



ZJHV V 型球阀

ZJHV V-ball valve



ZJHV V型球阀由阀体部件与气动或电动执行机构组成。其结构紧凑、重量轻、体积小、装拆维护方便。流路畅通、流阻小；密封性能好，泄漏低；可调比大。用于控制高粘度、带有纤维性和含有颗粒的介质。广泛应用于电力、化工、造纸、轻工等行业。

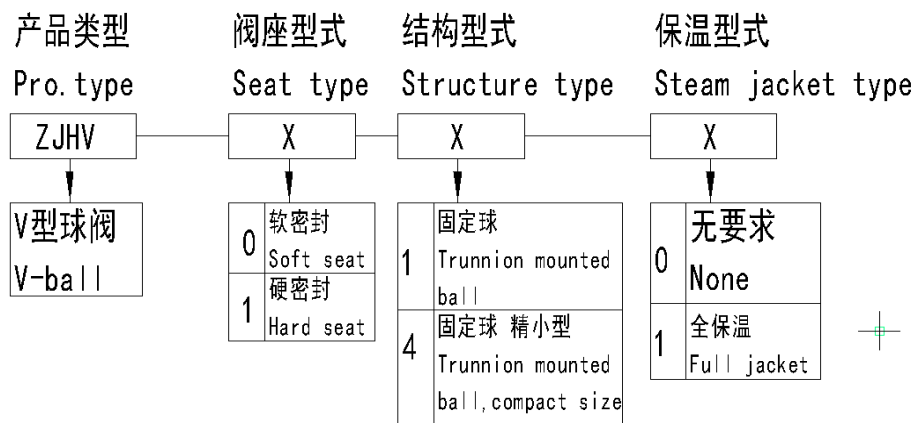
V-ball valve consists of valve body and pneumatic or electric actuator, with the following characteristics: compact structure, light weight, small volume, and easy to install, disassemble and maintain; Smooth flow path, low flow resistance; good sealing performance, low leakage; large adjustable ratio. Used to control media with high viscosity, fibrous and containing particles. Widely used in electric power, chemical industry, paper making, light industry and other industries.

标准规格

Standard specification

型谱

Type spectrum



系列型号

Series model

产品型号 Product model	产品名称 Product name	阀座型式 Valve seat type	结构型式 Structure type	保温型式 Steam jacket type
ZJHV—110	硬密封固定 V 型球阀 Hard seal trunnion mounted V-ball valve	硬密封 Hard seal	固定球 Trunnion mounted ball	无要求 None
ZJHV—111	硬密封固定保温型 V 型球阀 Hard seal trunnion mounted insulation V-ball valve	硬密封 Hard seal	固定球 Trunnion mounted ball	全保 Full jacket
ZJHV—140	硬密封固定精小型 V 型球阀 Hard seal trunnion mounted compact	硬密封 Hard seal	固定球精小型 Trunnion	无要求 None

	size V-ball valve		mounted ball,compact size	
ZJHV—010	软密封固定 V 型球阀 Soft seal trunnion mounted V-ball valve	软密封 Soft seal	固定球 Trunnion mounted ball	无要求 None

阀体

Valve body

形 式 Form	直通铸造球型阀 Straight-through cast ball valve
公称通径 Nominal diameter	1/2" (15)、3/4" (20)、1" (25)、1¼" (32)、1½" (40)、2" (50)、2½" (65)、3" (80)、4" (100)、5" (125)、6" (150)、8" (200)、10" (250)、12" (300)、14" (350)、16" (400) 备注：1、ZJHV—140 范围为 1" (25) 至 6" (150)； 2、1/2" (15) 法兰为螺纹孔,； 3/4" (20) CL150 法兰为螺纹孔 Note: 1. ZJHV-140 ranges from 1 "(25) to 6" (150); 2. 1/2 "(15) flanges are threaded holes; 3/4 "(20) CL150 flanges are threaded holes
公称压力 Nominal pressure	Class 150、300 PN 16、20、25、40、50
连接型式 Connection type	法兰型：FF、RF、MFM Flange type: 法兰标准：ASME B16.5 ; JIS B2201 ; HG/T 20592 ; HG/T 20615; JB/T 79.1 ; JB/T 79.2 ; GB/T 9112 Flange standard
材 料 Material	见表 1 See Table 1
温度范围 Temperature range	ZJHV—110: -100℃~+550℃ (详见表 1B) ZJHV—110: -100℃ to+550℃ (see Table 1B for details) ZJHV—140: -20℃~+200℃ (详见表 1B) ZJHV—140: -20℃ to+200℃ (see Table 1B for details)
填 料 Packing material	聚四氟乙烯填料、石墨填料 Teflon packing, graphite packing

Valve components

阀芯型式 Valve core type	球型阀芯 Spherical valve core
流量特性 Flow rate characteristic	近似等百分比特性 Approximate equal percentage characteristic
材 料 Material	见表 1 See Table 1

执行机构

Actuator

规格 Specification	型号 Model	气动执行机构 Pneumatic actuator	
		AT	AW
供气压力 Air supply pressure		400~700kPa	
气源接口 Air supply interface		G1/8"、G1/4"、G3/8"、G1/2"、G3/4"	
行程角度 Stroke angle		90°	90°
环境温度 Ambient temperature		标准型 -20~+80℃ Standard type -20~+80℃ 高温型 -15~+120℃ High temperature type -15~+120℃ 低温型 -40~+80℃ Low temperature type -40~+80℃	
附 件 Accessories		电磁阀、空气过滤减压器、保位阀、行程开关、阀位传送器、手轮机构等 Solenoid valve, air filtration pressure reducer, hold valve, stroke switch, valve position transmitter, handwheel, etc.	

型号 Model 规格 Specification	电动执行机构 Electric actuator
	M 系列 M Series
输入信号 Input signal	4~20mA • DC
电源电压 Supply voltage	380V AC/ 50Hz(60Hz 可选)
行程角度 Stroke angle	90° ±5°
环境温度 Ambient temperature	-25℃ ~+70℃

性能

Performance

执行机构 Actuator 性能参数 Performance parameter	AT/AW 系列气动执行机构 AT/AW serial pneumatic actuator	M 系列电动执行机构 M serial electric actuator
泄漏量 Leakage volume	见表 1 See Table 1	见表 1 See Table 1
回差 Return difference	2%	2%
基本误差 Basic error	±2%	±2%
可调范围 Adjustable range	200:1	200:1

额定 Cv 值及最大允许压差

Rated Cv value and maximum allowable

公称通径 Nominal diameter	1/2"-1"(15-25)			1¼"(32)	1½"(40)	2"(50)	2½"(65)	3"(80)	4"(100)
Cv	2	5	25	45	68	110	180	290	470
公称通径 Nominal diameter	5"(125)			6"(150)	8"(200)	10"(250)	12"(300)	14"(350)	16"(400)

Cv	760	1040	1360	2400	3900	6100	8000
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阀体、阀内件材质组合及使用温度范围 • 阀座允许泄漏量

Combinations and operating temperature range of valve body and internal parts - Allowable leakage of valve seat

表 1A 本体部材质

Table 1-1 Main body material

RTFE: 强化聚四氟乙烯 HT: 热处理 HF: 表面硬化处理
RTFE: Reinforced telfon HT: Heat treatment HF: Surface-hardening treatment

