



## HTSJ (B) 保温夹套单座调节阀

J- 阀体半保温;

B- 阀体全保温

**HTSJ (B)** 保温夹套单座调节阀适用于需要保温的场合。当工艺介质的结晶温度低于环境温度或流体温度降低, 造成粘度增加或流体出现凝固时, 这时在阀体和上阀盖处增设蒸汽保温夹套装置, 使工艺介质满足过程过程控制的需要。

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执行机构, 其结构紧凑, 输出力大。

产品符合 GB/T4213-2008 标准。

## Steam Jacket Single Seated Control Valves

J-Segmental Steam Jacket for Valve Body;

B-Full Steam Jacket for Valve Body

**HTSJ(B)**Control Valves are applicable for the service of heat preservation. When the crystal temperature of fluid is lower than the ambient temperature or the fluid temperature decreases, causing the fluid viscosity increases or when the solidification occurs, the steam jacket is added to the valve body and bonnet to meet the needs of process control.

The leakage complies with the ANSI FCI 70-2-2006 standards. The compact size and large output force can be 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	40、50、65、80、100、150mm
公称压力 Pressure rating	ANSI Class 150, 300; JIS 10K, 16K, 20K; PN 1.6, 4.0 MPa *
连接型式 End connections	法兰型 Flanged: FF、RF、RJ、TG、MFM
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	伸长 I 型 (EI) Extension Type I: -17~+566℃
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	单座柱塞型 Single seated, Contoured 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	等百分比特性（%CF）和线性特性（LCF），参见图4 Equal percentage（%CF）and Linear（LCF），see Fig.4 Cv值从0.04~14的高精度流量特性符合IEC534-2-1976 High-precision flow characteristics（Cv value: 0.04~14）conform to IEC534-2-1976 standards.

### 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
	HA	VA6	VP	EIL	M8系列
规格 Specification	多弹簧型 Multi-Spring type	单作用 Single acting	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) 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: G3/8 (VA6、VP5、VP6) ; G1/2 (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

<b>回差</b> <b>Hysteresis error</b>	$\leq 1\%FS$ (带定位器) $\leq 3\%FS$ (不带定位器) $\leq 5\%FS$ (配 HA1 型) $\leq 1\%FS$ ( With positioner) $\leq 3\%FS$ ( Without positioner) $\leq 5\%FS$ ( With type HA1)	$\leq 1\%FS$ (带定位器) $\leq 3\%FS$ (不带定位器) $\leq 5\%FS$ (配 HA1 型) $\leq 1\%FS$ ( With positioner) $\leq 3\%FS$ ( Without positioner) $\leq 5\%FS$ ( With type HA1)	$\leq 1\%FS$	$\leq 1\%FS$
<b>基本误差</b> <b>Limit of intrinsic error</b>	$\leq \pm 1\%FS$ (带定位器) $\leq \pm 5\%FS$ (不带定位器) $\leq \pm 2\%FS$ (配 HA1 型) $\leq \pm 1\%FS$ ( With positioner) $\leq \pm 5\%FS$ ( Without positioner) $\leq \pm 2\%FS$ ( With type HA1)	$\leq \pm 1\%FS$ (带定位器) $\leq \pm 5\%FS$ (不带定位器) $\leq \pm 2\%FS$ (配 HA1 型) $\leq \pm 1\%FS$ ( With positioner) $\leq \pm 5\%FS$ ( Without positioner) $\leq \pm 2\%FS$ ( With type HA1)	$\leq \pm 1\%FS$	$\leq \pm 1\%FS$
<b>环境温度</b> <b>Ambient temperature</b>	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℃
<b>油漆颜色</b> <b>Painting</b>	蓝色 Munsell 色标 10B5/10 Blue (Munsell color 10B5/10)	蓝色 Munsell 色标 10B5/10 Blue (Munsell color 10B5/10)		
<b>附件</b> <b>Accessories</b>	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, Handwheel 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
配管安装示意图 Actuator orientation	请参见图 3 See Fig.3

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		
阀芯 Plug	材质 material	SUS304/316	SUS304/316	SUS304/316
	处理 treatment	—	R.TFE	SS/SF
阀座 Seat ring	材质 material	SUS304/316	SUS304/316	SUS304/316
	处理 treatment	—	—	SS/SF
导向套 Guide	材质 material	SUS420	SUS420	SUS420
	处理 treatment	HT	HT	HT
垫圈 Gasket	材质 material	SUS316L	SUS316L	SUS316L
夹套 Steam jacket	材质 material	A3	A3	A3
阀座允许泄漏量 Seat Leakage	ANSI	Class IV	Class VI	Class IV
	Rated Cv×	0.01%	Bubble-tight	0.01%
使用温度 Operating Temp. °C	SCPH2/WCB Body	-17~+350	-17~+350	-17~+350
	SCPH21/WC6 Body	-17~+566		-17~+566

注: 夹套蒸汽压力≤1.0MPa, 温度≤350℃。

Note: The steam pressure of jacket is smaller than 1.0MPa and temperature is smaller than 350℃

表 1-2 阀体材质: 不锈钢

Table 1-2 BODY MATERIAL: STAINLESS STEEL

阀体材质 Body material		SCS13A/CF8,SCS14A/CF8M,SCS16A/CF3M		
阀芯 Plug	材质 material	SUS304/316/316L	SUS304/316	SUS304/316/316L
	处理 treatment	—	R.TFE	SS/SF
阀座 Seat ring	材质 material	SUS304/316/316L	SUS304/316/316L	SUS304/316/316L
	处理 treatment	—	—	SS/SF
导向套 Guide	材质 material	SUS304/316/316L	SUS304/316/316L	SUS304/316/316L
	处理 treatment	ST	R.TFE	ST
垫圈 Gasket	材质 material	SUS316L	SUS316L	SUS316L
夹套 Steam jacket	材质 material	SUS304	SUS304	SUS304
阀座允许泄漏量 Seat Leakage	ANSI	Class IV	Class VI	Class IV
	Rated Cv×	0.01%	Bubble-tight	0.01%
使用温度 Operating Temp. °C		-17~+566	-17~+230	-17~+566

注: 夹套蒸汽压力≤1.0MPa, 温度≤350℃。

Note: The steam pressure of jacket is smaller than 1.0MPa and temperature is smaller than 350℃

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.℃	ANSI150					ANSI300					ANSI600				
	LCB	WCB	WC6	SCS13A	SCS14A	LCB	WCB	WC6	SCS13A	SCS14A	LCB	WCB	WC6	SCS13A	SCS14A
				CF8	CF8M				CF8	CF8M				CF8	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

