



HKG 多级降压低噪音调节阀

HKG 多级降压低噪音调节阀是我厂在吸收 CV3000 调节阀技术的基础上自主研发的实用新型阀门，特殊的阀内件设计可实现阀门在高温高压差工况下达到降噪降压的效果。该系列阀门采用多层套筒结构，套筒层数一般为 2~6 层，最高压差可达 7MPa。

原理：当流体介质流经阀体内件时，复杂的节流通道具有较大的阻尼系数，会逐级降低压力和速度，防止对内件的冲蚀。同时控制其噪音，最大降噪可达 30 分贝左右。

调节阀的泄漏量符合 ANSI FCI 70-2-2006 标准。调节阀配用多弹簧薄膜执行机构或气缸执行机构，其结构紧凑，输出力大。

产品符合 GB/T4213—2008 标准。

Multi-Stage Pressure Reducing Low-Noise Control Valve

HKG Multi-stage pressure reducing low-noise Control Valve is a practical new type of valves self-developed by our company in absorption of CV3000 control valve technology. The special valve trim parts with 2~6 layers of multi-cage can effectively reduce the noise and pressure under the condition of high temperature and pressure, and the max. pressure drops can be up to 7MPa.

Theory: When the fluid flow across the valve trims, the complex throttle passage with larger damping coefficient can gradually reduce the pressure and velocity of the fluid to prevent eroding the trims. Meanwhile, the noise can be controlled, and the max noise reduction can be up to 30db.

The leakage complies with ANSI FCI 70-2-2006 standard. The compact size and large output force are available when the control valve is combined with multi-spring diaphragm actuator or cylinder actuator

This product complies with the GB/T4213-2008 standards.

标准规格 STANDARD SPECIFICATION

阀体 BODY

形式 Type	直通单座铸造球型阀 Straight-through, single seated, cast globe valve
公称通径 Normal size	25、32、40、50、65、80、100、125、150、200、250、300、350mm
公称压力 Pressure rating	ANSI Class 300,600; JIS 20K, 30K,40K; PN 4.0, 6.4 MPa *
连接型式 End connections	法兰型 Flanged: FF、RF、RJ、TG、MFM 焊接型 Welded end: SW (40~50mm) ; BW (65~350mm)
尺寸 Dimensions	请参见表 5 See Table 5
阀体及上阀盖材质 Body & Bonnet Material	SCPH2/WCB,SCPH21/WC6,SCS13A/CF8,SCS14A/CF8M,SCS16A/CF3M and other alloy steels. 各种材质的使用温度·压力范围，请参见表 1 和表 2 As to the operating pressure-temperature limitation for each material, see Table 1& 2
上阀盖型式 Bonnet type	常温型 Plain type: -17~+230℃ 伸长 I 型 (EI) Extension Type I: -45~-17℃ and +230~+566℃ 伸长 II 型 (EII) Extension Type II: -100~-45℃

	注：工作温度不准超过各种材料的允许范围。 Note: Take care not to exceed the operating temperature ranges specified for required materials.
压盖型式 Gland type	螺栓压紧式 Bolted gland
填料 Packing	V 型聚四氟乙烯填料、石墨填料请参见图 2 Teflon V-ring, Grafoil, etc. See Fig.2.
垫圈 Gasket	平型、锯齿型（碳钢、不锈钢（SUS304、SUS316、SUS316L）、其它合金） Flat type, Saw-tooth type (Carbon steel, Stainless steel or other alloy steels)
表面涂层 Surface coating	银灰色（环氧树脂）。但是阀体材质为不锈钢时，本体部不加涂层。 SLV (Epoxy resin group) is standard. In the case of stainless steel body, no painting is standard.

* 法兰标准 Standard: JIS B2201-1984、JB/T79.1-94(PN1.6MPa);JB/T79.2-94(PN4.0、6.4MPa);
ANSI B16.5-2009;HG20592-2009、HG20615-2009

阀内组件 TRIM

阀芯型式 Valve plug type	压力平衡式阀芯 Pressure-balanced type plug
阀内件材质 Trim materials	标准材质组合及使用温度· 压力范围，请参见表 1 及图 1
阀内件处理 Trim materials	See Table 1&Fig.1 for hardening treatment and operating pressure-temperature
流量特性 Flow characteristics	线性特性（LC）及等百分比特性（%C），参见图 4 Linear (LC) and Equal percentage (%C), see Fig.4

执行机构 ACTUATOR

型号 Type	气动薄膜式 Pneumatic Diaphragm type	气缸活塞式 Cylinder piston type	电子式 Electronic type	智能式 Intelligent type
规格 Specification	HA	VP	EIL	M8 系列
	多弹簧型 Multi-Spring type	双作用 Double acting		
用途 Purpose	调节 Modulation	调节 Modulation	调节 Modulation	
供气压力或 供给电压 Air supply or Power supply	供气压力（弹簧范围） Air supply (Spring range) 280 (80~240) kPa 400 (80~240) kPa	供气压力 Air supply 300~500kPa	电压：220 /380V 50HZ Power supply: 220 /380V 50Hz 输入信号 Input signal: 4~20mA DC	电压：220 /380V 50HZ Power supply: 220 /380V 50Hz 输入信号 Input signal: 4~20mA DC

接口 Connection	空气配管: Rc1/4 Air piping: Rc1/4	空气配管 Air piping: Rc3/8 (VP5、VP6); Rc1/2 (VP7)	配线:2-PF3/4 Wiring: 2-PF3/4	配线: PG13.5 Wiring:PG13.5
正作用 Direct action	气压增加阀闭 Air to valve close	气压增加阀闭 Air to valve close	输入信号阀闭 Signal increase to valve shut	输入信号阀闭 Signal increase to valve shut
反作用 Reverse action	气压增加阀开 Air to valve open	气压增加阀开 Air to valve open	输入信号阀开 Signal increase to valve open	输入信号阀开 Signal increase to valve open
回差 Hysteresis error	≤1%FS (带定位器) ≤1%FS (With positioner) ≤3%FS (不带定位 器) ≤3%FS (Without positioner)	≤1%FS (带定位器) ≤1%FS (With positioner) ≤3%FS (不带定位 器) ≤3%FS (Without positioner)	≤1%FS	≤1%FS
基本误差 Limit of intrinsic error	≤±1%FS (带定位器) ≤±1%FS (With positioner) ≤±5%FS (不带定位 器) ≤±5%FS (Without positioner)	≤±1%FS (带定位器) ≤±1%FS (With positioner) ≤±5%FS (不带定位 器) ≤±5%FS (Without positioner)	≤±1%FS	≤±1%FS
环境温度 Ambient temperature	标准型 Standard type-30~+70℃ 高温型 High Temp.service 0~ +100℃ 低温型 Low Temp.service -40~ +40℃	标准型 Standard type-20~+60℃ 高温型 High Temp.service 0~ +100℃ 低温型 Low Temp.service -50~ +60℃	-20~+70℃	-25~+70℃
油漆颜色 Painting	蓝色 Munsell 色标 10B5/10 Blue (Munsell color 10B5/10)	蓝色 Munsell 色标 10B5/10 Blue (Munsell color 10B5/10)		
附件 Accessories	定位器、空气过滤减 压阀、保位阀、阀传 送器、手轮机构等 Positioner, Air-set, Lock-up valve, Position transmitter, Hand wheel and others	定位器、空气过滤减 压阀、保位阀、阀传 送器、手轮机构等 Positioner, Air-set, Lock-up valve, Position transmitter, Hand wheel and others	EIL 执行机构手轮 Handwheel	M8 执行机构手轮 Handwheel

性能 PERFORMANCE

CV 值及行程 Rated CV value and Stroke	请参见表 3 See Table 3
阀座泄漏量 Seat Leakage	请参见表 1 See Table 1
可调范围 Rangeability	25 : 1
允许压差 Allowable Pressure Drops	请参见表 4 See Table 4
产品重量 Weight	请参见表 5 See Table 5

表 1 阀体、阀内件材质组合及使用温度范围• 阀座允许泄漏量

Table 1 BODY/TRIM STANDARD MATERIAL COMBINATION, OPERATING TEMPERATURE AND SEAT LEAKAGE

- R.TFE: 强化聚四氟乙烯 Reinforced Teflon
- HT : 热处理 Heat treatment
- ST : 堆焊司太莱合金 Partial stellite
- SS : 部分堆焊司太莱合金 Stellite seat surface
- SF : 全部堆焊司太莱合金 Stellite full surface

