



## HAC 笼式角型调节阀

**HAC** 笼式角型调节阀是一种压力平衡式的调节阀。阀体结构紧凑，流体通道呈 S 型，还设有一个改善套筒周围流体平衡流动的导流翼，使其压降损失小，流量大，可调范围广，流量特性精度高，符合 IEC60534-2-1-2011 标准。调节阀动态稳定性好，噪音低，空化腐蚀小。调节阀泄漏量符合 ANSI FCI 70-2-2006 标准。调节阀配用多弹簧薄膜或气缸执行机构，其结构紧凑，输出力大。

**HAC** 型调节阀适用于控制各种高温、低温的高压流体。

产品符合 GB/T4213-2008 标准

## Balance Cage Guided Angle Valve

**HAC** Cage Guided Angle Valve is a kind of improved pressure balanced valve. The valve with a compact structure, S type flow way and a guide wing that improved the fluid balance around the cage makes the low pressure loss, large flow, wide adjustable range and high-precision flow characteristic are available. The design of valve is in compliance with IEC60534-2-1-2011. This valve represents dynamic stability, low noise and small cavitation corrosion. The leakage rate accords 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. The leakage rate accords 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.

The Model HAC Angle Valve is suitable for controlling variety of high pressure fluids under high temperature or low temperature.

This product complies with the GB/T4213-2008 standards

## 标准规格 STANDARD SPECIFICATION

### 阀体 BODY

形式 Type	角型双座铸造球型阀 Angle, double seated, cast globe valve
公称通径 Normal size	40、50、65、80、100、150、200mm
公称压力 Pressure rating	ANSI Class 125, 150, 300, 600; JIS 10K, 20K, 30K, 40K; PN 1.6, 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 (65~200mm)
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, Ti 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 (P) Plain type : -17~+230°C 伸长 I 型 (EI) Extension Type I: -45~-17°C and +230~+566°C

	伸长 II 型 (EII) Extension Type II: $-100\sim-45^{\circ}\text{C}$ 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.
垫片 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	压力平衡型 Pressure-balanced type
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	<p>大容量流量特性, 参见图 4-1</p> <ul style="list-style-type: none"> <li>● 金属阀座 等百分比特性 (%C) 和线性特性 (LC)</li> <li>● 软阀座 等百分比特性 (%T) 和线性特性 (LT)</li> </ul> <p>High-capacity flow characteristics, see Fig.4-1</p> <ul style="list-style-type: none"> <li>● Metal seat: Equal percentage (%C) and Linear (LC)</li> <li>● Soft seat: Equal percentage (%T) and Linear (LT)</li> </ul> <p>高精度流量特性, 参见图 4-2</p> <ul style="list-style-type: none"> <li>● 金属阀座 等百分比特性 (%CF) 和线性特性 (LCF)</li> <li>● 软阀座 等百分比特性 (%TF) 和线性特性 (LTF)</li> </ul> <p>High-precision flow characteristics, see Fig.4-2</p> <ul style="list-style-type: none"> <li>● Metal seat: Equal percentage (%CF) and Linear (LCF)</li> <li>● Soft seat: Equal percentage (%TF) and Linear (LTF)</li> </ul> <p>注: 关于司太莱堆焊的适用范围, 请参见图 1</p> <p>Note: For the applicable ranges for soft seat, see Fig.1</p>

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 多弹簧型 Multi-Spring type	VA6R 单作用 Single acting	EIL	M8 系列
用途 Purpose	调节 Modulation	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) 140 (20~100) kPa 160 (20~100) kPa 280 (80~240) kPa 400 (80~240) kPa	供气压力 Air supply 400~700kPa	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 (VA6R)	配线: PG13.5 Wiring:PG13.5	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) ≤3%FS (不带定位器) ≤1%FS (With positioner) ≤3%FS (Without positioner)	≤1%FS (带定位器) ≤3%FS (不带定位器) ≤1%FS (With positioner) ≤3%FS (Without positioner)	≤1%FS	≤1%FS
基本误差 Limit of intrinsic error	≤±1%FS (带定位器) ≤±5%FS (不带定位器) ≤ ±1%FS ( With positioner) ≤ ±5%FS ( Without positioner)	≤±1%FS (带定位器) ≤±5%FS (不带定位器) ≤ ±1%FS ( With positioner) ≤ ±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 Travel	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	50 : 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			
	处理 treatment	HT			
阀芯 Plug	材质 material	SUS410			
	处理 treatment	HT			
阀座 Valve seat	材质 material	SUS316+R.TFE	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	Rated Cv × 0.0001%	Class IV	Class IV
使用温度 Operating Temp. °C	SCPH2/WCB Body	-17~230	-17~270	-17~270	-17~425
	SCPH21/WC6 Body	-17~230	-17~270	-17~270	-17~566
	SCPL1/LCB Body	-45~230	-45~270	-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	Inconel 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	Rated Cv × 0.0001%	Class IV	Class IV
使用温度 Operating Temp. °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 RATING

表 2-1 Table 2-1 ANSI

UNIT:MPa

温度 Temp.℃	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.℃	PN16	PN40	PN63	PN100	温度 Temp.℃	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

