above graphs indicate typical flow characteristics

Permissible differential pressure

Table 4. Valve with Type HA or VA actuator

Direct action (Air-to-close)

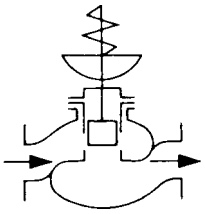


Rating	Actuator	Supply Pressure kPa {kgf/cm²}	Spring Range kPa {kgf/cm²}	Differential pressure (by nominal size) kPa {kgf/cm²}					
				1½	2	3	4	6	8
JIS 63K ANSI 900, 1500 JPI 900, 1500	HA3D	270 {2.8}	40 to 200 {0.4 to 2.0}	15000 {153}	11400 {116}	7650 {780}	5690 {58.0}	—	—
				25900 {264}	18600 {190}	11100 {113}	7260 {74.0}		
		290 {3.0}		15000 {153}	11400 {116}	7650 {780}	5690 {58.0}	—	—
				25900 {264}	24300 {248}	14900 {152}	10100 {103}		
		340 {3.5}	80 to 240 {0.8 to 2.4}	25600 {261}	22800 {233}	15300 {156}	11500 {117}	6280 {64.0}	—
				25900 {264}	25900 {264}	16900 {172}	11600 {118}	6280 {64.0}	
		390 {4.0}		25900 {264}	22800 {233}	15300 {156}	11500 {117}	7650 {78.0}	—
				25900 {264}	25900 {25.9}	25900 {264}	18700 {191}	11500 {117}	
	HA4D	270 {2.8}	40 to 200 {0.4 to 2.0}	20700 {211}	19700 {201}	13200 {135}	9900 {110}	6570 {67.0}	4900 {50.0}
				25900 {264}	25900 {264}	22300 {227}	15600 {159}	8920 {91.0}	5590 {57.0}
		290 {3.0}		25800 {263}	19700 {201}	13200 {135}	9900 {110}	6570 {67.0}	4900 {50.0}
				25900 {264}	25900 {264}	25900 {264}	20600 {210}	12200 {125}	8140 {83.0}
		340 {3.5}	80 to 240 {0.8 to 2.4}	—	25900 {264}	25900 {264}	19800 {202}	13200 {135}	9320 {95.0}
					25900 {264}	25900 {264}	23000 {235}	13900 {142}	9320 {95.0}
		390 {4.0}		—	—	—	19800 {202}	13200 {135}	9900 {101}
							25900 {264}	22200 {226}	15500 {158}
	HA5D	270 {2.8}	40 to 200 {0.4 to 2.0}	—	—	—	13500 {138}	9020 {92.0}	6770 {69.0}
							22900 {234}	13800 {141}	9320 {950}
ANSI 2500 JPI 2500	HA3D	270 {2.8}	40 to 200 {0.4 to 2.0}	15000 {153}	11400 {116}	10400 {106}	6960 {71.0}	4310 {44.0}	—
				25900 {264}	18600 {190}	16600 {169}	9710 {99.0}	4410 {45.0}	
		290 {3.0}		15000 {153}	11400 {116}	10400 {106}	6960 {71.0}	4310 {44.0}	—
				33200 {339}	24300 {248}	21800 {222}	13200 {135}	6570 {67.0}	
		340 {3.5}	80 to 240 {0.8 to 2.4}	25600 {261}	22800 {233}	20800 {212}	13900 {142}	7650 [78.0}	—
				37000 {377}	27200 {277}	24400 {249}	15000 {153}	7650 [78.0}	
		390 {4.0}		30000 {30}	22800 {233}	20800 {212}	13900 {142}	8630 {88.0}	—
				43100 {440}	41500 {423}	37400 {381}	23700 {242}	13100 {134}	
	HA4D	270 {2.8}	40 to 200 {0.4 to 2.0}	20700 {211}	19700 {201}	17900 {183}	12100 {123}	7450 {76.0}	6570 {67.0}
				43100 {440}	35200 {359}	31800 {324}	19900 {203}	10800 {110}	8920 {91.0}
		290 {3.0}		25800 {263}	19700 {201}	17900 {183}	12100 {123}	7450 {76.0}	6570 {67.0}
				43100 {440]	35200 {359}	40700 {415}	26000 {265}	14500 {148}	12200 {125}
		340 {3.5}	80 to 240 {0.8 to 2.4}	28300 {289}	19700 {201}	28300 {289}	24100 {246}	15000 {153}	13200 {135}
				43100 {440}	43100 {440}	43100 {440}	28900 {295}	16400 {167}	13900 {142}
		390 {4.0}		41200 {420}	39500 {403}	36000 {367}	24100 {246}	15000 {153}	13200 {135}
				43100 {440}	43100 {440}	43100 {440}	43100 {440}	25800 {263}	22200 {226}
	VA5D	270 {2.8}	40 to 200 {0.4 to 2.0}	—	—	—	16500 {168}	10200 {104}	9020 {92.0}
							28800 {294}	16300 {166}	13800 {141}