表 1-1 阀体材质: 碳钢

Table 1-1 BODY MATERIAL: CARBON STEEL

阀体材质 Body material	SCPH2/A216-WCB,SCPH21/A217-WC6,SCPL1/A352-LCB				
套筒 Cage	材质 material	SUS630/SCS24			
	处理 treatment	HT			
阀芯 Plug	材质 material	SUS410			
	处理 treatment	HT			
阀座 Valve seat	材质 material	SUS304+R.TFE	SUS304+PEEK	SUS630	SUS630
	处理 treatment	—	—	HT	HT
平衡密封环 Balanced seal ring	材质 material	R.TFE	R.TFE	R.TFE	Inconel 750
	垫环 gasket ring	SUS316	SUS316	SUS316	—
垫圈 Gasket	材质 material	SUS316L	SUS316L	SUS316L	SUS316L
阀座允许泄漏量 Seat Leakage		Class V/VI	Rated Cv × 0.0001%	Class IV	Class IV
使用温度 Operating Tep. °C	SCPH2/WCB Body	-17~+230	-17~+270		-17~+425
	SCPH21/WC6 Body	-17~+230	-17~+270		-17~+566
	SCPL1/LCB Body	-45~+230	-45~+270		-45~+350

表 1-2 阀体材质：不锈钢

Table 1-2 BODY MATERIAL: STAINLESS STEEL

阀体材质		SCS13A/A351-CF8, SCS14A/A351-CF8M, SCS16A/A351-CF3M			
套筒 Cage	材质 material	SUS304/316/316L			
	处理 treatment	—			
阀芯 Plug	材质 material	SUS304/316/316L	SUS304/316/316L	SUS304/316/316L	SUS304/316/316L
	处理 treatment	—	—	ST	ST
阀座 Valve seat	材质 material	SUS304/316/316L +R.TFE	SUS304/316/316L +PEEK	SUS304/316/316L	SUS304/316/316L
	处理 treatment	—	—	ST	ST
平衡密封环 Balanced seal ring	材质 material	R.TFE	R.TFE	R.TFE	Iconel 750
	垫环 gasket ring	SUS316/哈氏 C (Hastelloy C)	SUS316/哈氏 C (Hastelloy C)	SUS316/哈氏 C (Hastelloy C)	—
垫圈 Gasket	材质 material	SUS316L	SUS316L	SUS316L	SUS316L
阀座允许泄漏量 Seat Leakage		Class V/VI	Rated Cv×0.0001%	Class IV	Class IV
使用温度 Operating Tep.°C		-75~+230	-75~+270	-196~+270	-196~+566

注：流体温度在-75℃以下，平衡密封环的材质：Fluoroloy G；垫环：Elgiloy。

Note: When the liquid temperature is below -75℃, the material of balanced seal ring is Fluoroloy G and one of ring is Elgiloy.

表 2 阀体材质使用温度· 压力范围

Table 2 BODY MATERIAL/OPERATING PRESSURE-TEMPERATURE RATIO

表 2-1 Table 2-1 ANSI

UNIT:MPa

温度 Temp.°C	ANSI150					ANSI300					ANSI600				
	LCB	WCB	WC6	SCS13A CF8	SCS14A CF8M	LCB	WCB	WC6	SCS13A CF8	SCS14A CF8M	LCB	WCB	WC6	SCS13A CF8	SCS14A CF8M
-196~38	—	—	—	1.90	1.90	—	—	—	4.95	4.95	—	—	—	9.91	9.92
-45~38	1.84	—	—	1.90	1.90	4.78	—	—	4.95	4.95	9.57	—	—	9.91	9.92
-5~38	1.84	1.96	1.99	1.90	1.90	4.78	5.10	5.16	4.95	4.95	9.57	10.2	10.32	9.91	9.92
50	1.81	1.92	1.92	1.84	1.84	4.72	5.00	5.16	4.77	4.80	9.46	10.1	10.32	9.56	9.62
100	1.72	1.76	1.76	1.56	1.61	4.51	4.63	5.14	4.08	4.21	9.02	9.27	10.29	8.17	8.43
150	1.57	1.57	1.57	1.39	1.47	4.40	4.51	5.01	3.62	3.85	8.78	9.04	10.03	7.26	7.69
200	1.40	1.40	1.40	1.25	1.37	4.26	4.38	4.88	3.27	3.56	8.54	8.75	9.75	6.54	7.12
250	1.20	1.20	1.20	1.16	1.20	4.05	4.16	4.62	3.04	3.34	8.11	8.33	9.26	6.10	6.67
300	1.01	1.01	1.01	1.01	1.01	3.76	3.87	4.23	2.91	3.15	7.54	7.74	8.48	5.80	6.32
350	0.84	0.84	0.84	0.84	0.84	3.59	3.69	4.01	2.81	3.03	7.18	7.38	8.04	5.60	6.07
375		0.73	0.73	0.73	0.73		3.64	3.88	2.77	2.96		7.28	7.75	5.54	5.93
400		0.64	0.64	0.64	0.64		3.44	3.65	2.74	2.91		6.89	7.31	5.48	5.81
425		0.55	0.55	0.55	0.55		2.88	3.44	2.71	2.87		5.74	6.91	5.42	5.72

450		0.47	0.47	0.47	0.47		1.99	3.08	2.68	2.81		4.00	6.17	5.37	5.61
475		0.37	0.37	0.37	0.37		1.35	2.58	2.65	2.73		2.70	5.17	5.30	5.46
500		0.28	0.28	0.28	0.28		0.88	2.02	2.60	2.67		1.75	4.04	5.20	5.37
525		0.18	0.18	0.18	0.18		0.51	1.53	2.19	2.57		1.03	3.07	4.77	5.15
550		—						1.20	2.00	2.40			2.40	4.00	4.60
566								1.00	1.90	2.20			2.00	3.80	4.50

表 2-2 Table 2-2 JB/T79-94 或 HG20592-2009

UNIT:MPa

温度 Temp. °C	PN16	PN40	PN63	PN100	温度 Temp. °C	PN16	PN40	PN63	PN100
	ZG230-450					ZG0Cr18Ni9			
-5~200	1.60	4.00	6.30	10.0	-45~200	1.60	4.00	6.30	10.0
~250	1.40	3.50	5.40	9.00	~300	1.40	3.50	5.40	9.00
~300	1.20	3.00	4.80	7.50	~400	1.20	3.00	4.80	7.50
~350	1.10	2.60	4.00	6.60	~480	1.10	2.60	4.00	6.60
~400	0.90	2.30	3.70	5.80	~520	0.90	2.30	3.70	5.80
~425	0.80	2.00	3.20	5.00	~560	0.80	2.00	3.20	5.00
~435	0.70	1.80	2.80	4.50					
~445	0.62	1.60	2.50	4.20					
~455	0.57	1.40	2.30	3.60					

图 1 阀内件材质·处理

Fig.1 TRIM MATERIAL/TREATMENT

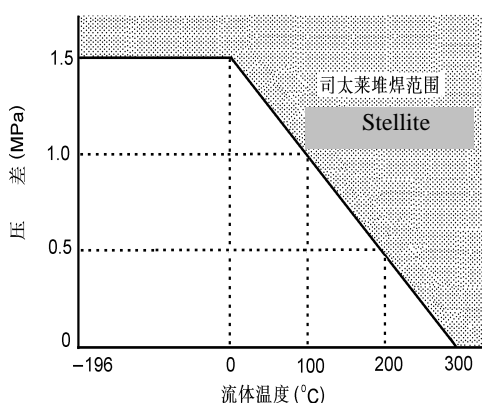


图 1-1 司太莱的工作范围

Fig.1-1 Temperature/normal differential pressure ranges requiring Stellite

注: 1. 17-4PH 不锈钢 (SCS24) 不需堆焊。

2. 空化、闪蒸、禁油场合, 不管温度和压力多大, 建议堆焊司太莱合金。

Note: 1. SCS24 (Precipitation-hardened stainless steel) requires no stellite.

