COMPANY PROFILE

MACOTANGO VALVE GROUP

MacoTango Valve Group provides industrial fluid control and control valve solutions worldwide. Founded in 2005, the company focuses on the design, development, and supply of control valves, including ball valves, butterfly valves, and self-operated valves. These products are widely used in chemical processing, LNG, power generation, metallurgy, and other industrial applications.

MacoTango Valve is a registered brand used for the international marketing and sales of valve products manufactured by SICHUAN MARK FLUID TECHNOLOGY CO., LTD., an established valve manufacturer in China. All products are produced by the named manufacturing entity, and all certifications are issued in its name. The company is headquartered in Chengdu and operates under consistent quality control and supply systems.

Guided by a commitment to quality, safety, and precision, MacoTango continues to improve its products and service capability, providing reliable solutions for modern industrial applications.

The manufacturing entity operates under recognised certifications, including ISO 9001, ISO 14001, ISO 45001, API, EAC, and TÜV. Type test capabilities cover up to Class 2500 for shut-off valves and up to PN320 for control valves.

MACOTANGO VALVE GROUP

PRODUCTION WORKSHOP

MacoTango Valve Group uses advanced Computer Numerical Control (CNC) machining equipment, including CNC lathes, CNC drilling machines, machining centres, large vertical lathes, and drilling machines. These advanced facilities support efficient production and consistent machining accuracy.

A well-organised production workshop and systematic process management help ensure stable product quality and reliable delivery. From machining to assembly, MacoTango maintains high standards to meet the needs of industrial valve and control valve applications.

Advanced processing equipment and refined workshop management ensure dependable quality and delivery performance.

PRODUCTION EQUIPMENT

MacoTango Valve Group makes extensive use of Computer Nunerical Control(CNC) machining center equipment, including CNC lathes, CNC drilling machines, and machining centers. The factory is also equipped with large vertical lathe and drilling machines. The advanced processing equipment and CNC management system ensure the quality and delivery of products.








TESTING CENTER

MacoTango Valve Group has implemented strict QC measures starting from raw material incoming inspection, process inspection to final inspection.The company has a series of advanced testing equipment that are applied to every inspection control link.






P 产品集锦
RODUCT HIGHLIGHTS

HTS型
顶部导向型单座调节阀
Top-guide single-seated control valve

HCN型
顶部导向型多孔笼式调节阀
Top-guided porous cage regulating valve

HTSG型
注脂密封高温调节阀
Grease seal high temperature control valve

HCB型
平衡式套筒调节阀
Balanced sleeve regulating valve

HTSD型
气动薄膜低温调节阀
Pneumatic diaphragm cryogenic control valve

HTSB型
气动薄膜保温调节阀
Pneumatic fim insulation control valve

HTSW型
气动薄膜波纹管调节阀
Pneumatic diaphragm bellows control valve

T947H-16K 型
电动平衡式大口径调节阀
Electric Balanced Large-caliber Control Valve

V230Y型
自力式压力调节阀
Self-actuated pressurt control valve

ZZYP型
自力式调节阀
Self-actuated control valve series

ZJHPF4/PFA型
内衬PTFE耐腐调节阀
PTFE Lining anti-corrosion control valve

ZZWPE型
电动温控调节阀
Electric temperature control valve

ZZYVP型
自力式氮封调节阀
Self-operated nitrogen seal control valve

ZZVP型
自力式微压调节阀
Self-operated micro pressure control valve

ZMAX/Q型
三通分流合流调节阀
Three way shunt and confluence control valve

HLS型
超小流量针式调节阀
Ultra-small flow needle control valve

DHTSW型
电动波纹管密封调节阀
Electric bellows seal control valve

DHJP型
电动切断阀
Electric shut-off valve

DHTS型
电动单座调节阀
Electric single seat control valve

ZSPQ型
气动活塞切断阀
Pneumatic piston cut-off valve

D641F型
气动衬氟调节蝶阀
Pneumatic fluorine lining control butterfly valve

Q641H/Y型
气动O型切断球阀
Pneumatic o-type cut-off ball valve

Q641F46/PFA型
气动衬氟O型切断球阀
Pneumatic fluorine lined O-type

Q941F型
电动O型切断球阀
Electric O - type cut - off ball valve

C 目录 CONTENTS

直行程调节阀系列 Straight stroke Control Valve Series

自力式系列 Self-operated Series

切断阀系列 Shut-Off Valve Series

角行程系列 Angle stroke series

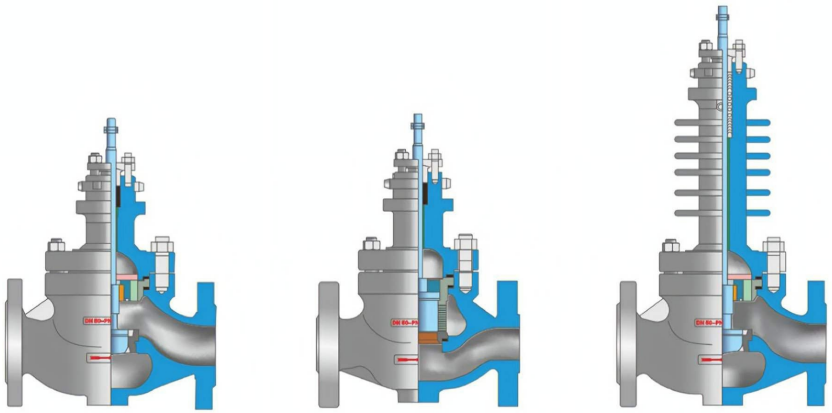
附录说明 Appendix Deseription


STRAIGHT
STROKE
CONTROL VALVE
SERIES
STRAIGHT STROKE
CONTROL VALVE
SERIES
MACOTANGO VALVE GROUP

产品概述Product Overview

本公司的产品采用模块化设计，满足特定工况要求，使控制阀能够在最苛刻工况下适应最难需求。此外，模块化设计降低了备件、安装和维护的成本，使重要的总成本得以节约。

Modular design is adopted for the products of the Company to meet the requirements of specific working conditions, so that the regulating valve can adapt to the most difficult requirements under the most severe working conditions. in addition, modular design reduces the cost of spare parts, installation and maintenance, so that the important total cost can be saved.



产品特点 Products features

1、计算与选型简单;
2、维护简单且方便;
3、设计紧凑合理，使用寿命长;
4、可提供一体化式控制器及执行器;
5、阀体通径从DN20~500(3/4"~20"):
6、压力等级从PN1.0~42.0MPa(ANSI150~2500LB);
7、可供选择类型范围广泛。

1.Simple calculation and selection;
2.Simple and convenient maintenance;
3.Compact and reasonable design; long service life;
4.Integrated controller and actuator can be provided;
5.Body diameter from DN20 to 500(3/4" to 20");
6.Pressure rating from PN1.0 to 42.0MPa(ANSI 150 to 2500LB);
7.Wide range of available types.

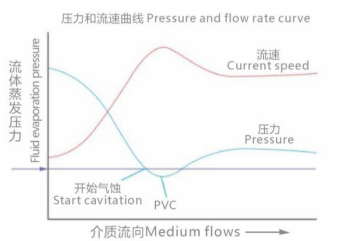
应用领域Application Fields

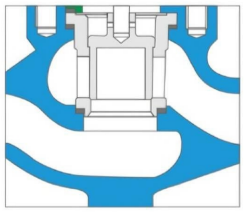
广泛应用于石油天然气、环保水处理、生物制药、化工、电力、食品、造纸、冶金、采矿、船舶及一般工业系统。

It is widely used in petroleum and natural gas, environmental water treatment, biopharmaceutical,chemical, electric power, food, papermaking, metallurgy,mining,ships and general industrial systems.

直行程调节阀概述
OVERVIEW OF STRAIGHT STROKE CONTROL VALVE

通过控制阀的流体 Flow Through Regulating Valve

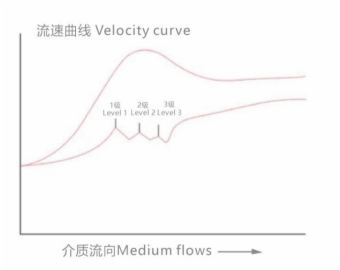


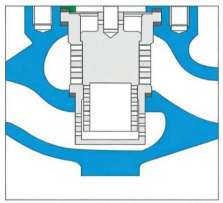


当流体通过控制阀时。流体的阻力影响压力下降。同时流速成比例增加，阻力越大流速增加越大。对不同的流体工况，通过阀门的能量改变会影响空气噪音和气蚀问题。

When the fluid passes through the regulating valve, the resistance of the fuid affects the pressure to drop.At the same time, the fow rate increases proportionally, and the larger the resistance is, the larger the fow rate is.For different fluid conditions, the energy change through the valve will affect air noise and cavitation problems.

空气动力噪音解决方案 Solutions for Aerodynamic Noise

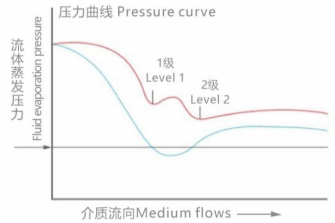


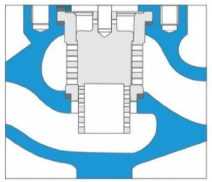


控制通过阀门的流速动力之一是控制流体的空气动力学噪音。通过多级的鼠笼结构，连续吸收压降产生的能量将通过阀门的流速控制到可以接受的范围以内。

One of the forces that control the flow rate through the valve is the aerodynamic noise of the fluid. Through the multi-stage squirrel cage structure ,the energy generated by continuous absorption of pressure drop will be controlled to an acceptable range of flow rate through the valve.

气蚀解决方案 Solutions for Cavitation





将压力控制在临界压力(PVC)以上，可实现对气蚀的控制，通过多级结构，连续吸收压降产生能量，流道的阻力增加，PVC得以控制，这样可以避免气蚀。

By controlling the pressure above the critical pressure(PVC),cavitation can be controlled Through the multi-stage structure, the pressure drop can be absorbed continuously to generate energy,theresistance of the fow channel increases, and PVC can be controlled, so cavitation can be avoided

HTS型顶部导向型单座调节阀
TOP-GUIDE SINGLE-SEATED CONTROL VALVE

产品概述Product Overview

本公司生产的系列单座调节阀，采用顶部导向平衡笼式结构，具有高强度、重载荷、S型流道、压降损失小、流量系数大、可调范围广、流量特性精度高。此调节间适用于工况压差较小的场合，关闭严密，适用于对介质流量或者压力的调节。

The serles of single seat-control valves produced by the Company adopt top guide balanced cage stncture, with high strength, heavy load, S-shaped fow passage, small pressure drop loss, large flow coefhcient, wide adjustable range and high flow characteristic accuracy. This control valve s suitable for ine occasion with small working condition pressure difference and It can close tightly. it is suitable for the regulatlon of medium flow or pressure.

型号编制 Model Preparation

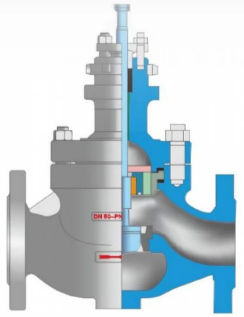
H	结构型式
T	L:超小流量型 T:压套型 C:笼式
S	S:标准型单座调节阀 N:笼式多孔低噪音调节阀 B:套筒调节阀
H	structural style
T	L: Ultra low traffic type T:Compression type C:cage
S	S:Single seat regulating valve N:Cage style porousnoise reduction B:Sleeve regulatingvalve

HTS型顶部导向型单座调节阀概述
TOP-GUIDE SINGLE-SEATED CONTROL VALVE

产品特点 Products Features

阀座采用压笼式结构，具有可靠性能强，后期更换维修方便等特点，解决了传统的无阀座结构泄露无法更换的困难，延长了使用寿命。采用流开式设计，介质趋向于阀门开启的方向，小开度可控性好，流量特性畸变小。根据工况可选配电动或气动执行器进行控制。

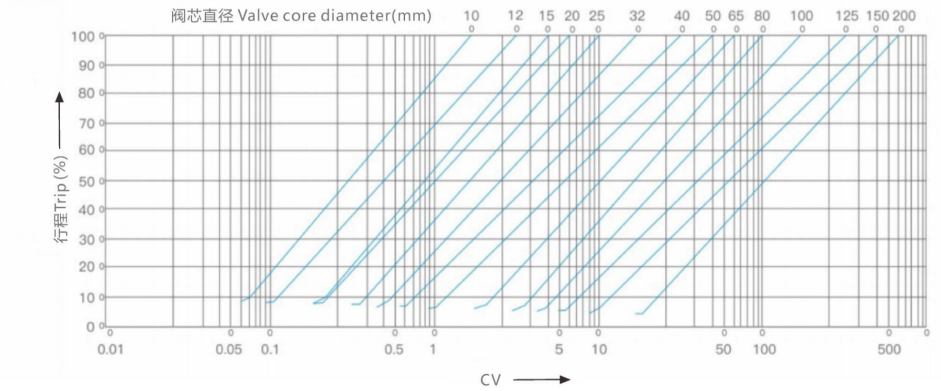
The valve seat adopts pressure cage structure, which has the characterlstics of strong rellabl ity and convenlent replacement and maintenance in the later stage. and solves the problem that the traditlonal structur'e without valve seat cannot be replaced due to leakage. The service life can be extended. With flow opening design, the medium tends to the dlrectlon of valve opening, with good controllablity of small opening and small fow characterisiic distortion. According to the working conditions,electric or pneumatic actuators can be selected for control.



技术参数 Technical Parameters

阀体形式 Body typel	直通S型铸造阀　Stralght–ihrough S–type cast val 'o
阀芯形式 Plug type	平衡笼式单座柱塞阀芯 Balance cage sIngle–seat plunger valve core
公称通径 Nomlnal dlameter	DN15~300mm; NPS 1/2"~12"
公称压力 Nominal pressure	PN1.6–6.4MPa; CLASS 150~300LB
适用温度Applicable temperature	–196~+550℃(按工况可选)(Optional according toworking conditions)
连接形式 Type of connectlon	法兰、焊接、螺纹(适用于1"内) Flango,woldlng,throad (appl catlo wlthln 1")
法兰距 Flange dlstance	符合IEC 60534 According to IEC 60534
压盖形式 Gland type	螺栓压紧式 Bolt compresslon type
密封垫片 Sealing gasket	金属石墨缠绕垫片 Motolgrophlte splral wound goskot
填 料 Packing	聚四氟乙烯、柔性石墨 PTFE,fexible graphlte
执行器 Actuator	气动执行器、电动执行器 Pnoumotlc octuotor,olootrlc aotuator

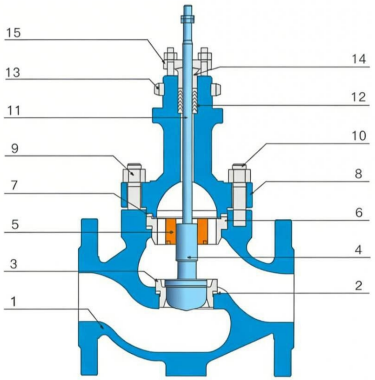
流量特性曲线图 Flow Characteristic Curve



结构与材料 Structure and Materials

本体材质为碳钢 Body Materialls Carbon Steel

1	阀体 Body	WCB	LCB	WC9
2	垫片 Gasket	316+石墨Graphite/FTFE		
3	阀座 Seat	304	304	304
4	阀芯 Plug	304	304	304
5	铜套 Copper bush		Cu/316L	
6	导向套 Guide sleeve	304	304	304
7	垫片 Gasket	316+石墨Graphite/FTFE		
8	阀盖 Bonnet	WCB	LCB	WC9
9	螺母 Nut	304	304	304
10	螺柱 Double-screw bolt	304	304	304
11	阀杆 Ste m	304	304	304
12	填料 Packing	PTFE/柔性石墨 Flexible graphite		
13	锁紧螺母 Lock nut	304	304	304
14	压套Pressing sleeve	304	304	304
15	压板 Plate	304	304	304



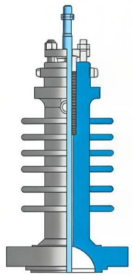
本体材质为不锈钢 Body Materialls Stainless Steel

1	阀体 Body	CF8	CF8M	CF3M
2	垫片 Gasket	316+石墨Graphite/FTFE		
3	阀座 Seat	304	316	316L
4	阀芯 Plug	304	316	316L
5	铜套 Copper bush		Cu/316L	
6	导向套 Guide sleeve	304	316	316L
7	垫片 Gasket	316+石墨Graphite/FTFE		
8	阀盖 Bonnet	CF8	CF8M	CF3M
9	螺母 Nut	304	316	316L
10	螺柱 Double-screw bolt	304	316	316L
11	阀杆 Ste m	304	316	316L
12	填料 Packing	PTFE/柔性石墨 Flexible graphite		
13	锁紧螺母 Lock nut	304	316	316L
14	压套Pressing sleeve	304	316	316L
15	压板 Plate	304	316	316L

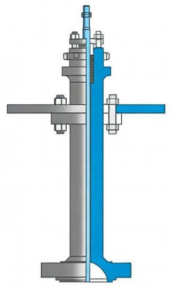
注:1、以上为标准配置结构，阀座为金属密封，阀座为软密封选用V级可选件。可提供喷焊硬质合金的阀内件。2、常规材质为碳钢和不锈钢两种，可根据用户现场条件订制特殊材质控制阀产品。

Note: 1the above Is of standard conh uratlon structur ; the valve seat Is metal soal, and the valve seat is soft se l, grade VI optlonal it can provlde valve trim ot spray welding cemented carbide.2. ihe conventional materlal is carbon steel and stainless steel, and the specal material regulating valve products can be customized according to the user's work conditlons.

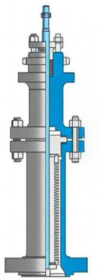
可应用于不同工况的结构 Can be Applled to Different Conditions of the Struc:ture



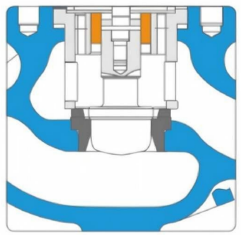
高温型:
适用介质:蒸汽、热油等
适用温度: +250~550℃
High temperature type:
Applicable media:steam. hot oil.etc
Appllcable temperature:+250-550℃



低温型:
适用介质:液氮、液氧等
适用温度:-70~-196℃
Low temperature type:
App icable medium: llquid nitrogen. llguid oxygen, etc.
Applicable temperature:-70~-196℃

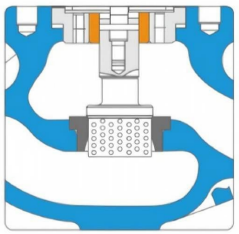


波纹管型:
适用介质:易燃易爆气体、有毒液体
腐蚀性介质等
Bellows type:
Applicable medium:fammable and explosivegas,toxlc llquld, corrosive medlum, etc.



笼式单座结构:
适用于阀前后压差较小，允许少量软性杂质的场合。此结构具有动态稳定性好、噪音低的优点。

Cage-type single-seat structure:
It is suitable for the occasion where the pressure difference between the front and back of the valve is small and a small amount of soft impurities are allowed. This structure has the advantages of good dynamlc stablllty and low noise.



改进型单座结构:
适用于阀前后压差较大，介质干净的场合。此结构设计具有双重导向，稳定性高、泄漏量低等优点。

Improved single-seat structure:
It is suitable for the cccaslons with large pressure dlfference between the front and back of the valve and clean medium.The structure deslgn has the advantages of double guldance,high stabillty and low leakage.