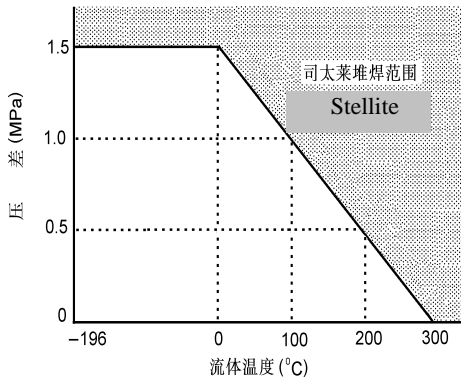


图 1-1 司太莱的工作范围

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

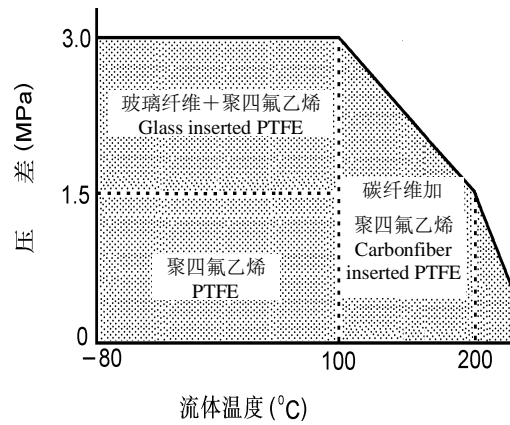


图 1-2 软阀座的工作温度和压差的范围

Fig.1-2 Temperature and maximum differential pressure range for soft seat

- 注: 1. 空化和闪蒸或者水的温度超过 100 °C 热场合, 建议用 9Cr18 硬化不锈钢。  
2. 空化、闪蒸、禁油及常处于关闭状态  
3. 如  $C_v \leq 0.16$ , 阀芯全部堆焊司太莱合金或用 9Cr18 硬化不锈钢。

**Note:** 1.9Cr18 hardened stainless steel is recommended for valves in cavitation/flashing situation or superheated service of water higher than 100°C.

2. Stellite is recommended for the cavitation/flashing, oil prohibitive and valve-close situation.  
3. When  $C_v$  value is 0.16 or lower, Stellite faced valve plug or 9Cr18 hardened stainless steel valve plug are standard.