2. For cavitation/flashing service, or oil prohibitive service, Stellite is recommended regardless of temperature or Pressure Drops.

图 2 填料使用温度·压力范围

Fig.2 PACKING PRESSURE · TEMPERATURE RATINGS

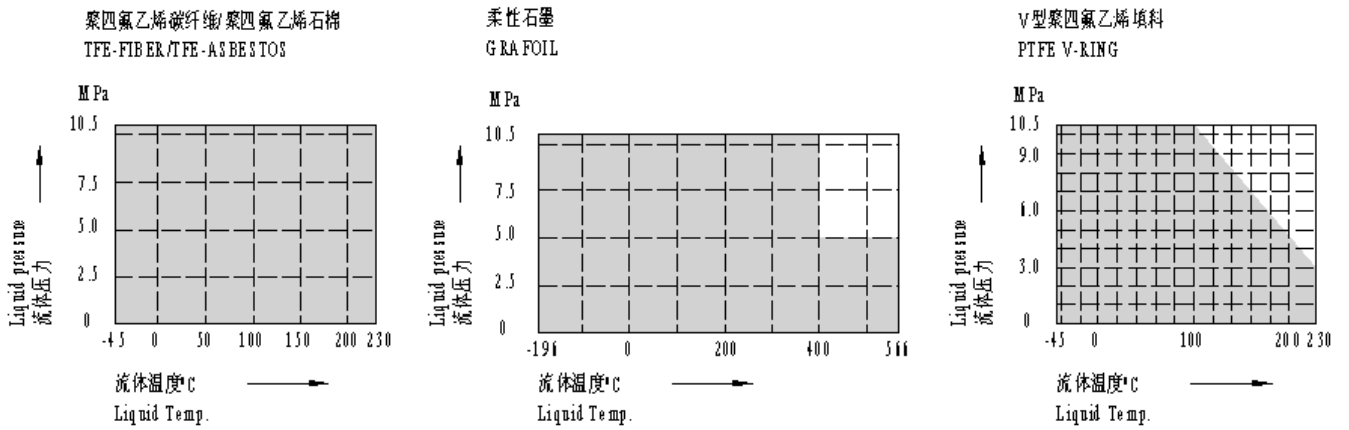


图 3 平衡密封环使用温度·压力范围

Fig.3 BALANCE SEAL PRESSURE-TEMPERATURE RATINGS

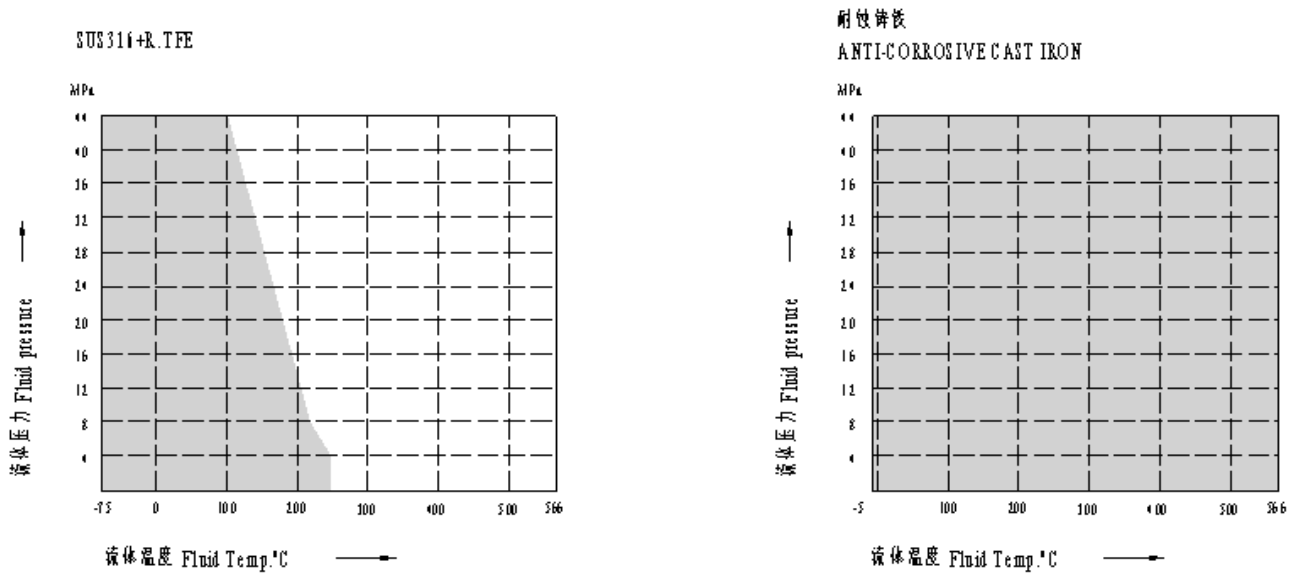


图 4 阀体部件结构
Fig.4 BODY SECTION

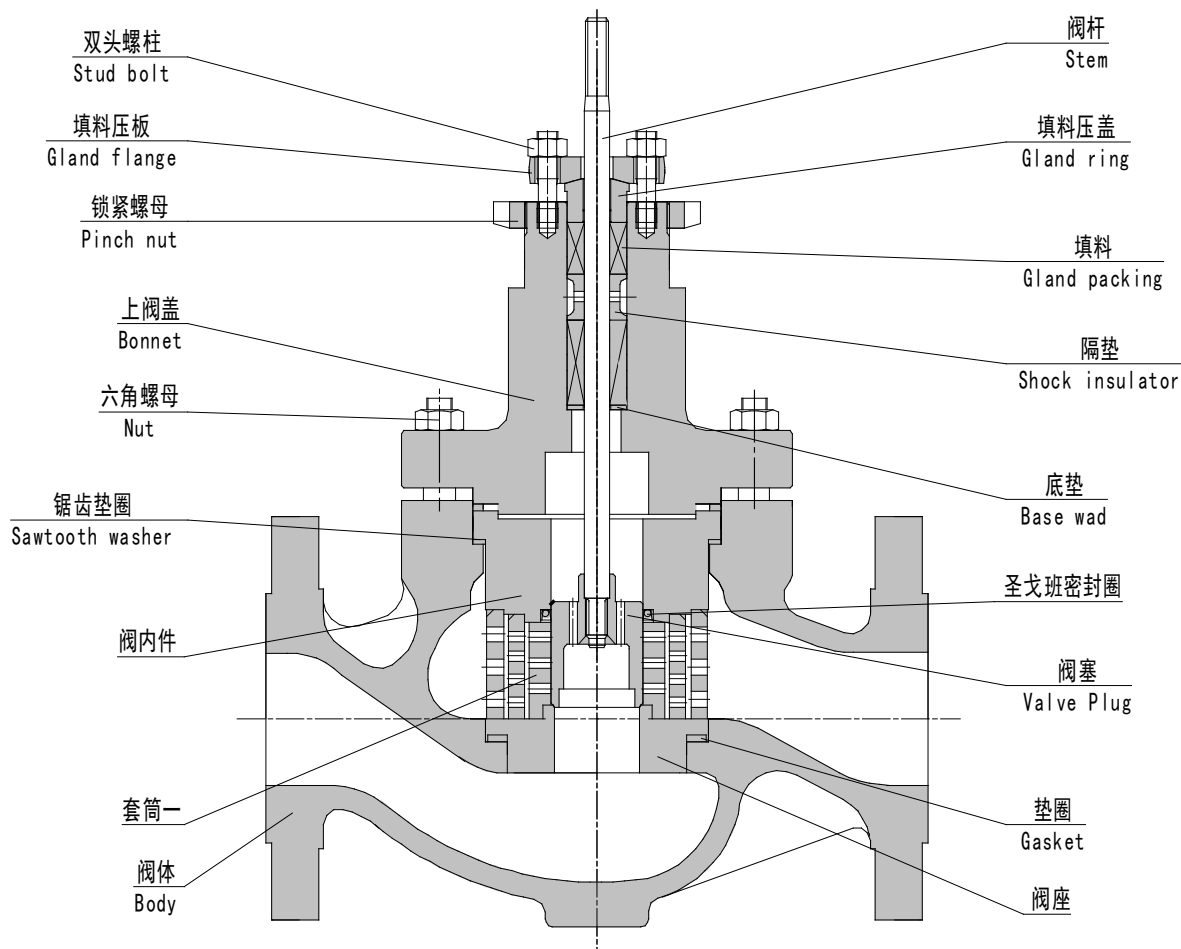


表 3 CV 值和行程

Table 3 Rated Cv value and Trave

表 3-1 公称压力(ANSI300~600)