规格参数 Specifcation Parameter

阀座直径 (mm) Inside diameter (in)		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
流量系数(KV) Flow coefficient	直线 siralght line	6.9	11	17.6	27.5	44	69	110	176	275	440	690	1100	1760
	等百分 Percent	6.3	10	16	25	40	63	100	160	250	400	630	1000	1600
口径(DN) Diameter(in)	行程 Travel	可选流量系数Cv(★ 标准型 ● 推荐 ○ 定制) Optlonal flow coefhclentCv(★ standard type ● Recommended ○ Customized)												
20	3/4	★												
25	1	●	★											
32	1-1/4	○	○	★										
40	1-1/2	○	○	●	★									
50	2	○	○	●	●	★								
65	2-1/2			○	○	○	★							
80	3			○	○	○	●	★						
100	4			○	○	○	●	●	★					
125	5						○	○	○	★				
150	6							○	○	●	★			
200	8							○		●	●	★		
250	10								○	○	●	●	★	
300	12								○	○	●	●	●	★
行程 Travel		16mm		25mm			40mm			60mm			100mm	
气动执行机构 Pneumatic actuator		HA/B-22		HA/B-23			HA/B-34			HA/B-45			HA/B-56	
		350cm²		350cm²			560cm²			900cm²			1400cm²	
作用方式 Mode of action	弹簧范围 Spring range	金属密封允许压差(MPa) Metalseal allows dlfferentlalpressure(MPa)												
气开式 Gas openlng	20-100 KPa	1.16	0.7	0.44	0.28	0.18	0.17	0.11	0.07	0.07	0.05	0.03	0.02	0.01
	40-200 KPa	3.34	2.14	1.31	0.84	0.53	0.51	0.33	0.21	0.21	0.16	0.09	0.06	0.04
	80-240 KPa	6.40	4.99	3.05	1.95	1.25	1.18	0.78	0.50	0.50	0.36	0.21	0.15	0.08
气关式 Gas off	20-100 KPa	2.23	2.14	0.87	0.56	0.36	0.34	0.22	0.14	0.14	0.1	0.06	0.03	0.02
	40-200 KPa	6.40	6.40	5.86	3.64	2.30	2.21	1.43	0.91	0.91	0.66	0.37	0.25	0.20
	80-240KPa	6.40	6.40	6.40	5.04	3.18	3.06	1.98	1.26	1.26	0.92	0.52	0.47	0.35
电动执行机构 Electric actuator		金属密封允许压差(MPa) Metalseal allows dlfferentlalpressure(MPa)												
推力(N) Thrust(N)	800	2.38												
	2000	4.77	3.05	1.86	1.19	0.76								
	3000			2.79	1.79	1.14								
	5000			4.66	2.98	1.91	1.13	0.6	0.47					
	6500						1.35	0.8	0.57	0.39	0.26	0.16		
	10000									0.61	0.42	0.20	0.15	
	16000									0.97	0.67	0.35	0.12	0.09

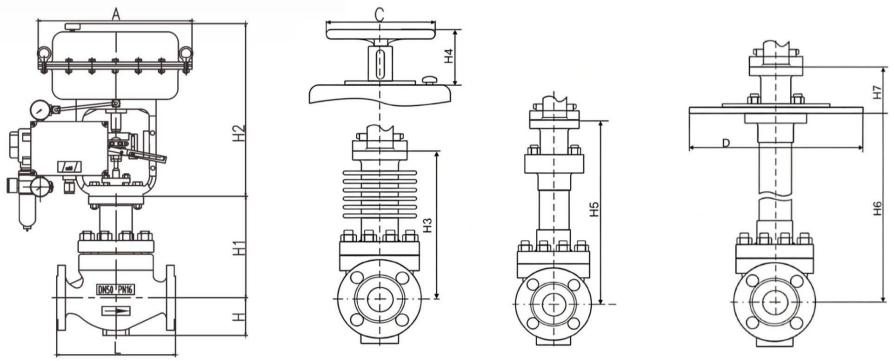
执行机构参数 Actuator parameters

形式 Form 型号 Model	气动薄膜执行机构 Pneumatlc film actuator	电子式电动执行机构 Electronic electric actuator
	HA B22~ HA B56	3810L、RSL
	多弹簧型 Multl sprlng	智能一体化型Intellgentintegratad :type
用途 Purpose	调节、开关Adjustment,swltch	调节 Regulating
驱动 Drlve	气压 (弹簧范围) Alrpressure(sprlng range) 140(20~100)KPa G 240(40~200)KPa G 280(80~240)KPa G	电源 Power supply: AC 220 V +10% 50HZ 电源Power supply: AC 380V+10%50HZ
接头 Jolnt	Rc 1/4	普通型 Common type:2-PF(G1/2") 隔爆型 Flameproof type:2-PF(G3/4")
正作用 Positive action	气压增加推动阀门关闭 Alr pressura lncreases to push the valve to close	控制信号增加推动阀门关闭 Control signalincreases to push the valve to close
反作用 Reactlon	气压增加推动阀门开启 Air pressure increases to push the vaive open	控制信号增加推动阀门开启 Control signalincreases to push the valve open
控制信号 Control slgnal	4~20mA.DC(带定位器with posltlone・)	输入输出 Input output4~20mA.DC
滞后Lag	≤1% FS(带定位器 With posltloner)	≤0.8%FS
直线性 Llnearity	2% FS(带定位器 With posltlonar)	≤ ±1% FS
环境温度 Amblent tamperature	-10~+70℃	
表面涂层 Surface coatlng	阀体 Body:黑色碳化处理Black phosphating treatment 执行器 Actuator:丙烯酸聚氨酯漆 Acryllc polyurethane palnt	
选配附件 Optional accessorles	阀门定位器、手轮、电磁阀、行程开关、保位阀 Optlonal accessorles,Hand wheel,Magnetlc valve Travel switch.Lock up valve	加热器 Heater

主要性能参数 Main Performance Parameters

流量特性Flowcharacteristlcs		等百分比 Equal percentage、直线Stralght line	
可调范围 Adjustable range		50:1	
额定Cv值 Rated Cv value		等百分比 Equalpercentage:10~1400 直线 Straightline:11~1500	
允许泄漏量 Allowable leakage		硬密封:IV级(0.01%阀额定流量);软密封:V级 hard saal: level-IV(0.01% rated fow ofvalve): Soft seal: Level-V	
性能指标 Pelformance Index	驱动方式 Driving mode	气动 Pneumatlc	电动 Electric
	基本误差 Intrinsic error%	±1.0	±1.0
	回差Return difference %	≤1.0	≤1.0
	死区 Dead zone %	≤0.6	≤1.0
	始终点偏差 Constant polnt devla llon%	±2.5	±2.5
	额定行程偏差 Ratedstroke devlatlon%	≤2.5	≤2.5

HTS型顶部导向型单座调节阀
TOP-GUIDE SINGLE_SEATED CONTROL VALVE



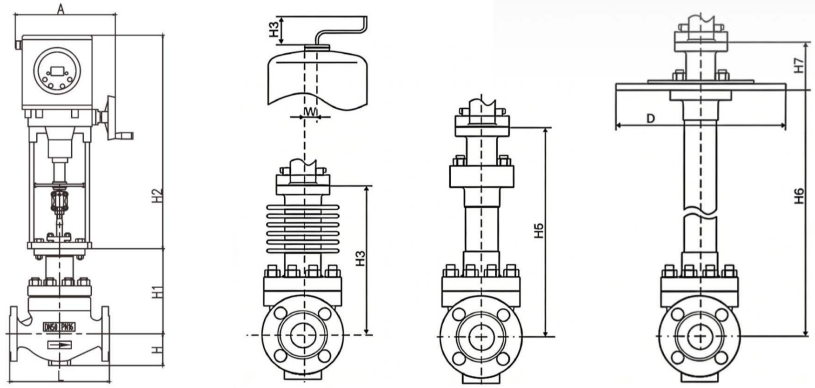
标准型 Standard type　高温型 High temperature type　波纹管型 Corrugated pipe type　低温型 Low temperature type

气动调节阀连接尺寸 Connection Dimension of Pneumatic Control Valve

	DN / in	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
L	PN16/25	180	188	200	220	252	275	300	350	400	455	555	660	740
	PN40	180	188	200	220	252	275	310	370	410	475	600	670	750
	PN64	206	210	220	251	290	315	341	398	452	511	610	752	819
H	PN16	52.5	57.5	70	75	82.5	92.5	100	110	125	142	170	202	230
	PN40	52.5	57.5	70	75	82.5	92.5	100	117.5	135	150	187	225	257
	PN64	65	70	77.5	85	90	102.5	107.5	125	147.5	172	207	235	285
H1		132	132	158	170	179	214	221	234	270	294	331	390	505
H2		315	315	335	335	335	415	415	415	500	500	500	670	670
H3		208	208	224	228	228	334	334	342	408	453	482	520	550
H4		153	153	153	153	153	181	181	181	247	247	247	/	/
H5		336	338	402	402	405	627	628	635	698	702	728	755	790
H6		700(根据实际温度定制According to the vcluol tempcraturc)												
H7		88	88	88	88	88	95	95	95	95	110	110	140	140
D		310	310	355	355	390	430	465	520	585	660	770	890	950
A		285	285	285	285	285	360	360	360	470	470	470	580	580
C		180	180	180	180	180	200	200	200	250	250	250	380	380
法兰 Flange		可执行:GB.HG.JB.DIN.JIS.JS.ANSI等相应标准 Executeble:GB.HG.JB.DIN.JIS.JSANSIDesponaing slandard												

注: 1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新料请联系本公司技术部
Note: 1.The dlimonslons in the ieble ore sienderd dple wlthout accessorls. The dimengions of eccescrios are cpiculelod according lo the aclueconhgurelon. 2.Due lo lhe lechnical innovation and improvemment of the producl,the aize may change.Please conlacl the tecinical departmenloftho company for the latestinformatlon.

DHTS型顶部导向型单座调节阀
TOP-GUIDE SINGLE_SEATED CONTROL VALVE



标准型 Standard type　高温型 High temperature type　波纹管型 Corrugated pipe type　低温型 Low temperature type

电动调节阀连接尺寸 Connection Dimension of Electric Control Valve

	DN / in	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
L	PN16/25	180	188	200	220	252	275	300	350	400	455	555	660	740
	PN40	180	188	200	220	252	275	310	370	410	475	600	670	750
	PN64	206	210	220	251	290	315	341	398	452	511	610	752	819
H	PN16	52.5	57.5	70	75	82.5	92.5	100	110	125	142. 5	170	202. 5	230
	PN40	52.5	57.5	70	75	82.5	92.5	100	117.5	135	150	187	225	257
	PN64	65	70	77.5	85	90	102.5	107.5	125	147.5	172	207. 5	235	285
H1		132	132	158	170	179	214	221	234	270	294	331	390	507
H2		373	373	456	456	179	538	548	548	725	725	725	795	955
H3		208	208	224	228	228	334	334	342	408	453	482	520	50
H4		90	90	90	90	228	90	90	90	90	90	90	90	90
H5		336	338	402	402	406	627	628	635	698	702	728	755	790
H6		700(根据实际温度定制According to the vcluol tempcraturc)												
H7		88	88	88	88	88	95	95	95	95	110	110	140	140
D		310	310	355	355	390	430	465	520	585	660	770	890	950
A		285	285	285	285	285	360	360	360	470	470	470	580	580
法兰 Flange		可执行:GB.HG.JB.DIN.JIS.JS.ANSI等相应标准 Executeble:GB.HG.JB.DIN.JIS.JSANSIDesponaing slandard												

注: 1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新料请联系本公司技术部
Note: 1.The dlimonslons in the ieble ore sienderd dple wlthout accessorls. The dimengions of eccescrios are cpiculelod according lo the aclueconhgurelon. 2.Due lo lhe lechnical innovation and improvemment of the producl,the aize may change.Please conlacl the tecinical departmenloftho company for the latestinformatlon.

产品概述Product Overview

本公司生产的系列平衡式二级密封套筒调节阀，采用套筒导向，压力平衡式阀芯，该系列的调节阀是套间双密封结构主要应用于泄漏要求不高的场合，因为是双密封结构两个密封面都是金属密封，因此使用的压差范团更大一些，

The company produced a series of balanced two-stage sealed sleve control valve, usingsleeve-oriented, pressure-balanced spool, The series of control valve is a suite of double-sealstructure is mainly used in leakage requirements are not high occasions, because it is adouble-seal structure, both sealing surfaces are metal seal, So the differential pressure usedreturns more.

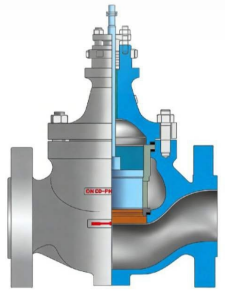
型号编制 Model Preparation

H	结构型式
T	L:超小流量型 T:压套型 C:笼式
S	S:标准型单座调节阀 N:笼式多孔低噪音调节阀 B:套筒调节阀
H	structural style
T	L: Ultra low traffic type T:Compression type C:cage
S	S:Single seat regulating valve N:Cage style porousnoise reduction B:Sleeve regulatingvalve

产品特点 Products Features

阀芯利用压力平衡式结构，启闭力小，通过较小的执行机构推力就能控制高压差的工况。广泛应用于要求动态稳定性好的中低温、中低压管线的流体控制。密封性能一般、允许压差大。套筒导向，平衡压力，稳定性好，结构紧，可以快速在线更换阀内件，维修效率高，节约人力和时间。平衡式阀芯结构确保所需的执行机构推力偏小。

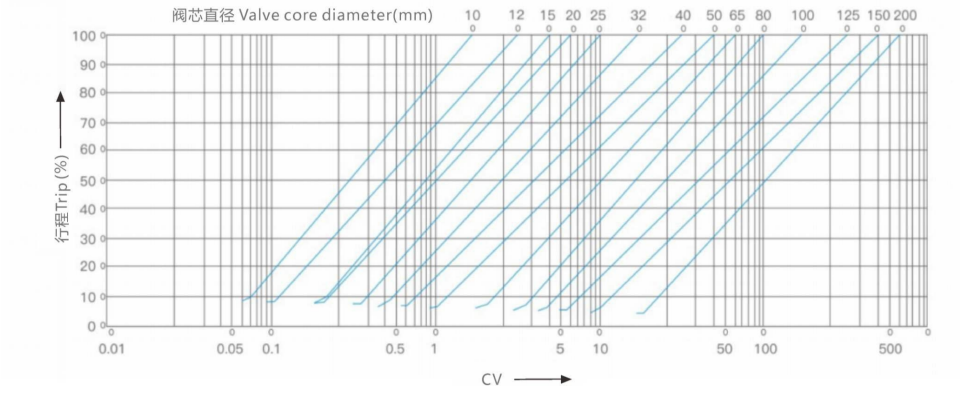
The pressure balanced structure ls used for the plug, wlth small opening and closing force, and the worklng conditlon of high-pressure dlfference can be controlled by a sma l actuator thrust. It is wldely used in the fuid control of nedlum and low temperature, medlum and low pressure plpellnes with good dynamic stabllity. it has good sealing performance and large allowable pressure dlfference, It has sleeve gulde, with large gulde area, good stabl lty, compact structure, qulck on-line replacement of valve trlm, high maintenance efhclency saving manpower and time, Balanced vaive plug constructlon ensures minimum actuatorthrust.



技术参数 Technical Parameters

阀体形式 Body type]	直通S型铸造阀　Stralght−ihrough S−type cast val 'o
阀芯形式 Plug type	平衡式双密封套筒阀芯 Balanceddouble seel sleeve plug
公称通径 Nomlnal dlameter	DN25~300mm; NPS1"~12"
公称压力 Nominal pressure	PN1.6−16.0MPa; CLASS 150~1500LB
适用温度Applicable temperature	−196~+550℃(按工况可选)(Optlonal according to working conditlons)
连接形式 Type of connectlon	法兰、焊接、螺纹(适用于1"内) Flango,woldlng,throad (appl catlo wlthln 1"）
法兰距 Flange dlstance	符合IEC 60534 According to lEC 60534
压盖形式 Gland type	螺栓压紧式 Bolt compresslon type
密封垫片 Sealing gasket	金属石墨缠绕垫片 Motolgrophlte splral wound goskot
填 料 Packing	聚四氟乙烯、柔性石墨 PTFE,fexible graphlte
执行器 Actuator	气动执行器、电动执行器 Pnoumotlc octuotor,olootrlc aotuator

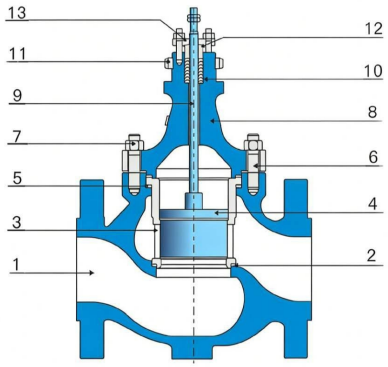
流量特性曲线图 Flow Characteristic Curve



结构与材料 Structure and Materials

本体材质为碳钢 Body Materialls Carbon Steel

1	阀体 Body	WCB	LCB	WC9
2	垫片 Gasket	316+石墨Graphite/FTFE		
3	套筒 Sleeve	304	304	304
4	阀芯 Plug	304	304	304
5	垫片 Gasket	316+石墨Graphite/FTFE		
6	螺柱 Double-screw bolt	304	304	304
7	螺母 Nut	304	304	304
8	阀盖 Bonnet	WCB	LCB	WC9
9	阀杆 Stem	304	304	304
10	填料 Packing	PTFE/柔性石墨 Flexible graphite		
11	锁紧螺母 Lock nut	304	304	304
12	压套Pressing sleeve	304	304	304
13	压板 Plate	304	304	304



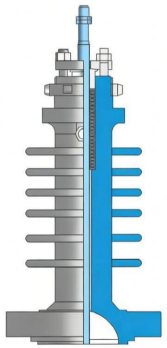
本体材质为不锈钢 Body Materialls Stainless Steel

1	阀体 Body	CF8	CF8M	CF3M
2	垫片 Gasket	316+石墨Graphite/FTFE		
3	套筒 Sleeve	304	316	316L
4	阀芯 Plug	304	316	316L
5	垫片 Gasket	316+石墨Graphite/FTFE		
6	螺柱 Double-screw bolt	304	316	316L
7	螺母 Nut	304	316	316L
8	阀盖 Bonnet	CF8	CF8M	CF3M
9	阀杆 Stem	304	316	316L
10	填料 Packing	PTFE/柔性石墨 Flexible graphite		
11	锁紧螺母 Lock nut	304	316	316L
12	压套Pressing sleeve	304	316	316L
13	压板 Plate	304	316	316L

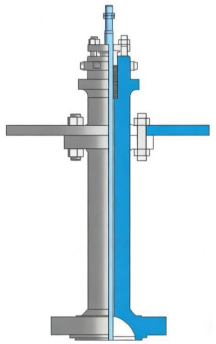
注:1、以上为标准配置结构，阀座为金属密封，阀座为软密封选用V级可选件。可提供喷焊硬质合金的阀内件。2、常规材质为碳钢和不锈钢两种，可根据用户现场条件订制特殊材质控制阀产品。

Note: 1the above Is of standard conh uratlon structur ; the valve seat Is metal soal, and the valve seat is soft se l, grade Vl optlonal it can provlde valve trim ot spray welding cemented carbide.2. ihe conventional materlal is carbon steel and stainless steel, and the speclal material regulating valve products can be customized according to the user's work conditlons.