Permissible differential pressure

Table 5. Valve with Type HA or VA actuator

Reverse action (Air-to-open)



Rating	Actuator	Supply Pressure kPa {kgf/cm²}	Spring Range kPa {kgf/cm²}	Differential pressure (by nominal size) MPa {kgf/cm²}					
				1½	2	3	4	6	8
JIS 63K ANSI 900, 1500 JPI 900, 1500	HA3R	270 {2.8}	80 to 240 {0.8 to 2.4}	15000 {153} 25900 {264}	11400 {116} 18600 {190}	7650 {780} 11100 {113}	5690 {58.0} 7260 {74.0}	—	—
		290 {3.0}		18600 {190} 25900 {264}	17200 {175} 18600 {190}	11100 {113} 11100 {113}	7260 {74.0} 7260 {74.0}	—	—
		340 {3.5}		—	22800 {233} 25900 {264}	—	—	—	—
	HA4R	270 {2.8}	80 to 240 {0.8 to 2.4}	20700 {211} 25900 {264}	19700 {201} 25900 {264}	13200 {135} 22300 {227}	9900 {110} 15600 {159}	6570 {67.0} 8920 {91.0}	4900 {50.0} 5590 {57.0}
		290 {3.0}		—	20600 {210} 25900 {264}	19900 {203} 22300 {227}	14900 {152} 15600 {159}	8920 {91.0} 8920 {91.0}	5590 {57.0} 5590 {57.0}
		340 {3.5}		—		20600 {210} 22300 {227}	15600 {159} 15600 {159}	—	—
	HA5R	270 {2.8}	40 to 200 {0.4 to 2.0}	—	—	—	13500 {138} 22900 {234}	9020 {92.0} 13800 {141}	6770 {69.0} 9320 {95.0}
	PSA6R	400 {4.0}	200 to 340 {2.0 to 3.5}	—	—	—	25900 {264} 25900 {264}	—	—
		500 {5.1}	200 to 390 {2.0 to 4.0}	—	—	—	—	18700 {191} 25900 {264}	—
ANSI 2500 JPI 2500	HA3R	270 {2.8}	80 to 240 {0.8 to 2.4}	15000 {153} 25900 {264}	11400 {116} 18600 {190}	10400 {106} 16600 {169}	6960 {71.0} 9710 {99.0}	4310 {44.0} 4410 {45.0}	—
		290 {3.0}		18600 {190} 25900 {264}	17200 {175} 18600 {190}	15600 {159} 16600 {169}	9710 {99.0} 9710 {99.0}	4310 {44.0} 4410 {45.0}	—
		340 {3.5}		—	18500 {189} 18600 {190}	16600 {169} 16600 {169}	—	—	—
	HA4R	270 {2.8}	80 to 240 {0.8 to 2.4}	20700 {211} 43100 {440}	19700 {201} 35200 {359}	18500 {189} 31800 {324}	12100 {123} 19900 {203}	7450 {76.0} 10800 {110}	6570 {67.0} 8920 {91.0}
		290 {3.0}		—	20600 {210} 35200 {359}	20600 {210} 31800 {324}	1800 {184} 19900 {203}	10800 {110} 10800 {110}	8920 {91.0} 8920 {91.0}
		340 {3.5}		—	—	—	19900 {203} 19900 {203}	—	—
	VA5R	270 {2.8}	80 to 240 {0.8 to 2.4}	—	—	—	24.1 {246} 43.1 {440}	15.0 {153} 25.8 {263}	13.2 {135} 22.2 {226}
	PSA6R	390 {4.0}	200 to 340 {2.0 to 3.5}	—	—	—	35500 {362} 43100 {440}	—	—
		490 {5.0}	200 to 390 {2.0 to 4.0}	—	—	—		21200 {216} 36100 {368}	—

Note : 1) " ▭ " shows a model with standard actuator.

2) Positioner is employed in general.

3) Permissible differential pressure at valve-close in the above table is under the condition of $\Delta P \approx P1$

Permissible differential pressure at full closure varies depending on the outlet pressure (P_2). Detailed information is available on request.