Table 3-1 Pressure rating (ANSI300~600)

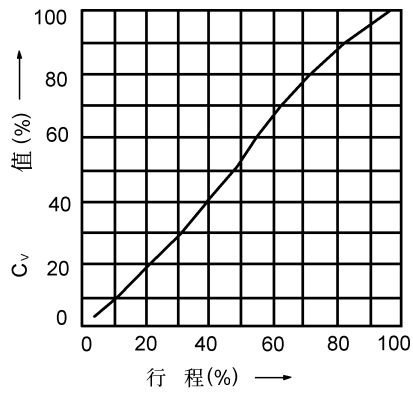
公称通径 Nominal size mm	25		32		40		50		65		80		100		125		
套筒层数 Cage layer	2	3	2	3	2	3	3	4	3	4	3	4	3	4	3	4	
阀座直径 Seat size mm	25	16	30	20	40	30	40	30	50	40	63	50	75	63	90	75	
Rated Cv value 额定 Cv	线性 L Liner	8.5	4	17	11	24	17	19	13	32	19	54	32	78	54	120	78
	等百分 比% EQ%	6.3	4	11	6.3	17	11	17	11	24	17	44	24	68	44	99	68
额定行程 Travel mm	14.3		25						38						50		
公称通径 Nominal size	150			200			250			300			350				
套筒层数 Cage layer No.	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5		
阀座直径 Seat size mm	115	90	75	160	130	115	190	160	130	275	205	160	300	250	205		
Rated Cv value 额定 Cv	线性 L Liner	200	120	75	330	226	163	454	330	243	625	410	310	840	720	446	
	等百分 比% EQ%	150	99	68	240	175	99	365	275	175	435	365	275	585	492	330	
额定行程 Travel mm	50			75			100						120				

注：特殊 Cv 请与销售部咨询

Note: If you need special Cv value, please contact with sales department.

图 5 典型流量特性曲线

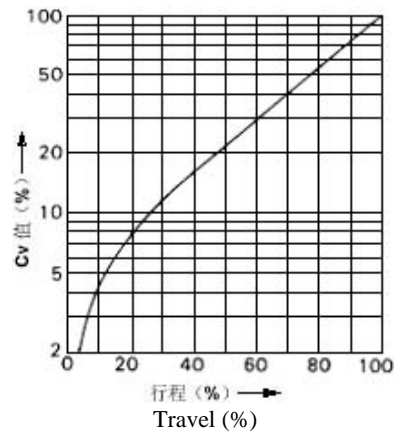
Fig.4 TYPICAL FLOW CHARACTERISTICS



Travel (%)

线性特性 (LC)

Linear characteristics (LC)



Travel (%)

等百分比特性 (%C)

Equal percentage characteristics (%C)

表 4 允许压差

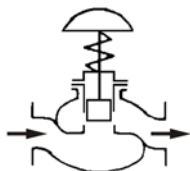
Table 4 ALLOWABLE PRESSURE DROPS

表 4-1 薄膜式执行机构

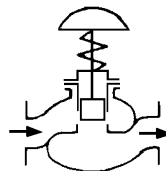
Table 4-1 DIAPHRAGM ACTUATOR (HA)

表 4-1-1 气—关式阀（公称压力 ANSI600 以下）

Table4-1- 1 Air-to-close (Pressure rating: ANSI 600 and the below)



(适用于气体及蒸汽 Refer to gas & steam)



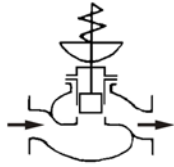
(适用于液体 Refer to liquid)

100kPa

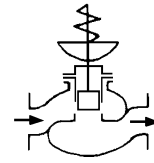
执行机构 Actuator	供气压力 Air supply	弹簧范围 Spring range	阀座型式 Seat type	平衡密封环 Balance Seal	允许压差 Allowable Pressure Drops										
					公称通径 Nominal size										
					25	32	40	50	65	80	100	150	200	250	300
HA2D	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	100	100	100	100	—	—	—	—	—	—	—
				Grafoil	—	—	—	—	—	—	—	—	—	—	
			软密封 Soft seal	SUS316/RTFE	100	100	88.2	62.7	—	—	—	—	—	—	—
HA3D	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	100	100	—	—	—	—	—	—	
				Grafoil	83.3	83.3	83.3	83.3	—	—	—	—	—	—	
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	—	—	—	—	—	—	—
HA4D	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	—	—	100	100	100	76.4	—	—	
				Inconel 750	—	—	—	—	83.3	83.3	78.5	—	—	—	
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	100	100	100	76.4	—	—	—
HA4X2D	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	—	—	—	—	—	100	100	—	
				Inconel 750	—	—	—	—	—	—	—	83.3	83.3	—	
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	—	—	—	—	100	100	—
HA5YD	4.0	1.06~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	—	—	—	—	—	—	100	100	75
				Inconel 750	—	—	—	—	—	—	—	—	83.3	51.5	—
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	—	—	—	—	—	100	100

表 4-1-2 气—开式阀 (公称压力 ANSI600 以下)

Table4-1-2 Air-to-open (Pressure rating: ANSI 600 and the below)



(适用于气体及蒸汽 Refer to gas & steam)



(适用于液体 Refer to liquid)

100kPa

执行机构 Actuator	供气压力 Air supply	弹簧范围 Spring range	阀座型式 Seat type	平衡密封环 Balance Seal	允许压差 Allowable Pressure Drops										
					公称口径 Nominal size										
					25	32	40	50	65	80	100	150	200	250	300
HA2R	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	100	100	88.2	62.7	—	—	—	—	—	—	—
				Grafoil	—	—	—	—	—	—	—	—	—	—	—
			软密封 Soft seal	SUS316/RTFE	100	100	88.2	62.7	—	—	—	—	—	—	—
HA3R	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	100	100	—	—	—	—	—	—	—
				Grafoil	83.3	83.3	83.3	83.3	—	—	—	—	—	—	—
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	—	—	—	—	—	—	—
HA4R	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	—	—	100	100	100	76.4	—	—	—
				Inconel 750	—	—	—	—	83.3	83.3	78.5	—	—	—	—
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	100	100	100	76.4	—	—	—
HA4X2R	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	—	—	—	—	—	100	100	—	—
				Inconel 750	—	—	—	—	—	—	—	83.3	83.3	—	—
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	—	—	—	100	100	—	—
HA5YR	4.0	1.06~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	—	—	—	—	—	—	100	100	75
				Inconel 750	—	—	—	—	—	—	—	—	83.3	51.5	—
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	—	—	—	—	100	100	—

表 4-2 气缸式执行机构 (VP)

Table 4-2 CYLINDER TYPE ACTUATOR (VP)

(公称压力 ANSI600 以下) (Pressure rating: ANSI600 and the below)

100kPa

执行机构 Actuator	供气压力 Air supply	阀座型式 Seat type	平衡密封环 Balance Seal	允许压差 Allowable differential pressure						
				公称通径 Nominal size						
				100	125	150	200	250	300	350
VP4	5.0	金属密封 Metal seal	SUS316/RTFE	100	100	100	—	—	—	
			Inconel 750	83.3	83.3	83.3	—	—	—	
		软密封 Soft seal	SUS316/RTFE	100	100	100	—	—	—	
VP5	5.0	金属密封 Metal seal	SUS316/RTFE	—	—	—	100	68	62	
			Inconel 750	—	—	—	83.3	68	62	
		软密封 Soft seal	SUS316/RTFE	—	—	—	100	68	62	
VP6	5.0	金属密封 Metal seal	SUS316/RTFE	—	—	—	—	100	100	100
			Inconel 750	—	—	—	—	83.3	83.3	100
		软密封 Soft seal	SUS316/RTFE	—	—	—	—	100	100	100
VP7	5.0	金属密封 Metal seal	SUS316/RTFE	—	—	—	—	—	—	100
			Inconel 750	—	—	—	—	—	—	100
		软密封 Soft seal	SUS316/RTFE	—	—	—	—	—	—	100

注: 1. 最大允许压差不准超过 ANSI B16.34—1981 或 JIS B2201—1984 标准规定的最大工作压力。

2. 黑线框内数字表示阀配用标准规格执行机构。

Note:

1. Take care not to cause the allowable maximum Pressure Drops to exceed the maximum operating pressure designated by ANSI B16.34—1981 or JIS B2201—1984.