阀体材质 Valve body material		A216-WCB, A217-WC6, A352-LCB 等 A216-WCB, A217-WC6, A352-LCB,etc.		A351-CF8, A351-CF8M, A351-CF3M 等 A351-CF8,A351-CF8M,A351-CF3M,etc.	
球芯 Spherical core	材质 Material	304, 316 等 304,316,etc.		304, 316, 316L 等 304,316,316L,etc.	
	处理 Treatment	硬密封 Hard seal: HF; 软密封 Soft Seal: 抛光 Polished		硬密封 Hard seal: HF; 软密封 Soft Seal: 抛光 Polished	
阀杆 Valve stem	材质 Material	630, S20910 等 630,S20910,etc.		630, S20910 等 630,S20910,etc.	
	处理 Treatment	HT		HT	
挡圈 Retaining ring	材质 Material	304, 316 等 304,316,etc.		304, 316, 316L 等 304,316,316L,etc.	
导向套 Guide sleeve	材质 Material	316	PEEK	316	PEEK
	处理 Treatment	HF	—	HF	—
阀座 Valve seat	材质 Material	304, 316 等 304,316,etc.		304, 316, 316L 等 304,316,316L,etc.	
	处理 Treatment	硬密封 Hard seal: HF; 软密封 Soft Seal: RTFE, PTFE		硬密封 Hard seal: HF; 软密封 Soft Seal: RTFE, PTFE	
阀座泄漏量 Valve seat leakage		硬密封 Hard seal: Class IV; 软密封 Soft Seal: Class V; (注: 如有高于上述要求请详询技术部) (Note: If any requirements are higher than the above, please contact the technical department for details)		硬密封 Hard seal: Class IV; 软密封 Soft Seal: Class V; (注: 如有高于上述要求请详询技术部) (Note: If any requirements are higher than the above, please contact the technical department for details)	
阀门密封方向 Valve sealing direction		单向密封 One-way seal		单向密封 One-way seal	

表 1B 使用温度范围（公称通径 DN25～400（1"～16"））

Table 1B Operating temperature range (Nominal diameter DN25～400 (1"～16"))

温度范围/℃ temperature 压力 Pressure	结构形式 Structure	-100℃	-45℃	200℃	350℃	550℃
		—	-45℃～+350℃			—
Class150-300 PN16-50	标准型 Standard	—	-45℃～+350℃			—
	伸长上 阀盖型 Extended bonnet	-100℃～-45℃	-45℃～+350℃			+350℃～+550℃

备注：表 1 B 规格范围外的温度范围详询技术部。

Note: Please consult the technical department for the temperature ranges beyond those specified in Table 1B.

表 2—1 阀体材料的使用温度・压力范围

单位：MPa

Table 2-1 Operating temperature ・ pressure range of valve body materials Unit: MPa

温度 Tempe rature ℃	Class 150					Class 300					Class 600				
	LCB	WCB	WC6	CF8	CF8M	LCB	WCB	WC6	CF8	CF8M	LCB	WCB	WC6	CF8	CF8M
-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 或 HG20592

Table 2-2 JB/T79 or HG20592

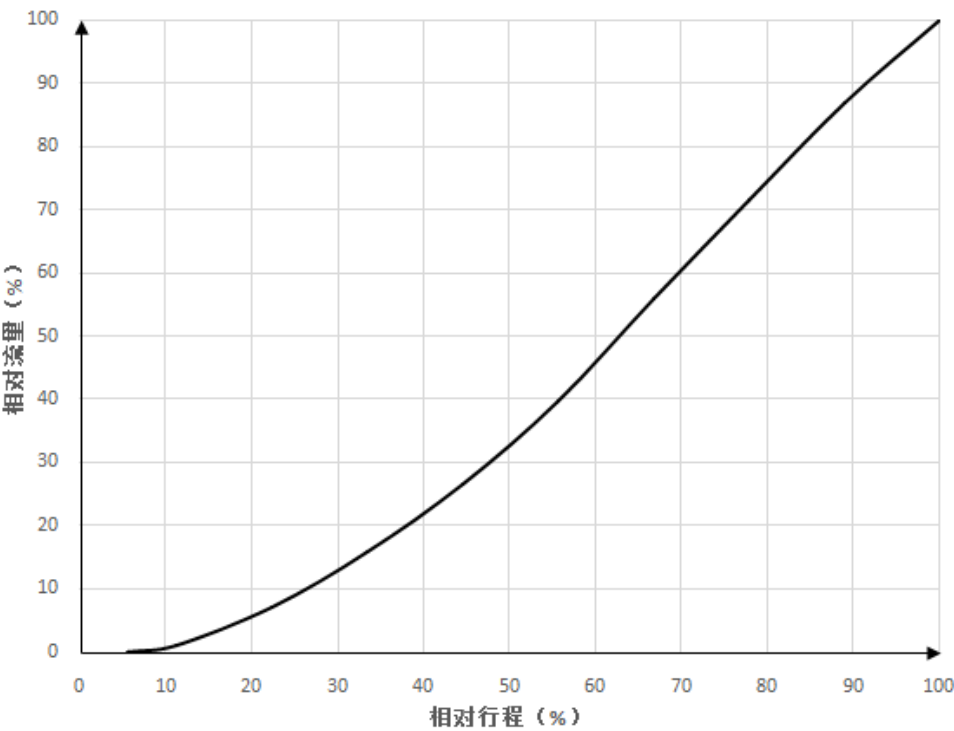
温度 Temperature ℃	PN16	PN40	PN63	PN100	温度 Temperature ℃	PN16	PN40	PN63	PN100
	ZG230-450					ZG0Cr18Ni9			
-5~200	1.60	4.00	6.30	10.0	-45~200	1.60	4.00	6.30	10.0
~250	1.40	3.50	5.40	9.00	~300	1.40	3.50	5.40	9.00
~300	1.20	3.00	4.80	7.50	~400	1.20	3.00	4.80	7.50
~350	1.10	2.60	4.00	6.60	~480	1.10	2.60	4.00	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					