4) Take care not to cause the maximum permissible differential pressure to exceed the maximum operating pressure designated by ANSI B16. 34-1981 or JIS B2201-1984.

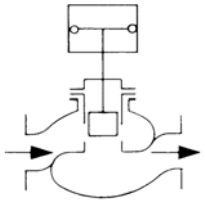
5) Take care not to cause the inlet pressure (P_1) to exceed permissible differential pressure at valve close.

6) The upper figures denote the operating permissible differential pressure; the lower denote permissible differential pressure at full closure.

Permissible differential pressure

Table 6. Valve with Type VP actuator

Direct and reverse actions



Rating	Actuator	Supply pressure / Nominal size(inch)	290 kPa {3.0 kgf/cm²}	390 kPa {4.0 kgf/cm²}	490 kPa {5.0 kgf/cm²}
			Differential pressure kPa {kgf/cm²}		
JIS 63K, ANSI 900, 1500, JPI 900, 1500	VP5	6	19400 {198}	25900 {264}	25900 {264}
			23700 {242}	25900 {264}	25900 {264}
ANSI 2500 JPI 2500			19400 {198}	25900 {264}	32400 {330}
			27600 {281}	38100 {389]	43100 {440}
JIS 63K, ANSI 900, 1500, JPI 900, 1500	VP6	8	18700 {191}	2500 {255}	25900 {264}
			25900 {264}	25900 {264}	25900 {264}
ANSI 2500 JPI 2500			18800 {192}	25000 {255}	31300 {319}
			43100 {440}	43100 {440}	43100 {440}

Notes: 1) Positioner is employed in general.

2) In case a back-up system is used for pressure drop of supply air, select the permissible differential pressure whichever is lower- the operating supply air pressure or the back-up system set pressure (trip pressure).

3) Permissible differential pressure at valve-close indicated in the table is under the condition of $\Delta P \approx P_1$
Differential pressure at full closure varies depending on its permissible levels depending on the outlet pressure (P_2). Detailed information is available on request.

4) Take care not to cause the maximum permissible differential pressure to exceed the maximum operating pressure designated by ANSI B16. 34-1981 or JIS B2201-1984.

5) Take care not to cause the inlet pressure (P_1) to exceed permissible differential pressure at valve-close.

6) Upper figures denote the operating permissible differential pressure; the lower denote permissible differential pressure at valve-close.

DIMENSIONS

Table 7. Face-to-face dimensions

Nominal size (in.)	A						
	JIS 63K	ANSI 900, JPI 900		ANSI 1500, JPI 1500		ANSI 2500, JPI 2500	
	RF	RF(SW, BW)	RJ	RF(SW, BW)	RJ	RF(SW, BW)	RJ
1½	323	333	333	333	333	358	361
2	354	375	378	375	378	400	403
3	431	440	443	460	463	498	504
4	496	510	513	530	533	575	585
6	699	715	718	770	776	820	833
8	895	915	918	972	982	1020	1036

Table 8. External dimensions (Unit : mm)

Nominal Size (in.)	Actuator Model No.	H						B	C	E		
		JIS 63K ANSI 900 JPI900		ANSI 1500 JPI 1500		ANSI 2500 JPI 2500				JIS 63K ANSI 900 JPI 900	ANSI 1500 JPI 1500	ANSI 2500 JPI 2500
		Plain bonnet	Extention bonnet	Plain bonnet	Extention bonnet	Plain bonnet	Extention bonnet					
1½	HA 3D, R	735	875	735	875	780	725	363	350	100	105	115
	HA 4D, R	890	1030	890	1030	935	1080	520	470			
2	HA 3D, R	765	925	765	925	300	960	353	350	110	120	130
	HA 4D, R	925	1085	925	1085	960	1120	520	470			
3	HA 3D, R	800	980	800	980	835	1005	363	350	140	150	165
	HA 4D, R	960	1140	960	1140	995	1165	520	470			
4	HA 3D, R	835	1015	835	1015	880	1050	363	350	160	170	195
	HA 4D, R	995	1175	995	1175	1040	1210	520	470			
	VA 5D	1380	1560	1380	1560	1425	1595	—	620			
	VA 5R	1490	1670	1490	1670	1535	1705	—	620			
	PSA 6R	1324	1504	1324	1504	1369	1539	—	475			
6	HA 3D, R	895	1075	895	1075	935	1110	363	350	210	225	260
	HA 4D, R	1055	1235	1055	1235	1095	1270	520	470			
	VA 5D	1440	1620	1440	1620	1480	1655	—	620			
	VA 5R	1550	1730	1550	1730	1590	1765	—	620			
	PSA 6R	1395	1575	1395	1575	1435	1610	—	476			
	VP 5	1080	1260	1080	1260	1120	1295	—	345			
8	HA 4D, R	1155	1395	1155	1395	1185	1370	520	470	280	290	330
	VA 5D	1545	1785	1545	1785	1575	1760	—	620			
	VA 5R	1655	1895	1655	1895	1685	1870	—	620			
	VP 6	1395	1635	1395	1635	1425	1610	—	445			