2. The figures in gray denote the standard actuator specifications.

表 4-3 电子式执行机构 (EIL) 及智能式执行机构 (M8) (公称压力 ANSI600 以下)

Table 4-3 ELECTRONIC ACTUATOR (EIL) & INTELLIGENT ACTUATOR (M8) (Pressure rating: ANSI600 and the below) 100kPa

执行机构 Actuator	阀座形式 Seat type	平衡密封环 Balance Seal	公称通径 (mm) Nominal size (mm)										
			40	50	65	80	100	125	150	200	250	300	350
EIL04	金属阀座 Metal seat	SUS316/RTFE	100	100	—	—	—	—	—	—	—	—	—
		Grafoil	83.3	83.3	—	—	—	—	—	—	—	—	—
	软阀座 Soft seat	SUS316/RTFE	30	30	—	—	—	—	—	—	—	—	—
EIL08 M8610+L82 10	金属阀座 Metal seat	SUS316/RTFE	—	—	100	100	100	—	—	—	—	—	—
		Inconel 750	—	—	83.3	83.3	83.3	—	—	—	—	—	—
	软阀座 Soft seat	SUS316/RTFE	—	—	30	30	30	—	—	—	—	—	—
EIL12	金属阀座 Metal seat	SUS316/RTFE	—	—	—	—	—	98.3	88.8	—	—	—	—
		Inconel 750	—	—	—	—	—	83.3	—	—	—	—	—
	软阀座 Soft seat	SUS316/RTFE	—	—	30	30	30	30	30	—	—	—	—
EIL20 M8620+L82 20	金属阀座 Metal seat	SUS316/RTFE	—	—	—	—	—	—	—	100	—	—	—
		Inconel 750	—	—	—	—	—	—	83.3	83.3	—	—	—
	软阀座 Soft seat	SUS316/RTFE	—	—	—	—	—	—	—	30	—	—	—
EIL25 M8620+L82 30	金属阀座 Metal seat	SUS316/RTFE	—	—	—	—	—	—	—	—	80	75	—
		Inconel 750	—	—	—	—	—	—	—	—	65	57	—
	软阀座 Soft seat	SUS316/RTFE	—	—	—	—	—	—	—	—	30	30	—
M8630+L82 40	金属阀座 Metal seat	SUS316/RTFE	—	—	—	—	—	—	—	—	100	100	100
		Inconel 750	—	—	—	—	—	—	—	—	83.3	83.3	83.3
	软阀座 Soft seat	SUS316/RTFE	—	—	—	—	—	—	—	—	30	30	30

注: 1. 以上允许压差为阀全关时的允许压差。

2. 黑线框内数字表示阀配用标准规格执行机构。

Note: 1. The figures denote the allowable Pressure Drops at full closure.

2. The figures in gray denote the standard actuator specifications.

表 5 尺寸

Table 5 DIMENSIONS

表 5-1 法兰距尺寸

Table 5-1 Fact-to-Face dimensions

mm

公称 口径 Nominal size	A				
	ANSI 300 RF JIS 20、30K RF PN4.0 MFM	ANSI 600 RF JIS 40K RF PN6.4 MFM	JIS 20K TG	JIS 30K TG	JIS 40K TG
25	197	210	198	212	—
32	235	251	—	—	—
40	235	251	236	248	251
50	267	286	267	276	286
65	292	311	292	303	311
80	317	337	317	326	337
100	368	394	368	379	394
150	473	508	473	486	508
200	568	610	568	580	610
250	708	752	—	—	—
300	775	819	—	—	—
350	927	972	—	—	—

公称 口径 Nominal size	A				
	ANSI 300 RJ	ANSI 600 RJ	ANSI 300 TG	ANSI 600 TG	ANSI 300、600 SW、BW
25	210	210	206	—	210
32	248	251	244	248	251
40	248	251	244	248	251
50	283	289	276	283	286
65	308	314	302	308	311
80	333	340	327	333	337
100	384	397	378	391	394
150	489	511	483	505	508
200	584	613	578	606	610

注：法兰距符合 IEC 534-3-1976 标准。

Note: Face-to-face dimensions comfort to IEC 534-3-1976 Standard.

表 5-2 外形尺寸 Other dimensions

Table 5-2 Other dimensions

表 5-2-1 外形尺寸 Other dimensions

Table 5-2-1 Other dimensions

mm

公称 通径 Nominal size	执行机构 Actuator	H			B	B1	B2	B3	B4	H1
		常温型(P) Plain bonnet	伸长 I 型(E I) Extension bonnet Type I	伸长 II 型(E II) Extension bonnet Type II						
25	HA2D、R	545	590	985	281	—	—	—	—	40
	HA3D、R	620	660	1055	363	—	—	—	—	
	EIL04	760	805	1200	267	—	258	—	—	
32	HA2D、R	575	745	850	281	—	—	—	—	70
	HA3D、R	700	870	1015	363	—	—	—	—	
	EIL04	790	960	1065	267	—	258	—	—	
40	HA2D、R	575	745	850	281	—	—	—	—	70
	HA3D、R	700	870	1015	363	—	—	—	—	
	EIL04	790	960	1065	267	—	258	—	—	
50	HA2D、R	575	745	855	281	—	—	—	—	80
	HA3D、R	700	870	980	363	—	—	—	—	
	EIL04	790	960	1070	267	—	258	—	—	
65	HA4D、R	920	1100	1215	520	—	—	—	—	88
	EIL08	925	1105	1225	229	—	338	—	—	
	M8610+L8210	975	1155	1275	—	285	346	253	350	
80	HA4D、R	925	1115	1240	520	—	—	—	—	98
	EIL08	930	1110	1230	229	—	338	—	—	
	M8610+L8210	985	1170	1305	—	285	346	253	350	
100	HA4D、R	945	1165	1305	520	—	—	—	—	113
	VP4	1180	1400	1545	334	—	—	—	—	
	EIL08	960	1170	1295	229	—	338	—	—	
	M8610+L8210	1010	1220	1245	—	285	346	253	350	
125	HA4D、R	1010	1270	1485	520	—	—	—	—	146
	HA4X2D、R	1575	1835	2050	470	—	—	—	—	
	VP4	1190	1450	1665	334	—	—	—	—	
	EIL12	1050	1310	1515	229	—	338	—	—	
150	HA4D、R	1010	1270	1485	520	—	—	—	—	170
	HA4X2D、R	1575	1835	2050	470	—	—	—	—	
	VP4	1190	1450	1665	334	—	—	—	—	
	EIL12	1050	1310	1515	229	—	338	—	—	
200	HA4X2D、R	1715	1975	2220	470	—	—	—	—	220
	HA5YD、R	1380	1640	1885	605	—	—	—	—	
	VP5	1420	1685	2050	382	—	—	—	—	
	EIL20	1290	1550	1800	258	—	356	—	—	
	M8620+L8220	1570	1835	2205	—	313	350	253	350	
250	HA5YD、R	1395	1660	—	605	—	—	—	—	305
	VP5	1355	1620	—	382	—	—	—	—	
	VP6	1470	1735	—	480	—	—	—	—	
	EIL25	1540	1805	—	258	—	356	—	—	
	M8620+L8230	1865	2470	—	—	313	350	253	350	

300	HA5YD、R	1400	1655	—	605	—	—	—	—	345
	VP5	1355	1620	—	382	—	—	—	—	
	VP6	1470	1735	—	480	—	—	—	—	
	EIL25	1535	1780	—	258	—	356	—	—	
	M8620+L8230	1505	1845	—	—	313	350	253	350	
350	VP6	1565	1850	—	480	—	—	—	—	385
	VP7	1565	1850	—	580	—	—	—	—	
	M8630+L8240	1540	1880	—	—	375	455	266	350	