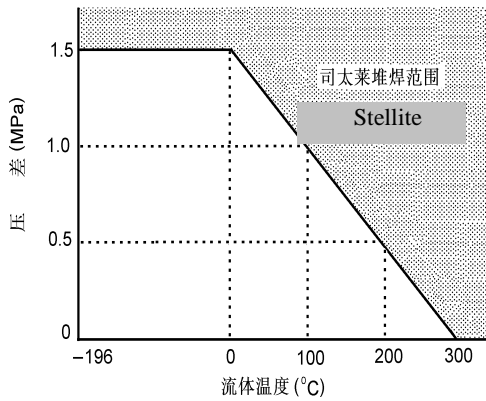


图 1-1 司太莱的工作范围  
Fig.1-1 Temperature/normal differential pressure ranges requiring Stellite

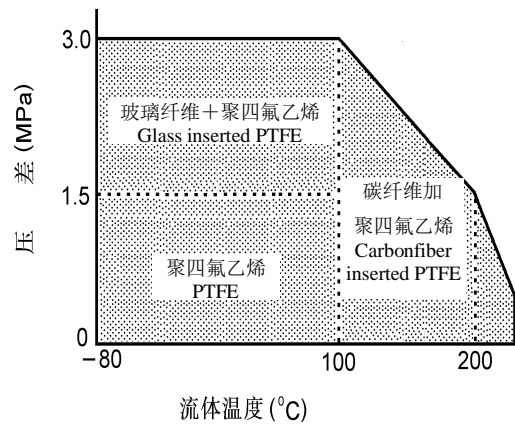


图 1-2 软阀座的工作温度和压差的范围  
Fig.1-2 Temperature and maximum differential pressure range for soft seat