图 2 填料使用温度·压力范围

Fig.2 PACKING PRESSURE · TEMPERATURE RATINGS

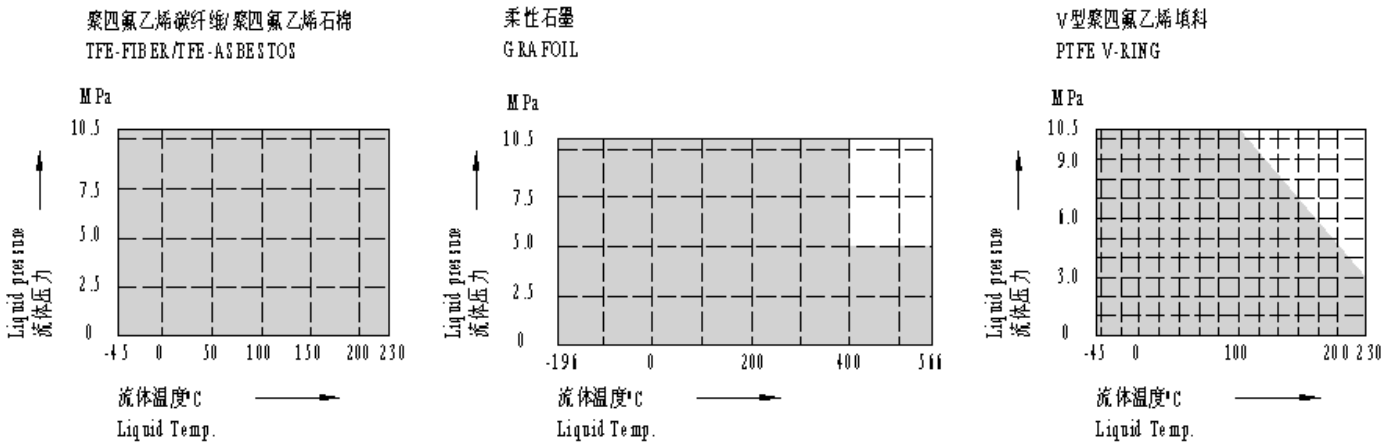


图 3 阀体部件结构 Fig.3 BODY SECTION

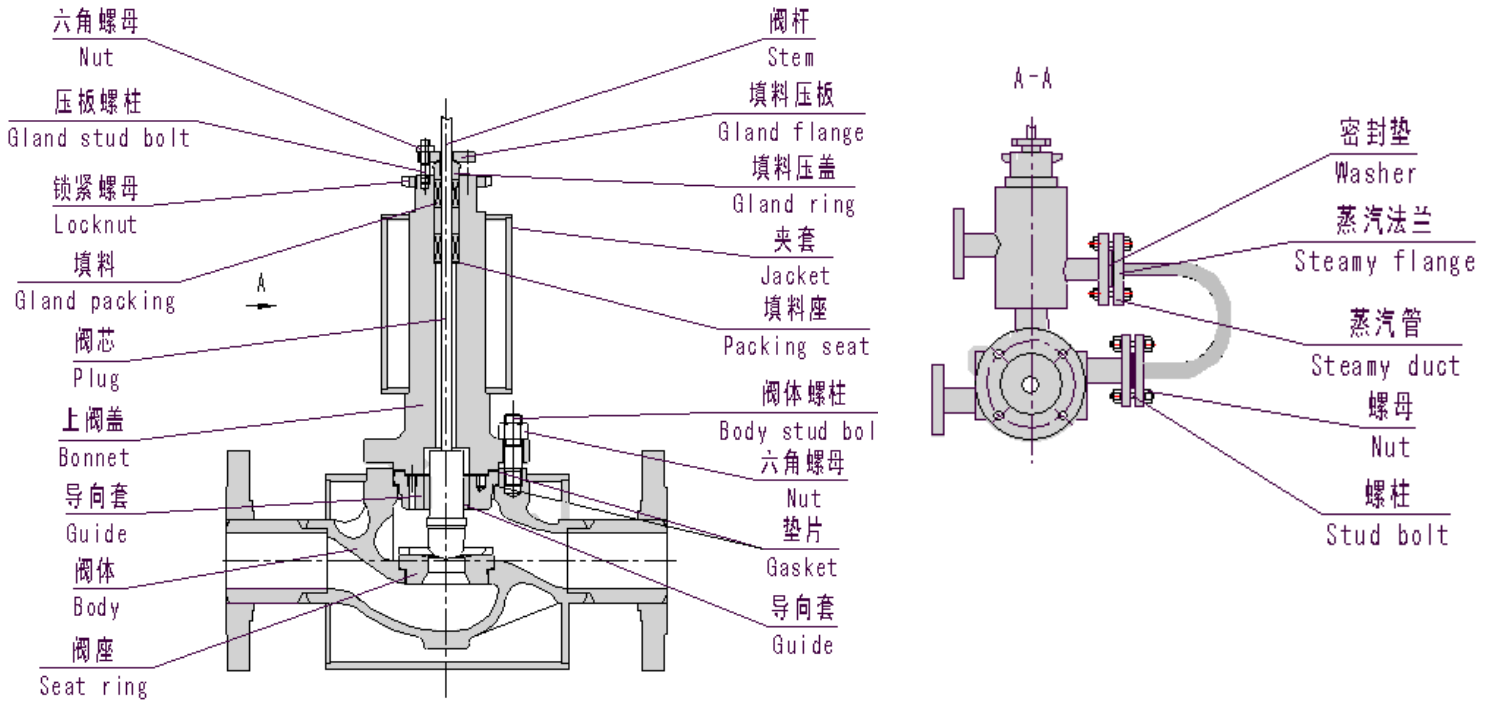


图 3-1 HTSJ 半保温夹套阀

Fig.3-1 HTSJ Segmental Steam Jacket Valve

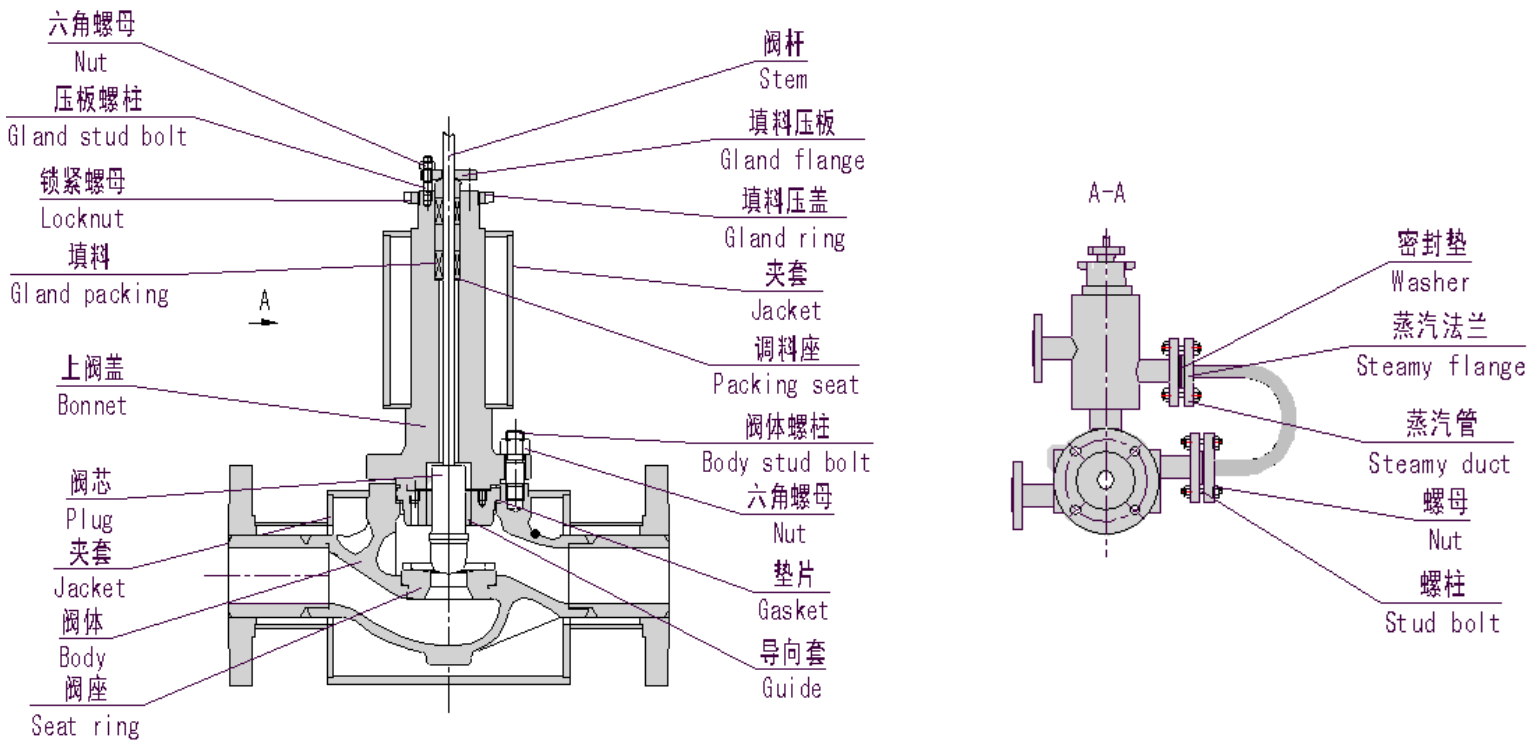


图 3-2 HTSB 半保温夹套阀

Fig.3-2 HTSB Segmental Steam Jacket Valve

表 3 CV 值和行程

Table 3 Rated Cv value and travel

表 3-1 高容量阀芯 (%C,LC,%T,LT)

Table 3-1 High-capacity flow characteristics valve plug (%C,LC)

公称通径 Nominal size	40	50	65	80	100	150
阀座直径 Seat size	40	50	65	80	100	150
额定 Cv 值 Rated Cv value	30	50	85	125	200	420
额定行程 Rated travel	25			38		50

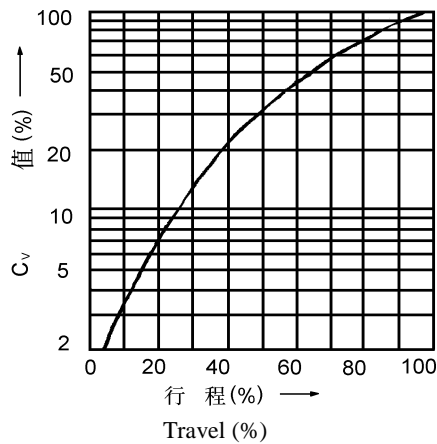
表 3-1 高精度阀芯 (%CF,LCF)

Table 3-1 High-precision flow characteristics valve plug (%C,LC,%T,LT)

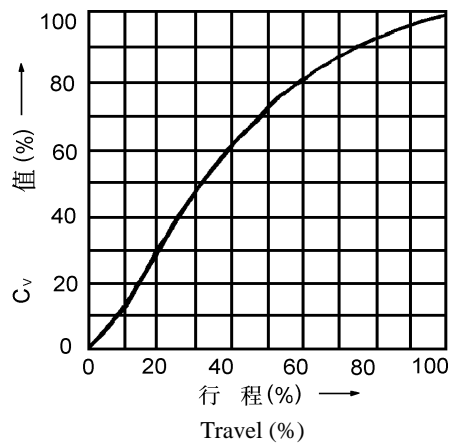
公称通径 Nominal size	40			50			65			80			100			150		
阀座直径 Seat size	25	32	40	32	40	50	40	50	65	50	65	80	65	80	100	100	125	150
额定 Cv 值 Rated Cv value	10	17	24	17	24	44	24	44	68	44	68	99	68	99	175	175	275	360
额定行程 Rated travel	25						38						50					