流量特性：近似等百分比特性

Flow rate characteristic: Approximate equal percentage characteristic

图 1 流量特性曲线

Figure 1 Flow rate characteristic

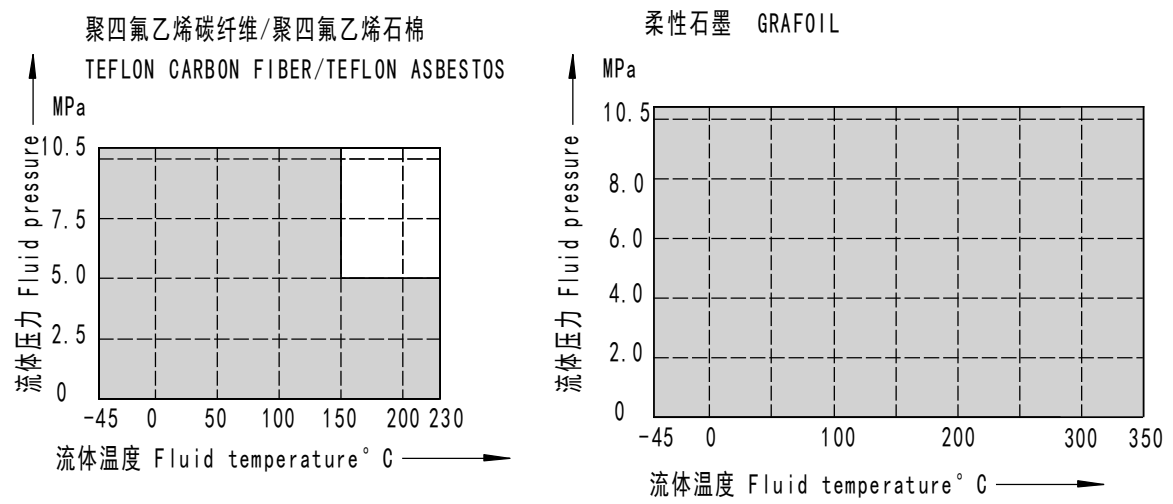


相对流量: Relative flow

相对行程: Relative stroke

图 2 填料的使用温度・压力范围

Figure 2 Operating temperature・pressure range of packing materials



阀体结构
Valve body structure

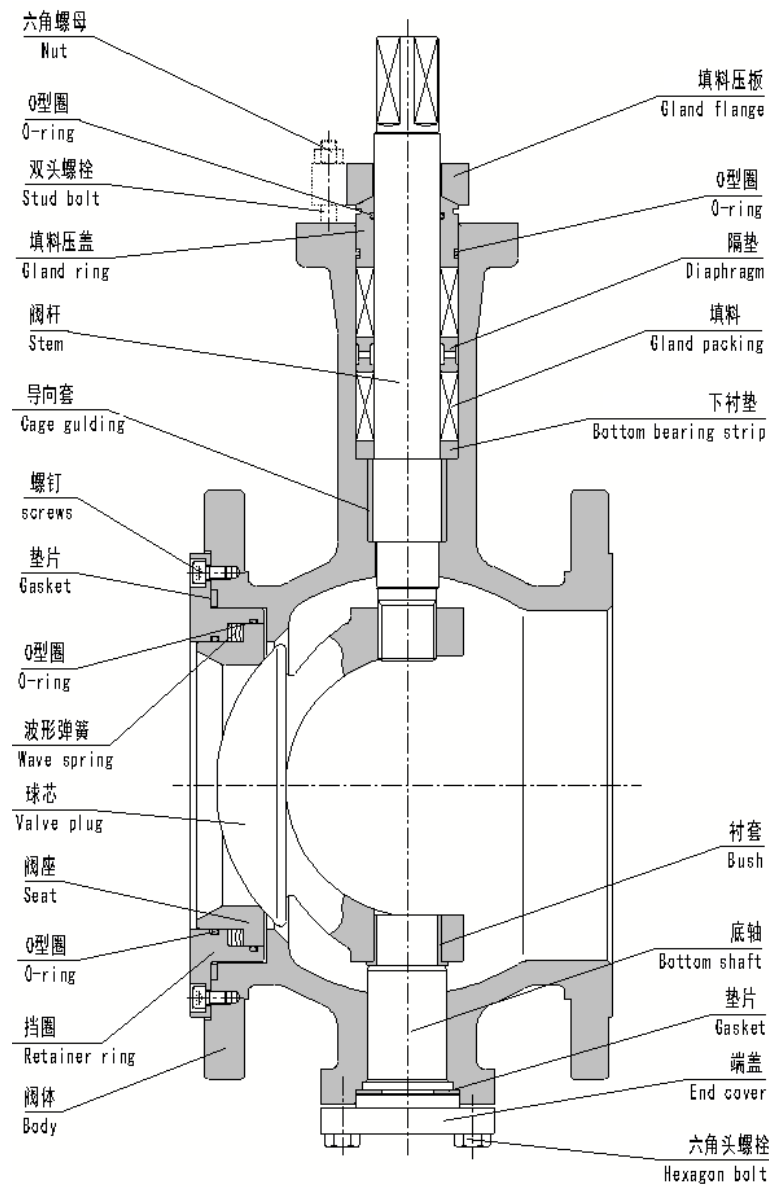


图 3-1 硬密封固定 V 型球阀
Fig. 3-1 Hard seal trunnion mounted V-ball valve

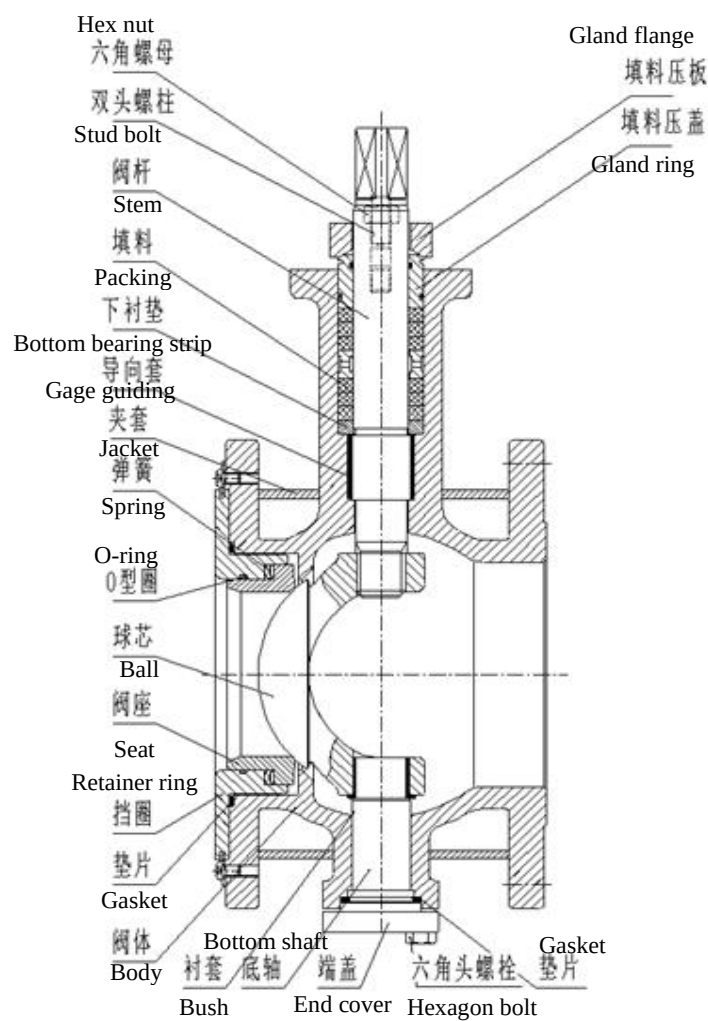


图 3-2 硬密封固定保温型 V 型球阀

Fig. 3-2 Hard seal trunnion mounted insulation ball valve

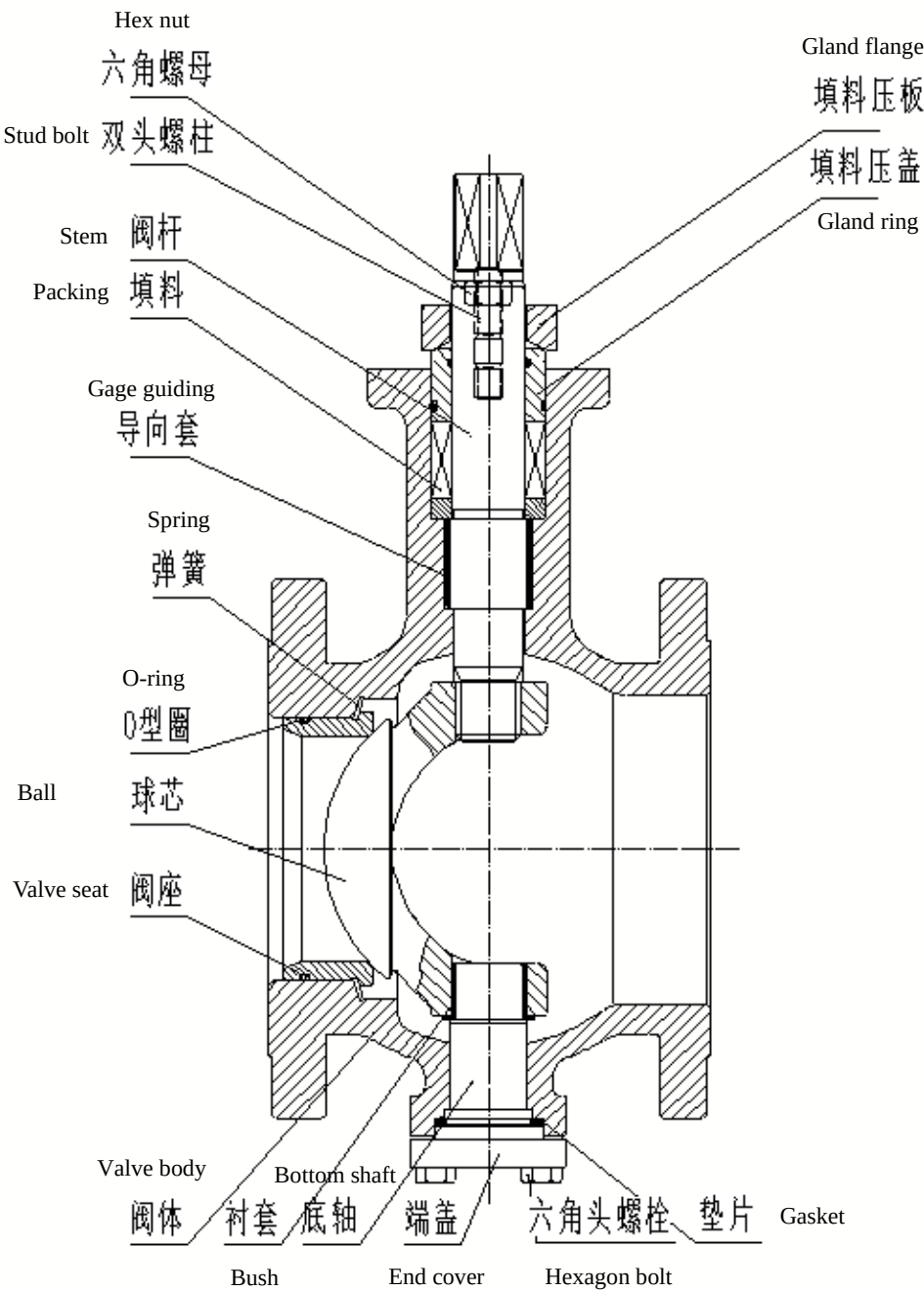


图 3-3 硬密封固定精小型 V 型球阀

Fig. 3-3 Hard Sealed trunnion mounted compact size V-Ball Valve

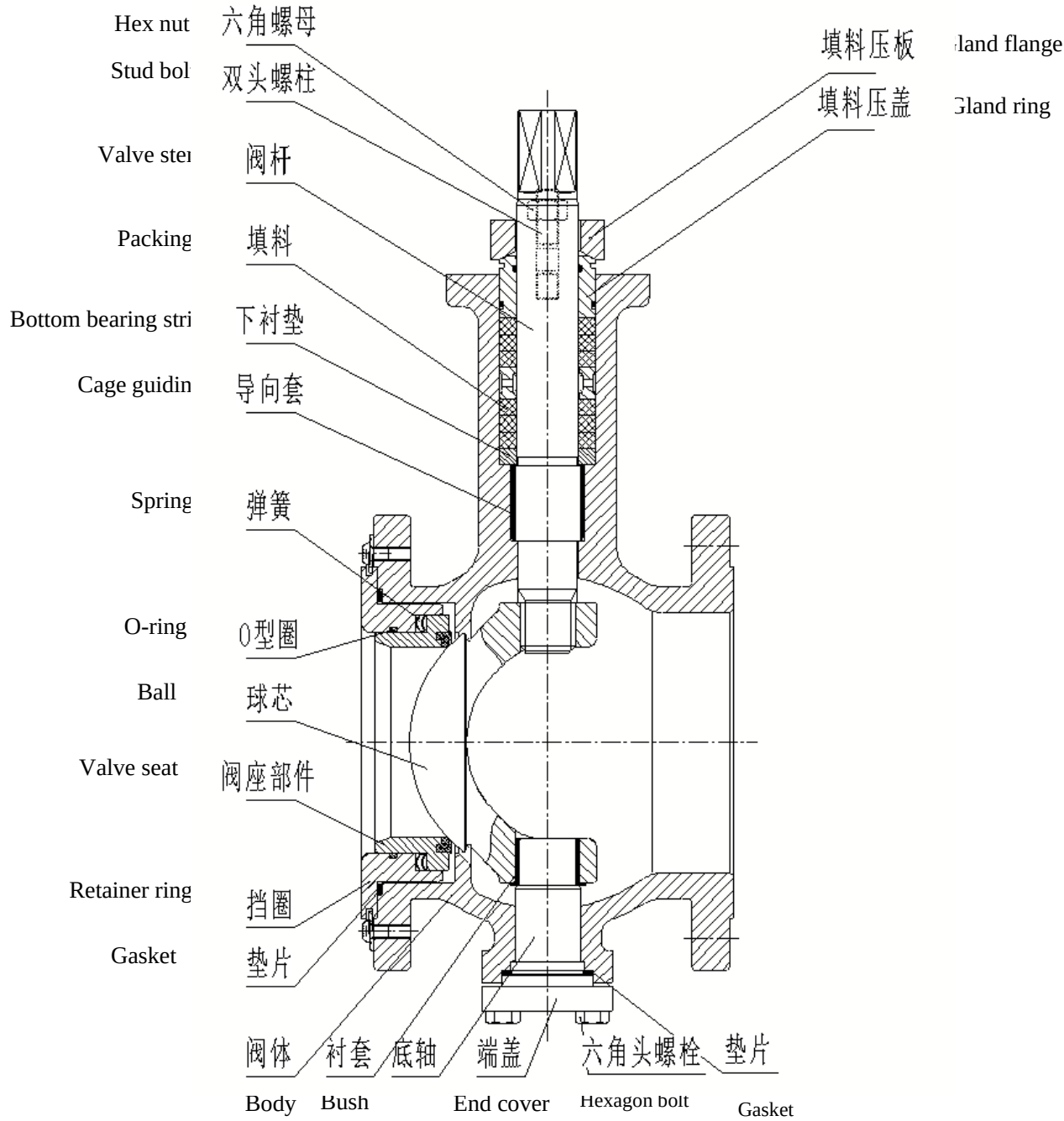


图 3-4 软密封固定 V 型球阀
Fig. 3-4 Soft Sealed trunnion mounted V-Ball Valve

执行机构标准配置及最大关闭压力

Standard configuration of actuator and maximum closing pressure

3-1 硬密封 V 型球阀配双作用气缸执行机构 （气开） 单位：MPa

3-1 Hard seal V-ball valve with double-acting cylinder actuator (air to open) Unit: MPa

执行机构 Actuator	气源压力 Air supply Pressure	阀门状态 Valve Status	公称通径 inch (mm) Nominal diameter inch (mm)													
			1/2"-1" (15-25)	1¼" (32)	1½" (40)	2" (50)	2½" (65)	3" (80)	4" (100)	5" (125)	6" (150)	8" (200)	10" (250)	12" (300)	14" (350)	16" (400)