表 5-2-2 外形尺寸

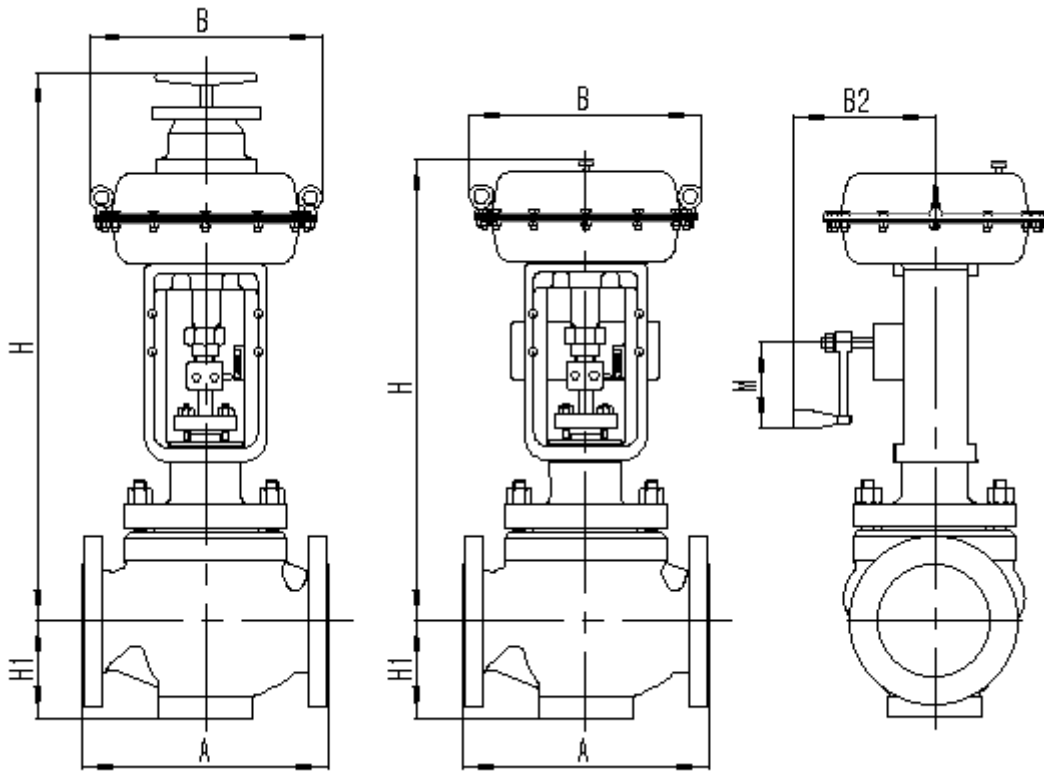
Table 5-2-2 Other dimensions

mm

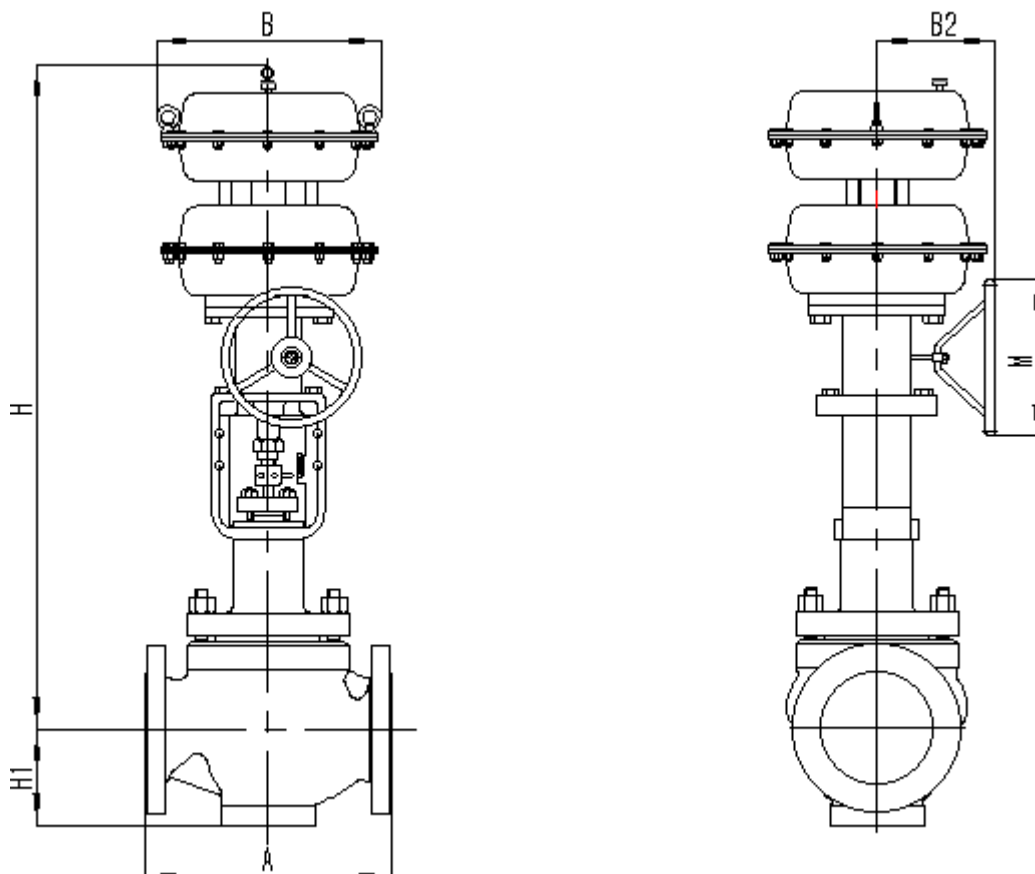
公称 通径 Nominal size	执行机构 Actuator	H						B2	M
		侧装手轮			顶装手轮				
		常温型(P) Plain bonnet	伸长 I 型(E) Extension bonnet Type I	伸长 II 型(E) Extension bonnet Type II	常温型(P) Plain bonnet	伸长 I 型(E) Extension bonnet Type I	伸长 II 型(E) Extension bonnet Type II		
25	HA2D、R	545	590	985	805	850	1245	273.5	175
	HA3D、R	620	660	1055	910	950	1345	278.5	175
32	HA2D、R	575	745	850	840	1005	1110	273.5	175
	HA3D、R	700	870	1015	990	1160	1305	278.5	175
40	HA2D、R	575	745	850	840	1005	1110	273.5	175
	HA3D、R	700	870	1015	990	1160	1305	278.5	175
50	HA2D、R	575	745	855	840	1005	1110	273.5	175
	HA3D、R	700	870	980	990	1160	1305	278.5	175
65	HA4D、R	920	1100	1215	1320	1500	1615	303	φ320
80	HA4D、R	925	1115	1240	1325	1515	1640	303	φ320
100	HA4D、R	945	1165	1305	1345	1565	1705	303	φ320
	VP4	1290	1510	1655	—	—	—	324	φ380
125	HA4D、R	1010	1270	1485	1410	1670	1885	278.5	175
	HA4X2D、R	1895	2055	2370	—	—	—	310	φ380
	VP4	1300	1560	1775	—	—	—	324	φ380
150	HA4D、R	1010	1270	1485	1410	1670	1885	278.5	175
	HA4DX2、R	1895	2055	2370	—	—	—	310	φ380
	VP4	1300	1560	1775	—	—	—	324	φ380
200	HA4X2D、R	2035	2295	2540	—	—	—	310	φ380
	HA5YD、R	1730	1990	2235	—	—	—	325	φ380
	VP5	1530	1795	2160	—	—	—	324	φ380
250	HA5YD、R	1745	1910	—	—	—	—	325	φ380
	VP5	1465	1730	—	—	—	—	324	φ380
	VP6	1595	1860	—	—	—	—	384	φ380
300	HA5YD、R	1750	2005	—	—	—	—	325	φ380
	VP5	1465	1730	—	—	—	—	324	φ380
	VP6	1595	1860	—	—	—	—	384	φ380
350	VP6	1690	1975	—	—	—	—	384	φ380
	VP7	1690	1975	—	—	—	—	384	φ380