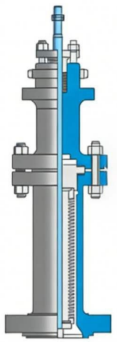
可应用于不同工况的结构 Can be Applled to Different Conditions of the Struc:ture



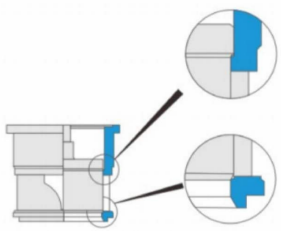
高温型:
适用介质:蒸汽、热油等
适用温度: +250~550℃
High temperature type:
Applicable media:steam. hot oil.etc
Appllcable temperature:+250-550℃



低温型:
适用介质:液氮、液氧等
适用温度:-70~-196℃
Low temperature type:
App icable medium: llquid nitrogen. llguid oxygen, etc.
Applicable temperature:-70~-196℃



波纹管型:
适用介质:易燃易爆气体、有毒液体
腐蚀性介质等
Bellows type:
Applicable medium:fammable and explosive gas,toxlc llquld, corrosive medlum, etc.



密封原理:
套筒调节阀采用双密封导向型结构。具有耐压差高，运行稳定的特点，特别适用于蒸汽、热油自动控制系统中。

Sealing principle:
Double sealing and guiding structure are adopted for sleeve controlvalve.It has the characteristics of high pressure difference and stable operation especially suitable for automatic control system with steam and hot oil.

规格参数 Specifcation Parameter

阀座直径 (mm) Inside diameter (in)			25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
流量系数(KV) Flow coefficient		直线 siralght line	11	17.6	27.5	44	69	110	176	275	440	690	1100	1760
		等百分 Percent	10	16	25	40	63	100	160	250	400	630	1000	1600
口径(DN) Diameter(in)		行程 Travel	可选流量系数Cv(★ 标准型 ● 推荐 ○定制) Optlonal flow coefhclentCv(★ standard type ● Recommended○ Customized)											
25	1	16mm	★											
32	1-1/4		○	★										
40	1-1/2	25mm	○	●	★									
50	2		○	●	●	★								
65	2-1/2	40mm		○	○	○	★							
80	3			○	○	○	●	★						
100	4			○	○	○	●	●	★					
125	5	60mm					○	○	○	★				
150	6							○	○	●	★			
200	8							○	○	●	●	★		
250	10	100mm								○	●	●	★	
300	12										○	●	●	★
气动执行机构 Pneumatic actuator			HA/B-23			HA/B-34			HA/B-45				HA/B-56	
			350cm²			560cm²			900cm²				1400cm²	
作用方式 Mode of action	弹簧范围 Spring range		金属密封允许压差(MPa) Metalseal allows dlfferentlalpressure(MPa)											
气开式 Gas openlng	20-100 KPa		3.00	2.25	2.25	1.95	2.36	2.04	1.67	1.41	1.41	1.14	0.65	0.55
	40-200 KPa		6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	1.55	1.40
	80-240 KPa		6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	4.08	4.08
气关式 Gas off	20-100 KPa		1.50	1.13	1.13	0.98	1.18	1.02	0.84	0.71	0.71	0.57	0.65	0.55
	40-200 KPa		4.50	3.38	3.38	2.93	3.54	3.06	2.51	2.12	2.12	1.71	0.80	1.55
	80-240KPa		6.40	6.40	6.40	6.40	6.40	6.40	5.85	4.94	4.94	4.00	4.08	3.65
电动执行机构 Electric actuator			金属密封允许压差(MPa) Metalseal allows dlfferentlalpressure(MPa)											
推力(N) Thrust(N)	800		6.40	6.40										
	2000		6.40	6.40	6.40	5. 10								
	3000		6.40	6.40	6.40	6.40	5. 70	4. 76						
	5000				6.40	6.40	6.40	6.40	6. 25					
	6500								6.40	6.40	4.23	3. 23		
	10000										6.40	6.10	3. 31	2. 07
	16000												6.00	4.00

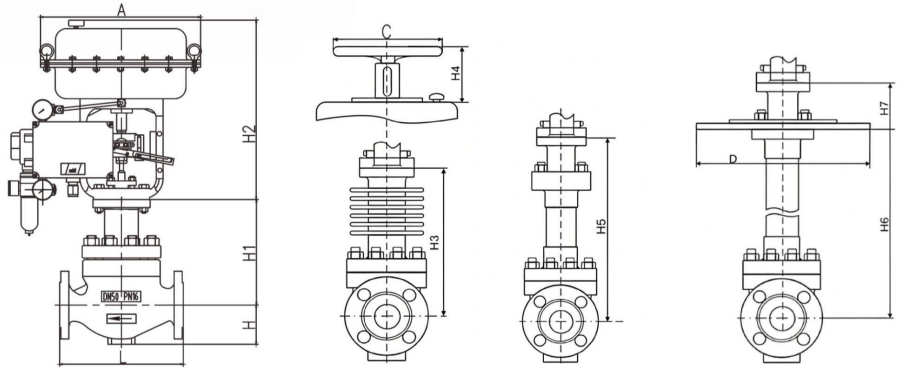
执行机构参数 Actuator parameters

形式 Form 型号 Model	气动薄膜执行机构 Pneumatlc film actuator	电子式电动执行机构 Electronic electric actuator
	HA B22~ HA B56	3810L、RSL
	多弹簧型 Multl sprlng	智能一体化型Intellgentintegratad :type
用途 Purpose	调节、开关Adjustment,swltch	调节 Regulating
驱动 Drlve	气压 (弹簧范围) Alrpressure(sprlng range) 140(20~100)KPa G 240(40~200)KPa G 280(80~240)KPa G	电源 Power supply: AC 220 V +10% 50HZ 电源Power supply: AC 380V+10%50HZ
接头 Jolnt	Rc 1/4	普通型 Common type:2-PF(G1/2") 隔爆型 Flameproof type:2-PF(G3/4")
正作用 Positive action	气压增加推动阀门关闭 Alr pressura lncreases to push the valve to close	控制信号增加推动阀门关闭 Control signalincreases to push the valve to close
反作用 Reactlon	气压增加推动阀门开启 Air pressure increases to push the vaive open	控制信号增加推动阀门开启 Control signalincreases to push the valve open
控制信号 Control slgnal	4~20mA.DC(带定位器with posltlone・)	输入输出 Input output4~20mA.DC
滞后Lag	≤1% FS(带定位器 With posltloner)	≤0.8%FS
直线性 Llnearity	2% FS(带定位器 With poslttonar)	≤ ±1% FS
环境温度 Amblent tamperature	-10~+70℃	
表面涂层 Surface coatlng	阀体 Body:黑色碳化处理Black phosphating treatment 执行器 Actuator:丙烯酸聚氨酯漆 Acryllc polyurethane palnt	
选配附件 Optional accessorles	阀门定位器、手轮、电磁阀、行程开关、保位阀 Optlonal accessorles,Hand wheel,Magnetlc valve Travel switch.Lock up valve	加热器 Heater

主要性能参数 Main Performance Parameters

流量特性Flowcharacteristlcs		等百分比 Equal percentage、直线Stralght line	
可调范围 Adjustable range		50:1	
额定Cv值 Rated Cv value		等百分比 Equalpercentage:10~1400 直线 Straightline:11~1500	
允许泄漏量 Allowable leakage		硬密封:IV级(0.01%阀额定流量),软密封:V级 hard saal: level-lV(0.01% rated fow ofvalve): Soft seal: Level-V	
性能指标 Pelformance Index	驱动方式 Driving mode	气动 Pneumatlc	电动 Electric
	基本误差 Intrinsic error%	±1.0	±1.0
	回差Return difference %	≤1.0	≤1.0
	死区 Dead zone %	≤0.6	≤1.0
	始终点偏差 Constant polnt devla llon%	±2.5	±2.5
	额定行程偏差 Ratedstroke devlatlon%	≤2.5	≤2.5

HCB型平衡式二级密封套筒调节阀
BALANCED TWO-STAGE SEALED SLEEVE CONTROL VALVE



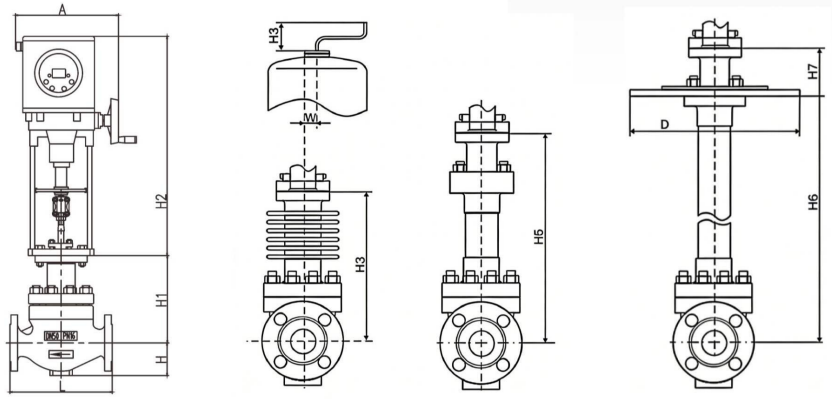
标准型 Standard type　高温型 High temperature type　波纹管型 Corrugated pipe type　低温型 Low temperature type

气动调节阀连接尺寸 Connection Dimension of Pneumatic Control Valve

	DN / in	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
L	PN16/25	180	188	200	220	252	275	300	350	400	455	555	660	740
	PN40	180	188	200	220	252	275	310	370	410	475	600	670	750
	PN64	206	210	220	251	290	315	341	398	452	511	610	752	819
H	PN16	52.5	57.5	70	75	82.5	92.5	100	110	125	142	170	202	230
	PN40	52.5	57.5	70	75	82.5	92.5	100	117.5	135	150	187	225	257
	PN64	65	70	77.5	85	90	102.5	107.5	125	147.5	172	207	235	285
H1		132	132	158	170	179	214	221	234	270	294	331	390	505
H2		315	315	335	335	335	415	415	415	500	500	500	670	670
H3		208	208	224	228	228	334	334	342	408	453	482	520	550
H4		153	153	153	153	153	181	181	181	247	247	247	/	/
H5		336	338	402	402	405	627	628	635	698	702	728	755	790
H6		700(根据实际温度定制According to the vcluol tempcraturc)												
H7		88	88	88	88	88	95	95	95	95	110	110	140	140
D		310	310	355	355	390	430	465	520	585	660	770	890	950
A		285	285	285	285	285	360	360	360	470	470	470	580	580
C		180	180	180	180	180	200	200	200	250	250	250	380	380
法兰 Flange		可执行:GB.HG.JB.DIN.JIS.JS.ANSI等相应标准 Executeble:GB.HG.JB.DIN.JIS.JSANSIDesponaing slandard												

注: 1、表中尺寸为不带附件标准数据，附件尺寸根居实际配置计算
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新料请联系本公司技术部
Note: 1.The dlimonslons in the ieble ore sienderd dple wlthout accessorls. The dimengions of eccescrios are cpiculelod according lo the aclueconhgurelon. 2.Due lo lhe lechnical innovation and improvemment of the producl,the aize may change.Please conlacl the tecinical departmenloftho company for the latestinformatlon.

DHCB型平衡式二级密封套筒调节阀
BALANCED TWO-STAGE SEALED SLEEVE CONTROL VALVE



标准型 Standard type　高温型 High temperature type　波纹管型 Corrugated pipe type　低温型 Low temperature type

电动调节阀连接尺寸 Connection Dimension of Electric Control Valve

	DN / in	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
L	PN16/25	180	188	200	220	252	275	300	350	400	455	555	660	740
	PN40	180	188	200	220	252	275	310	370	410	475	600	670	750
	PN64	206	210	220	251	290	315	341	398	452	511	610	752	819
H	PN16	52.5	57.5	70	75	82.5	92.5	100	110	125	142. 5	170	202. 5	230
	PN40	52.5	57.5	70	75	82.5	92.5	100	117.5	135	150	187	225	257
	PN64	65	70	77.5	85	90	102.5	107.5	125	147.5	172	207. 5	235	285
H1		132	132	158	170	179	214	221	234	270	294	331	390	507
H2		373	373	456	456	179	538	548	548	725	725	725	795	955
H3		208	208	224	228	228	334	334	342	408	453	482	520	50
H4		90	90	90	90	228	90	90	90	90	90	90	90	90
H5		336	338	402	402	406	627	628	635	698	702	728	755	790
H6		700(根据实际温度定制According to the vcluol tempcraturc)												
H7		88	88	88	88	88	95	95	95	95	110	110	140	140
D		310	310	355	355	390	430	465	520	585	660	770	890	950
A		285	285	285	285	285	360	360	360	470	470	470	580	580
法兰 Flange		可执行:GB.HG.JB.DIN.JIS.JS.ANSI等相应标准 Executeble:GB.HG.JB.DIN.JIS.JSANSIDesponaing slandard												

注: 1、表中尺寸为不带附件标准数据，附件尺寸根居实际配置计算
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新料请联系本公司技术部
Note: 1.The dlimonslons in the ieble ore sienderd dple wlthout accessorls. The dimengions of eccescrios are cpiculelod according lo the aclueconhgurelon. 2.Due lo lhe lechnical innovation and improvemment of the producl,the aize may change.Please conlacl the tecinical departmenloftho company for the latestinformatlon.

产品概述Product Overview

本公司生产的系列多孔笼式调节阀，采用套筒导向，压力平衡式阀芯是一种动态稳定性好，适合于苛刻工况的高性能控制阀。它具有工作平稳、允许压差大、流量特性精确噪音低等特点。特别适用于允许泄漏小、要求噪音低、阀前后压差较大的工作场合。

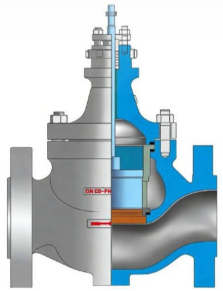
The company produced a series of porous cage control valve, using sleeve-oriented,pressure-balanced spool. It is ahigh performance control valve with good dynamic stability andsuitable for harsh working conditions. It has the characteristics of stable operation, largeallowable pressure difference,accurate flow characteristics andlow noise.It isespeciaysuitablefor workingplaces with small allowable leakage,low noiserequirement and large pressuredifference before and after the valve.

型号编制 Model Preparation

H	结构型式
T	L:超小流量型 T:压套型 C:笼式
S	S:标准型单座调节阀 N:笼式多孔低噪音调节阀 B:套筒调节阀
H	structural style
T	L: Ultra low traffic type T:Compression type C:cage
S	S:Single seat regulating valve N:Cage style porousnoise reduction B:Sleeve regulatingvalve

产品特点 Products Features

由于工况压差较大，介质的流速快对阀内件产生严重的冲蚀破坏，同时会产生很大的噪音，于是本公司将窗口式的标准套筒改成多孔式套筒。对于液体一般流向是从阀门高进低出，通过多孔节流使介质在套筒内部碰撞，消耗内能降低流速。而对于气体介质一般采用低进高出，使气体介质通过多孔套筒的节流之后在阀座后面有一个体积的膨胀，从而把介质的压力降下来降低流速。

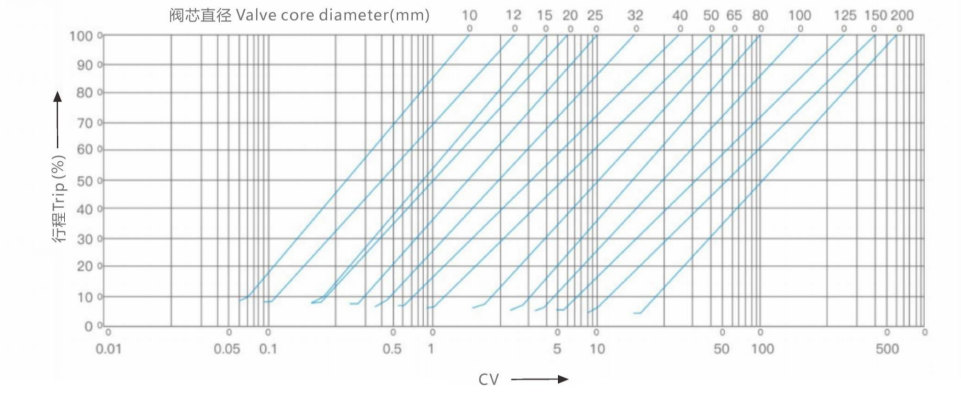


Due to the large pressure clifference of working conditlon and the fast fow rateof medium, the valve internals wlll be serlously damaged by eroslon and generate a lot of noise, so the company changed the window type standard sleeve to porous sleeve. For the general fow direction of llquld, it is from the valve high in and low out. Through porous throtting, the medlum col ides in the sleeve, and the internal consumption can reduce the flow rate. As for the gas medium, low inlet and high outlet are generaly adopted, so that the gas medlum has a volume expanslon behind the valve seat after throttlling through the porous sleeve, so as to reduce the pressure of the medium and reduce the flow rate.

技术参数 Technical Parameters

阀体形式 Body type)	直通S型铸造阀　Stralght-ihrough S-type cast val 'o
阀芯形式 Plug type	平衡型多孔阀芯 Balanced porous plug
公称通径 Nomlnal dlameter	DN25~300mm; NPS1"~12"
公称压力 Nominal pressure	PN1.6-16.0MPa; CLASS 150~1500LB
适用温度Applicable temperature	-196~+550℃(按工况可选)(Optlonal according to working conditlons)
连接形式 Type of connectlon	法兰、焊接、螺纹(适用于1"内) Flango,woldlng,throad (appl catlo wlthln 1")
法兰距 Flange dlstance	符合IEC 60534 According to IEC 60534
压盖形式 Gland type	螺栓压紧式 Bolt compresslon type
密封垫片 Sealing gasket	金属石墨缠绕垫片 Motolgrophlte splral wound goskot
填 料 Packing	聚四氟乙烯、柔性石墨 PTFE,fexible graphlte
执行器 Actuator	气动执行器、电动执行器 Pnoumotlc octuotor,olootrlc aotuator

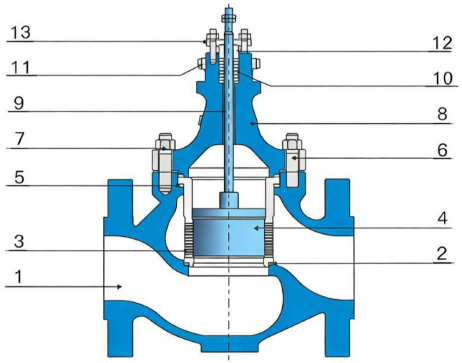
流量特性曲线图 Flow Characteristic Curve



结构与材料 Structure and Materials

本体材质为碳钢 Body Materialls Carbon Steel

1	阀体 Body	WCB	LCB	WC9
2	垫片 Gasket	316+石墨Graphite/FTFE		
3	阀笼 Cage	304	304	304
4	阀芯 Plug	304	304	304
5	垫片 Gasket	316+石墨Graphite/FTFE		
6	螺柱 Double-screw bolt	304	304	304
7	螺母 Nut	304	304	304
8	阀盖 Bonnet	WCB	LCB	WC9
9	阀杆 Stem	304	304	304
10	填料 Packing	PTFE/柔性石墨 Flexible graphite		
11	锁紧螺母 Lock nut	304	304	304
12	压套Pressing sleeve	304	304	304
13	压板 Plate	304	304	304



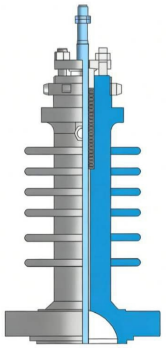
本体材质为不锈钢 Body Materialls Stainless Steel

1	阀体 Body	CF8	CF8M	CF3M
2	垫片 Gasket	316+石墨Graphite/FTFE		
3	阀笼 Cage	304	316	316L
4	阀芯 Plug	304	316	316L
5	垫片 Gasket	316+石墨Graphite/FTFE		
6	螺柱 Double-screw bolt	304	316	316L
7	螺母 Nut	304	316	316L
8	阀盖 Bonnet	CF8	CF8M	CF3M
9	阀杆 Stem	304	316	316L
10	填料 Packing	PTFE/柔性石墨 Flexible graphite		
11	锁紧螺母 Lock nut	304	316	316L
12	压套Pressing sleeve	304	316	316L
13	压板 Plate	304	316	316L

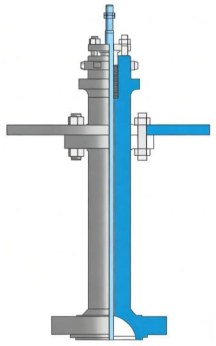
注: 1、以上为标准配置结构，阀座为金属密封，阀座为软密封选用V级可选件，可提供喷焊硬质合金的阀内件。 2、常规材质为碳钢和不锈钢两种，可根据用户现场条件订制特殊材质控制阀产品

Nota:1 the above is of standard conh uratlon structur ; tha valve seat is metal sea, and the valve seat is soft seal,grade Vl optional it can provide valve trim of spray welding cemented carblde.2, The conventlonal materlalls carbon steel and stainless staal and the spaclal matarlaregulating valve products can be customized according to the user's work conditions.