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 软阀座及填料使用温度·压力范围

Fig.2 SOFT SEAT MATERIAL & PACKING PRESSURE · TEMPERATURE RATINGS

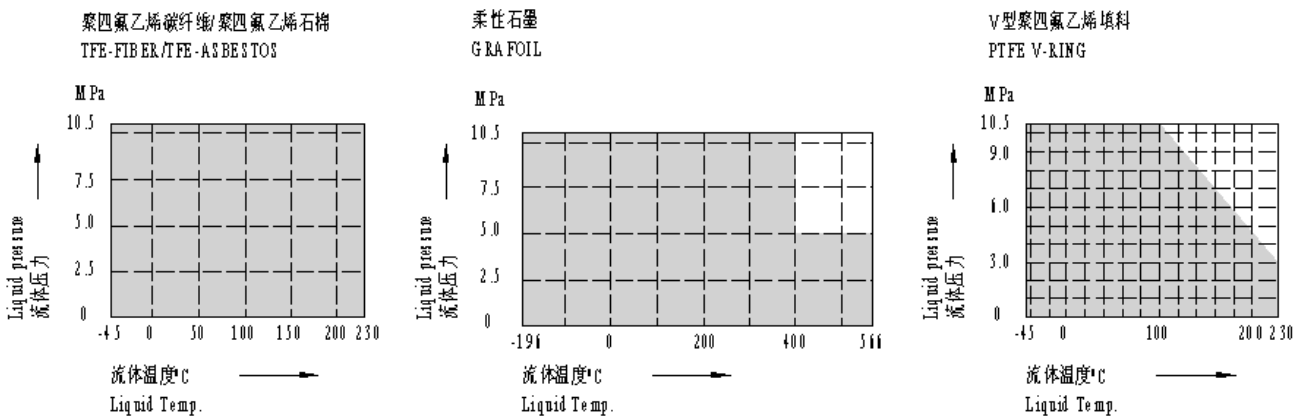


图 3 阀体部件结构 Fig.3 BODY SECTION

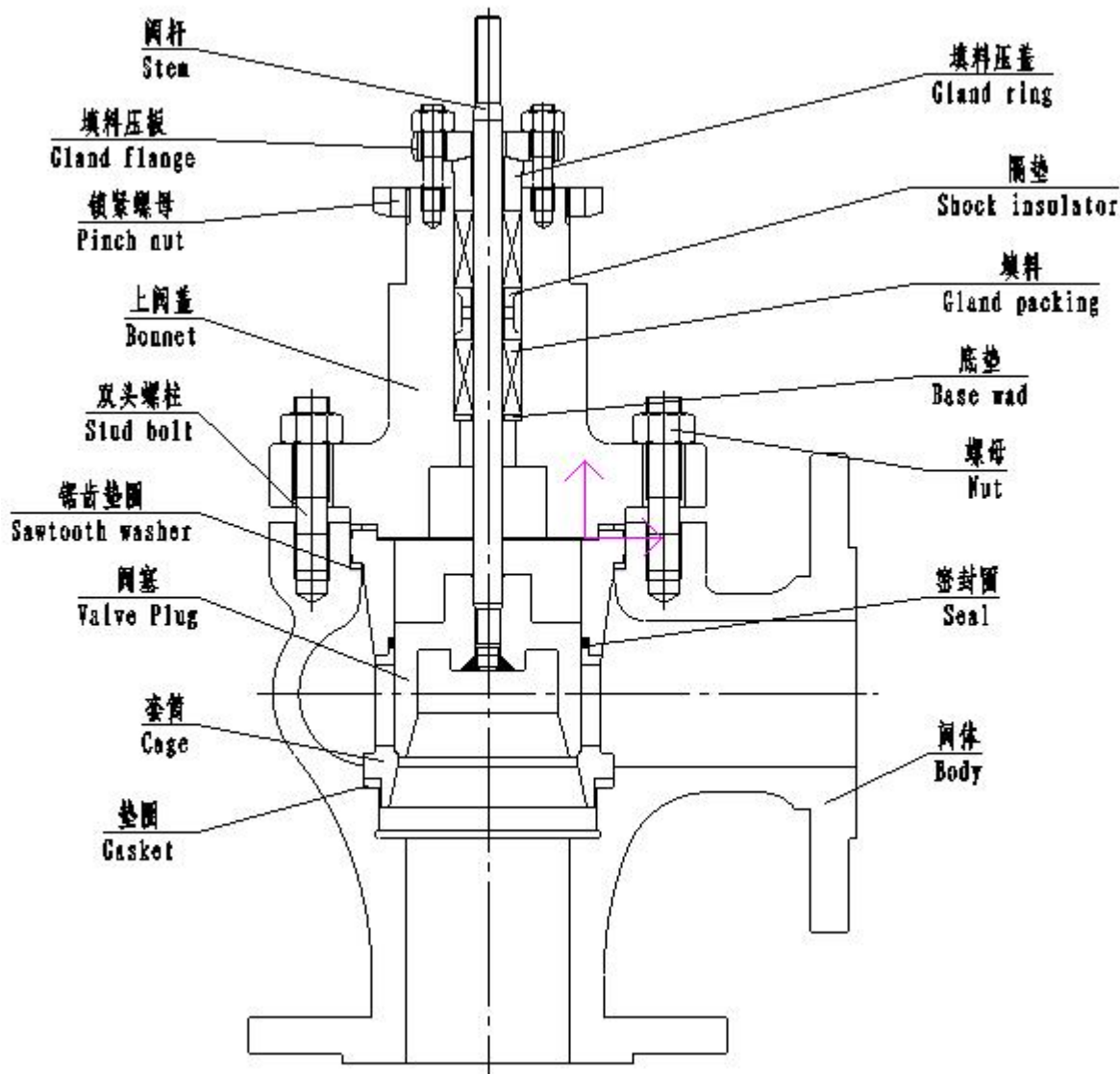


表 3 CV 值和行程

Table 3 Rated Cv value and Travel

表 3-1 大容量阀芯 (%V,LV,%T,LT)

Table 3-1 High-capacity flow characteristics valve plug (%V,LV,%T,LT)

公称通径 Nominal size		40	50	65	80	100	150	200
阀座直径 Seat size		40	50	65	80	100	150	200
额定 Cv 值 Rated Cv value	等百分比特性 (%C、%T) Equal percentage	36	60	100	140	220	420	820
	线性特性 (LC、LT) Linear	40	75	110	150	240	435	850
额定行程(mm) Rated Travel		25		38			50	75



表 3-2 高精度阀芯 (%VF,LVF,%TF,LTF)

Table 3-2 High-precision flow characteristics valve plug (%VF,LVF,%TF,LTF)

公称通径 Nominal size	40			50			65			80			100			150			200			
阀座直径 Seat size	25	32	40	32	40	50	40	50	65	50	65	80	65	80	100	100	125	150	125	150	200	
额定 CV 值 Rated Cv value	11	17	24	17	24	44	24	44	68	44	68	99	68	99	175	175	275	360	275	360	650	
等百分比 Equal percentage 线性 Linear	金属阀座 Metal seat	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	软阀座 Soft seat	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
额定行程(mm) Rated Travel	25						38						50			75						

注: 1. 符号○和△表示阀的规格范围。  
2. 符号△表示流量特性符合 IEC60534-2-1-2011 标准。  
Note: 1. ○ and △ denote production ranges.  
2. △ denotes the flow characteristics complying with the IEC60534-2-1-2011 stadards.

图 4 典型流量特性曲线

Fig.4 TYPICAL FLOW CHARACTERISTICS

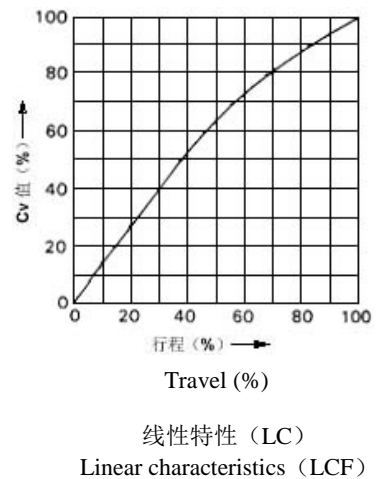
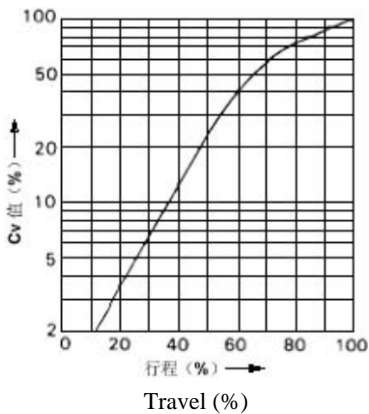
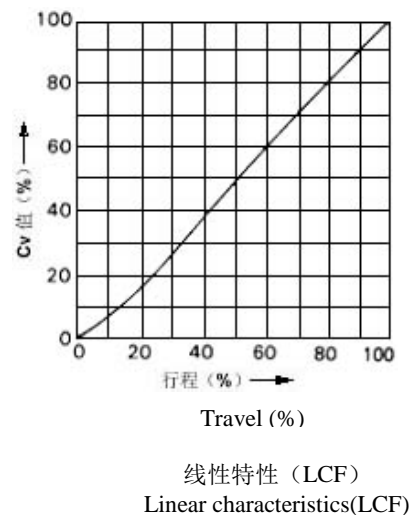
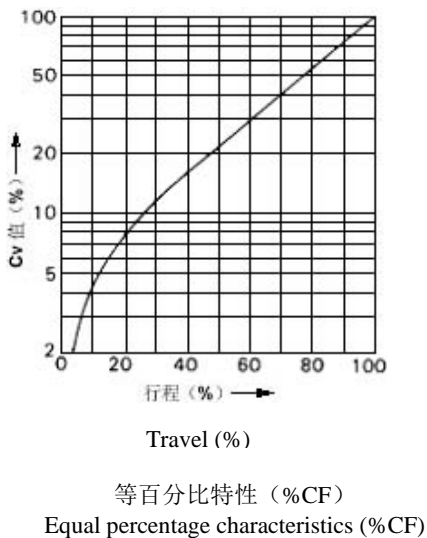
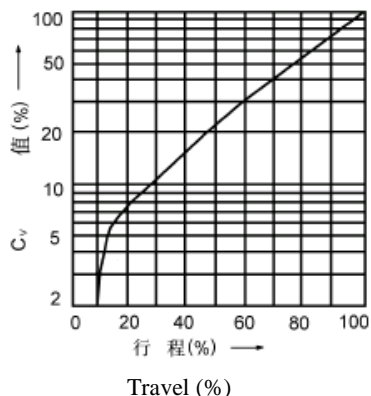
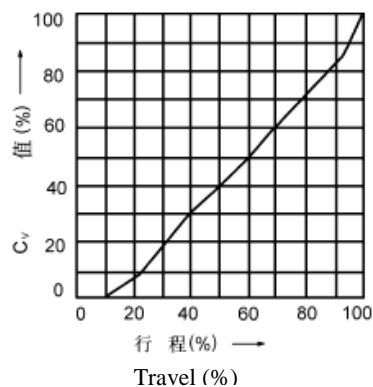