注：表 5-2-2 上 H 栏尺寸是气动执行机构（带手轮）调节阀高度。

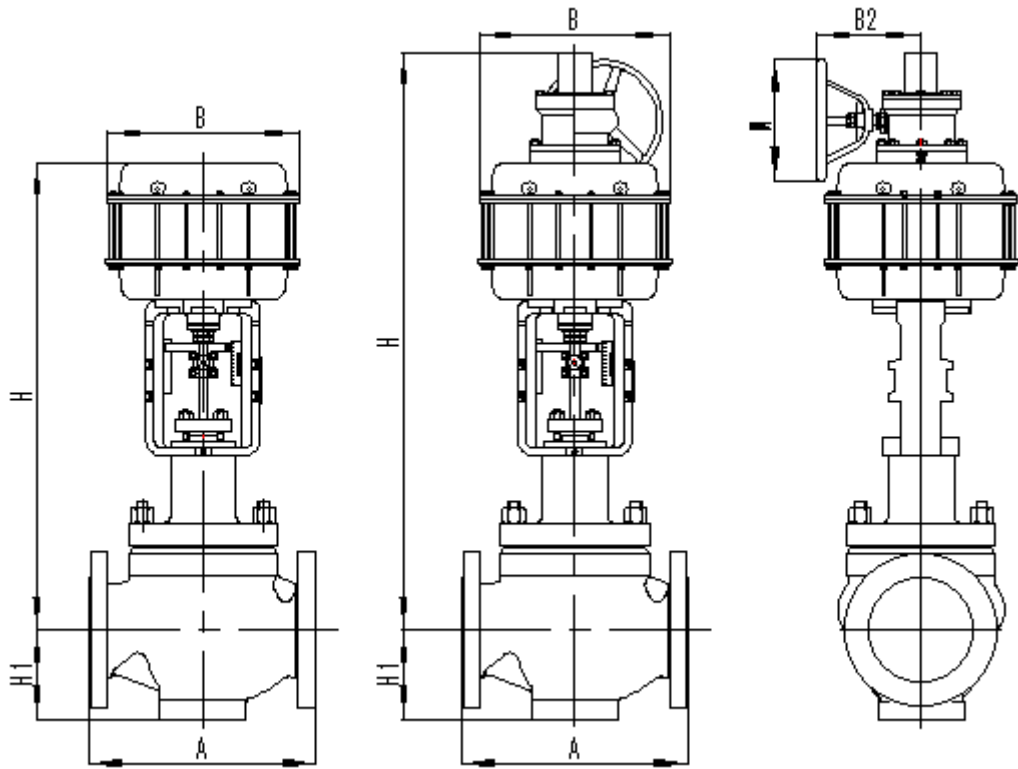
Note: Note: The size of H in Table 5-2-2-shows the values of the valve with actuator including the handwheel.



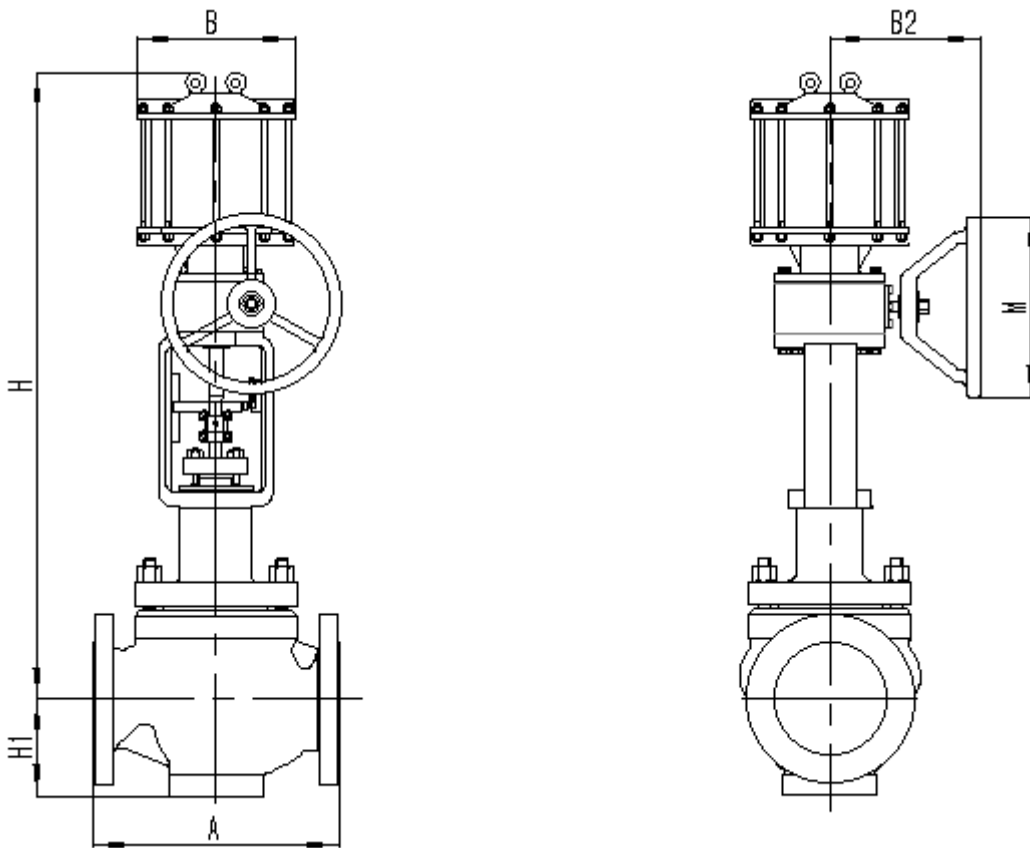
配 HA 执行机构
With type HA



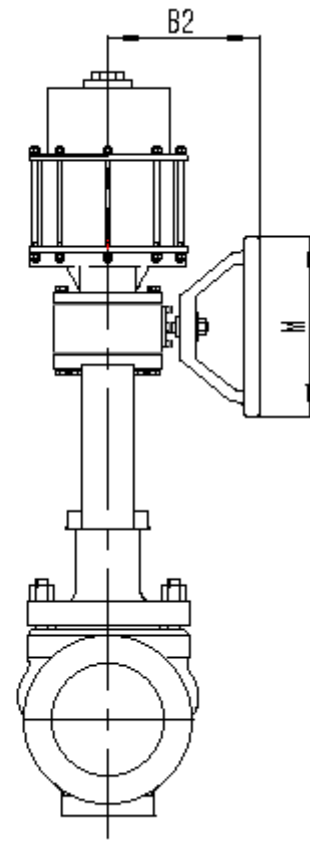
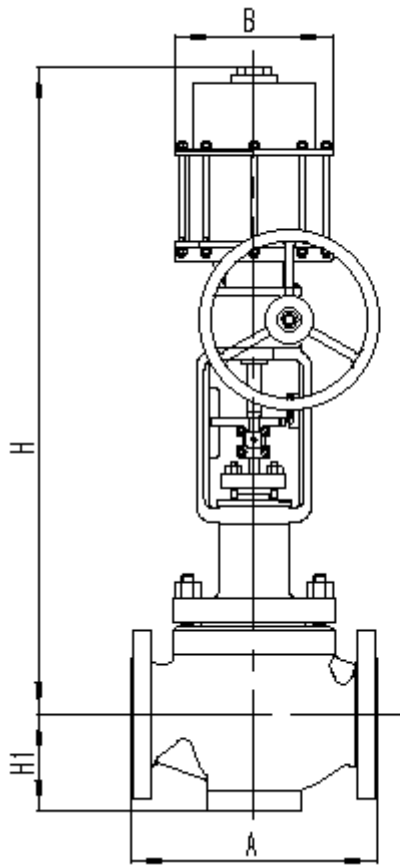
配 HA4X2 执行机构
With type HA4X2