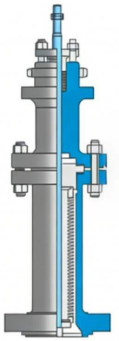
可应用于不同工况的结构 Can be Applled to Different Conditions of the Struc:ture



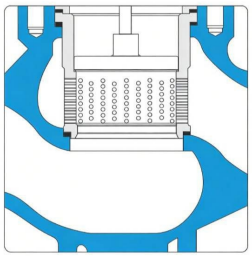
高温型:
适用介质:蒸汽、热油等
适用温度: +250~550℃
High temperature type:
Applicable media:steam. hot oil.etc
Appllcable temperature:+250-550℃



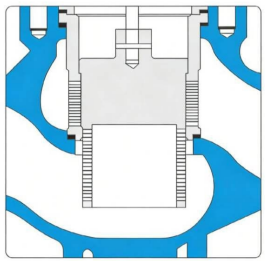
低温型:
适用介质:液氮、液氧等
适用温度:-70~-196℃
Low temperature type:
App icable medium: llquid nitrogen. llguid oxygen, etc.
Applicable temperature:-70~-196℃



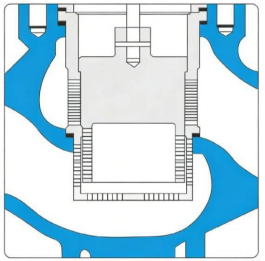
波纹管型:
适用介质:易燃易爆气体、有毒液体
腐蚀性介质等
Bellows type:
Applicable medium:fammable and explosive gas,toxlc llquld, corrosive medlum, etc.



笼式套筒结构:
适用于压差较大且介质干净无杂质的场合，对介质要求较高。
Cage sleeve structure:
It is suitable foroccasions wlth large pressure difference and clean medium without impurities. High conditlon is regulred for medlum.



单级笼式结构:
适用于高温高压且工作压力≤PN16.0MPa的场合中。对介质要求较高
Single-stage cage structure:
Itis suitable for the conditions of hiah temp-erature.high pressure,and working pres ture <PN16.0MPa. High conditlon Is requlred for medium.



二级笼式结构:
适用于高温高压且工作压力≤PN32.0MPa的场合。非常适合阀前后压差较大的工况中，对介质要求较高。
Double-stage cage structure:
Itls sultable for the condtions of hligh temp-erature,high pressure,and working pressure <PN32.0MPa.Itls very sultable for the large pressure difference between the front and back of the valve. High cond tlon Is requlred for medium.

规格参数 Specifcation Parameter

阀座直径 (mm) Inside diameter (in)			25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
流量系数(KV) Flow coefficient		直线 siralght line	11	17.6	27.5	44	69	110	176	275	440	690	1100	1500
		等百分 Percent	10	16	25	40	63	100	160	250	400	630	1000	1400
口径(DN) Diameter(in)		行程 Travel	可选流量系数Cv(★ 标准型 ● 推荐 ○ 定制) Optlonal flow coefhclentCv(★ standard type ● Recommended○ Customized)											
25	1	16mm	★											
32	1-1/4		○	★										
40	1-1/2	25mm	○	●	★									
50	2		○	●	●	★								
65	2-1/2			○	○	○	★							
80	3	40mm		○	○	○	●	★						
100	4			○	○	○	●	●	★					
125	5						○	○	○	★				
150	6	60mm						○	○	●	★			
200	8							○	○	●	●	★		
250	10	100mm								○	●	●	★	
300	12										○	●	●	★
气动执行机构 Pneumatic actuator			HA/B-23			HA/B-34			HA/B-45				HA/B-56	
			350cm²			560cm²			900cm²				1400cm²	
作用方式 Mode of action		弹簧范围 Spring range	金属密封允许压差(MPa) Metalseal allows dlfferentlalpressure(MPa)											
气开式 Gas openlng		20-100 KPa	3.00	2.25	2.25	1.95	2.36	2.04	1.67	1.41	1.41	1.14	0.65	0.55
		40-200 KPa	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	1.55	1.40
		80-240 KPa	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	4.08	4.08
气关式 Gas off		20-100 KPa	1.50	1.13	1.13	0.98	1.18	1.02	0.84	0.71	0.71	0.57	0.65	0.55
		40-200 KPa	4.50	3.38	3.38	2.93	3.54	3.06	2.51	2.12	2.12	1.71	0.80	1.55
		80-240KPa	6.40	6.40	6.40	6.40	6.40	6.40	5.85	4.94	4.94	4.00	4.08	3.65
电动执行机构 Electric actuator			金属密封允许压差(MPa) Metalseal allows dlfferentlalpressure(MPa)											
推力(N) Thrust(N)		800	6.40	6.40										
		2000	6.40	6.40	6.40	5. 10								
		3000	6.40	6.40	6.40	6.40	5. 70	4. 76						
		5000			6.40	6.40	6.40	6.40	6. 25					
		6500							6.40	6.40	4.23	3. 23		
		10000									6.40	6.10	3. 31	2. 07
		16000											6.00	4.00

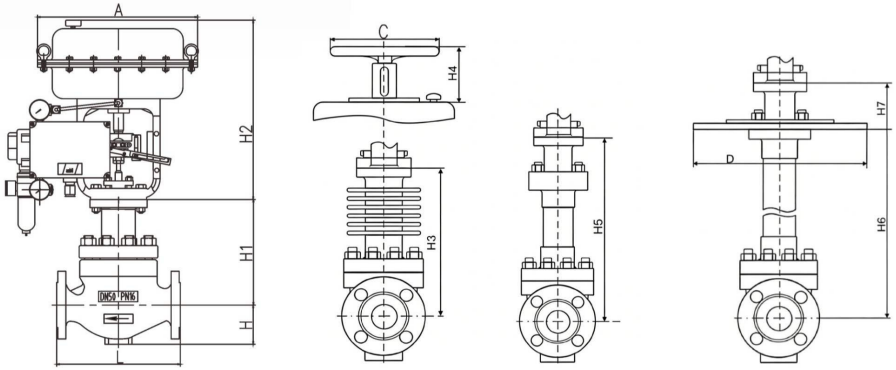
执行机构参数 Actuator parameters

型号 Model	气动薄膜执行机构 Pneumatlc film actuator	电子式电动执行机构 Electronic electric actuator
形式 Form	HA B22~ HAB56	3810L、RSL
	多弹簧型 Multl sprlng	智能一体化型Intellgentintegratad :type
用途 Purpose	调节、开关Adjustment,swltch	调节 Regulating
驱动 Drlve	气压 (弹簧范围) Alrpressure(sprlng range) 140(20~100)KPa G 240(40~200)KPa G 280(80~240)KPa G	电源 Power supply: AC 220 V +10% 50HZ 电源Power supply: AC 380V+10%50HZ
接头 Jolnt	Rc 1/4	普通型 Common type:2-PF(G1/2") 隔爆型 Flameproof type:2-PF(G3/4")
正作用 Positive action	气压增加推动阀门关闭 Alr pressura lncreases to push the valve to close	控制信号增加推动阀门关闭 Control signalincreases to push the valve to close
反作用 Reactlon	气压增加推动阀门开启 Air pressure increases to push the vaive open	控制信号增加推动阀门开启 Control signalincreases to push the valve open
控制信号 Control slgnal	4~20mA.DC(带定位器with posltlone・)	输入输出 Input output4~20mA.DC
滞后Lag	≤1% FS(带定位器 With posltloner)	≤0.8%FS
直线性 Llnearity	2% FS(带定位器 With posltlonar)	≤ ±1% FS
环境温度 Amblent tamperature	-10~+70℃	
表面涂层 Surface coatlng	阀体 Body:黑色碳化处理Black phosphating treatment 执行器 Actuator:丙烯酸聚氨酯漆 Acryllc polyurethane palnt	
选配附件 Optional accessorles	阀门定位器、手轮、电磁阀、行程开关、保位阀 Optlonal accessorles,Hand wheel,Magnetlc valve Travel switch.Lock up valve	加热器 Heater

主要性能参数 Main Performance Parameters

流量特性Flowcharacteristlcs		等百分比 Equal percentage、直线Stralght line	
可调范围 Adjustable range		50:1	
额定Cv值 Rated Cv value		等百分比 Equalpercentage:10~1400 直线 Straightline:11~1500	
允许泄漏量 Allowable leakage		硬密封:IV级(0.01%阀额定流量);软密封:V级 hard saal: level-IV(0.01% rated fow ofvalve): Soft seal: Level-V	
性能指标 Pelformance Index	驱动方式 Driving mode	气动 Pneumatlc	电动 Electric
	基本误差 Intrinsic error%	±1.0	±1.0
	回差Return difference %	≤1.0	≤1.0
	死区 Dead zone %	≤0.6	≤1.0
	始终点偏差 Constant polnt devla llon%	±2.5	±2.5
	额定行程偏差 Ratedstroke devlatlon%	≤2.5	≤2.5

HCN型多孔笼式低噪音调节阀
TOP-GUIDE TYPE POROUS CAGE CONTROL VALVE



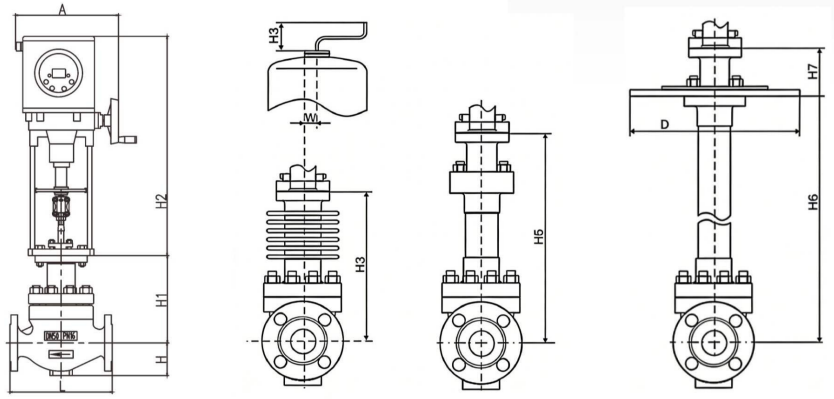
标准型 Standard type　高温型 High temperature type　波纹管型 Corrugated pipe type　低温型 Low temperature type

气动调节阀连接尺寸 Connection Dimension of Pneumatic Control Valve

	DN / in	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
L	PN16/25	180	188	200	220	252	275	300	350	400	455	555	660	740
	PN40	180	188	200	220	252	275	310	370	410	475	600	670	750
	PN64	206	210	220	251	290	315	341	398	452	511	610	752	819
H	PN16	52.5	57.5	70	75	82.5	92.5	100	110	125	142	170	202	230
	PN40	52.5	57.5	70	75	82.5	92.5	100	117.5	135	150	187	225	257
	PN64	65	70	77.5	85	90	102.5	107.5	125	147.5	172	207	235	285
H1		132	132	158	170	179	214	221	234	270	294	331	390	505
H2		315	315	335	335	335	415	415	415	500	500	500	670	670
H3		208	208	224	228	228	334	334	342	408	453	482	520	550
H4		153	153	153	153	153	181	181	181	247	247	247	/	/
H5		336	338	402	402	405	627	628	635	698	702	728	755	790
H6		700(根据实际温度定制According to the vcluol tempcraturc)												
H7		88	88	88	88	88	95	95	95	95	110	110	140	140
D		310	310	355	355	390	430	465	520	585	660	770	890	950
A		285	285	285	285	285	360	360	360	470	470	470	580	580
C		180	180	180	180	180	200	200	200	250	250	250	380	380
法兰 Flange		可执行:GB.HG.JB.DIN.JIS.JS.ANSI等相应标准 Executeble:GB.HG.JB.DIN.JIS.JSANSIDesponaing slandard												

注: 1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新料请联系本公司技术部
Note: 1.The dlimonslons in the ieble ore sienderd dple wlthout accessorls. The dimengions of eccescrios are cpiculelod according lo the aclueconhgurelon. 2.Due lo lhe lechnical innovation and improvemment of the producl,the aize may change.Please conlacl the tecinical departmenloftho company for the latestinformatlon.

DHCN型多孔笼式低噪音调节阀
TOP-GUIDE TYPE POROUS CAGE CONTROL VALVE



标准型 Standard type　高温型 High temperature type　波纹管型 Corrugated pipe type　低温型 Low temperature type

电动调节阀连接尺寸 Connection Dimension of Electric Control Valve

	DN / in	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
L	PN16/25	180	188	200	220	252	275	300	350	400	455	555	660	740
	PN40	180	188	200	220	252	275	310	370	410	475	600	670	750
	PN64	206	210	220	251	290	315	341	398	452	511	610	752	819
H	PN16	52.5	57.5	70	75	82.5	92.5	100	110	125	142. 5	170	202. 5	230
	PN40	52.5	57.5	70	75	82.5	92.5	100	117.5	135	150	187	225	257
	PN64	65	70	77.5	85	90	102.5	107.5	125	147.5	172	207. 5	235	285
H1		132	132	158	170	179	214	221	234	270	294	331	390	507
H2		373	373	456	456	179	538	548	548	725	725	725	795	955
H3		208	208	224	228	228	334	334	342	408	453	482	520	50
H4		90	90	90	90	228	90	90	90	90	90	90	90	90
H5		336	338	402	402	406	627	628	635	698	702	728	755	790
H6		700(根据实际温度定制According to the vcluol tempcraturc)												
H7		88	88	88	88	88	95	95	95	95	110	110	140	140
D		310	310	355	355	390	430	465	520	585	660	770	890	950
A		285	285	285	285	285	360	360	360	470	470	470	580	580
法兰 Flange		可执行:GB.HG.JB.DIN.JIS.JS.ANSI等相应标准 Executeble:GB.HG.JB.DIN.JIS.JSANSIDesponaing slandard												

注: 1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新料请联系本公司技术部
Note: 1.The dlimonslons in the ieble ore sienderd dple wlthout accessorls. The dimengions of eccescrios are cpiculelod according lo the aclueconhgurelon. 2.Due lo lhe lechnical innovation and improvemment of the producl,the aize may change.Please conlacl the tecinical departmenloftho company for the latestinformatlon.

HTSG型高温硬密封散热式调节阀
HIGH-TEMPERAT'URE CONTROL VALVE OF GREASE INJECTION SEAL

产品概述Product Overview

本公司生产的系列高温注脂型调节阀可广泛用于控制各种不同压力和温度的流体，阀体结构紧凑，流体通道呈S流线型，具有压降损失小流通量大，可调范围广，流量特性精度高等特点。阀门采用平衡式阀峦结构，具有阀稳定性好，不易震动，音低，对温度敏感性小。广泛使用于流量大、温度高、泄漏量要求不严格的工况场合。

The series of high-temperature grease injection type control valves produced by our company can be widely used to control various fluids of different pressures and temperatures. The valve body structure is compact, and the fluid passage is in an S-shaped streamlined shape. It features low pressure drop loss, large flow capacity, wide adjustable range, and high precision of flow characteristics. The valve adopts a balanced valve structure, featuring good stability, low vibration, low noise and low sensitivity to temperature. It is widely used in working conditions with large flow rates, high temperatures, and where leakage requirements are not strict.

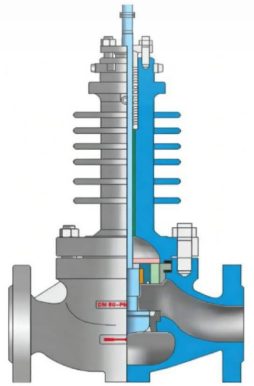
H	结构型式
T	L:超小流量型 T:压套型 C:笼式套筒型
S	S:标准型单座调节阀 SG::高温注脂密封单座调节阀 N:笼式多孔低噪音调节阀 B:套筒调节阀
H	structural style
T	L: Ultra low traffic type T:Compression type C:cage
S	S:Single seat regulating valve SG:High temperature grease injection seal N:Cage style porousnoise reduction B:Sleeve regulatingvalve

HTSG型高温硬密封散热式调节阀
HIGH-TEMPERAT'URE CONTROL VALVE OF GREASE INJECTION SEAL

产品特点 Products Features

阀芯具有丰富的Cv值，阀座关闭密封性能符合调节阀国际行业标准，调节阀配用气动或者电动执行机构，结构紧凑、输出力大，更适用于要求可靠性及关闭性能高的高温场合下的控制使用。增加密封注脂结构及双层密封在用于蒸汽、高温的工况下，有明显强阀杆密封填料的使用寿命及密封性能

The plug has rich Cv value, and the sealing parformance of the valve seat Is in line with the internatlonal industry standard of the regulating valve. The regulating valve is equipped with pneumatic or electric actuator, with compact structure and large output force, which is more sultable for the control use in the high temperature situatlon requlring high rellablllty and closing performance. The servlce life and sealing performance of the valve stem packing can be slignifcantly onhonced by ac'ding the structure of soaling groat.e and double-layar sualIng whon it Is used In steam and high temperature condltions.