图 4 典型流量特性曲线

Fig.4 TYPICAL FLOW CHARACTERISTICS



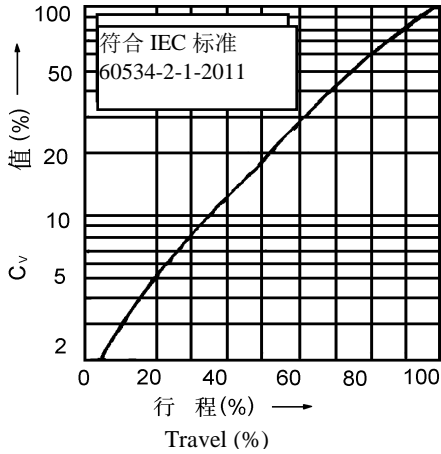
等百分比特性 (%C 金属阀座)  
Equal percentage characteristics (%C metal seat)



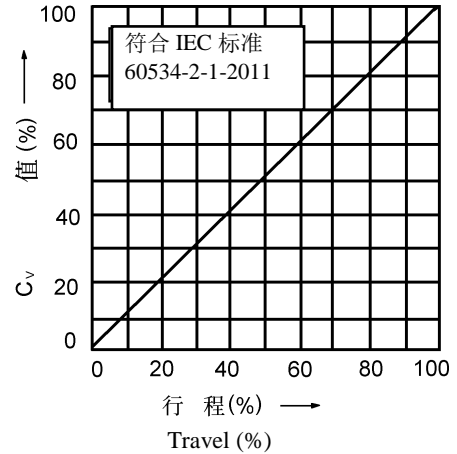
线性特性 (LC 金属阀座)  
Linear characteristics(LC metal seat)

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





等百分比特性 (%CF 金属阀座)  
Equal characteristics (%CF metal seat)



线性特性 (LCF 金属阀座)  
Linear characteristics (LCF metal 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 薄膜式或汽缸式执行机构 (HA / VA)

Table 4-1 DIAPHRAGM ACTUATORS (HA) & PNEUMATIC CYLINDER ACTUATORS (VA)

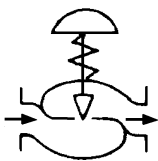
I. 柱塞阀芯、金属阀座 (%CF,LCF)

I. Contoured-type plug and metal seat (%CF,LCF)

表 4-1-1 气—关式阀

Table 4-1-1 Air-to-close

100kPa

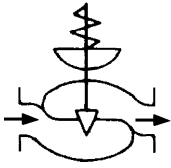


执行机构 Actuator	供气压力 Air supply	弹簧范围 Spring range	定位器 Positioner	允许压差 Allowable pressure drops								
				阀座直径 Valve seat size								
				25	32	40	50	65	80	100	125	150
HA2D	1.4	0.2~1.0	有或无 Yes or No	6.3	3.8	2.7	1.6	1.0	0.7	0.5	—	—
	1.6	0.2~1.0	有 Yes	31.6	19.3	13.7	7.8	5.1	3.5	2.0	—	—
	4.0	0.8~2.4	有 Yes	40 52	40 52	40 41	21.7	14.9	10.5	5.9	—	—
HA3D	1.4	0.2~1.0	有或无 Yes or No	11.2	6.8	4.8	2.8	1.7	1.2	0.7	0.4	0.3
	1.6	0.2~1.0	有 Yes	40 52	34.2	24.2	14	8.8	6.2	3.5	2.2	1.4
	4.0	0.8~2.4	有 Yes	40 52	40 52	40 52	40 42	26.5	18.7	10.5	6.7	4.1
HA4D	1.4	0.2~1.0	有或无 Yes or No	—	—	8.3	4.8	3.0	2.2	1.2	0.7	0.5
	1.6	0.2~1.0	有	—	—	40	24.2	15.2	10.7	6.1	3.9	2.4
	4.0	0.8~2.4	有 Yes	—	—	40 52	40 52	40 45	32.2	18.2	11.6	7.1

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	定位器 Positioner	允许压差 Allowable pressure drops									
				阀座直径 Valve seat size									
				25	32	40	50	65	80	100	125	150	
HA2R	1.4	0.2~1.0	有或无 Yes or No	6.3	3.8	2.7	1.6	1.0	0.7	0.5	—	—	
	2.8	0.8~2.4	有 Yes	40 44	27	14.1	11.1	6.9	4.9	2.8	—	—	
HA3R	1.4	0.2~1.0	有或无 Yes or No	11.2	6.8	4.8	2.8	1.7	1.2	0.7	0.4	0.3	
	2.8	0.8~2.4	有 Yes	40 52	40 47	34	19.6	12.3	8.7	4.9	3.1	1.9	
HA4R	1.4	0.2~1.0	有或无 Yes or No	—	—	8.4	4.8	3.0	2.2	1.2	0.7	0.5	
	2.8	0.8~2.4	有 Yes	—	—	40 52	31.5	21.3	15	8.5	5.4	3.3	
VA6R	4(1*)	1.9~3.5	有 Yes	—	—	—	—	40 52	40 43	24.2	—	—	
	5(2*)	1.9~3.5	有 Yes	—	—	—	—	—	—	24.2	15.5	9.5	

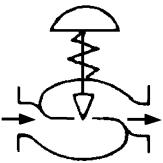
II. 柱塞阀芯、软阀座 (%TF、LTF)

II. Contoured-type plug and soft seat (%TF、LTF)

表 4-1-3 气—关式阀

Table 4-1-3 Air-to-close

100kPa

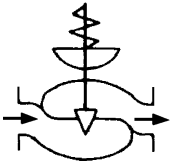


执行机构 Actuator	供气压力 Air supply	弹簧范围 Spring range	定位器 Positioner	允许压差 Allowable pressure drops									
				阀座直径 Valve seat size									
				25	32	40	50	65	80	100	125	150	
HA2D	1.4	0.2~1.0	有或无 With or not	4.4	2.7	1.9	1.1	0.7	0.5	0.3	—	—	
	1.6	0.2~1.0	有 With	22	13.5	9.6	5.5	3.6	2.5	1.4	—	—	
	4.0	0.8~2.4	有 With	30	30	28	15	10.4	7.4	4.1	—	—	
HA3D	1.4	0.2~1.0	有或无 With or not	7.8	4.8	3.4	2.0	1.2	0.8	0.5	0.3	0.2	
	1.6	0.2~1.0	有 With	30	24	17	9.8	6.2	4.3	2.5	1.5	0.9	
	4.0	0.8~2.4	有 With	30	30	30	28	18	13	7.4	4.7	2.9	
HA4D	1.4	0.2~1.0	有或无 With or not	—	—	5.8	3.4	2.1	1.5	0.8	0.5	0.3	
	1.6	0.2~1.0	有 With	—	—	28	17	10.6	7.5	4.3	2.7	1.7	
	4.0	0.8~2.4	有 With	—	—	30	30	30	22	12.7	8.1	5.0	