AT75DD0	0.5	切断 Shut-off	5.0	4.0	2.0											
AT83DD0	0.5	切断 Shut-off		5.0	5.0	2.0										
AT92DD0	0.5	切断 Shut-off				5.0	1.0									
AT105DD0	0.5	切断 Shut-off					3.0	2.0								
AT125DD0	0.5	切断 Shut-off					5.0	5.0	1.0							
AT140DD0	0.5	切断 Shut-off							5.0	1.0						
AT160DD0	0.5	切断 Shut-off								5.0	2.0					
AT190DD0	0.5	切断 Shut-off									5.0	1.0				
AT210DD0	0.5	切断 Shut-off										2.0				
AT240DD0	0.5	切断 Shut-off										5.0	1.0			
AT270DD0	0.5	切断 Shut-off											3.0	1.0		
AT300DD0	0.5	切断 Shut-off											5.0	2.0		
AT350DD0	0.5	切断 Shut-off												5.0	2.0	1.0
AT400DD0	0.5	切断 Shut-off													4.0	3.0
AW18D001	0.5	切断 Shut-off										1.0				
AW22D001	0.5	切断 Shut-off										4.0	1.0			
AW22D002	0.5	切断 Shut-off										5.0	2.0			
AW24D002	0.5	切断 Shut-off											4.0	1.0		
AW27D002	0.5	切断 Shut-off											5.0	2.0		
AW27D003	0.5	切断 Shut-off												4.0	1.0	
AW30D003	0.5	切断 Shut-off												5.0	2.0	1.0

AW32D003	0.5	切断 Shut-off													3.0	2.0
AW35D003	0.5	切断 Shut-off													4.0	3.0

注：1 • 最大允许压差不准超过 ASME B16.34 标准规定的最大工作压力。

Note: 1. The maximum allowable pressure differential is not allowed to exceed the maximum working pressure specified in ASME B16.34 standard.