技术参数 Technical Parameters

阀体形式 Body type	直通S型铸造阀　Stralght-ihrough S-type cast val 'o
阀芯形式 Plug type	平衡式套筒结构阀芯 Balanceddouble seel sleeve plug
公称通径 Nomlnal dlameter	DN15~300mm; NPS1/2"~12"
公称压力 Nominal pressure	PN1.6-6.4MPa; CLASS 150~300LB
适用温度Applicable temperature	+250~+550℃(按工况可选)(Optlonal according to working conditlons)
连接形式 Type of connectlon	法兰、焊接、螺纹(适用于1"内) Flango,woldIng,throad (appl catlo wlthln 1"）
法兰距 Flange dlstance	符合IEC 60534 According to IEC 60534
压盖形式 Gland type	螺栓压紧式 Bolt compresslon type
密封垫片 Sealing gasket	金属石墨缠绕垫片 Motolgrophlte splral wound goskot
填 料 Packing	柔性石墨Fexible graphlte
执行器 Actuator	气动执行器、电动执行器 Pnoumotlc octuotor,olootrlc aotuator

设计特点 Design features

1、采用顶部导向结构

2、流量系数大，可调范围广

3、双密封结构，密封更可靠

4、增加散热片，散热功能强

5、带注脂油槽，填料寿命更长

6、主要应用于高温蒸汽、热油等场合

1. with top guide structure

2.Large fow coefhclent and wlde adjustable range

3. Double sealing structure, more rellable sealing

4.With eat sink strong heat dlsalpatlon functlon

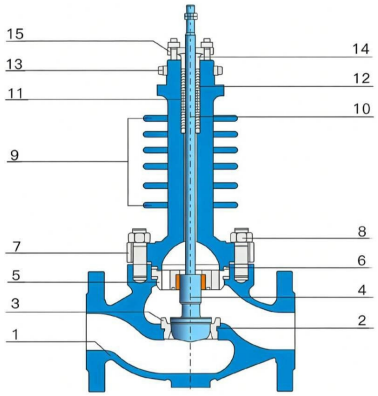
5.With grease injeci on tank, longer packing life

6. Malnly used in high temperature steam, hot oll and othe occuglons

结构与材料 Structure and Materials

本体材质为碳钢 Body Materialls Carbon Steel

1	阀体 Body	WCB	LCB	WC9
2	垫片 Gasket	316+石墨Graphite/FTFE		
3	阀座 Seat	304	304	304
4	阀芯 Plug	304	304	304
5	导向套 Guide sleeve	304	304	304
6	垫片 Gasket	316+石墨Graphite/FTFE		
7	阀盖 Bonnet	WCB	LCB	WC9
8	螺柱螺母 Bolt and Nut	304	304	304
9	散热片 Heat slnk	25	25	25
10	阀杆 Stem	304	304	304
11	储油环 Oll storage ring	304	304	304
12	填料 Packing	PTFE/柔性石墨 Flexible graphite		
13	锁紧螺母 Lock nut	304	304	304
14	压套Pressing sleeve	304	304	304
15	压板 Plate	304	304	304



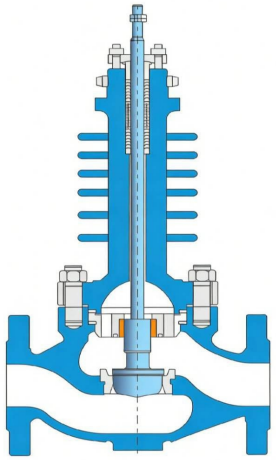
本体材质为不锈钢 Body Materialls Stainless Steel

1	阀体 Body	CF8	CF8M	CF3M
2	垫片 Gasket	316+石墨Graphite/FTFE		
3	阀座 Seat	304	316	316L
4	阀芯 Plug	304	316	316L
5	导向套 Guide sleeve	304	316	316L
6	垫片 Gasket	316+石墨Graphite/FTFE		
7	阀盖 Bonnet	CF8	CF8M	CF3M
8	螺柱螺母 Bolt and Nut	304	316	316L
9	散热片 Heat slnk	304	316	316L
10	阀杆 Stem	304	316	316L
11	储油环 Oll storage ring	304	316	316L
12	填料 Packing	PTFE/柔性石墨 Flexible graphite		
13	锁紧螺母 Lock nut	304	316	316L
14	压套Pressing sleeve	304	316	316L
15	压板 Plate	304	316	316L

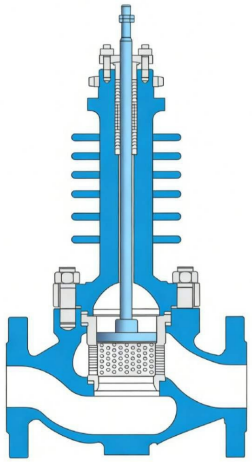
注：1、以上为标准配置结构，阀座为金属密封，阀座为软密封选用V级可选件。可提供喷焊硬质合金的阀内件。2、常规材质为碳钢和不锈钢两种，可根据用户现场条件订制特殊材质控制阀产品。

Nota:1 the above is of standard conh uratlon structur ; tha valve seat is metal sea, and the valve seat is soft seal,grade Vl optional it can provide valve trim of spray welding cemented carblde.2, The conventlonal materlalls carbon steel and stainless staal and the spaclal matarlaregulating valve products can be customized according to the user's work conditions.

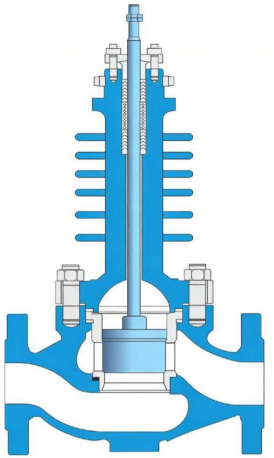
可应用于不同工况的结构 Can be Applled to Different Conditions of the Struc:ture



高温单座阀结构
High temperature single seat valve structure



高温笼式套筒结构
High temperature cage type sleeve structure



高温套筒阀结构
High temperature three-way valve structure

规格参数 Specifcation Parameter

阀座直径 (mm) Inside diameter (in)		25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
流量系数(KV) Flow coefficient	直线 siralght line	11	17.6	27.5	44	69	110	176	275	440	690	1100	1500
	等百分 Percent	10	16	25	40	63	100	160	250	400	630	1000	1400
口径(DN) Diameter(in)	行程 Travel	可选流量系数Cv(★ 标准型 ● 推荐 ○定制) Optlonal flow coefhclentCv(★ standard type ● Recommended○ Customized)											
25	1	16mm ★											
32	1-1/4	16mm ○	★										
40	1-1/2	25mm ○	●	★									
50	2	25mm ○	●	●	★								
65	2-1/2		○	○	○	★							
80	3	40mm	○	○	○	●	★						
100	4	40mm	○	○	○	●	●	★					
125	5					○	○	○	★				
150	6	60mm					○	○	●	★			
200	8	60mm					○	○	●	●	★		
250	10	100mm							○	●	●	★	
300	12	100mm								○	●	●	★
气动执行机构 Pneumatic actuator		HA/B-23 350cm²			HA/B-34 560cm²				HA/B-45 900cm²			HA/B-56 1400cm²	
作用方式 Mode of action	弹簧范围 Spring range	金属密封允许压差(MPa) Metalseal allows dlfferentlalpressure(MPa)											
气开式 Gas openlng	20-100 KPa	3.00	2.25	2.25	1.95	2.36	2.04	1.67	1.41	1.41	1.14	0.65	0.55
	40-200 KPa	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	1.55	1.40
	80-240 KPa	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	4.08	4.08
气关式 Gas off	20-100 KPa	1.50	1.13	1.13	0.98	1.18	1.02	0.84	0.71	0.71	0.57	0.65	0.55
	40-200 KPa	4.50	3.38	3.38	2.93	3.54	3.06	2.51	2.12	2.12	1.71	0.80	1.55
	80-240KPa	6.40	6.40	6.40	6.40	6.40	6.40	5.85	4.94	4.94	4.00	4.08	3.65
电动执行机构 Electric actuator		金属密封允许压差(MPa) Metalseal allows dlfferentlalpressure(MPa)											
推力(N) Thrust(N)	800	6.40	6.40										
	2000	6.40	6.40	6.40	5. 10								
	3000	6.40	6.40	6.40	6.40	5. 70	4. 76						
	5000			6.40	6.40	6.40	6.40	6. 25					
	6500							6.40	6.40	4.23	3. 23		
	10000									6.40	6.10	3. 31	2. 07
	16000											6.00	4.00

执行机构参数 Actuator parameters

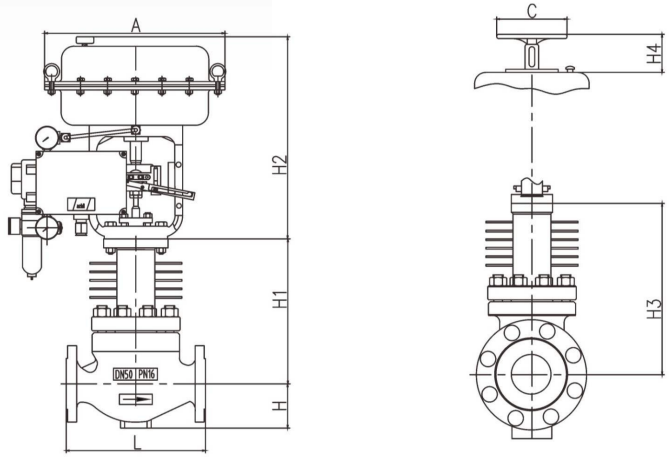
型号 Model	气动薄膜执行机构 Pneumatlc film actuator	电子式电动执行机构 Electronic electric actuator
形式 Form	HA B22~ HA B56	3810L、RSL
	多弹簧型 Multl sprlng	智能一体化型Intellgentintegratad :type
用途 Purpose	调节、开关Adjustment,swltch	调节 Regulating
驱动 Drlve	气压 (弹簧范围) Alrpressure(sprlng range) 140(20~100)KPa G 240(40~200)KPa G 280(80~240)KPa G	电源 Power supply: AC 220 V +10% 50HZ 电源Power supply: AC 380V+10%50HZ
接头 Jolnt	Rc 1/4	普通型 Common type:2-PF(G1/2") 隔爆型 Flameproof type:2-PF(G3/4")
正作用 Positive action	气压增加推动阀门关闭 Alr pressura lncreases to push the valve to close	控制信号增加推动阀门关闭 Control signalincreases to push the valve to close
反作用 Reactlon	气压增加推动阀门开启 Air pressure increases to push the vaive open	控制信号增加推动阀门开启 Control signalincreases to push the valve open
控制信号 Control slgnal	4~20mA.DC(带定位器with posltlone・)	输入输出 Input output4~20mA.DC
滞后Lag	≤1% FS(带定位器 With posltloner)	≤0.8%FS
直线性 Llnearity	2% FS(带定位器 With posltlonar)	≤ ±1% FS
环境温度 Amblent tamperature	-10~+70℃	
表面涂层 Surface coatlng	阀体 Body:黑色碳化处理Black phosphating treatment 执行器 Actuator:丙烯酸聚氨酯漆 Acryllc polyurethane palnt	
选配附件 Optional accessorles	阀门定位器、手轮、电磁阀、行程开关、保位阀 Optlonal accessorles,Hand wheel,Magnetlc valve Travel switch.Lock up valve	加热器 Heater

主要性能参数 Main Performance Parameters

流量特性Flowcharacteristlcs		等百分比 Equal percentage、直线Stralght line	
可调范围 Adjustable range		50:1	
额定Cv值 Rated Cv value		等百分比 Equalpercentage:10~1400 直线 Straightline:11~1500	
允许泄漏量 Allowable leakage		硬密封:IV级(0.01%阀额定流量);软密封:V级 hard saal: level-lV(0.01% rated fow ofvalve): Soft seal: Level-V	
性能指标 Pelformance Index	驱动方式 Driving mode	气动 Pneumatlc	电动 Electric
	基本误差 Intrinsic error%	±1.0	±1.0
	回差Return difference %	≤1.0	≤1.0
	死区 Dead zone %	≤0.6	≤1.0
	始终点偏差 Constant polnt devla llon%	±2.5	±2.5
	额定行程偏差 Ratedstroke devlatlon%	≤2.5	≤2.5

HTSG型高温硬密封散热式调节阀

HIGH-TEMPERAT'URE CONTROL VALVE OF GREASE INJECTION SEAL



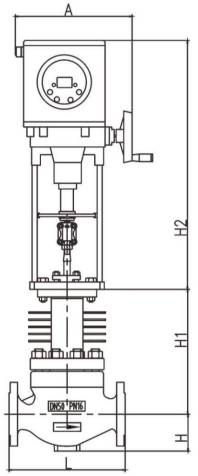
气动调节阀连接尺寸 Connection Dimension of Pneumatic Control Valve

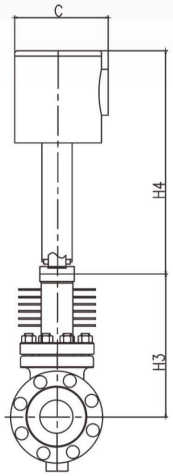
DN / in		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
L	PN16/25	180	188	200	220	252	275	300	350	400	455	555	660	740
	PN40	180	188	200	220	252	275	310	370	410	475	600	670	750
	PN64	206	210	220	251	290	315	341	398	452	511	610	752	819
H	PN16	52.5	57.5	70	75	82.5	92.5	100	110	125	142	170	202	230
	PN40	52.5	57.5	70	75	82.5	92.5	100	117.5	135	150	187	225	257
	PN64	65	70	77	85	90	102.5	107.5	125	147.5	172	207	235	285
H1		208	208	158	170	179	214	221	234	270	294	331	390	450
H2		315	315	335	335	335	415	415	415	500	500	500	670	670
H3		153	153	153	153	153	181	181	181	247	247	247	/	/
气动 Pneu-matic	C	180	180	180	180	180	200	200	200	250	250	250	380	380
	A	285	285	285	285	285	360	360	360	500	500	500	580	580
法兰 Flange		可执行:GB.HG.JB.DIN.JIS.JS.ANSI等相应标准 Executeble:GB.HG.JB.DIN.JIS.JSANSIDesponaing slandard												

注: 1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新料请联系本公司技术部
Note: 1.The dlimonslons in the ieble ore sienderd dple wlthout accessorls. The dimengions of eccescrios are cpiculelod according lo the aclueconhgurelon. 2.Due lo lhe lechnical innovation and improvemment of the producl,the aize may change.Please conlacl the tecinical departmenloftho company for the latestinformatlon.

DHTSG型高温硬密封散热式调节阀

HIGH-TEMPERAT'URE CONTROL VALVE OF GREASE INJECTION SEAL





电动调节阀连接尺寸 Connection Dimension of Electric Control Valve

DN / in		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
L	PN16/25	180	188	200	220	252	275	300	350	400	455	555	660	740
	PN40	180	188	200	220	252	275	310	370	410	475	600	670	750
	PN64	206	210	220	251	290	315	341	398	452	511	610	752	819
H	PN16	52.5	57.5	70	75	82.5	92.5	100	110	125	142	170	202	230
	PN40	52.5	57.5	70	75	82.5	92.5	100	117.5	135	150	187	225	257
	PN64	65	70	77	85	90	102.5	107.5	125	147.5	172	207	235	285
H1		208	208	224	228	228	334	334	342	408	453	482	520	550
H2		373	373	456	456	538	538	548	548	725	725	725	795	795
H4		90	90	90	90	90	90	90	90	90	90	90	90	90
电动 Electric	A	225	225	225	225	255	255	255	255	310	310	310	350	350
	W	28	28	45	45	45	45	60	60	60	60	60	60	60
法兰 Flange		可执行:GB.HG.JB.DIN.JIS.JS.ANSI等相应标准 Executeble:GB.HG.JB.DIN.JIS.JSANSIDesponaing slandard												

注: 1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新料请联系本公司技术部
Note: 1.The dlimonslons in the ieble ore sienderd dple wlthout accessorls. The dimengions of eccescrios are cpiculelod according lo the aclueconhgurelon. 2.Due lo lhe lechnical innovation and improvemment of the producl,the aize may change.Please conlacl the tecinical departmenloftho company for the latestinformatlon.

产品概述Product Overview

本公司生产的系列三通调节阀有三通合流及三通分流两种作用方式，在某些场合可以代替两个二通阀和一个三通阀接管而得到广泛应用。实现对压力、流量、温度、液位等参数的调节，阀芯结构采用圆筒薄壁窗口，并采用阀芯侧面导向，稳定性好、不易产生震动、噪声低、允许使用压差大，连线简单等特点。

The series of three-way control valves produced by our company have two working modes: three-way combined flow and three-way split flow. In some cases, they can replace two two-way valves and one three-way valve connection pipe and are widely used. It realizes the regulation of parameters such as pressure, flow rate, temperature and liquid level. The valve core structure adopts a circular simple A-wall window and uses the side guidance of the core. It features good stability, less vibration, low noise, large allowable pressure difference and simple wiring.

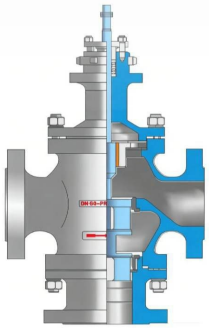
型号编制 Model Preparation

H	结构型式
MA	MA:气动执行器 DL:电动执行器
X	X:三通分流调节阀 Q:三通合流调节阀
H	structural style
MA	MA:Ipneumatic actuator DL: Electric actuator
X	X:Three waydiversion regulating valve Q:Three way merging regulating valve

产品特点 Products Features

三通分流合流调节阀整体具有动作灵敏、连线简单、流量大、体积小调节精度高等特点。三通合流调节阀主要用于将两种流体混合成第三种流体三通分流调节阀主要用于将一股流体分成两股流体。三通分流合流调节阀产品可代替两台互为开关的单、双座调节阀，用于液体、气体、蒸汽等介质的调节与控制，

The three-way shunt and confluence regulating valve is characterized by sensitive actlon, simple connect on, large flow, small volume and hlgh regulat:lng accuracy The three-way confluence regulating valve ls malnly used to mlix two kinds of flulds Into the third one; the th ee-way shunt regulating valve ls mainly used to dlvide one fuld into two streams. The three-way shunt and confluence control valve products can replace two sets of single and double seat control valves which are mutually switched and can be used for regulating and controlling liquld, gas, steam and other media.