Note) "H" dimensions are applicable when handwheel is not provided. When top-mounted handwheel HA or VA actuators or side-mounted handwheel PSA6R or VP actuators are used, add the handwheel dimensions designated in respective specification sheets (No. SS2-8213-0500 for type HA actuators; No. SS2-8210-0100 and SS2-PSA100-0100 for type VA, PSA actuators; No. SS2-8210-0300 for type VP actuators.)

Table 9. Weight

(Unit : kg)

Nominal Size (inch)	Actuator Model No.	Flanged type						Welded type					
		JIS 63K ANSI 900 JPI900		ANSI 1500 JPI 1500		ANSI 2500 JPI 2500		JIS 63K ANSI 900 JPI 900		ANSI 1500 JPI 1500		ANSI 2500 JPI 2500	
		Plain bonnet	Extention bonnet	Plain bonnet	Extention bonnet	Plain bonnet	Extention bonnet	Plain bonnet	Extention bonnet	Plain bonnet	Extention bonnet	Plain bonnet	Extention bonnet
1½	HA 3D, R	60 (55)	65 (60)	65	70	90	95	50	55	55	60	75	80
	HA 4D, R	90 (85)	95 (90)	95	100	125	130	80	85	85	90	405	110
2	HA 3D, R	70 (65)	80 (75)	75	85	110	120	55	65	60	70	85	95
	HA 4D, R	100 (95)	110 (105)	105	115	140	150	85	95	90	100	115	125
3	HA 3D, R	105 (100)	115 (110)	140	160	225	245	85	95	110	30	170	190
	HA 4D, R	135 (130)	145 (140)	170	190	255	275	115	125	140	160	200	220
4	HA 3D, R	135 (125)	160 (150)	195	225	315	345	105	130	155	185	230	260
	HA 4D, R	165 (155)	190 (180)	225	255	345	375	135	160	185	215	260	290
	VA 5D	265 (255)	290 (280)	325	355	445	475	235	260	285	315	360	390
	VA 5R	290 (280)	315 (305)	350	380	470	500	260	285	310	340	385	415
	PSA 6R	270 (260)	275 (285)	330	360	450	480	240	265	290	320	365	395
6	HA 3D, R	345 (330)	380 (365)	525	570	85	915	285	320	435	480	660	700
	HA 4D, R	395 (360)	410 (395)	555	600	905	945	315	350	465	510	690	730
	VA 5D	475 (460)	510 (495)	655	700	1005	1045	415	450	565	610	790	830
	VA 5R	500 (485)	535 (520)	680	725	1030	1070	440	475	590	635	815	855
	PSA 6R	480 (465)	515 (500)	660	705	1010	1050	420	455	470	615	795	835
	VP 5	390 (375)	425 (410)	570	615	920	960	330	365	365	525	705	745
8	HA 4D, R	633 (598)	678 (643)	065	1115	1500	1545	535	580	580	958	1193	1240
	VA 5D	735 (700)	780 (745)	1165	1215	1600	1645	635	680	680	1060	1295	1340
	VA 5R	760 (725)	805 (770)	1190	1240	1625	1670	660	705	705	1085	1320	1365
	VP 6	725 (690)	770 (735)	1155	1205	1590	1635	625	670	670	1050	1285	1330

Note) Parenthesized figures denote the weight under JIS 63K.