3-1（续）硬密封 V 型球阀配双作用气缸执行机构 （气关） 单位：MPa

Table 3-1 (Contd) Hard seal V-ball valve with double-acting cylinder actuator (air to close) Unit: MPa

执行机构 Actuator	气源压力 Air supply Pressure	阀门状态 Valve Status	公称通径 inch (mm) Nominal diameter inch (mm)													
			1/2"-1" (15-25)	1¼" (32)	1½" (40)	2" (50)	2½" (65)	3" (80)	4" (100)	5" (125)	6" (150)	8" (200)	10" (250)	12" (300)	14" (350)	16" (400)
AT75DD0	0.5	切断 Shut-off	5.0	4.0	2.0											
AT83DD0	0.5	切断 Shut-off		5.0	5.0	2.0										
AT92DD0	0.5	切断 Shut-off				5.0	1.0									
AT105DD0	0.5	切断 Shut-off					3.0	2.0								
AT125DD0	0.5	切断 Shut-off					5.0	5.0	1.0							
AT140DD0	0.5	切断 Shut-off							5.0	1.0						
AT160DD0	0.5	切断 Shut-off								5.0	2.0					
AT190DD0	0.5	切断 Shut-off									5.0	1.0				
AT210DD0	0.5	切断 Shut-off										2.0				
AT240DD0	0.5	切断 Shut-off										5.0	1.0			
AT270DD0	0.5	切断 Shut-off											3.0	1.0		
AT300DD0	0.5	切断 Shut-off											5.0	2.0		
AT350DD0	0.5	切断 Shut-off												5.0	2.0	1.0
AT400DD0	0.5	切断 Shut-off													4.0	3.0
AW18D001	0.5	切断 Shut-off										1.0				
AW22D001	0.5	切断 Shut-off										4.0	1.0			
AW22D002	0.5	切断 Shut-off										5.0	2.0			
AW24D002	0.5	切断 Shut-off											4.0	1.0		
AW27D002	0.5	切断 Shut-off											5.0	2.0		

AW27D003	0.5	切断 Shut-off												4.0	1.0	
AW30D003	0.5	切断 Shut-off												5.0	2.0	1.0
AW32D003	0.5	切断 Shut-off													3.0	2.0
AW35D003	0.5	切断 Shut-off													4.0	3.0

注：1 • 最大允许压差不准超过 ASME B16.34 标准规定的最大工作压力。

Note: 1. Maximum allowable differential pressure is not allowed to exceed the maximum working pressure specified in ASME B16.34 standard.

表 3-2 硬密封 V 型球阀配单作用气缸执行机构 （气开） 单位：MPa
Table 3-2 Hard seal V-ball valve with single-acting cylinder actuator (air to open) Unit: MPa

执行机构 Actuator	气源压力 Air supply Pressure	阀门状态 Valve Status	公称通径 inch (mm) Nominal diameter inch (mm)													
			1/2"-1" (15-25)	1/4" (32)	1 1/2" (40)	2" (50)	2 1/2" (65)	3" (80)	4" (100)	5" (125)	6" (150)	8" (200)	10" (250)	12" (300)	14" (350)	16" (400)
AT83SR5	0.5	切断 Shut-off	4.0	1.0												
AT92SR5	0.5	切断 Shut-off	5.0	5.0	3.0	1.0										
AT105SR5	0.5	切断 Shut-off			5.0	2.0										
AT125SR5	0.5	切断 Shut-off				5.0	1.0									
AT140SR5	0.5	切断 Shut-off					5.0	3.0								
AT160SR5	0.5	切断 Shut-off						5.0	3.0							
AT190SR5	0.5	切断 Shut-off							5.0	2.0						
AT210SR5	0.5	切断 Shut-off								5.0	2.0					
AT240SR5	0.5	切断 Shut-off									4.0	1.0				
AT270SR5	0.5	切断 Shut-off									5.0	2.0				
AT300SR5	0.5	切断 Shut-off										4.0	1.0			
AT350SR5	0.5	切断 Shut-off											2.0			
AW22SR51	0.5	切断 Shut-off									3.0	1.0				
AW24SR51	0.5	切断 Shut-off									5.0	1.0				
AW24SR52	0.5	切断 Shut-off										3.0	1.0			
AW27SR52	0.5	切断 Shut-off										3.0	1.0			

AW30SR52	0.5	切断 Shut-off										5.0	2.0	1.0		
AW32SR52	0.5	切断 Shut-off											3.0	1.5		
AW35SR53	0.5	切断 Shut-off											5.0	2.0		
AW45SR53	0.5	切断 Shut-off												5.0	1.0	
AW45SR54	0.5	切断 Shut-off													3.0	2.0
AW50SR54	0.5	切断 Shut-off													4.0	2.5
AW55SR54	0.5	切断 Shut-off													5.0	3.0

注：1 • 最大允许压差不准超过 ASME B16.34 标准规定的最大工作压力。
Note: 1. Maximum allowable differential pressure is not allowed to exceed the maximum working pressure specified in ASME B16.34 standard.

表 3-2（续）硬密封 V 型球阀配单作用气缸执行机构 （气关） 单位：MPa
Table 3-2 (Contd)Hard seal V-ball valve with single-acting cylinder actuator (air to close) Unit: MPa

执行机构 Actuator	气源压力 Air supply Pressure	阀门状态 Valve Status	公称通径 inch (mm) Nominal diameter inch (mm)													
			1/2"-1" (15-25)	1¼" (32)	1½" (40)	2" (50)	2½" (65)	3" (80)	4" (100)	5" (125)	6" (150)	8" (200)	10" (250)	12" (300)	14" (350)	16" (400)
AT83SD5	0.5	切断 Shut-off	4.0	1.0												
AT92SD5	0.5	切断 Shut-off	5.0	5.0	3.0	1.0										
AT105SD5	0.5	切断 Shut-off			5.0	2.0										
AT125SD5	0.5	切断 Shut-off				5.0	1.0									
AT140SD5	0.5	切断 Shut-off					5.0	3.0								
AT160SD5	0.5	切断 Shut-off						5.0	3.0							
AT190SD5	0.5	切断 Shut-off							5.0	2.0						
AT210SD5	0.5	切断 Shut-off								5.0	2.0					
AT240SD5	0.5	切断 Shut-off									4.0	1.0				
AT270SD5	0.5	切断 Shut-off									5.0	2.0				
AT300SDR5	0.5	切断 Shut-off										4.0	1.0			
AT350SD5	0.5	切断 Shut-off											2.0			
AW22SD51	0.5	切断 Shut-off									3.0	1.0				
AW24SD51	0.5	切断 Shut-off									5.0	1.0				

AW24SD52	0.5	切断 Shut-off										3.0	1.0			
AW27SD52	0.5	切断 Shut-off										3.0	1.0			
AW30SD52	0.5	切断 Shut-off										5.0	2.0	1.0		
AW32SD52	0.5	切断 Shut-off											3.0	1.5		
AW35SD53	0.5	切断 Shut-off											5.0	2.0		
AW45SD53	0.5	切断 Shut-off												5.0	1.0	
AW45SD54	0.5	切断 Shut-off													3.0	2.0
AW50SD54	0.5	切断 Shut-off													4.0	2.5
AW55SD54	0.5	切断 Shut-off													5.0	3.0

注：1 • 最大允许压差不准超过 ASME B16.34 标准规定的最大工作压力。

Note: 1-Maximum allowable differential pressure is not allowed to exceed the maximum working pressure specified in ASME B16.34 standard.