技术参数 Technical Parameters

阀体形式 Body typel	直通S型铸造阀　Stralght–ihrough S–type cast val 'o
阀芯形式 Plug type	柱塞式、套筒式 Body type:stralght–through S–type cast valve
公称通径 Nomlnal dlameter	DN20~300mm; NPS1/2"~12"
公称压力 Nominal pressure	PN1.6–10.0MPa; CLASS 150~600LB
适用温度Applicable temperature	–196~+550℃(按工况可选)(Optlonal according to working conditlons)
连接形式 Type of connectlon	法兰、焊接、螺纹(适用于1"内) Flango,woldlng,throad (appl catlo wlthln 1"）
法兰距 Flange dlstance	符合IEC 60534 According to IEC 60534
压盖形式 Gland type	螺栓压紧式 Bolt compresslon type
密封垫片 Sealing gasket	金属石墨缠绕垫片 Motolgrophlte splral wound goskot
填 料 Packing	聚四氟乙烯、柔性石墨 PTFE, flexible graphite
执行器 Actuator	气动执行器、电动执行器 Pnoumotlc octuotor,olootrlc aotuator

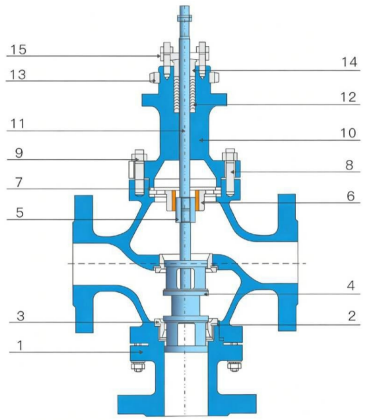
特殊规格 Special Specification

特殊检验 Special inspection	本体材料渗透探伤(PT)、射线探伤(RT)、流量曲线测试、低温测试 PT,RT,llow curve test,low temperature test
特殊处理 Specialtreatment	内件氮化处理、密封件喷涂硬质合金处理 Internal nitrlding treatment, seal spraying cemented carblde treatment
特殊清洗 Special cleaning	完全禁油、脱脂处理 Complete oll prohibition and degreasing treatment
特殊规格 Special specifcation	特殊连接件、特殊气管、特殊材质接头、特殊涂层 Special connector,special gas pipe, special materialjoint, special coating
特殊尺寸 Special size	接照使用要求进行量身定制 Customlzed according to the use raqulrements
认证检验 Certifcation inspection	第三方认证检验报告 Thlrd party certlhcatlon inspectlon report

结构与材料 Structure and Materials

本体材质为碳钢 Body Materialls Carbon Steel

1	阀体 Body	WCB	LCB	WC9
2	垫片 Gasket	316+石墨Graphite/FTFE		
3	阀座 Seat	304	304	304
4	阀芯 Plug	304	304	304
5	连接器 Connector	304	304	304
6	导向套 Guide sleeve	304	304	304
7	垫片 Gasket	316+石墨Graphite/FTFE		
8	螺柱 Double-screw bolt	304	304	304
9	螺母 Nut	304	304	304
10	阀盖 Bonnet	WCB	LCB	WC9
11	阀杆 Ste m	304	304	304
12	填料 Packing	PTFE/柔性石墨 Flexible graphite		
13	锁紧螺母 Lock nut	304	304	304
14	压套Pressing sleeve	304	304	304
15	压板 Plate	304	304	304



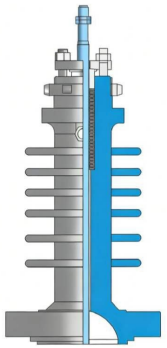
本体材质为不锈钢 Body Materialls Stainless Steel

1	阀体 Body	CF8	CF8M	CF3M
2	垫片 Gasket	316+石墨Graphite/FTFE		
3	阀座 Seat	304	316	316L
4	阀芯 Plug	304	316	316L
5	连接器 Connector	304	316	316L
6	导向套 Guide sleeve	304	316	316L
7	垫片 Gasket	316+石墨Graphite/FTFE		
8	螺柱 Double-screw bolt	304	316	316L
9	螺母 Nut	304	316	316L
10	阀盖 Bonnet	CF8	CF8M	CF3M
11	阀杆 Ste m	304	316	316L
12	填料 Packing	PTFE/柔性石墨 Flexible graphite		
13	锁紧螺母 Lock nut	304	316	316L
14	压套Pressing sleeve	304	316	316L
15	压板 Plate	304	316	316L

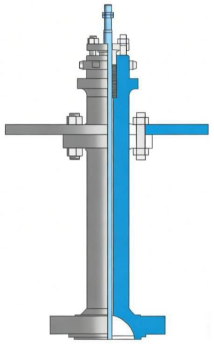
注:1、以上为标准配置结构，阀座为金属密封，阀座为软密封选用V级可选件。可提供喷焊硬质合金的阀内件。2、常规材质为碳钢和不锈钢两种，可根据用户现场条件订制特殊材质控制阀产品。

Note: 1the above Is of standard conh uration structur ; the valve seat Is metal soal, and the valve seat is soft se l, grade VI optlonal it can provlde valve trim ot spray welding cemented carbide.2. ihe conventional materlal is carbon steel and stainless steel, and the specal material regulating valve products can be customized according to the user's work conditlons.

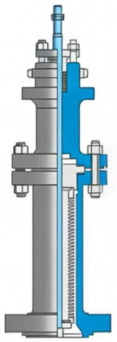
可应用于不同工况的结构 Can be Applled to Different Conditions of the Struc:ture



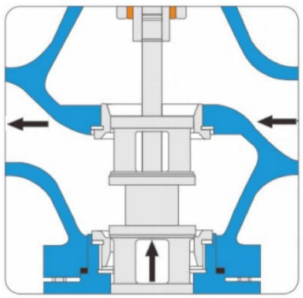
高温型:
适用介质:蒸汽、热油等
适用温度: +250~550℃
High temperature type:
Applicable media:steam. hot oil.etc
Appllcable temperature:+250-550℃



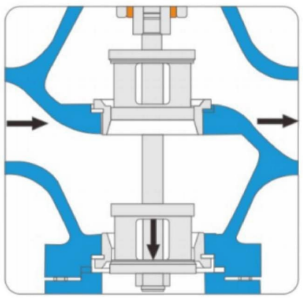
低温型:
适用介质:液氮、液氧等
适用温度:-70~-196℃
Low temperature type:
App icable medium: llquid nitrogen. llguid oxygen, etc.
Applicable temperature:-70~-196℃



波纹管型:
适用介质:易燃易爆气体、有毒液体
腐蚀性介质等
Bellows type:
Applicable medium:fammable and explosive gas,toxlc llquld, corrosive medlum, etc.



三通合流调节阀结构示意图
Three-way confluence control valve structure diagram



三通分流调节阀结构示意图
Three-way shunt control valve structure diagram

规格参数 Specifcation Parameter

阀座直径 (mm) Inside diameter (in)			25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
流量系数(KV) Flow coefficient			8.5	13	21	34	53	85	135	210	340	535	800	1280
口径(DN) Diameter(in)		行程 Travel	可选流量系数Cv(★ 标准型 ● 推荐) Optlonal flow coefhclentCv(★ standard type ● Recommended)											
25	1	16mm	★											
32	1-1/4	25mm		★										
40	1-1/2	25mm		●	★									
50	2	25mm		●	●	★								
65	2-1/2	40mm					★							
80	3	40mm					●	★						
100	4	40mm					●	●	★					
125	5	60mm								★				
150	6	60mm								●	★			
200	8	60mm								●	●	★		
250	10	100mm									●	●	★	
300	12	100mm										●	●	★
气动执行机构 Pneumatic actuator			HA/B-23 350cm²			HA/B-34 560cm²			HA/B-45 900cm²				HA/B-56 1400cm²	
作用方式 Mode of action		弹簧范围 Spring range	金属密封允许压差(MPa) Metalseal allows dlfferentlalpressure(MPa)											
气开式 Gas openlng		20-100 KPa	3.00	2.25	2.25	1.95	2.36	2.04	1.67	1.41	1.41	1.14	0.65	0.55
		40-200 KPa	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	1.55	1.40
		80-240 KPa	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	4.08	4.08
气关式 Gas off		20-100 KPa	1.50	1.13	1.13	0.98	1.18	1.02	0.84	0.71	0.71	0.57	0.65	0.55
		40-200 KPa	4.50	3.38	3.38	2.93	3.54	3.06	2.51	2.12	2.12	1.71	0.80	1.55
		80-240KPa	6.40	6.40	6.40	6.40	6.40	6.40	5.85	4.94	4.94	4.00	4.08	3.65
电动执行机构 Electric actuator			金属密封允许压差(MPa) Metalseal allows dlfferentlalpressure(MPa)											
推力(N) Thrust(N)		800	6.40	6.40										
		2000	6.40	6.40	6.40	5. 10								
		3000	6.40	6.40	6.40	6.40	5. 70	4. 76						
		5000			6.40	6.40	6.40	6.40	6. 25					
		6500							6.40	6.40	4.23	3. 23		
		10000									6.40	6.10	3. 31	2. 07
		16000											6.00	4.00

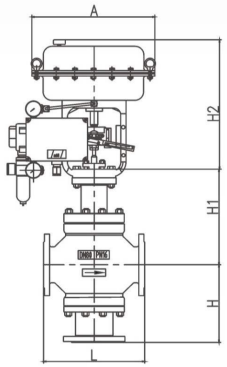
执行机构参数 Actuator parameters

形式 Form	型号 Model	气动薄膜执行机构 Pneumatlc film actuator	电子式电动执行机构 Electronic electric actuator
		HA B22~ HAB56	3810L、RSL
		多弹簧型 Multl sprlng	智能一体化型Intellgentintegratad :type
用途 Purpose		调节、开关Adjustment,swltch	调节 Regulating
驱动 Drlve		气压 (弹簧范围) Alrpressure(sprlng range) 140(20~100)KPa G 240(40~200)KPa G 280(80~240)KPa G	电源 Power supply: AC 220 V +10% 50HZ 电源Power supply: AC 380V+10%50HZ
接头 Jolnt		Rc 1/4	普通型 Common type:2-PF(G1/2") 隔爆型 Flameproof type:2-PF(G3/4")
正作用 Positive action		气压增加推动阀门关闭 Alr pressura Increases to push the valve to close	控制信号增加推动阀门关闭 Control signalincreases to push the valve to close
反作用 Reactlon		气压增加推动阀门开启 Air pressure increases to push the vaive open	控制信号增加推动阀门开启 Control signalincreases to push the valve open
控制信号 Control slgnal		4~20mA.DC(带定位器with posltlone・)	输入输出 Input output4~20mA.DC
滞后Lag		≤1% FS(带定位器 With posltloner)	≤0.8%FS
直线性 Llnearity		2% FS(带定位器 With posltlonar)	≤ ±1% FS
环境温度 Amblent tamperature		-10~+70℃	
表面涂层 Surface coatlng		阀体 Body:黑色碳化处理Black phosphating treatment 执行器 Actuator:丙烯酸聚氨酯漆 Acrylc polyurethane palnt	
选配附件 Optional accessorles		阀门定位器、手轮、电磁阀、行程开关、保位阀 Optlonal accessorles,Hand wheel,Magnetlc valve Travel switch.Lock up valve	加热器 Heater

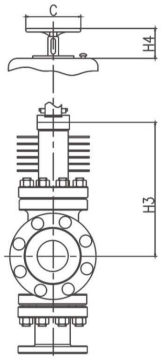
主要性能参数 Main Performance Parameters

流量特性Flowcharacteristlcs		等百分比 Equal percentage、直线Stralght line	
可调范围 Adjustable range		50:1	
额定Cv值 Rated Cv value		等百分比 Equalpercentage:10~1400 直线 Straightline:11~1500	
允许泄漏量 Allowable leakage		硬密封:IV级(0.01%阀额定流量);软密封:V级 hard saal: level-IV(0.01% rated fow ofvalve): Soft seal: Level-V	
性能指标 Pelformance Index	驱动方式 Driving mode	气动 Pneumatlc	电动 Electric
	基本误差 Intrinsic error%	±1.0	±1.0
	回差Return difference %	≤1.0	≤1.0
	死区 Dead zone %	≤0.6	≤1.0
	始终点偏差 Constant polnt devla llon%	±2.5	±2.5
	额定行程偏差 Ratedstroke devlatlon%	≤2.5	≤2.5

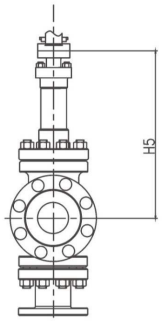
ZMAX/Q型三通分流合流调节阀
THREE WAY SHUNT AND CONFLUENCE CONTROL VALVE



标准型
Standard type



高温型
High temperature type



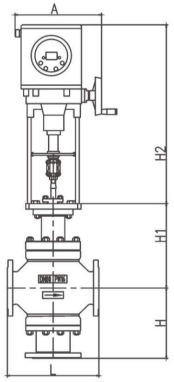
波纹管型
Corrugated pipe type

气动调节阀连接尺寸 Connection Dimension of Pneumatic Control Valve

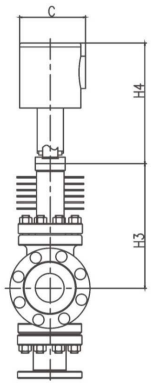
DN / in		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
L	PN16/40	184	184	200	220	254	276	298	351	408	451	550	673	737
	PN64/100	210	210	215	235/251	267/286	292/311	318/337	368/394	435/457	473/508	568/610	708/752	775/819
H	PN16/40	140	140	150	160	180	200	222	230	270	280	306	474	584
	PN64/100	150	150	170	180	200	220	240	260	300	322	380	495	605
H1		155	155	175	180	200	235	250	260	330	350	420	530	680
H2		285	285	285	285	285	360	360	360	470	470	470	580	580
H3		208	208	224	228	228	334	334	342	408	453	482	520	550
H4		153	153	153	153	153	181	181	181	247	247	247	/	/
H5		336	338	402	402	405	627	628	635	698	702	728	755	790
H7		88	88	88	88	88	95	95	95	95	110	110	140	140
D		310	310	355	355	390	430	465	520	585	660	770	890	950
A		285	285	285	285	285	360	360	360	500	500	500	580	580
C		180	180	180	180	180	200	200	200	250	250	250	380	380
法兰 Flange		可执行:GB.HG.JB.DIN.JIS.JS.ANSI等相应标准 Executeble:GB.HG.JB.DIN.JIS.JSANSIDesponaing slandard												

注：1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算。
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新资料请联系本公司技术部
3、本控制阀可以根据客户现场实际尺寸定制。
Note: 1. The dlmenslons in the table are standard data withoutaccessorles.The dimensions of accessorles are calculated according to the actual onfguration. 2. Due to the technical innovafion and improvement of the product, the size may change. Please contact the technlcal depatment of the Company for the latest information. 3. The actuated valve can be customized according to the actual size.

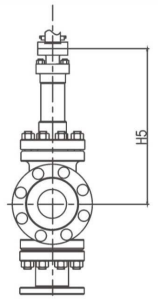
ZDLX/Q型三通分流合流调节阀
THREE WAY SHUNT AND CONFLUENCE CONTROL VALVE



标准型
Standard type



高温型
High temperature type



波纹管型
Corrugated pipe type

电动调节阀连接尺寸 Connection Dimension of Electric Control Valve

DN / in		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
L	PN16/40	184	184	200	220	254	276	298	351	408	451	550	673	737
	PN64/100	210	210	215	235/251	267/286	292/311	318/337	368/394	435/457	473/508	568/610	708/752	775/819
H	PN16/40	140	140	150	160	180	200	222	230	270	280	306	474	584
	PN64/100	150	150	170	180	200	220	240	260	300	322	380	495	605
H1		155	155	175	180	200	235	250	260	330	350	420	530	680
H2		285	285	285	285	285	360	360	360	470	470	470	580	580
H3		208	208	224	228	228	334	334	342	408	453	482	520	550
H4		153	153	153	153	153	181	181	181	247	247	247	/	/
H5		336	338	402	402	405	627	628	635	698	702	728	755	790
H7		88	88	88	88	88	95	95	95	95	110	110	140	140
D		310	310	355	355	390	430	465	520	585	660	770	890	950
A		225	225	225	255	255	255	255	255	310	310	310	350	350
法兰 Flange		可执行:GB.HG.JB.DIN.JIS.JS.ANSI等相应标准 Executeble:GB.HG.JB.DIN.JIS.JSANSIDesponaing slandard												

注：1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算。
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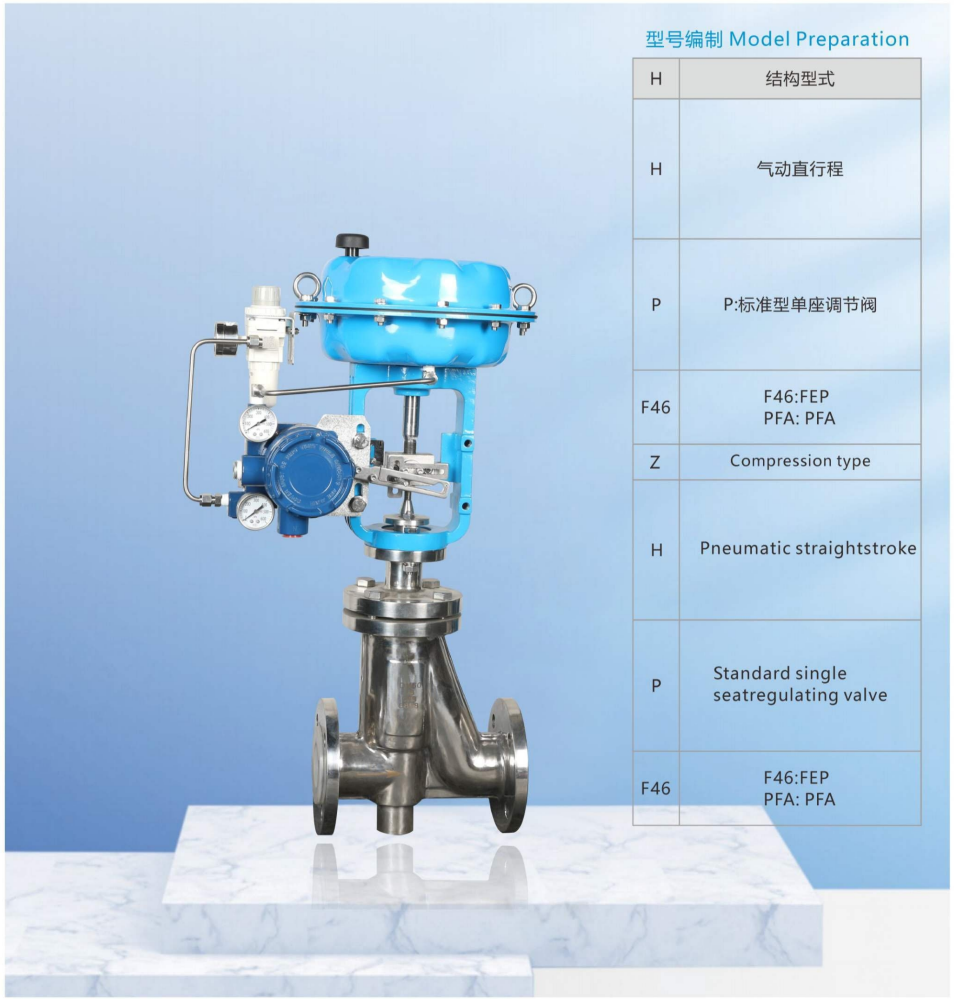
产品概述Product Overview

本公司生产的系列内衬PTFE耐腐调节阀，接触介质部位采用高压注塑工艺，内部衬有聚四氟乙烯耐腐材料，可耐腐蚀及耐老化功能。如:盐酸、硫酸、硝酸、氢氟酸等，又采用聚四氟乙烯波纹管密封，广泛应用于各种工艺中对酸、碱等强腐蚀介质以及有毒易挥发等气体、液体介质的过程控制。

The series of corrosion-resistant control valves with PTFE lining produced by our company adopt high-quality materials for the parts that come into contact with the mediumThe compression injection molding process is internally lined with polytetrafluoroethylene (PTFE) corrosion-resistant material, which is resistant to corrosion and agingYes. Such as hydrochloric acid, sulfuric acid, nitric acid, hydrofluoric acid, etc., and also using polytetrafluoroethylene corrugated pipe for sealingSeals are widely used in various processes for handling strong corrosive media such as acids and alkalis, as well as toxic and volatile substancesProcess control of gas and liquid media.