表 4-1-4 气—开式阀

Table 4-1-4 Air-to-open

100kPa



执行机构 Actuator	供气压力 Air supply	弹簧范围 Spring range	定位器 Positioner	允许压差 Allowable pressure drops									
				阀座直径 Valve seat size									
				25	32	40	50	65	80	100	125	150	
HA2R	1.4	0.2~1.0	有或无 With or not	4.4	2.7	1.9	1.1	0.7	0.5	0.3	—	—	
	2.8	0.8~2.4	有 With	30	19	9.9	7.8	4.8	3.4	2.0	—	—	
HA3R	1.4	0.2~1.0	有或无 With or not	7.8	4.8	3.4	2.0	1.2	0.8	0.5	0.3	0.2	
	2.8	0.8~2.4	有 With	30	30	23.8	13.7	8.6	6.1	3.4	2.1	1.3	
HA4R	1.4	0.2~1.0	有或无 With or not	—	—	5.8	3.4	2.1	1.5	0.8	0.5	0.3	
	2.8	0.8~2.4	有 With	—	—	30	22	14.9	10.5	5.9	3.7	2.3	

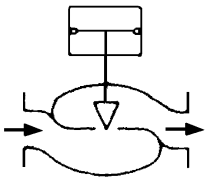
- 注:**
1. 最大允许压差不准超过 ANSI B16.34—1981 或 JIS B2201—1984 标准规定的最大工作压力。
  2. 同一格内的上方数字表示阀常开允许压差，下方数字表示阀全关时的允许压差。
  3. 1\*适用于 65、80、100mm 的阀，2\*适用于 150mm 的阀。
  4. 黑线框内数字表示阀配用标准规格执行机构。

- 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 upper figures denote the operating allowable pressure drops; the lower denote the allowable pressure drops at full closure.
  3. 1\* is applicable to the valves (DN65,80,100), and 2\* is applicable to the valve size 150mm.
  4. The figures in gray denote the standard actuator specifications.

表 4-2 气缸式执行机构 (VP)

Table 4-1 PNEUMATIC CYLINDER ACTUATOR (VP)

100kPa



执行机构 Actuator	供气压力 Air supply	定位器 Positioner	允许压差 Allowable pressure drops				
			阀座直径 Valve seat size				
			65	80	100	125	150
VP5	3	有 Yes	40	36.8	20.7	13.2	8
			52				
	4	有 Yes	40	40	27.8	17.8	10.8
			52	49			
	5	有 Yes	40	40	34.9	22.4	13.6
			52	52			
VP6	3	有 Yes	40	40	36.9	23.6	14.4
			52	52			
	4	有 Yes	40	40	40	31.8	19.3
			52	52	49		
	5	有 Yes	40	40	40	40	24.3
			52	52	52		
VP7	3	有 Yes	—	—	—	35.5	21.6
	4	有 Yes	—	—	—	40	29
						47	
5	有 Yes	—	—	—	40	36.4	
52							

- 注：1. 如果执行机构带有辅助气源，应选二者中较小一个供气压力作为计算允许压差的基础。  
2. 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。  
3. 同一格内上方数字为阀常开允许压差，下方数字为阀关闭时的允许压差。

- Note:** 1. In case a back-up system is used for the actuator, select the pressure drops whichever is lower—the operating supply air pressure or the back-up system set pressure.  
2. Take care not to cause the allowable maximum pressure drops to exceed the maximum operating pressure designated by ANSI B16.34—1981 或 JIS B2201—1984.  
3. The upper figures denote the operating allowable pressure drops; the lower denote the allowable pressure drops at full closure.

表 4-3 电子式执行机构 (EIL) 及智能式执行机构 (M8)

Table 4-3 ELECTRONIC ACTUATOR (EIL) & INTELLIGENT ACTUATOR (M8)

100kPa

执行机构 Actuator	阀座形式 Valve seat	阀座直径 (mm) Valve seat size								
		25	32	40	50	65	80	100	125	150
EIL04	金属阀座 Metal seat	64	42	27	17.3	12.3	8.1	5.2	—	—
	软阀座 Soft seat	30	30	23.8	13.7	8.6	6.1	3.4	—	—
EIL08 M8610+L8210	金属阀座 Metal seat	100	100	72	43	29.9	21.1	11.8	7.5	4.8
	软阀座 Soft seat	—	—	30	30	19.8	14.3	8.1	5.2	3.2
M8620+L8220	金属阀座 Metal seat	—	—	—	—	45	32.2	18.2	11.6	7.1
	软阀座 Soft seat	—	—	—	—	30	22	12.7	8.1	5.0

表 5 尺寸

Table 5 DIMENSIONS

表 5-1 法兰距尺寸

Table 5-1 Fact-to-Face dimensions

mm

阀口径 Valve Size	A				
	阀体部分保温 Segmental Steam Jacket		阀体全部保温 Full Steam Jacket		
	ANSI 150 RF JIS 10K RF PN16 RF	JIS 16K RF JIS 20K RF ANSI 300 RF PN40 MFM	ANSI 150 RF JIS 10K RF PN16 RF	JIS 16K RF JIS 20K RF ANSI 300 RF PN40 MFM	配管口径 Piping Size
40	340	370	370	380	50
50	400	400	410	420	80
65	430	440	430	460	100
80	460	470	470	470	125
100	510	540	530	550	150
125	550	600	580	600	200
150	600	660	620	660	200

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（不带手轮机构）

Table 5-2-1 Other dimensions

mm

	执行机构 Actuator	H	H1	L1	L2	L3	B1	B2	B3	B4	B	H1
40	HA2D、R	745	355	105	135	255	-	-	-	-	281	95
	HA3D、R	870					-	-	-	-	363	
	EIL04	960					-	260	-	-	175	
50	HA2D、R	745	365	105	160	280	-	-	-	-	281	100
	HA3D、R	870					-	-	-	-	363	
	EIL04	965					-	260	-	-	175	
65	HA2D、R	745/755	420	110	170	290	-	-	-	-	281	115
	HA3D、R	915					-	-	-	-	363	
	HA4D、R	1100					-	-	-	-	520	
	EIL08	1105					-	340	-	-	230	
	M8610+L8210	1400					285	350	255	230	-	
80	HA2D、R	755/765	435	110	175	295	-	-	-	-	281	130
	HA3D、R	930					-	-	-	-	363	
	HA4D、R	1115					-	-	-	-	520	
	EIL08	1110					-	340	-	-	230	
	M8610+L8210	1170					285	350	255	230	-	
100	HA2D、R	810/870	505	125	200	320	-	-	-	-	281	145
	HA3D、R	980					-	-	-	-	363	
	HA4D、R	1165					-	-	-	-	520	
	VA6R	1705					-	-	-	-	480	