表 3-3 V 型球阀电动执行机构配置及最大关闭压力 单位：MPa

Table 3-3 Configuration of electric actuator and maximum closing pressure of V-ball valve Unit: Mpa

执行机构 Actuator	阀座形式 Valve seat type	阀门状态 valve status	公称通径 inch (mm) Nominal diameter inch (mm)													
			1/2"-1" (15-25)	1¼" (32)	1½" (40)	2" (50)	2½" (65)	3" (80)	4" (100)	5" (125)	6" (150)	8" (200)	10" (250)	12" (300)	14" (350)	16" (400)
M0411	硬密封 Hard seal	切断 Shut-off	5.00													
M0421	硬密封 Hard seal	切断 Shut-off		5.00	5.00	3.95										
M0430	硬密封 Hard seal	切断 Shut-off					5.00	3.80								
M0460	硬密封 Hard seal	切断 Shut-off							3.07							
M8410 +A8020	硬密封 Hard seal	切断 Shut-off								4.36						
M8420 +A8020	硬密封 Hard seal	切断 Shut-off									2.81					

M8420 +A8040	硬密封 Hard seal	切断 Shut-off										2.89				
M8430 +A8040	硬密封 Hard seal	切断 Shut-off											2.62	2.03		
M8610 +A8020	硬密封 Hard seal	切断 Shut-off								4.36						
M8620 +A8020	硬密封 Hard seal	切断 Shut-off									2.81					
M8620 +A8040	硬密封 Hard seal	切断 Shut-off										2.89				
M8630 +A8040	硬密封 Hard seal	切断 Shut-off											2.62	2.03		
M8440 +A8090	硬密封 Hard seal	切断 Shut-off													2.00	
M8440 +A8161	硬密封 Hard seal	切断 Shut-off														2.00

注：1 最大允许压差不准超过 ASME B16.34 标准规定的最大工作压力。

Note: 1 Maximum allowable differential pressure is not allowed to exceed the maximum working pressure specified in ASME B16.34 standard.

2 标准连接形式为直连式，如要求杠杆式连接形式需在电动执行器型号明确或合同订单上注明。

2 Standard connection form is direct connection, if lever connection is required, should be specified in the electric actuator model number or on the contract order.

3 表格配置只作为阀门所需力矩的参考，其他功能要求及型号请参考 M 系列执行器样本。

3The configuration in the table only serves as a reference for the required torque of the valve, please refer to the M series actuator sample for other functional requirements and models.

表 3-4 软密封 V 型球阀配双作用气缸执行机构 (气开) 单位: MPa

Table 3-4 Soft seal V-ball valve with double-acting cylinder actuator (air to open) Unit: MPa

执行机构 Actuator	气源压力 Air supply	阀门 状态 valve status	公 称 通 径 inch (mm) Nominal diameter inch (mm)											
			1/2"-1" (15-25)	1¼" (32)	1½" (40)	2" (50)	2½" (65)	3" (80)	4" (100)	5" (125)	6" (150)	8" (200)	10" (250)	12" (300)
AT52DRO	0.5	切断 Shut-off	2.0											
AT63DRO	0.5	切断 Shut-off	5.0	4.0	1.0									
AT75DRO	0.5	切断 Shut-off		5.0	4.0	1.0								
AT83DRO	0.5	切断 Shut-off			5.0	4.0	2.0							
AT92DRO	0.5	切断 Shut-off				5.0	4.0	2.0						

AT105DRO	0.5	切断 Shut-off					5.0	5.0	1.0					
AT125DRO	0.5	切断 Shut-off							5.0	2.0				
AT140DRO	0.5	切断 Shut-off								5.0	4.0			
AT160DRO	0.5	切断 Shut-off									5.0	3.0		
AT190DRO	0.5	切断 Shut-off										5.0	1.0	
AT210DRO	0.5	切断 Shut-off											2.0	
AT240DRO	0.5	切断 Shut-off											4.0	2.0
AT270DRO	0.5	切断 Shut-off											5.0	5.0
AW18D001	0.5	切断 Shut-off										5.0	2.0	
AW22D001	0.5	切断 Shut-off											3.0	1.0
AW22D002	0.5	切断 Shut-off											5.0	3.0
AW24D002	0.5	切断 Shut-off												5.0

注：1 最大允许压差不准超过 ASME B16.34 标准规定的最大工作压力。
Note: 1 Maximum allowable differential pressure is not allowed to exceed the maximum working pressure specified in ASME B16.34 standard.

表 3-4（续）软密封 V 型球阀配双作用气缸执行机构 （气关） 单位：MPa
Table 3-4 (Contd) Soft seal V-ball valve with double-acting cylinder actuator (air to close) Unit: MPa

执行机构 Actuator	气源压力 Air supply	阀门 状态 valve status	公 称 通 径 inch (mm) Nominal diameter inch (mm)											
			1/2"-1" (15-25)	1¼" (32)	1½" (40)	2" (50)	2½" (65)	3" (80)	4" (100)	5" (125)	6" (150)	8" (200)	10" (250)	12" (300)
AT52DDO	0.5	切断 Shut-off	2.0											
AT63DDO	0.5	切断 Shut-off	5.0	4.0	1.0									
AT75DDO	0.5	切断 Shut-off		5.0	4.0	1.0								
AT83DDO	0.5	切断 Shut-off			5.0	4.0	2.0							
AT92DDO	0.5	切断 Shut-off				5.0	4.0	2.0						
AT105DDO	0.5	切断 Shut-off					5.0	5.0	1.0					

AT125DDO	0.5	切断 Shut-off							5.0	2.0				
AT140DDO	0.5	切断 Shut-off								5.0	4.0			
AT160DDO	0.5	切断 Shut-off									5.0	3.0		
AT190DDO	0.5	切断 Shut-off										5.0	1.0	
AT210DDO	0.5	切断 Shut-off											2.0	
AT240DDO	0.5	切断 Shut-off											4.0	2.0
AT270DDO	0.5	切断 Shut-off											5.0	5.0
AW18D001	0.5	切断 Shut-off										5.0	2.0	
AW22D001	0.5	切断 Shut-off											3.0	1.0
AW22D002	0.5	切断 Shut-off											5.0	3.0
AW24D002	0.5	切断 Shut-off												5.0

注：1 • 最大允许压差不准超过 ASME B16.34 标准规定的最大工作压力。

Note: 1 Maximum allowable differential pressure is not allowed to exceed the maximum working pressure specified in ASME B16.34 standard.

表 3-5 软密封 V 型球阀配单作用气缸执行机构 （气开） 单位：MPa

Table 3-5 Soft seal V-ball valve with single-acting cylinder actuator (air to open) Unit: MPa

执行机构 Actuator	气源压力 Air supply	阀门 状态 valve status	公 称 通 径 inch (mm) Nominal diameter inch (mm)											
			1/2"-1"	1¼"	1½"	2"	2½"	3"	4"	5" (125)	6"	8"	10"	12"
			(15-25)	(32)	(40)	(50)	(65)	(80)	(100)		(150)	(200)	(250)	(300)
AT63SR5	0.5	切断 Shut-off	1.0											
AT75SR5	0.5	切断 Shut-off	5.0	2.0										
AT83SR5	0.5	切断 Shut-off		4.0	2.0									
AT92SR5	0.5	切断 Shut-off		5.0	5.0	1.0								
AT105SR5	0.5	切断 Shut-off				4.0	2.0							
AT125SR5	0.5	切断 Shut-off				5.0	5.0	2.0						
AT140SR5	0.5	切断 Shut-off						5.0	4.0					
AT160SR5	0.5	切断 Shut-off							5.0	4.0				

AT190SR5	0.5	切断 Shut-off								5.0	4.0			
AT210SR5	0.5	切断 Shut-off									5.0	3.0		
AT240SR5	0.5	切断 Shut-off										5.0	0.6	
AT270SR5	0.5	切断 Shut-off											2.0	
AT300SR5	0.5	切断 Shut-off											3.0	1.0
AT350SR5	0.5	切断 Shut-off											5.0	3.0
AW22SR51	0.5	切断 Shut-off										5.0		
AW24SR51	0.5	切断 Shut-off											1.0	
AW24SR52	0.5	切断 Shut-off											5.0	3.0
AW27SR52	0.5	切断 Shut-off											2.0	
AW30SR52	0.5	切断 Shut-off											5.0	3.0
AW32SR52	0.5	切断 Shut-off												5.0

注：1 • 最大允许压差不准超过 ASME B16.34 标准规定的最大工作压力。

Note: 1 Maximum allowable differential pressure is not allowed to exceed the maximum working pressure specified in ASME B16.34 standard.