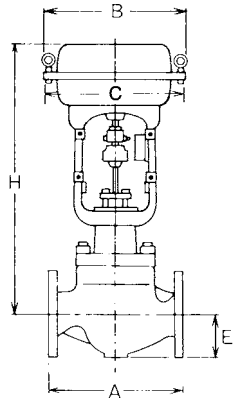


Figure 3. For HA actuator

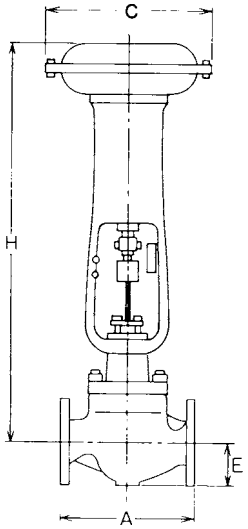


Figure 4. For VA5 actuator

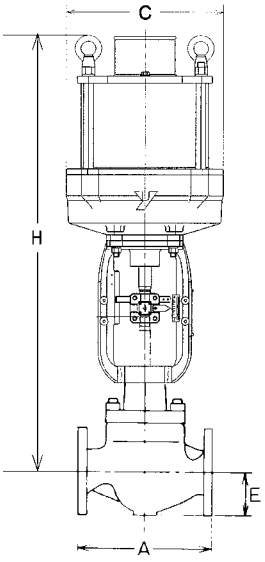


Figure 5. For PSA6R actuator

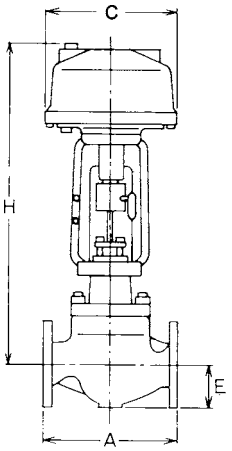
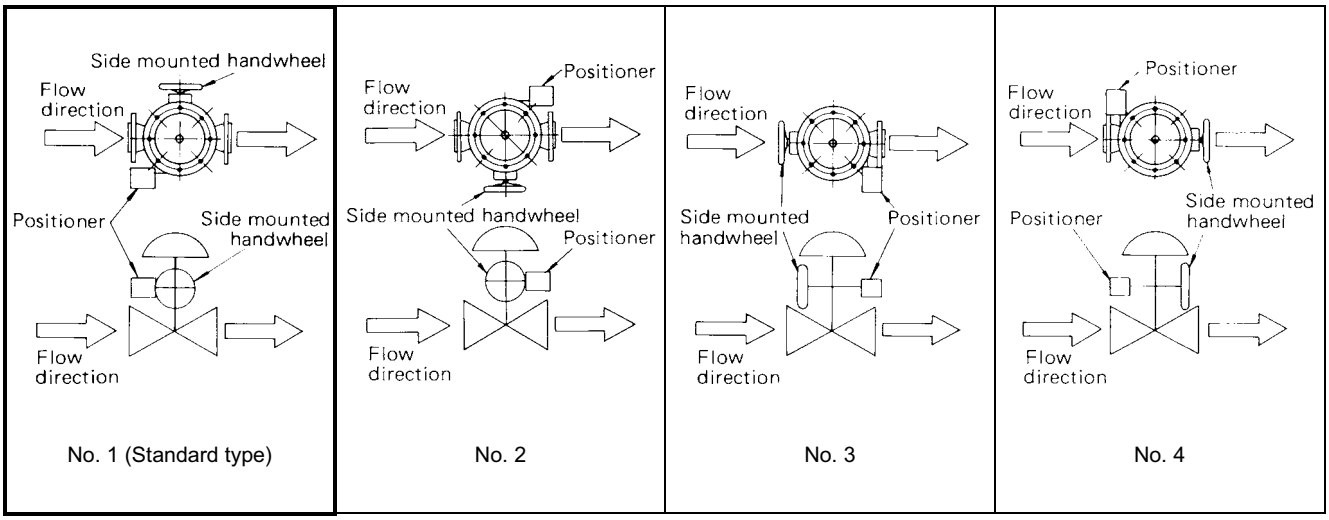


Figure 6. For VP6 actuator

Face-to-face and external dimensions



Note: 1)Indicated by position number when installation other than by the standard type is required.

2) With type PSA6R and type VP actuators, the side-mounted handwheel is mounted on the same side as the positoner.

Figure 7. Pipe installation positions

Ordering Information

When ordering, please specify ;

1) Model Number : HPC
2) Nominal size X Port size
3) Type and rating of end connections
4) Body and trim material, necessity of hardening
5) Valve characteristics
6) Type of bonnet
7) Type of actuator, air to diaphragm
8) Valve action (direct or reverse)
9) Accessories (positioner, handwheel, pressure regulator etc.)
10) Special requirement of degreasing, free from copper and etc.
11) Name of flow medium
12) Normal flow and maximum required flow
13) Pressure of flow medium upstream and downstream pressure at maximum and minimum, required flow
14) Temperature and specific gravity of flow medium
15) Viscosity of flow medium, inclusive or exclusive of slurry

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