图 4-1 大容量流量特性曲线  
Fig.4-1 High-capacity flow characteristics





等百分比特性 (%TF 软阀座)  
Equal percentage characteristics (%TF soft seat)



线性特性 (LTF 软阀座)  
Linear characteristics(LTF soft seat)

图 4-2 高精度流量特性曲线  
Fig.4-2 High-precision flow characteristics

表 4 允许压差

Table 4 ALLOWABLE PRESSURE DROPS

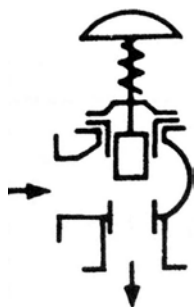
表 4-1 薄膜式执行机构 (HA)

Table 4-1 DIAPHRAGM ACTUATOR (HA)

表 4-1-1 气—关式阀

Table 4-1-1 Air-to-close

100kPa

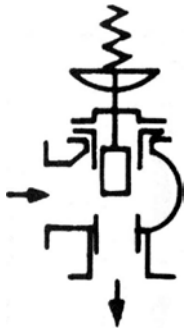


执行机构 Actuator	供气压力 Air supply	弹簧范围 Spring range	阀座型式 Seat type	平衡密封环 Balance Seal	允许压差 Allowable pressure drops								
					公称通径 Nominal size								
					40	50	65	80	100	125	150	200	
HA2D	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	100	100	—	—	—	—	—	—	—
				Grafoil	—	—	—	—	—	—	—	—	—
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	—	—	—	—	—
HA3D	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	100	100	100	100	100	—	—	—	
				Grafoil	83.3	83.3	—	—	—	—	—	—	
			软密封 Soft seal	SUS316/RTFE	30	30	—	—	—	—	—	—	
HA4D	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	100	100	100	100	100	80	
				Inconel 750	—	—	83.3	83.3	83.3	—	—	—	
			软密封 Soft seal	SUS316/RTFE	—	—	30	30	30	30	30	—	
HA4X2D	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	—	—	—	—	—	100	
				Inconel 750	—	—	—	—	—	83.3	83.3	83.3	
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	—	—	—	30	
HA5YD	4.0	1.06~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	—	—	—	—	—	100	
				SUS316/RTFE	—	—	—	—	—	—	—	30	
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	—	—	—	30	

表 4-1-2 气—开式阀

Table 4-1-2 Air-to-open

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								
					40	50	65	80	100	125	150	200	
HA2R	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	88.2	62.7	—	—	—	—	—	—	—
				Grafoil	—	—	—	—	—	—	—	—	
			软密封 Soft seal	SUS316/RTFE	30	30	—	—	—	—	—	—	
HA3R	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	100	100	100	90	60	—	—	—	
				Grafoil	83.3	83.3	—	—	—	—	—	—	
			软密封 Soft seal	SUS316/RTFE	30	30	—	—	—	—	—	—	
HA4R	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	100	100	100	100	76.4	40	
				Inconel 750	—	—	83.3	83.3	83.3	—	—	—	
			软密封 Soft seal	SUS316/RTFE	—	—	30	30	30	30	30	—	
HA4X2R	4.0	0.8~2.4	金属密封 Metal seal	SUS316/RTFE	—	—	—	—	—	—	—	100	
				Inconel 750	—	—	—	—	—	83.3	83.3	83.3	
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	—	—	—	30	
HA5YR	5.0	2.12~4.8	金属密封 Metal seal	SUS316/RTFE	—	—	—	—	—	—	—	100	
			软密封 Soft seal	SUS316/RTFE	—	—	—	—	—	—	—	30	

注：1. 最大允许压差不准超过 ANSI B16.43-1981 或 JIS B2201-1984 标准规定的最大工作压力。  
2. 同一规格的上方数字表示阀常开允许压差，下方数字表示阀全关时的允许压差。  
3. 灰框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 B16.43-1981 or JIS B2201-1984.  
2. The upper figures denote the operating allowable pressure drops; the lower denote the allowable pressure drops at full closure.  
3. The figures in gray denote the standard actuator specifications.