表 3-5（续）软密封 V 型球阀配单作用气缸执行机构 （气关） 单位：MPa

Table 3-5 (Contd) Soft seal V-ball valve with single-acting cylinder actuator (air to close) Unit: MPa

执行机构 Actuator	气源压力 Air supply	阀门 状态 valve status	公 称 通 径 inch (mm) Nominal diameter inch (mm)											
			1/2"-1"	1¼"	1½"	2"	2½"	3"	4"	5"	6"	8"	10"	12"
			(15-25)	(32)	(40)	(50)	(65)	(80)	(100)	(125)	(150)	(200)	(250)	(300)
AT63SD5	0.5	切断 Shut-off	1.0											
AT75SD5	0.5	切断 Shut-off	5.0	2.0										
AT83SD5	0.5	切断 Shut-off		4.0	2.0									
AT92SD5	0.5	切断 Shut-off		5.0	5.0	1.0								
AT105SD5	0.5	切断 Shut-off				4.0	2.0							
AT125SD5	0.5	切断 Shut-off				5.0	5.0	2.0						

AT140SD5	0.5	切断 Shut-off						5.0	4.0					
AT160SD5	0.5	切断 Shut-off							5.0	4.0				
AT190SD5	0.5	切断 Shut-off								5.0	4.0			
AT210SD5	0.5	切断 Shut-off									5.0	3.0		
AT240SD5	0.5	切断 Shut-off										5.0	0.6	
AT270SD5	0.5	切断 Shut-off											2.0	
AT300SD5	0.5	切断 Shut-off											3.0	1.0
AT350SD5	0.5	切断 Shut-off											5.0	3.0
AW22SD51	0.5	切断 Shut-off										5.0		
AW24SD51	0.5	切断 Shut-off											1.0	
AW24SD52	0.5	切断 Shut-off											5.0	3.0
AW27SD52	0.5	切断 Shut-off											2.0	
AW30SD52	0.5	切断 Shut-off											5.0	3.0
AW32SD52	0.5	切断 Shut-off												5.0

注：1 • 最大允许压差不准超过 ASME B16.34 标准规定的最大工作压力。

Note: 1 Maximum allowable differential pressure is not allowed to exceed the maximum working pressure specified in ASME B16.34 standard.

外形尺寸及重量
External Dimensions and Weight

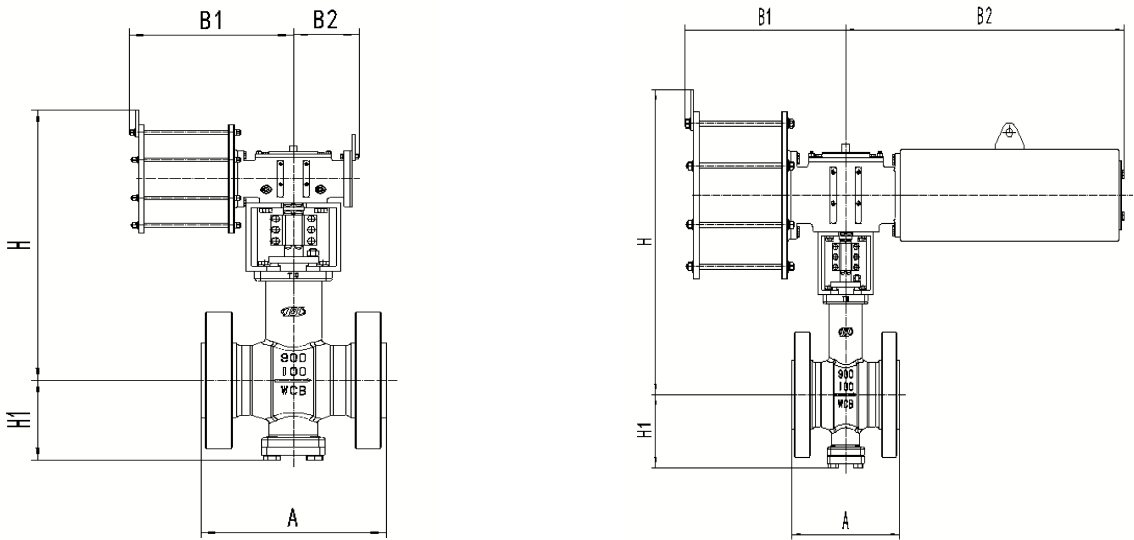


图 5 V 型球阀配 AW 气动单作用执行机构
Figure 5 V-ball valve with AW pneumatic single-acting actuator