	VP5	1410					-	-	-	-	384	
	EIL08	1170					-	340	-	-	230	
	M8610+L8210	1220					285	350	255	230		
125	HA3D、R	1100	585	130	245	330	-	-	-	-	363	180
	HA4D、R	1270					-	-	-	-	520	
	VA6R	1810					-	-	-	-	480	
	VP5	1515					-	-	-	-	384	
	VP6	1630					-	-	-	-	480	
	VP7	1630					-	-	-	-	580	
	EIL08	1310					-	340	-	-	230	
	M8620+L8220	1430					315	350	255	230		
150	HA3D、R	1100	585	130	270	330	-	-	-	-	363	205
	HA4D、R	1270					-	-	-	-	520	
	VA6R	1810					-	-	-	-	480	
	VP5	1515					-	-	-	-	384	
	VP6	1630					-	-	-	-	480	
	VP7	1630					-	-	-	-	580	
	EIL08	1310					-	340	-	-	230	
	M8620+L8220	1430					315	350	255	230	-	

表 5-2-2 外形尺寸（带侧装手轮机构）

Table 5-2-2 Other dimensions

mm

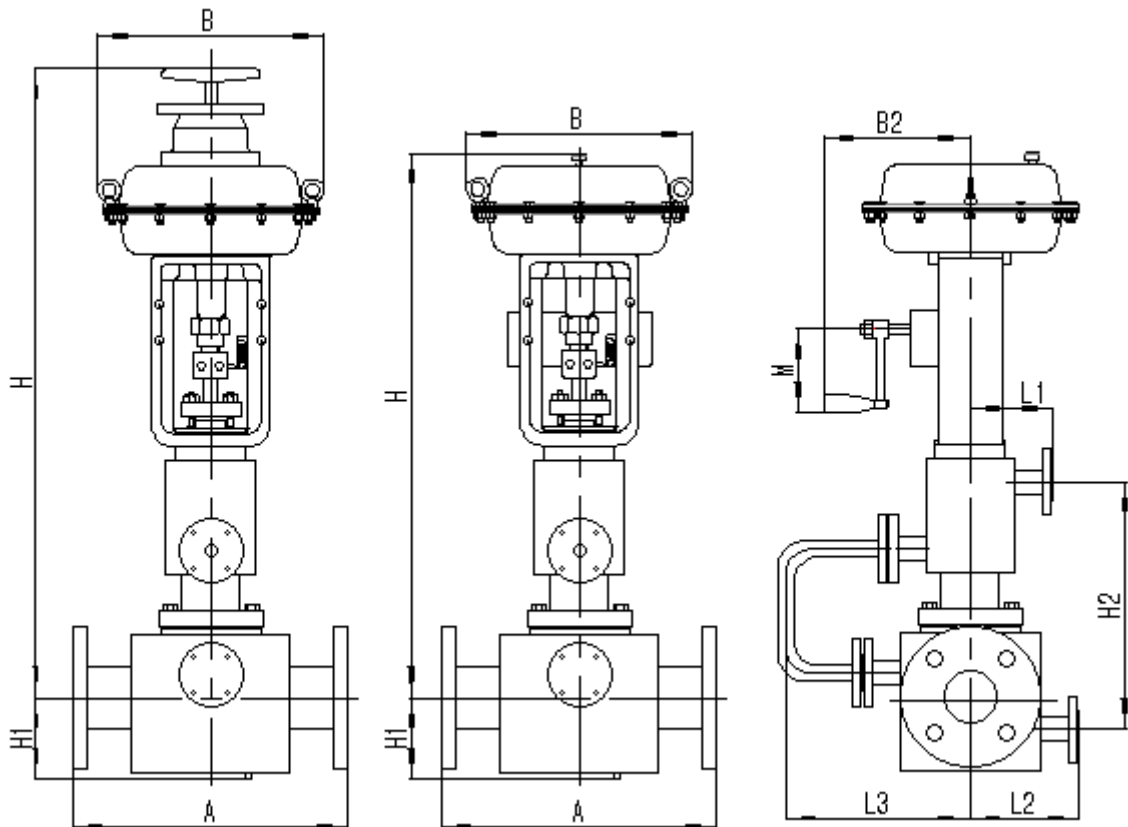
公称 通径 Nominal size	执行机构 Actuator	H	H1	L1	L2	L3	M	B1	B2	B3	B4	B	H1
40	HA2D、R	745	355	105	135	255	175	-	-	-	-	281	95
	HA3D、R	870					175	-	-	-	-	363	
50	HA2D、R	745	365	105	160	280	175	-	-	-	-	281	100
	HA3D、R	870					175	-	-	-	-	363	
65	HA2D、R	745/755	420	110	170	290	175	-	-	-	-	281	115
	HA3D、R	915					175	-	-	-	-	363	
	HA4D、R	1100					φ 320	-	-	-	-	520	
80	HA2D、R	755/765	435	110	175	295	175	-	-	-	-	281	130
	HA3D、R	930					175	-	-	-	-	363	
	HA4D、R	1115					φ 320	-	-	-	-	520	
100	HA2D、R	810/870	505	125	200	320	175	-	-	-	-	281	145
	HA3D、R	980					175	-	-	-	-	363	
	HA4D、R	1165					φ 320	-	-	-	-	520	
	VA6R	1830					φ 380	-	-	-	-	480	
	VP5	1520					φ 380	-	-	-	-	384	
125	HA3D、R	1100	585	130	245	330	175	-	-	-	-	363	180
	HA4D、R	1270					φ 320	-	-	-	-	520	
	VA6R	1935					φ 380	-	-	-	-	480	
	VP5	1625					φ 380	-	-	-	-	384	
	VP6	1755					φ 380	-	-	-	-	480	
	VP7	1755					φ 380	-	-	-	-	580	
150	HA3D、R	1100	585	130	270	330	175	-	-	-	-	363	205
	HA4D、R	1270					φ 320	-	-	-	-	520	
	VA6R	1935					φ 380	-	-	-	-	480	
	VP5	1625					φ 380	-	-	-	-	384	
	VP6	1755					φ 380	-	-	-	-	480	
	VP7	1755					φ 380	-	-	-	-	580	