表 4-2 气缸式执行机构 (VP)

Table 4-2 CYLINDER TYPE ACTUATOR (VP)

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 pressure drops			
				公称通径 Nominal size			
				100	125	150	200
VP4	5	金属密封 Metal seal	SUS316/RTFE	100	100	100	—
			Inconel 750	100	100	100	—
		软密封 Soft seal	SUS316/RTFE	30	30	30	—
VP5	5	金属密封 Metal seal	SUS316/RTFE	—	—	—	100
			Inconel 750	—	—	—	100
		软密封 Soft seal	SUS316/RTFE	—	—	—	30

注：最大允许压差不准超过 ANSI B16.43-1981 或 JIS B2201-1984 标准规定的最大工作压力。

Note: Take care not to cause the allowable maximum pressure drops to exceed the maximum operating pressure designated by ANSI B16.43-1981 or JIS B2201-1984.

表 4-3 电子式执行机构 (EIL) 及电动式执行机构 (M8)

Table 4-3 ELECTRONIC ACTUATOR (EIL) & ELECTRIC MOTOR ACTUATOR (M8) 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
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+L8210	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+L8220	金属阀座 Metal seat	SUS316/RTFE	—	—	—	—	—	—	—	100
		Inconel 750	—	—	—	—	—	—	83.3	83.3
	软阀座 Soft seat	SUS316/RTFE	—	—	—	—	—	—	—	30

注: 1. 以上允许压差为阀全关时的允许压差。  
2. 灰框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

公称通径 Nominal size	A/A1							
	ANSI 125 FF ANSI 150 RF JIS 10K FF RF PN1.6 MFM	JIS 16K RF	ANSI 300 RF JIS 20K RF JIS 30K RF PN4.0 MFM	ANSI 600 RF JIS 40K RF PN6.4 MFM	JIS 16K TG	JIS 20K TG	JIS 30K TG	JIS 40K TG
40	111	116	118	126	118	118	124	126
50	127	132	134	143	133	134	138	143
65	138	144	146	156	145	146	152	156
80	149	157	159	169	155	159	163	169
100	176	182	184	197	180	184	190	197
150	226	233	237	254	238	237	243	254
200	272	280	284	305	285	284	290	305

公称 通径 Nominal size	A/A1						
	ANSI 150 RJ	ANSI 300 RJ	ANSI 600 RJ	ANSI 300 TG	ANSI 600 TG	ANSI 150 SW、BW	ANSI 150、600 SW、BW
40	118	124	126	122	124	126	126
50	134	142	145	138	142	143	143
65	145	154	157	151	154	156	156
80	156	167	170	164	167	169	169
100	183	192	199	189	196	197	197
150	232	245	256	242	253	237	254
200	278	292	307	289	303	284	305

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

Table 5-2 Other dimensions

表 5-2-1 外形尺寸

Table 5-2-1 Other dimensions

公称 通径 Nominal size	执行机构 Actuator	H			ΦB/B	B1	B2	B3	B4
		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					
		40	HA2D、R	555					
40	HA3D、R	680	850	1000	363	—	—	—	—
	EIL04	770	940	1050	172	—	258	—	—
	50	HA2D、R	550	720	830	281	—	—	—
50	HA3D、R	675	845	955	363	—	—	—	—
	EIL04	765	940	1045	172	—	258	—	—
	65	HA2D、R	625	795/805	930	281	—	—	—
65	HA3D、R	705	885/895	1005	363	—	—	—	—
	HA4D、R	890	1070/1080	1185	520	—	—	—	—
	EIL08	890	1070	1195	229	—	338	—	—
	M8610+L8210	945	1125	1245	—	285	346	353	230
80	HA2D、R	660	835/845	980	281	—	—	—	—
	HA3D、R	715	900/910	1035	363	—	—	—	—
	HA4D、R	900	1085/1095	1215	520	—	—	—	—
	EIL08	905	1085	1205	229	—	338	—	—
	M8610+L8210	955	1140	1275	—	285	346	253	230
100	HA2D、R	700	900/970	1040	281	—	—	—	—
	HA3D、R	755	965/1005	1090	363	—	—	—	—
	HA4D、R	930	1150/1160	1290	520	—	—	—	—
	VA6R	1470	1690	1830	480	—	—	—	—
	VP5	1175	1395	1535	382	—	—	—	—
	EIL08	940	1150	1275	229	—	338	—	—
	M8610+L8210	995	1205	1330	—	285	346	253	230
125	HA3D、R	825	1085/1105	1285	363	—	—	—	—
	HA4D、R	995	1255/1290	1465	520	—	—	—	—
	VA6R	1535	1795	2010	480	—	—	—	—
	VP5	1240	1500	1715	382	—	—	—	—
	VP6	1355	1615	1830	480	—	—	—	—
	VP7	1355	1615	1830	580	—	—	—	—
	EIL08	1035	1295	1495	229	—	338	—	—