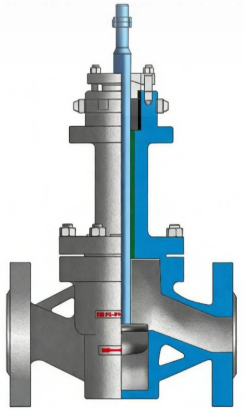
型号编制 Model Preparation

H	结构型式
H	气动直行程
P	P:标准型单座调节阀
F46	F46:FEP PFA: PFA
Z	Compression type
H	Pneumatic straightstroke
P	Standard single seatregulating valve
F46	F46:FEP PFA: PFA

产品特点 Products Features

该系列内衬PTFE耐腐调节阀，采用阀体与内件全部衬氟结构，有效阻隔了腐蚀介质对阀门中金属材质的腐蚀。金属阀体内腔采用齿式加工处理。使内衬材料完全与金属接合，延长内衬材料的使用寿命与性能。阀杆密封可采用F46波纹管密封与PTFE填料两种组合密封，完全消除了介质从阀杆出向外漏的可能。不平衡式全衬结构特别针对低压常温工况下极具腐蚀性的介质使用，

The series of PTFE lining anti-corrosion control valve is of the fluorine lining structure on valve body and internal parts, which effec:t:lvely obstructs the corrosion of metal materlals in the valve caused by corrosive medium. The inner cavity of the metal valve body is processed by tooth type processing, which makes the lining completely connected with the metal, and extends the service life and performance of the lining. F46 bellows seal and PTFE packing are used to seal the valve rod, which completely ellminates the possiblllty of medium leakage from the valve rod. The unbalanced full lining structure is especlally suitable for the extremely corrosive medium under the condition of low pressure and normal temperature.



技术参数 Technical Parameters

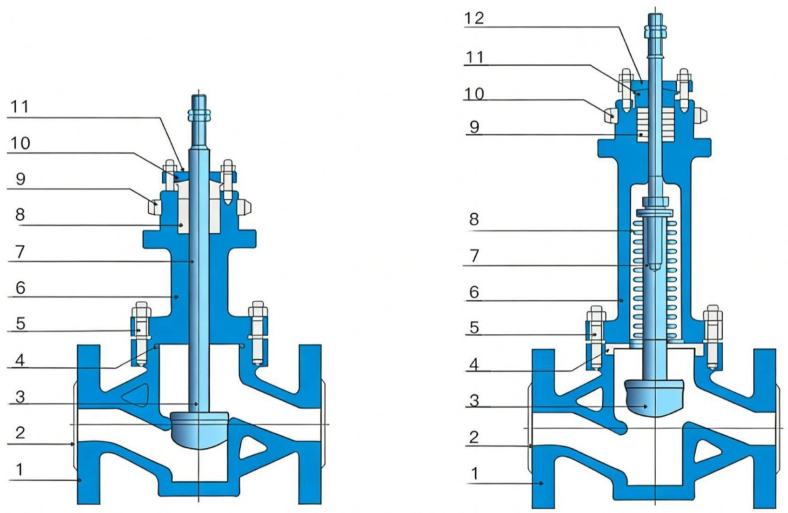
阀体形式 Body type	直通式、角式、夹套保温型 Straight through type, angle type, jacket Insulatlon type
阀芯形式 Plug type	多级节流阀芯Multistage throttlo spool
公称通径 Nomlnal dlameter	DN15~300mm; NPS1/2"~12"
公称压力 Nominal pressure	PN0.6~2.5MPa; CLASS 150LB
适用温度Applicable temperature	-30~+180℃(按工况可选)(Optlonal according to working conditlons)
连接形式 Type of connectlon	法兰(RF面、FM面)FlangelRF side,FM side)
法兰距 Flange dlstance	符合IEC 60534、非标定制Meet IEC 60534,Non-standard customization
压盖形式 Gland type	螺栓压紧式 Bolt compresslon type
密封垫片 Sealing gasket	锯齿型金属垫片 Serrated metal gasket
填 料 Packing	聚四氟乙烯、柔性石墨 PTFE, flexible graphlte
执行器 Actuator	气动执行器、电动执行器 Pnoumotlc octuotor,olootrlc aotuator

设计特点 Design features

1、采用顶部导向结构
2、阀体内腔及内件全包四氟
3、可加装四氟波纹管密封
4、双层密封保护，无外漏
5、适用于腐蚀性较强的场合

1. With top guide structure
2. The inner cavity and internal components of the valve body are fully covered with Teflon
3.Teflon bellows seal can be installed
4.Double seal protectlon,n ,leakage
5.Sultable for corrosive occaslons

可应用于不同工况的结构 Can be Applled to Different Conditions of the Struc:ture



结构与材料 Structure and Materials

1	阀体 Body	WCB	LCB	WC9
2	衬里 Lining	F46/F4		
3	阀芯 Plug	304	304	304
4	垫片 Gasket	PTFE		
5	螺丝螺母 Screw nut	304	304	304
6	阀盖 Bonnet	WCB	LCB	WC9
7	阀杆 Stem	304	304	304
8	填料 Packing	PTFE		
9	锁紧螺母 Lock nut	304	304	304
10	压套Pressing sleeve	WCB	LCB	WC9
11	压板 Plate	WCB	LCB	WC9

1	阀体 Body	WCB	LCB	WC9
2	衬里 Lining	F46/F4		
3	阀芯 Plug	304	304	304
4	垫片 Gasket	PTFE		
5	螺丝螺母 Screw nut	304	304	304
6	阀盖 Bonnet	WCB	LCB	WC9
7	阀杆 Stem	304	304	304
8	波纹管 Corrugated plpe	PTFE		
9	填料 Packing	PTFE		
10	锁紧螺母 Lock nut	304	304	304
11	压套Pressing sleeve	WCB	LCB	WC9
12	压板 Plate	WCB	LCB	WC9

注：1、以上为标准配置结构，阀座为金属密封，阀座为软密封选用V级可选件。可提供喷焊硬质合金的阀内件。
2、常规材质为碳钢和不锈钢两种，可根据用户现场条件订制特殊材质控制阀产品。
Note: 1.the above is of standard conhquration structure:the valve seat is metal seal,and the valve seat is soft seal, grade VI optional it can provide valve rim of spray welding cemented carbide. 2. The conventional material Is carbon steel and stainless stel, and the special material regulating valve products can be customized according to the user's work conditions.

规格参数 Specifcation Parameter

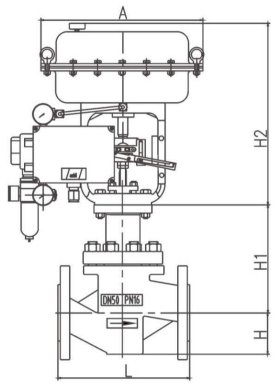
阀座直径 (mm) Inside diameter (in)			20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"
流量系数(KV) Flowcoeff cent			5	10	16	25	38	63	80	120	220	300
口径(DN) Diameter(in)		行程 Travel	可选流量系数Cv(★ 标准型 ● 推荐) Optlonal flow coefhclentCv(★ standard type ● Recommended)									
20	1	16mm	★									
25	1-1/4	25mm		★								
32	1-1/2			●	★							
40	2			●	●	★						
50	2-1/2	40mm				●	★					
65	3						●	★				
80	4					●		●	★			
100	5	60mm							●	★		
125	6								●		★	
150	8									●	●	★
气动执行机构 Pneumatic actuator			HA/B-23			HA/B-34				HA/B-45		
			350cm²			560cm²				950cm²		
作用方式 Mode of action		弹簧范围 Spring range	金属密封允许压差(MPa) Metalseal allows dlfferentlalpressure(MPa)									
气开式 Gas openlng		20-100 KPa	1. 16	0. 7	0. 44	0. 28	0. 18	0. 17	0. 11	0. 07	0. 07	0. 05
		40-200 KPa	3. 34	2. 14	1. 31	0. 84	0. 53	0. 51	0. 33	0.21	0.22	0. 15
		80-240 KPa	6.40	4. 99	3. 05	1. 95	1. 25	1. 18	0. 78	0.5	0.51	0. 36
气关式 Gas off		20-100 KPa	2. 23	2. 14	0. 87	0. 56	0. 35	0. 34	0.22	0.14	0.15	0.1
		40-200 KPa	6. 40	6. 40	5. 86	2.93	2. 3	2.21	1. 43	0.91	0.95	0. 66
		80-240KPa	6.40	6.40	6.40	6.40	3. 18	3. 06	1. 98	1.26	1.32	0. 92
电动执行机构 Electric actuator			金属密封允许压差(MPa) Metalseal allows dlfferentlalpressure(MPa)									
推力(N) Thrust(N)		800	2.38	1.52								
		2000	4.77	3.05	1.86	1.19	0. 76					
		3000			2.79	1.79	1. 14					
		5000			4.66	2.98	1. 91	1.13	0. 6	0.47		
		6500						1.35	0. 8	0.57	0.39	0. 26
		10000									0.61	0. 42

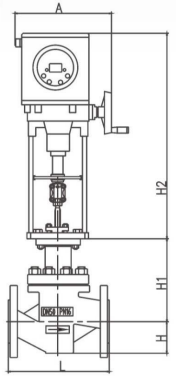
执行机构参数 Actuator parameters

型号 Model	气动薄膜执行机构 Pneumatlc film actuator	电子式电动执行机构 Electronic electric actuator
形式 Form	HA B22~ HAB56	3810L、RSL
	多弹簧型 Multl sprlng	智能一体化型Intellgentintegratad :type
用途 Purpose	调节、开关Adjustment,swltch	调节 Regulating
驱动 Drlve	气压 (弹簧范围) Alrpressure(sprlng range) 140(20~100)KPa G 240(40~200)KPa G 280(80~240)KPa G	电源 Power supply: AC 220 V +10% 50HZ 电源Power supply: AC 380V+10%50HZ
接头 Jolnt	Rc 1/4	普通型 Common type:2-PF(G1/2") 隔爆型 Flameproof type:2-PF(G3/4")
正作用 Positive action	气压增加推动阀门关闭 Alr pressura Increases to push the valve to close	控制信号增加推动阀门关闭 Control signalincreases to push the valve to close
反作用 Reactlon	气压增加推动阀门开启 Air pressure increases to push the vaive open	控制信号增加推动阀门开启 Control signalincreases to push the valve open
控制信号 Control slgnal	4~20mA.DC(带定位器with posltlone・)	输入输出 Input output4~20mA.DC
滞后Lag	≤1% FS(带定位器 With poslttoner)	≤0.8%FS
直线性 Llnearity	2% FS(带定位器 With poslttonar)	≤ ±1% FS
环境温度 Amblent tamperature	-10~+70℃	
表面涂层 Surface coatlng	阀体 Body:黑色碳化处理Black phosphating treatment 执行器 Actuator:丙烯酸聚氨酯漆 Acryllc polyurethane palnt	
选配附件 Optional accessorles	阀门定位器、手轮、电磁阀、行程开关、保位阀 Optlonal accessorles,Hand wheel,Magnetlc valve Travel switch.Lock up valve	加热器 Heater

主要性能参数 Main Performance Parameters

流量特性Flowcharacteristlcs		等百分比 Equal percentage、直线Stralght line	
可调范围 Adjustable range		50:1	
额定Cv值 Rated Cv value		等百分比 Equalpercentage:10~1400 直线 Straightline:11~1500	
允许泄漏量 Allowable leakage		硬密封:IV级(0.01%阀额定流量);软密封:V级 hard saal: level-IV(0.01% rated fow ofvalve): Soft seal: Level-V	
性能指标 Pelformance Index	驱动方式 Driving mode	气动 Pneumatlc	电动 Electric
	基本误差 Intrinsic error%	±1.0	±1.0
	回差Return difference %	≤1.0	≤1.0
	死区 Dead zone %	≤0.6	≤1.0
	始终点偏差 Constant polnt devla llon%	±2.5	±2.5
	额定行程偏差 Ratedstroke devlatlon%	≤2.5	≤2.5





气动调节阀连接尺寸 Connection Dimension of Pneumatic Control Valve

DN in	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"
L	155	160	180	200	230	290	310	350	400	480
H	52. 5	57. 5	70	75	82. 5	92. 5	100	117	125	142
H1	132	132	158	170	179	214	221	234	270	294
H2	285	285	285	285	285	360	360	360	470	470
H3	336	338	402	402	405	627	628	635	698	702
H4	153	153	153	153	153	181	181	181	247	247
A	200	200	200	200	200	240	240	240	350	350
C	282	282	282	282	282	282	360	360	470	470

电动调节阀连接尺寸 Connection Dimension of Electric Control Valve

DN in	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"
L	155	160	180	200	230	290	310	350	400	480
H	52. 5	57. 5	70	75	82. 5	92. 5	100	110	125	142
H1	132	132	158	170	179	214	221	234	270	294
H2	373	373	456	456	538	538	548	548	725	725
H3	336	338	402	402	405	627	628	635	698	702
H4	88	88	88	88	88	95	95	95	95	110
A	225	225	225	255	255	255	255	255	310	310

注: 1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新料请联系本公司技术部

Note: 1.The dlimonslons in the ieble ore sienderd dple wlthout accessorls. The dimengions of eccescrios are cpiculelod according lo the aclueconhgurelon. 2.Due lo lhe lechnical innovation and improvemment of the producl,the aize may change.Please conlacl the tecinical departmenloftho company for the latestinformatlon.

HAS型顶部导向高压角式调节阀
TOP-GUIDE HIGH-PRESSURE CONTROL VALVE

产品概述Product Overview

本公司生产的系列顶部导向型高压调节阀，采用套筒导向，压力平衡式阀芯。该系列调节阀主要适用于压差大，工况产生闪蒸、空化的场合。本间结构可多样化设计，口径从DN20-DN200mm，压力范围设计最大可达2500LB，可配用多种规格电气动执行器。

The sairas of op-gulda type high-prssure egulating vale producad by the company lis subject to sleeve guide, pressure balanced valve plug. The series of regulating valves are mainly suitable for the situation of large pressure dlfference and flash and cavltation. The valve can be deslgned n a variety of structures, with a diameter of DN20-DN200mm, and a maximum piessure range of 2500LB.it can be Bqulpped with a varlety of speclfcatlons of electric actuators.

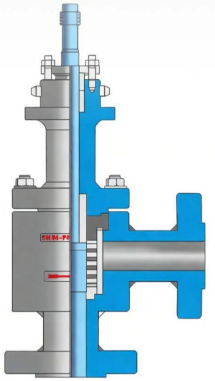
型号编制 Model Preparation

H	结构型式
A	A:角式 T:压套型 C:笼式
S	S:单座针式调节阀 B:套筒调节阀
H	structural style
A	A: Angle T:Compression type C:cage
S	S:Single seat needle type regulating valve B:Sleeve regulatingvalve

HAS型顶部导向高压角式调节阀
TOP-GUIDE HIGH-PRESSURE CONTROL VALVE

产品特点 Products Features

根据参数的不同设计多个不同的降压笼套组成一个多级降压内件，根据不同的工况设计的笼套，保证消除阀门的闪蒸、空化现象。介质从接触第一只笼套开始节流，通过多次节流将进口的高压差逐步的降低下来，这样有效的保证了介质在阀门中流动时，压力始终在其饱和蒸汽压之上，也就消除了产生闪蒸空化现象的可能，延长了恶劣工况中调节间的使用寿命



According to the dlffarent parameters, several different pressure reducing cages are deslgned to form a multl-stage pressure re ducing internals. The cages are deslgned according to different working condltlons to ensure the ellminatlon of fash and cavltatlon of the valve. The medlum begins to throt :le from contacting the hi st cage and gradually reduces the dlfferentlal pressure of the inlet throug hmultlple throttling. Thls effectlvely ensures that the pressurels always above the satulated vapor pressure when the medlum fows In the valve, so thatl ellminates the posslb!ltyof flash and cavltatlon, and prolongs the servlce llfe of the regulating valve In bad working conditlons.

技术参数 Technical Parameters

阀体形式 Body type	直通式锻造阀体 Stralght through forging body
阀芯形式 Plug type	多级节流阀芯 Multistage throt tle plug
公称通径 Nomlnal dlameter	DN15~300mm; NPS1/2"~12"
公称压力 Nominal pressure	PN10.0~42.0MPa; CLASS 600~2500LB
适用温度Applicable temperature	-196~+650℃(按工况可选)(Optlonal according to working conditlons)
连接形式 Type of connectlon	法兰、焊接、螺纹 Flange,welding, thread
法兰距 Flange dlstance	符合IEC 60534 According to IEC 60534
压盖形式 Gland type	螺栓压紧式 Bolt compresslon type
密封垫片 Sealing gasket	锯齿型金属垫片 Serrated metal gasket
填 料 Packing	聚四氟乙烯、柔性石墨 PTFE, flexible graphite
执行器 Actuator	气动执行器、电动执行器 Pnoumotlc octuotor,olootrlc aotuator

设计特点 Design features

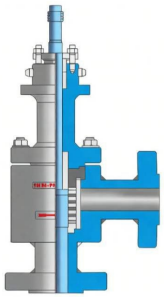
1、高压差范围内连续调节
2、采用多级逐渐减压、抗汽蚀、噪音低
3、阀芯来用锥面密封、密封效果好
4、阀芯多元化设计、调节性能好
5、阀芯阀座喷焊硬质合金、耐冲蚀、寿命长
6、阀芯设导向结构、调节平衡、无振动
7、执行器可互换安装

1.Continuous regulation in the range of high pressure difference
2.Adopt multl-stage gradual decompresslon, ant:!-cavltatlon and low nolse
3. The valve plug ls sealed by conlcal surface wlth good sealling effe ct
4.Multiple deslgn of valve plug, good regulation performance
5. Hard alloy spray welding for valve plug and valve seat, eroslon resistance and long service llfe
6. The vallve core ls provided with gulding structure, balanced adjustment and no vibratlon
7.Acluator can be subject to interchangeable installal.lon

结构与材料 Structure and Materials

1	阀座 Seat	A105	304	316	316L
2	垫片 Gasket	锯齿型金属垫片 Saw tooth type metal gasket 、金属石墨垫片 Metal graphit, gasket			
3	阀体 Body	A105	304	316	316L
4	导向杆 Guide rod	304	304	316	316L
5	导向套 Guide sleeve	304	304	316	316L
6	阀芯 Plug	304	304	316	316L
7	垫片 Gasket	锯齿型金属垫片 Saw tooth type metal gasket 、金属石墨垫片 Metal graphit, gasket			
8	螺丝螺母 Screw nut	304	304	316	316L
9	阀盖 Bonnet	A105	304	316	316L
10	填料 Packing	聚四氟乙烯PTFE、柔性石墨 Flexible graphite			
11	锁紧螺母 Lock nut	304	304	316	316L
12	压套Pressing sleeve	304	304	316	316L
13	压板 Plate	304	304	316	316L

可应用于不同工况的结构 Can be Applied to Different Conditions of the Struc:ture



本阀阀体为直角形，流路简单，阻力小。特别适用于高粘度，含有悬浮物和颗粒状介质流体的调节，可避免结焦、粘结、堵塞。阀芯为柱塞形，用于高压差条件下的阀芯，采用堆焊钨钴合金，具有耐气蚀、抗冲等优点，大大提高了使用寿命。广泛应用于化工、炼油等行业，尤其适用于合成氨、尿素工业上高压和高压差介质调节。

The valve body of this valve is in a right-angle shape, with a simple flow path and low resistance. It is particularly suitable for regulating fluids with high viscosity, suspended solids and granular media, and can prevent coking, adhesion and blockage. The valve core is in the shape of a plunger and is used for valve cores under high pressure difference conditions. It is made by surfacing tungsten cobalt alloy and has the advantages of cavitation resistance and impact resistance, which greatly extends the service life. It is widely applied in industries such as chemical engineering and oil refining, and is particularly suitable for regulating high-pressure and high-pressure differential media in the synthetic nitrogen and urea industries.