表 5-2-3 外形尺寸 (带顶装手轮机构)

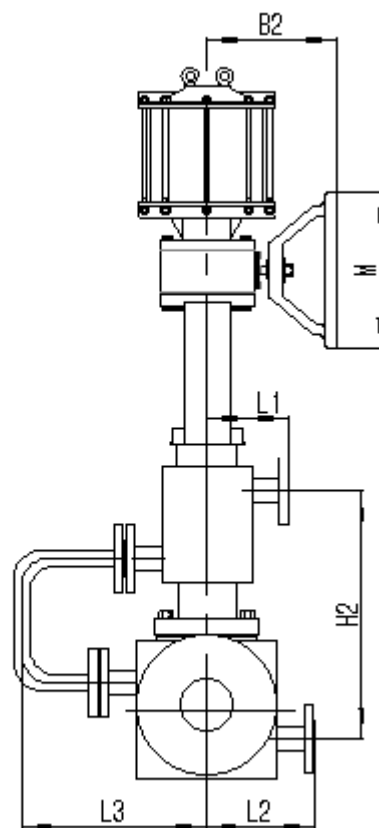
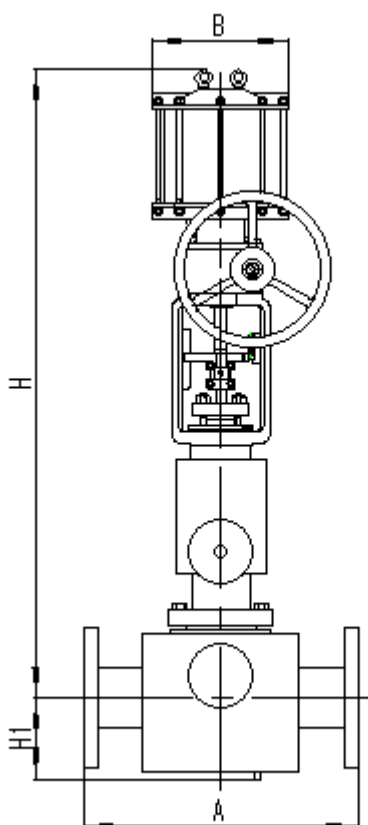
Table 5-2-3 Other dimensions

mm

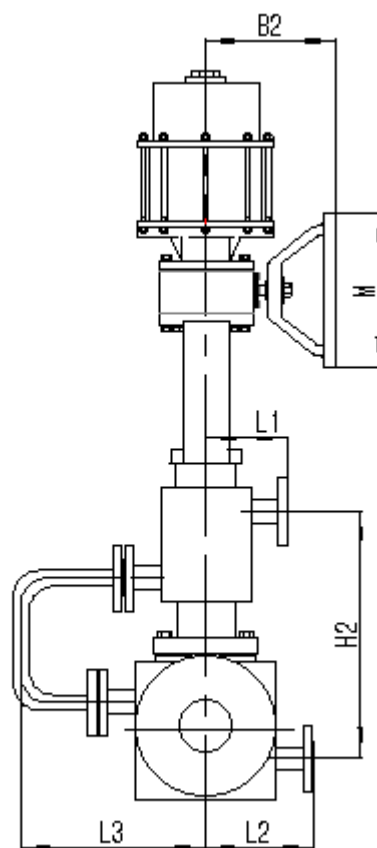
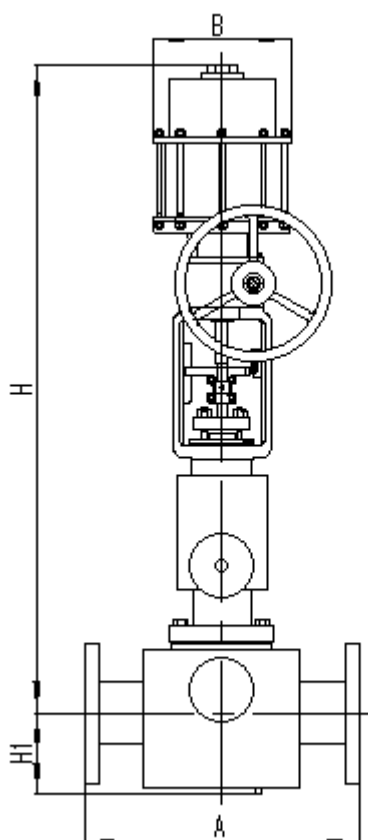
公称 通径 Nominal size	执行机构 Actuator	H	H1	L1	L2	L3	B1	B2	B3	B4	B	H1
40	HA2D、R	1010	355	105	135	255	-	-	-	-	281	95
	HA3D、R	1160					-	-	-	-	363	
50	HA2D、R	1010	365	105	160	280	-	-	-	-	281	100
	HA3D、R	1160					-	-	-	-	363	
65	HA2D、R	1020	420	110	170	290	-	-	-	-	281	115
	HA3D、R	1200					-	-	-	-	363	
	HA4D、R	1500					-	-	-	-	520	
80	HA2D、R	1020	435	110	175	295	-	-	-	-	281	130
	HA3D、R	1210					-	-	-	-	363	
	HA4D、R	1515					-	-	-	-	520	
100	HA2D、R	1135	505	125	200	320	-	-	-	-	281	145
	HA3D、R	1270					-	-	-	-	363	
	HA4D、R	1565					-	-	-	-	520	
150	HA3D、R	1390	585	130	270	330	-	-	-	-	363	205
	HA4D、R	1670					-	-	-	-	520	