	M8620+L8220	1155	1415	1630	—	313	350	253	230
150	HA3D、R	825	1085/1105	1285	363	—	—	—	—
	HA4D、R	995	1255/1290	1465	520	—	—	—	—
	VA6R	1535	1795	2010	480	—	—	—	—
	VP5	1240	1500	1715	382	—	—	—	—
	VP6	1355	1615	1830	480	—	—	—	—
	VP7	1355	1615	1830	580	—	—	—	—
	EIL08	1035	1295	1495	229	—	338	—	—
	M8620+L8220	1155	1415	1630	—	313	350	253	230
200	HA4D、R	1135	1395	1640	520	—	—	—	—
	VP5	1405	1670	2035	382	—	—	—	—
	VP6	1515	1780	2150	480	—	—	—	—
	VP7	1515	1780	2150	580	—	—	—	—
	M8620+L8230	1485	1745	1990	—	313	350	253	230

表 5-2-2 外形尺寸

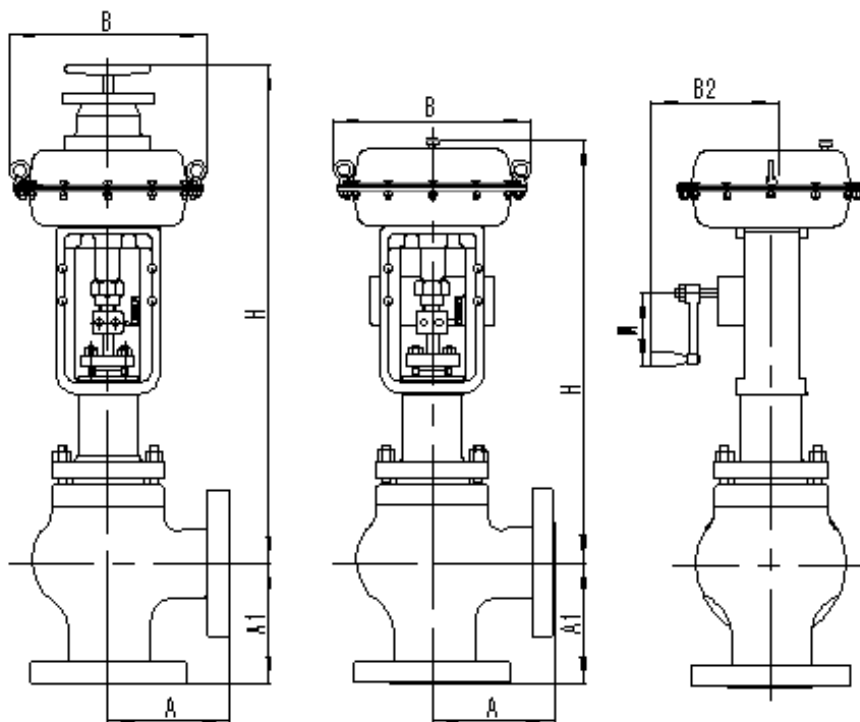
Table 5-2-2 Other dimensions

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 I) Extension bonnet Type I	伸长 II 型(E II) Extension bonnet Type II	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		
40	HA2D、R	555	725	835	811	986	1096	273.5	175
	HA3D、R	680	850	1000	967	1137	1287	278.5	175
50	HA2D、R	550	720	830	811	981	1091	273.5	175
	HA3D、R	675	845	955	962	1132	1242	278.5	175
65	HA2D、R	625	805	930	886	1066	1191	273.5	175
	HA3D、R	705	895	1005	992	1182	1292	278.5	175
	HA4D、R	890	1080	1185	1288	1478	1583	303	φ 320
80	HA2D、R	660	845	980	921	1106	1241	273.5	175
	HA3D、R	715	910	1035	1002	1197	1322	278.5	175
	HA4D、R	900	1095	1215	1298	1493	1613	303	φ 320
100	HA2D、R	700	970	1040	961	1231	1301	273.5	175
	HA3D、R	755	1005	1090	1042	1292	1377	278.5	175
	HA4D、R	930	1160	1290	1328	1558	1688	303	φ 320
125	HA3D、R	825	1105	1285	1112	1392	1572	278.5	175
	HA4D、R	995	1290	1465	1393	1688	1863	303	φ 320
	VA6R	1660	1920	2135	—	—	—	384	φ 380
	VP5	1350	1610	1825	—	—	—	324	φ 380
	VP6	1480	1740	1955	—	—	—	384	φ 380
	VP7	1480	1740	1955	—	—	—	384	φ 380
150	HA3D、R	825	1105	1285	1112	1392	1572	278.5	175
	HA4D、R	995	1290	1465	1393	1688	1863	303	φ 320
	VA6R	1660	1920	2135	—	—	—	384	φ 380
	VP5	1350	1610	1825	—	—	—	324	φ 380
	VP6	1480	1740	1955	—	—	—	384	φ 380
	VP7	1480	1740	1955	—	—	—	384	φ 380
200	HA4D、R	1135	1395	1640	1533	1793	2038	303	φ 320
	VP5	1515	1780	2145	—	—	—	324	φ 380
	VP6	1640	1905	2275	—	—	—	384	φ 380
	VP7	1640	1905	2275	—	—	—	384	φ 380