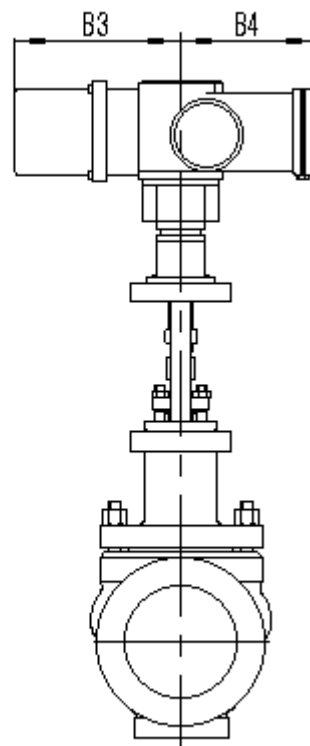
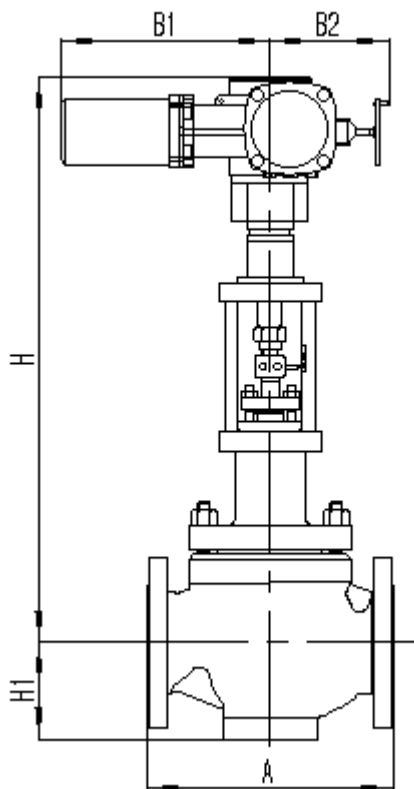
配 HA5YD、R 执行机构
With type HA5YD、R



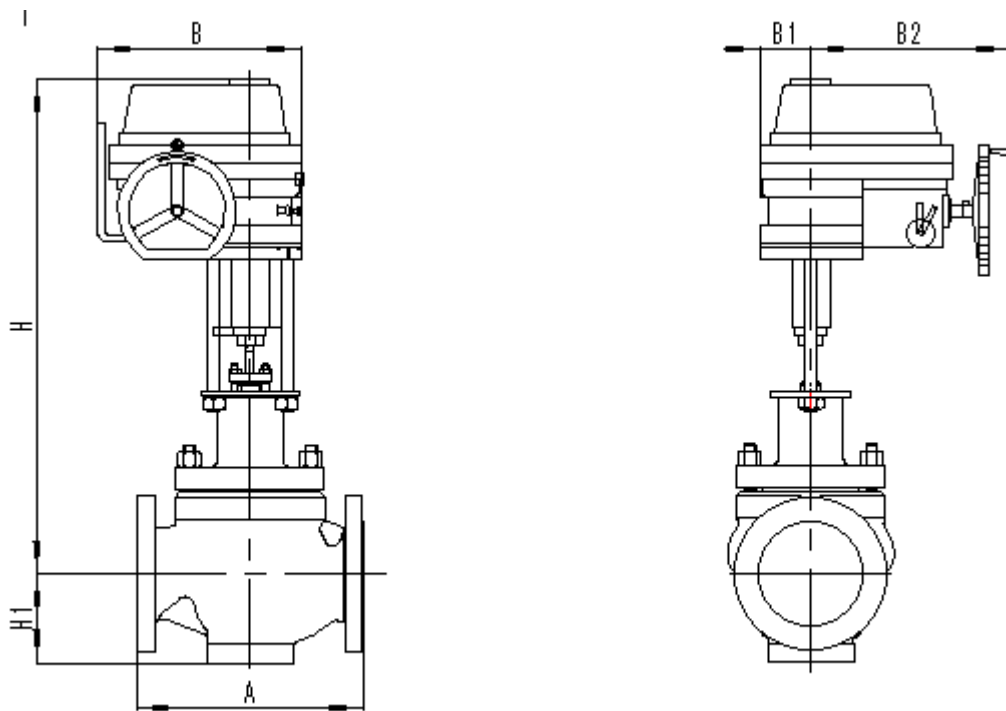
配 VP 执行机构
With type VP



配 VA 执行机构
With type VA



配 M8 执行机构
With type M8



配 EIL 执行机构
With type EIL

图 5 法兰距及外形尺寸
Fig.5 Face-to-Face dimension and Other dimensions

表 6 重量

Table 6 WEIGHT

公称 通径 Nominal size	执行机构 Actuator	法兰连接 Flanged type									焊接连接 Welded type		
		ANSI 125、150 JIS 10K			ANSI 300 JIS 16、20、30K			ANSI 600 JIS 40K			ANSI 150、300、600 JIS 10、16、20、30K		
		P	E I	E II	P	E I	E II	P	E I	E II	P	E I	E II
32	HA2D、R	31	34	37	36	39	42	44	47	50	36	39	42
	EIL04	25	28	31	30	33	36	38	41	444	30	33	36
40	HA2D、R	31	34	37	36	39	42	44	47	50	36	39	42
	HA3D、R	43	46	49	48	51	54	56	59	62	48	51	54
	EIL04	25	28	31	30	33	36	38	41	444	30	33	36
50	HA2D、R	37	40	43	42	45	48	47	50	43	42	45	48
	HA3D、R	49	52	55	54	57	60	59	62	65	54	57	60
	EIL04	31	34	37	36	39	42	41	44	37	36	39	42
65	HA2D、R	46	50	54	51	55	59	68	72	76	51	55	59
	HA3D、R	58	62	66	63	67	71	80	84	88	63	67	71
	HA4D、R	89	93	97	94	98	102	111	115	119	94	98	102
	EIL08	44	48	52	49	53	57	66	70	74	49	53	57
	M8610+L8210	93	97	101	98	102	106	146	150	154	129	131	137
80	HA3D、R	68	74	80	78	84	90	100	106	112	78	84	90
	HA4D、R	99	105	111	109	115	121	132	137	143	112	115	121
	EIL08	54	59	66	64	70	76	86	92	98	64	70	76
	M8610+L8210	103	109	115	113	119	125	135	141	147	113	119	124

100	HA3D、R	78	88	93	93	103	108	128	138	143	90	100	103
	HA4D、R	109	119	124	124	134	139	159	169	174	121	132	136
	EIL08	64	74	79	79	89	94	114	124	129	76	87	91
	M8610+L8210	113	123	128	128	138	141	166	173	178	125	135	171
125	HA3D、R	79	89	94	94	104	109	129	139	144	91	101	106
	HA4D、R	110	120	125	125	135	140	160	170	175	122	132	137
	M8610+L8210	114	124	129	129	139	142	164	174	179	126	136	172
	EIL12	144	159	166	174	189	196	224	239	246	164	179	186
150	HA3D、R	161	176	183	191	206	213	241	256	263	181	196	203
	HA4D、R	192	207	214	222	237	244	272	287	294	212	227	234
	VP4	202	217	224	232	247	254	282	297	304	222	237	244
	EIL12	144	159	166	174	189	196	224	239	246	164	179	186
200	HA4D、R	274	294	304	324	344	354	444	464	474	314	334	344
	VP5	306	326	336	356	376	386	476	496	506	346	366	376
	EIL20	234	254	264	284	304	314	404	424	434	274	294	304
	M8620+L8220	274	294	304	324	344	354	444	464	474	314	334	344
250	HA5YD、R	730	790	—	900	960	—	1030	1145	—	—	—	—
	VP5	630	690	—	800	860	—	930	1045	—	—	—	—
	VP6	680	740	—	750	810	—	880	995	—	—	—	—
	EIL25	560	615	—	725	785	—	805	920	—	—	—	—
	M8620+L8230	610	670	—	780	840	—	910	1025	—	—	—	—
300	HA5YD、R	870	940	—	1000	1070	—	1070	1140	—	—	—	—
	VP5	770	840	—	900	970	—	970	1040	—	—	—	—
	VP6	820	890	—	950	1020	—	1020	1090	—	—	—	—
	EIL25	695	765	—	825	895	—	895	970	—	—	—	—
	M8620+L8230	730	800	—	860	1030	—	950	1020	—	—	—	—
350	VP6	1020	1120	—	1290	1390	—	1490	1590	—	—	—	—
	VP7	1170	1270	—	1440	1540	—	1640	1740	—	—	—	—
	M8630+L8240	970	1070	—	1270	1340	—	1440	1540	—	—	—	—