配 HA 执行机构  
With type HA

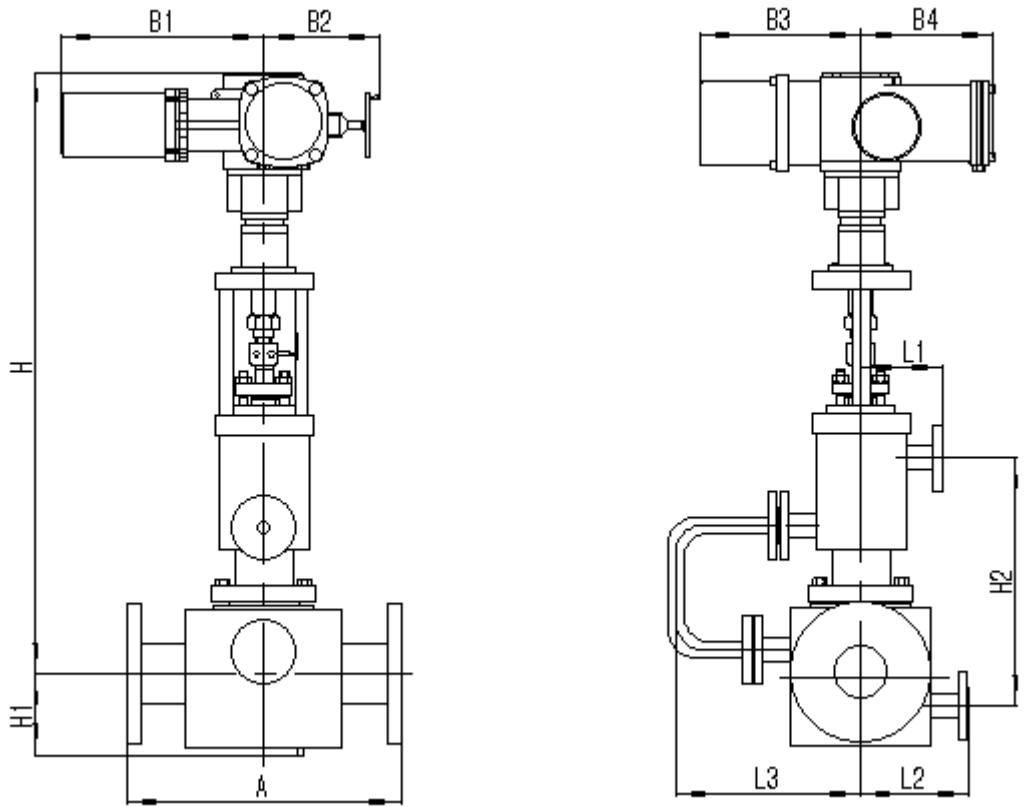


配 VP 执行机构  
With type VP

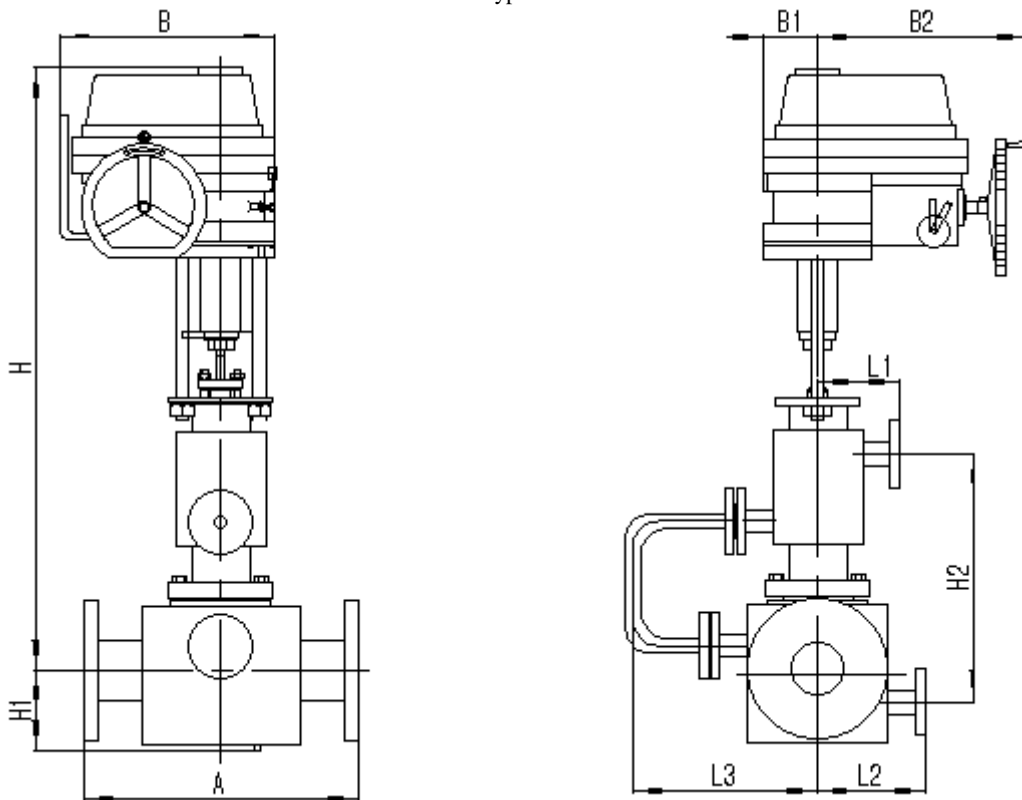


配 VA 执行机构  
With type VA





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 4 WEIGHT

kg

公称 口径 Nominal size	执行机构 Actuator	法兰连接 Flanged type			
		ANSI125、150、JIS 10K		ANSI300、JIS16、20、30K	
		HTSJ	HTSB	HTSJ	HTSB
40	HA2D、R	42	46	47	52
	HA3D、R	54	58	59	64
	EIL04	34	38	39	44
50	HA2D、R	48	54	45	54
	HA3D、R	60	66	57	66
	EIL04	40	46	37	46
65	HA2D、R	60	72	66	79
	HA3D、R	72	84	78	91
	HA4D、R	103	115	109	122
	EIL08	56	68	62	75
	M8610+L8210	79	91	84	97
80	HA2D、R	76	85	86	99
	HA3D、R	88	97	98	111
	HA4D、R	119	127	129	142
	EIL08	72	81	82	95
	M8610+L8210	94	103	92	105
100	HA2D、R	97	106	113	137
	HA3D、R	109	118	125	149
	HA4D、R	140	149	156	180
	VA6R	272	281	298	322
	VP5	157	166	173	196
	EIL08	93	102	107	131
	M8610+L8210	115	124	131	155
125	HA3D、R	232	262	272	308
	HA4D、R	263	293	305	338
	VA6R	405	435	447	480
	VP5	280	310	320	353
	VP6	355	385	395	428
	VP7	465	495	509	542
	EIL08	220	250	258	292
	M8610+L8210	238	268	280	314
150	HA3D、R	248	270	282	307
	HA4D、R	279	301	313	338
	VA6R	421	443	455	480
	VP5	296	319	330	255
	VP6	372	394	405	430
	VP7	481	503	515	540
	EIL08	232	254	266	391
	M8610+L8210	254	276	288	314

## 蒸汽夹套

夹套内蒸汽介质：压力 $\leq 1.0\text{MPa}$ ，温度 $\leq 350^\circ\text{C}$

夹套的材料：一般场合提供 A3 钢，特殊指定 SUS304 不锈钢

夹套分类 I：阀体半保，阀盖保温；

II：阀体全保，阀盖保温

夹套蒸汽输入接口：法兰式（PN1.0Mpa DN15、DN20）

## Steam jacket

**Steam:**  $P \leq 1.0\text{MPa}$ ,  $T \leq 350^\circ\text{C}$

**Material:** Adopt A3 steel in common use, and adopt SUS304 stainless steel in special.

**Classification:** I. Segmental steam jacket for valve body and heat preservation for cover

II. Full steam jacket for valve body and heat preservation for cover

**Steam jacket input:** Flanged type（PN1.0Mpa DN15、DN20）