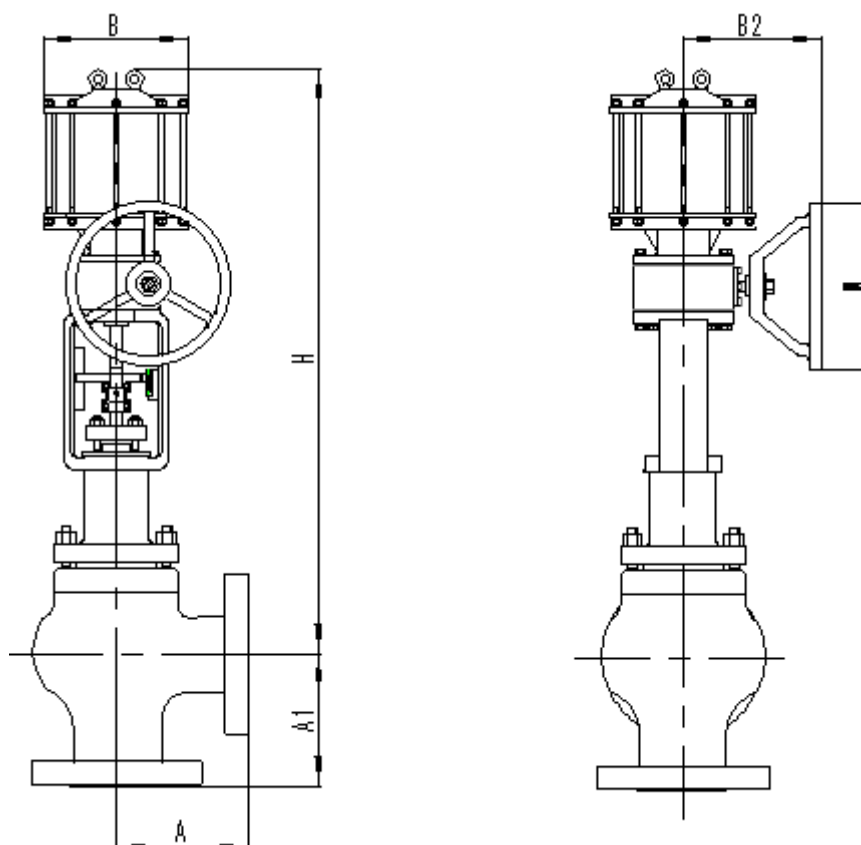
注：表 5-2-2 上 H 栏尺寸是气动执行机构(带手轮)调节阀高度。

Note: The size of H in Table 5-2-2 shows the height of the valve and pneumatic actuator (with handwheel) combined



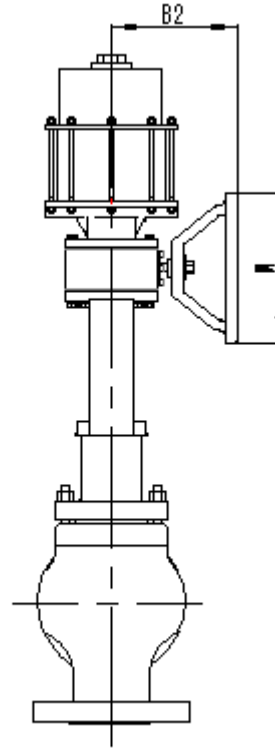
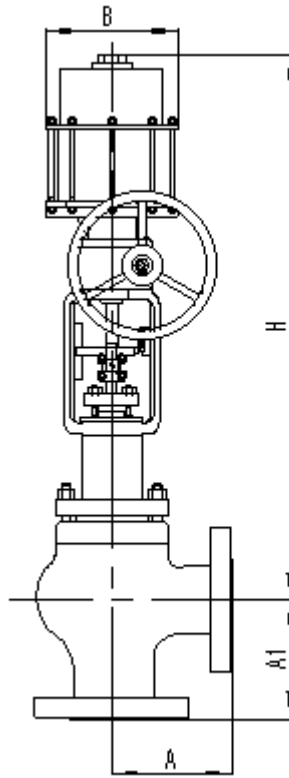
配 HA 执行机构

With tybe HA

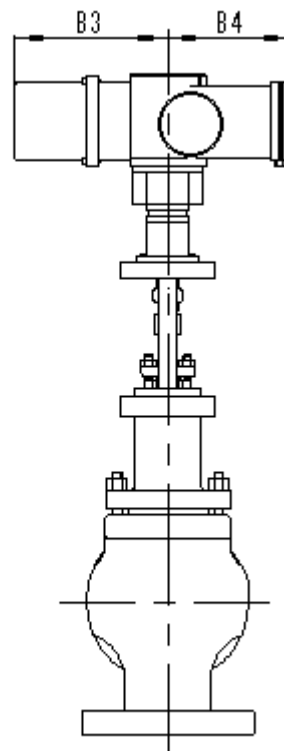
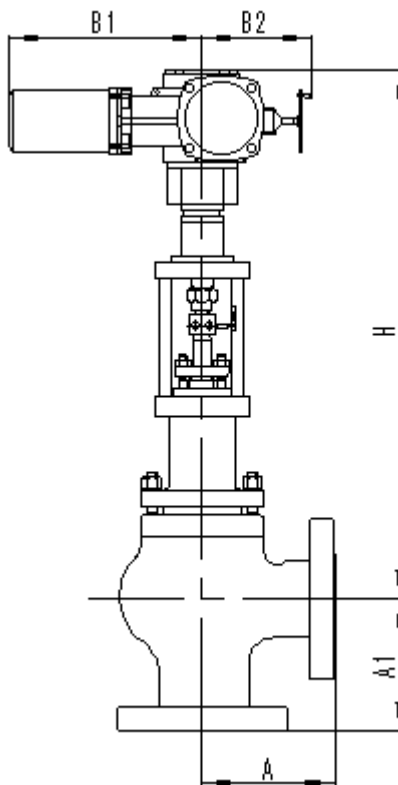