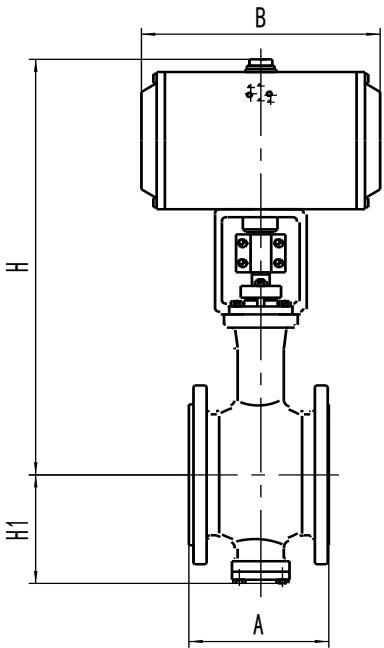


图 6 V 型球阀配 AT 气动执行机构
Figure 6 V-Ball Valve with AT pneumatic actuator

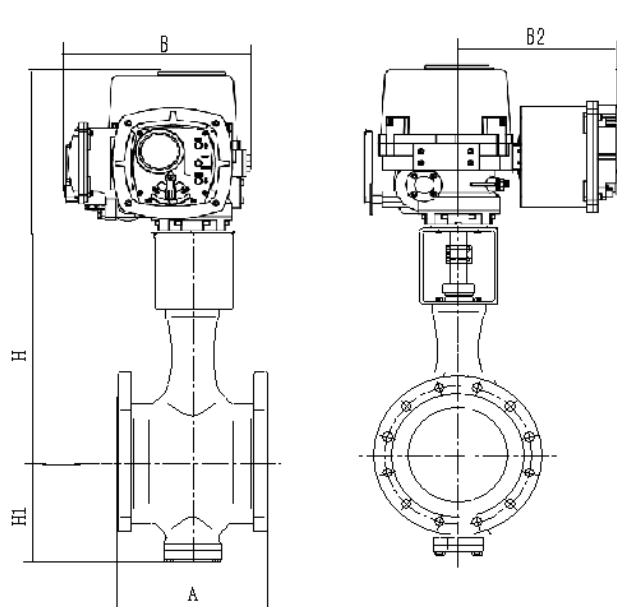


图 7.1 V 型球阀配 M 电动执行机构

Figure 7.1 V-ball valve with M electric actuator

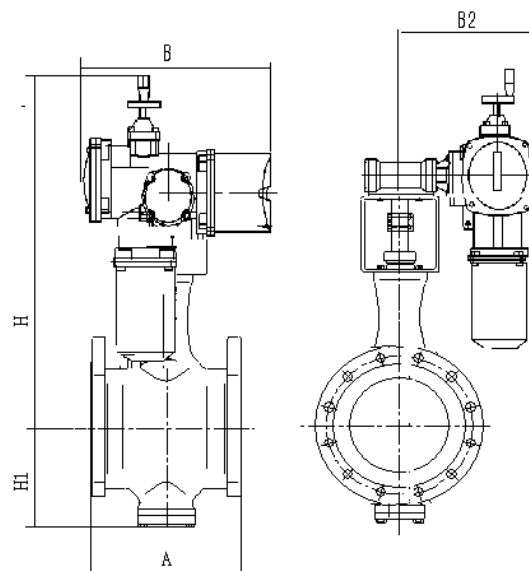


图 7.2 V 型球阀配 M+A 电动执行机构

Figure 7.2 V-ball valve with M+A electric actuator

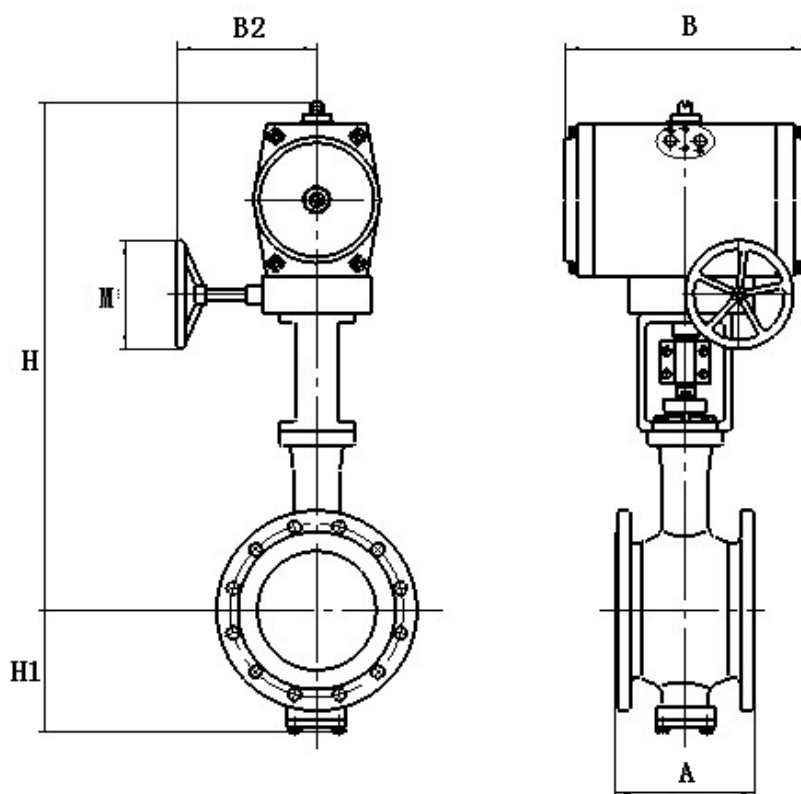


图 8 V 型球阀配 AT 执行机构带手轮

Figure 8 V-ball valve with AT actuator with hand wheel



外形尺寸及重量

External Dimensions and Weight

(注: 1、表 4 只包括 ZJHV—110 外形尺寸; ZJHV—111 和 ZJHV—140 外形尺寸请详询技术部。

2、如下述表格中数据与技术提供的外形尺寸图数据不一致时, 以外形尺寸图数据为准)

(Note: 1. Table 4 only includes the external dimensions of ZJHV-110; for the external dimensions of ZJHV-111 and ZJHV-140, please contact the technical department for details.

2. If the data in the following table is not consistent with the data in the dimensional drawing provided by the technical department, the later shall prevail)

表 4-1 V 型球阀 PN16/20/25/40/50、Class150/300 外形尺寸

mm

Table 4-1 External dimensions of V-ball valve PN16/20/25/40/50, Class150/300

mm

公称 通径 Nominal diameter Inch (mm)	执行机构 Actuator	H	B	B1	B2	A	H1	重量 Weight kg	公称 通径 Nominal diameter Inch (mm)	执行机构 Actuator	H	B	B1	B2	A	H1	重量 Weight t kg
1/2" 至 1" (15 至 25)	AT63DRO、 AT63DDO	363	195			102	69	10.5	4" (100)	AT105DRO、 AT105DDO	520	285			194	133	
	AT83DRO、 AT83DDO	384	235					11.6		AT125DRO、 AT125DDO	540	350					
	AT92SR5、 AT92SD5	392	275					13.7		AT160SR5、 AT160SD5	582	470					
	AT105SR5、 AT105SD5	408	285					15.4		AT160DRO、 AT160DDO	580	470					
										AT210SR5、 AT210SD5	650	560					
										AW22SR51 AW22SD51	642		520	910			
										AW22D001	642		520	110			
1¼" (32)	AT83DRO、 AT83DDO	409	235			102	76		5" (125)	AT125DRO、 AT125DDO	632	350			210	170	
	AT92DRO、 AT92DDO	420	275							AT160DRO、 AT160DDO	672	470					
	AT105SR5、 AT105SD5	430	285							AT210SR5、 AT210SD5	740	560					
	AT125SR5、 AT125SD5	452	350							AT240SR5、 AT240SD5	774	620					
										AW22D001	734		520	110			
										AW22SR51 AW22SD51	734		520	910			
										AW27SR52 AW27SD52	794		650	950			
1½" (40)	AT83DRO、 AT83DDO	410	235			114	76	13.1	6" (150)	AT160DRO、 AT160DDO	705	470			229	173	
	AT92DRO、 AT92DDO	425	275					14.6		AT210DRO、 AT210DDO	708	560					
	AT105SR5、 AT105SD5	434	285					16.9		AT210SR5、 AT210SD5	708	560					

	AT125SR5、 AT125SD5	456	350					20.1		AT240SR5、 AT240SD5	807	620					
										AT270SR5、 AT270SD5	744	740					
										AW22D001	754		520	110			
										AW22SR51 AW22SD51	754		520	910			
										AW27SR52 AW27SD52	808		650	950			
2" (50)	AT83DRO、 AT83DDO	420	235					14.1		AT210DRO、 AT210DDO	790	560					
	AT92DRO、 AT92DDO	435	275					15.6		AT240DRO、 AT240DDO	939	620					
	AT105SR5、 AT105SD5	440	285					17.9		AT240SR5、 AT240SD5	939	620					
	AT125SR5、 AT125SD5	462	350					21.1	8"(200)	AT270SR5、 AT270SD5	931	740			243	209	
										AW22D001	819		520	110			
										AW27SR52 AW27SD52	879		650	950			
										AW40SR53 AW40SD53	909		700	1160			
2½" (65)	AT92DRO、 AT92DDO	487	275							AT210DRO、 AT210DDO	871	560					
	AT105DRO、 AT105DDO	495	285							AT240DRO、 AT240DDO	905	620					
	AT125SR5、 AT125SD5	515	350							AT270DRO、 AT270DDO	931	740					
	AT160SR5、 AT160SD5	557	470						10" (250)	AT270SR5、 AT270SD5	931	740			297	271	
										AW27D002	879		650	250			
										AW27SR52 AW27SD52	879		650	950			
										AW40SR53 AW40SD53	909		700	1160			
3" (80)	AT105DRO、 AT105DDO	503	285					33.8		AT210DRO、 AT210DDO	900	560					
	AT125DRO、 AT125DDO	525	350					35.9		AT240DRO、 AT240DDO	932	620					
	AT160SR5、 AT160SD5	567	470					51		AT270DRO、 AT270DDO	969	740					
	AT92DRO、 AT92DDO 5	509	275						12" (300)	AT270SR5、 AT270SD5	969	740			338	295	
	AT125SR5、 AT125SD5	525	350							AW27D002	906		650	250			
										AW27SR52 AW27SD52	906		650	950			
										AW40SR53 AW40SD53	1063		700	1160			

注：本表外形尺寸不包含附件。
Note: External dimensions in this table do not include accessories.

表 5 V 型球阀配电动执行机构外形尺寸 mm

Table 5 External dimensions of V-ball valve with electric actuator mm

公称通径 Nominal diameter Inch(mm)	执行机构 Actuator	A		H	H1	B2	B	重量 Weight kg
		PN1.6MPa Class150	PN4.0MPa Class300					
1/2"-1"(15-25)	M0411	102	102	524	69	280	365	
1¼" (32)	M0421	102	102	550	76	280	365	
1½" (40)	M0421	114	114	550	76	280	365	
2" (50)	M0421	124	124	559	83	280	365	
2½" (65)	M0430	145	145	649	117	300	410	
3" (80)	M0430	165	165	660	127	300	410	
4" (100)	M0460	194	194	674	137	300	410	
5" (125)	M8410+A8020, M8610+A8020	210	210	825	170	385	460	
6" (150)	M8420+A8020, M8620+A8020	229	229	870	173	385	460	
8"(200)	M8420+A8040, M8620+A8040	243	243	890	209	405	460	
10" (250)	M8430+A8040, M8630+A8040	297	297	1000	271	405	492	
12" (300)	M8430+A8040, M8630+A8040	338	338	1150	295	405	492	

注：本表外形尺寸连接形式直连式。

Note: The form of connection of external dimension in this table is direct connection.