配 VP 执行机构

With type VP

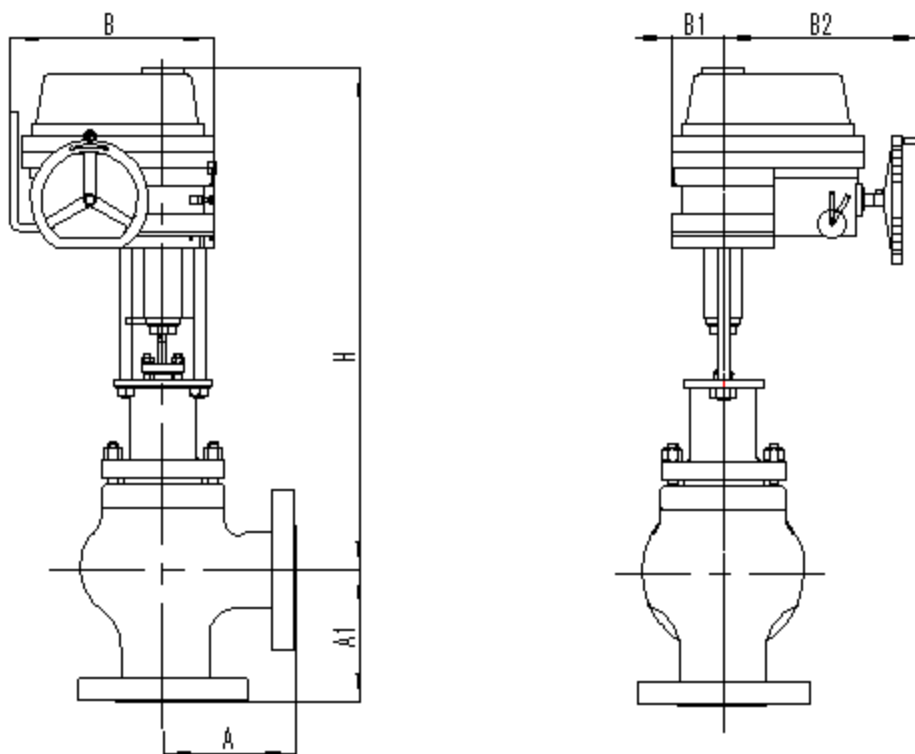


配 VA 执行机构  
With type VA



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

kg

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
	HA3D、R	43	46	49	48	51	54	56	59	62	48	51	54
	EIL04	23	26	29	27	31	34	36	39	42	28	31	33
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	23	26	29	27	31	34	36	39	42	28	31	33
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	29	32	35	33	37	40	42	45	48	34	51	54
65	HA2D、R	43	47	51	48	52	56	65	69	73	48	52	56
	HA3D、R	55	59	63	60	64	68	77	81	85	60	64	68
	HA4D、R	86	90	94	91	95	99	108	112	116	91	95	99
	EIL08	39	43	47	44	48	52	61	65	69	44	48	52
	M8610+L8210	61	65	69	66	70	74	83	87	91	66	70	73

80	HA2D、R	53	59	65	63	69	75	85	91	97	63	69	75
	HA3D、R	65	71	77	75	81	87	97	103	109	75	81	87
	HA4D、R	96	102	108	106	112	118	128	134	140	106	112	118
	EIL08	49	55	51	59	65	61	81	87	93	59	65	61
	M8610+L8210	71	77	83	81	75	81	103	109	115	81	87	93
100	HA2D、R	63	73	78	78	88	93	113	123	128	75	85	90
	HA3D、R	75	85	90	90	100	105	125	135	140	87	97	102
	HA4D、R	106	116	121	121	131	136	156	166	171	118	128	133
	VA6R	248	258	263	263	273	278	298	308	313	260	270	275
	VP5	123	133	138	138	148	153	173	183	188	135	145	150
	EIL08	59	69	74	74	84	89	109	119	124	71	81	86
	M8610+L8210	81	91	96	96	106	111	131	141	146	93	103	108
125	HA3D、R	143	172	179	187	202	209	145	252	259	177	192	199
	HA4D、R	175	203	210	218	233	240	181	283	290	208	223	230
	VA6R	295	345	352	360	375	382	313	425	432	350	365	372
	VP5	205	220	227	235	250	257	188	300	307	225	240	247
	VP6	280	295	302	310	325	332	263	375	382	300	315	322
	VP7	390	405	412	420	435	442	373	485	492	410	425	432
	EIL08	127	156	163	171	186	193	129	236	243	161	176	183
	M8620+L8220	149	178	185	193	208	215	151	258	265	183	198	205
150	HA3D、R	157	172	179	187	202	209	237	252	259	177	192	199
	HA4D、R	188	203	210	218	233	240	268	283	290	208	223	230
	VA6R	330	345	352	360	375	382	410	425	432	350	365	372
	VP5	205	220	227	235	250	257	285	300	307	225	240	247
	VP6	280	295	302	310	325	332	360	375	382	300	315	322
	VP7	390	405	412	420	435	442	470	485	492	410	425	432
	EIL08	141	156	163	171	186	193	221	236	243	161	176	183
	M8620+L8220	163	178	185	193	208	215	243	258	265	183	198	205
200	HA4D、R	268	288	298	318	338	348	438	458	468	308	328	338
	VP5	285	305	315	335	355	365	455	475	485	325	345	355
	VP6	360	380	390	410	430	440	530	550	560	400	420	430
	VP7	470	490	500	520	540	550	640	660	670	510	530	540
	M8620+L8220	248	268	279	298	318	328	418	438	448	288	308	318