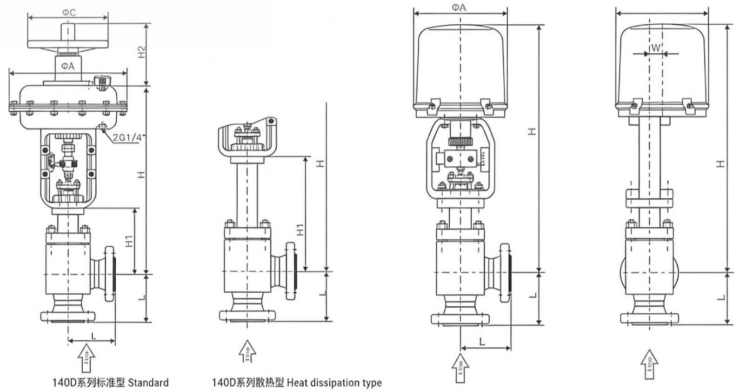
执行机构参数 Actuator parameters

形式 Form	型号 Model	气动薄膜执行机构 Pneumatlc film actuator	电子式电动执行机构 Electronic electric actuator
		HA B22~ HAB56	3810L、RSL
		多弹簧型 Multl sprlng	智能一体化型Intellgentintegratad :type
用途 Purpose		调节、开关Adjustment,swltch	调节 Regulating
驱动 Drlve		气压 (弹簧范围) Alrpressure(sprlng range) 140(20~100)KPa G 240(40~200)KPa G 280(80~240)KPa G	电源 Power supply: AC 220 V +10% 50HZ 电源Power supply: AC 380V+10%50HZ
接头 Jolnt		Rc 1/4	普通型 Common type:2-PF(G1/2") 隔爆型 Flameproof type:2-PF(G3/4")
正作用 Positive action		气压增加推动阀门关闭 Alr pressura Increases to push the valve to close	控制信号增加推动阀门关闭 Control signalincreases to push the valve to close
反作用 Reactlon		气压增加推动阀门开启 Air pressure increases to push the vaive open	控制信号增加推动阀门开启 Control signalincreases to push the valve open
控制信号 Control slgnal		4~20mA.DC(带定位器with posltlone・)	输入输出 Input output4~20mA.DC
滞后Lag		≤1% FS(带定位器 With posltloner)	≤0.8%FS
直线性 Llnearity		2% FS(带定位器 With posltlonar)	≤ ±1% FS
环境温度 Ambient tamperature		-10~+70℃	
表面涂层 Surface coatlng		阀体 Body:黑色碳化处理Black phosphating treatment 执行器 Actuator:丙烯酸聚氨酯漆 Acryllc polyurethane palnt	
选配附件 Optional accessorles		阀门定位器、手轮、电磁阀、行程开关、保位阀 Optlonal accessorles,Hand wheel,Magnetlc valve Travel switch.Lock up valve	加热器 Heater

主要性能参数 Main Performance Parameters

流量特性Flowcharacteristlcs		等百分比 Equal percentage、直线Stralght line	
可调范围 Adjustable range		50:1	
额定Cv值 Rated Cv value		等百分比 Equalpercentage:10~1400 直线 Straightline:11~1500	
允许泄漏量 Allowable leakage		硬密封:IV级(0.01%阀额定流量);软密封:V级 hard saal: level-lV(0.01% rated fow ofvalve): Soft seal: Level-V	
性能指标 Pelformance Index	驱动方式 Driving mode	气动 Pneumatlc	电动 Electric
	基本误差 Intrinsic error%	±1.0	±1.0
	回差Return difference %	≤1.0	≤1.0
	死区 Dead zone %	≤0.6	≤1.0
	始终点偏差 Constant polnt devla llon%	±2.5	±2.5
	额定行程偏差 Ratedstroke devlatlon%	≤2.5	≤2.5

DHAS型电动顶部导向高压角式调节阀
ELECTRIC TOP-GUIDED HIGH-PRESSURE ANGLE REGULATING VALVE



140D系列标准型 Standard　　140D系列散热型 Heat dissipation type

标准型、伸长型外形尺寸Standard and elongated dimensions

单位Unit：mm

DN	L	H		H1		A	C	H2	重量Weight(Kg)	
	900Lb、1500Lb	标准型 Standard	伸长型 Elongated type	标准型 Standard	伸长型 Elongated type				标准型 Standard	伸长型 Elongated type
20	160	500	600	215	315	282	220	180	28	32
25	160	500	600	215	315	282	220	180	29	33
40	180	535	685	245	395	308	220	180	38	44
50	200	545	695	255	405	308	220	180	41	47
80	250	685	835	310	460	394	270	240	70	81
100	330	745	895	370	520	394	270	240	90	104

电动多级降压式高压角阀外形尺寸
Dimensions of electric multi-stage step-down high pressure Angle valve

单位Unit：mm

DN	L	H	A	W	执行器型号 Actuator type number	重量Weight(Kg)
20	160	570	225	28	361LSA-20	28
25	160	570	225	28	361LSA-20	29
40	180	620	255	45	361LSB-30	38
50	200	635	255	45	361LSB-30	41
80	250	768	310	60	361LSB-50 361LSC-65	70
100	330	872	310	60	361LSB-50 361LSC-65	90

注：1、表中尺寸为900Lb标准配置时数据，如需不同压力等级时参数，请向本公司垂询；2、可按客户要求定制生产各种苛刻工况下阀门产品，如客户无特殊要求，本公司将按标准型配置供货；3、手轮机构为非标配阀门附件，可按客户要求选配。4、可按客户要求选配各种品牌电动(智能型)执行器。

Note: 1. The data in the table when the size is standard conhguralon of 900Lb. if you need parameters of diferent pressure levels, please contact us for further information. 2.We can customize the production of valve products under varlous harsh working conditlons according to the customer's requlrements. If the customer has no speclal requlrements, our company willsupply according to the standard confguration 3. The handwheel mechanlsm is not a standard valve accessory, which can be provided according to customar reoulramants. 4. Varlous alactria (intelgent) actuators of different brands can be selected according to customers' requlrements.

HLS型小流量针形调节阀
ULTRA-SMALL FLOW NEEDLE CONTROL VALVE

产品概述Product Overview

本公司生产的系列超小流量针形调节阀是一种顶部导向单阀座调节阀，具有结构简单、密封性能好、使用可靠等特点。有效而足够的顶部导向系统克服小开度时的震动，有效使用寿命更长。更有效控制小的流量系数，选择加了该阀的使用。可选择多弹簧气动薄膜机构或电动执行机构等

The series of the ultra-sma! flow needle valve produced by the company is a top guide single seated regulating valve with simple structure, good sealing performance and reliable use. The effectively and sufh-cient top guide system can overcome the vibration when the open-ing is small, and lengthen the effective service life. Smaller flov coefh-clent optlons ncrease the use of the valve Multl-spring pn-eumatic diaphragm actuator or electric actuator can be selected.

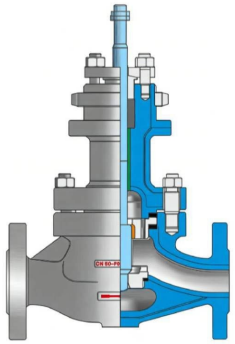
型号编制 Model Preparation

H	结构型式
L	L:超小流量型
S	S:单座针式调节阀 B:套筒调节阀
H	structural style
L	L: Ultra low traffictype
S	S:Single seat needle type regulating valve

产品特点 Products Features

该系列超小流量针形调节阀是本公司专业针对小流量场合自主研发的一款产品。阀体体积小，重量轻，结构简单。整体具有体调节性能高、用于微小流量的精确控制等特点。调节不干净介质时,应针对其节流间隙小的问题，注意预防堵卡现象的发生。特别适用于液体、气 体，蒸 汽。
等介质的主流量调节场合

The sarles of the ultra-small flow needle valve is a product independently devaloped by the Company for small flow occaslons. The valve body is small in volume and llght In welght; and the inter'nal thread structure is more convenlent for installatlon and dlsassembly. The whole system has the characterlsi cs ofsmall volume, ight welght high performance and precise control of small fow. When adjusting the unclean medlum for the matter of small throttling gap, it's necessary to pay attenilon to prevent the jamming. It is aspeclally suitable for regulating the maln flow of llquld, steam and other media



技术参数 Technical Parameters

阀体形式 Body type	直通式锻造阀体 Stralght through forging body
阀芯形式 Plug type	非平衡式单座阀芯Non-balanced single seat plug
公称通径 Nomlnal dlameter	DN8~25mm NPS 1/4"~1"
公称压力 Nominal pressure	PN1.6~32.0MPa:CLASS 150~1500LB
适用温度Applicable temperature	-196~+650℃ (按工况可选)(Optlonal according to working conditlons)
连接形式 Type of connectlon	法兰、焊接、螺纹 Flange,welding, thread
法兰距 Flange dlstance	符合IEC60534、非标定制Meet IEC 60534,Non-standardcustomlzation
压盖形式 Gland type	螺栓压紧式 Bolt compresslon type
密封垫片 Sealing gasket	金属石墨垫片、聚四氟乙烯 Metallic graphite gasket, polytetrafluoroethylene
填 料 Packing	聚四氟乙烯、柔性石墨 PTFE, flexible graphiteS
执行器 Actuator	气动执行器、电动执行器 Pnoumotlc octuotor,olootrlc aotuator

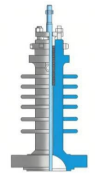
设计特色 Design features

1、小开度范围内可连续调节
2、采用顶部导向结构，抗震动
3、阀芯采用锥面密封，密封效果好
4、阀芯多元化设计，调节性能好
5、阀芯阀座喷焊硬质合金，耐冲蚀，寿命长
6、体积牺小，重量轻、便于安装
7、电气动执行器可互换安装

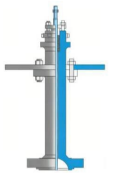
1.Continuously adjustable in small opening range
2. With top guide structure, anti-vibratlon
3. The valve plug is sealed with conlcal surface, with good sealing effect
4.Multiple design of valve plug, good regulation performance
5. Hard al loy spray welding fo valve plug and valve soat eroslon reslsionco. long service life
6.Smal size, light weight, easy to install
7.Interchangeableinstallatlon of elect:rlc actuator

可应用于不同工况的结构 Can be Applled to Different Conditions of the Struc:ture

1	阀体 Body	WCB	LCB	WC9
2	垫片 Gasket	316+石墨Graphite/FTFE		
3	阀座 Seat	304	304	304
4	阀芯 Plug	304	304	304
5	垫片 Gasket	316+石墨Graphite/FTFE		
6	导向套 Guide sleeve	304	304	304
7	铜套 Copper bush	Cu/316L		
8	螺丝 Screw	304	304	304
9	阀盖 Bonnet	WCB	LCB	WC9
10	阀杆 Ste m	304	304	304
11	填料 Packing	PTFE/柔性石墨 Flexible graphite		
12	锁紧螺母 Lock nut	304	304	304
13	压套Pressing sleeve	304	304	304
14	压板 Plate	304	304	304



高温型：
适用介质：蒸汽、热油等
适用温度：+250~550°C
High temperature type:
Applicable medla: steam,hot oil, etc.
Applicable temperature: +250-550°C



低温型：
适用介质：液氮、液氧等
适用温度:-70~-196°C
Low temperature type:
Applicable medlum:llquld nltrogen, liquid oxygen, etc.
Applicable temperature:-70~-196°C

波纹管型：
适用介质：易燃易爆气体、有毒液体、腐蚀性介质等
Bellows type:
Applicable medium: flammable and explosive gases, toxic liquids, corrosive media, etc

结构与材料 Structure and Materials

1	阀体 Body	CF8	CF8M	CF3M
2	垫片 Gasket	316+石墨Graphite/FTFE		
3	阀座 Seat	304	316	316L
4	阀芯 Plug	304	316	316L
5	垫片 Gasket	316+石墨Graphite/FTFE		
6	导向套 Guide sleeve	304	316	316L
7	铜套 Copper bush	Cu/316L		
8	螺丝 Screw	304	316	316L
9	阀盖 Bonnet	CF8	CF8M	CF3M
10	阀杆 Ste m	CF8	CF8M	CF3M
11	填料 Packing	304	304	316L
12	锁紧螺母 Lock nut	PTFE/柔性石墨 Flexible graphite		
13	压套Pressing sleeve	304	304	316L
14	压板 Plate	304	304	316L

注:1、以上为标准配置结构，阀座为金属密封，阀座为软密封选用V级可选件。可提供喷焊硬质合金的阀内件。2、常规材质为碳钢和不锈钢两种，可根据用户现场条件订制特殊材质控制阀产品。

Note: 1the above Is of standard conh uratlon structur ; the valve seat Is metal soal, and the valve seat is soft se l, grade VI optlonal it can provide valve trim ot spray welding cemented carbide.2. ihe conventional materlal is carbon steel and stainless steel, and the speclal material regulating valve products can be customized according to the user's work conditlons.

HLS型小流量针形调节阀
ULTRA-SMALL FLOW NEEDLE CONTROL VALVE

规格参数 Specifcation Parameter

流量系数(Cv) Flow coefficient		等百分比Equi percentape					0.25	0.1	0.4	0.63	1.0
		直线Straight line	0.01	0.04	0.1	0.16	0.25	0.1	0.4	0.63	1.0
口径(in)		行程 Trip	可选流量系数Cv（★符合IEC ●推荐）Optional flowcoemcient Cv(★ Conform toiEc ● Recammend								
8	1/4"	16mm 25mm	●	●	●	●	●	●	★	★	★
10	3/8*		●	●	●	●	●	●	★	★	★
15	1/2		●	●	●	●	●	●	★	★	★
20	3/4*		●	●	●	●	●	●	★	★	★
25	1		●	●	●	●	●	●	★	★	★
配用执行机构 Actuator			气动执行器Pneumatic actuator:ZHA/B;电动执行器 Electric actuator:3810、PSL								

执行机构参数 Actuator parameters

型号 Model	气动薄膜执行机构 Pneumatlc film actuator	电子式电动执行机构 Electronic electric actuator
形式 Form	HA B22~ HAB56	3810L、RSL
	多弹簧型 Multl sprlng	智能一体化型Intellgentintegratad :type
用途 Purpose	调节、开关Adjustment,swltch	调节 Regulating
驱动 Drlve	气压 (弹簧范围) Alrpressure(sprlng range) 140(20~100)KPa G 240(40~200)KPa G 280(80~240)KPa G	电源 Power supply: AC 220 V +10% 50HZ 电源Power supply: AC 380V+10%50HZ
接头 Jolnt	Rc 1/4	普通型 Common type:2-PF(G1/2") 隔爆型 Flameproof type:2-PF(G3/4")
正作用 Positive action	气压增加推动阀门关闭 Alr pressura lncreases to push the valve to close	控制信号增加推动阀门关闭 Control signalincreases to push the valve to close
反作用 Reactlon	气压增加推动阀门开启 Air pressure increases to push the vaive open	控制信号增加推动阀门开启 Control signalincreases to push the valve open
控制信号 Control slgnal	4~20mA.DC(带定位器with posltlone・)	输入输出 Input output4~20mA.DC
滞后Lag	≤1% FS(带定位器 With posltloner)	≤0.8%FS
直线性 Llnearity	2% FS(带定位器 With posltlonar)	≤ ±1% FS
环境温度 Amblent tamperature	-10~+70℃	
表面涂层 Surface coatlng	阀体 Body:黑色碳化处理Black phosphating treatment 执行器 Actuator:丙烯酸聚氨酯漆 Acryllc polyurethane palnt	
选配附件 Optional accessorles	阀门定位器、手轮、电磁阀、行程开关、保位阀 Optlonal accessorles,Hand wheel,Magnetlc valve Travel switch.Lock up valve	加热器 Heater

主要性能参数Main Performance Parameters

流量特性 Flow characterlstlcs	等百分比 Equal percentage、直线 Stralght line
可调范围 Adjustable range	30:1
额定Cv值 Rated Cv value	0.01~1.0
允许泄漏量 Allowable leakage	泄漏量标准Loakagc standard:GB/T4213

HLWS型食品卫生级调节阀
FOOD SANITATION GRADE CONTROL VALVE

产品概述 Product Overview

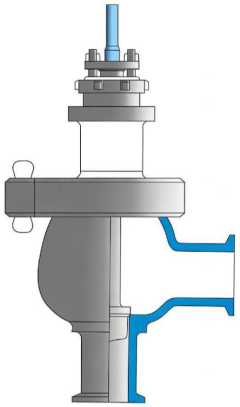
本公司为满足各种不同流体加工行业的需要，采用先进技术凭尖端科技而设计的高标准系列食品卫生级调节阀。其大量的不同的型号、多元化的设计和它全部零件的多功能性使它成为了尖端的高科技产品。为制药、生物、食品、酿造和饮料、化妆品等行业的洁净工况提供一个完整的解决方案。

We need to meet the needs of a variety of different fluld processing Industrles, Adopt advanced technology Deslgn of the highest standards of health class regulation valve by cutting-edge technology. Its a large number of different models, diversihed deslgns and all of its parts make it a cutting-edge high-tech products. To provide a complete solution for the clean working condltlons of pharme ceutlcal, blologlcal, food, brewing beverage, cosmetic and other industrles!

产品概述 Product Overview

本公司生产的系列食品卫生级调节阀具有结构紧凑、装拆方便、调节精度高等优点，角型设计确保阀门自动排放无滞留，标准电子抛光，光滑表面确保清洁，无介质积存区域，不会产生潜在的污染。快速拆装阀体和阀盖，使阀门打开和维修快捷方便。

The series of food hygieme regulating valves produced by our company have the advantages of compacl structure, convenient assembly and disassembly, and high regulating accuracy, Angle Type design to ensure that the valve is automatically discharged without detention standard electronic poishing, smooth sucace to ensure clean,No potenllal polution, ouiek assembling and assemblao valve body and valve cover,To open and repair the valve quickly and easily.



阀体形式:直角式铸造阀体
阀芯形式:非平衡式单座阀芯
公称通径:DN15~100 NPS1/2" ~4"
公称压力:PN0.6~1.6MPa;CALSS150LB
适用温度:-20~+180℃
连接形式:卡箍、焊接、螺纹、法兰
法兰距:符合IEC60534、非标定制
压盖形式:螺栓压紧式
密封垫片:聚四氟乙烯
填　料:聚四氟乙烯
执行器:气动执行器、电动执行器

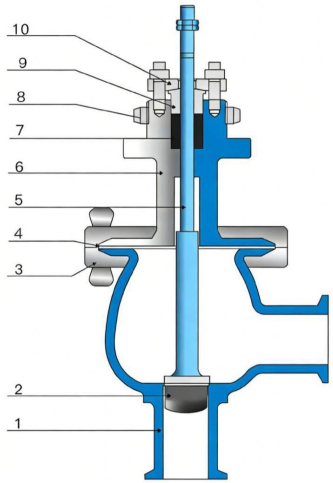
Body form: Right angle casting valve body
Spool form: Non balance type single seat valve
Nominal diameter:DN15~100 NPS1/2" ~4"
Nominal pressure:PN0.6~1.6MPa;CALSS 150 LB
Applicable temperature:-20~十180℃
Connection form: Quick assembly, welding, screw thread, flange
Flange distance:MeetIEC 60534、Non-standard customization
Gland form: Bolt pressing type
Sealing gasket: PTFE
Seal up: PTFE
Actuator:Pneumatic actuator,electric actuator

1、内壁0.5um电子抛光，流道畅通无阻;
2、球体大小与通径一致，不产生沉淀物;
3、开启的窗口用于观看检查轴密封情况;
4、简单的连接，方便维修和更换零件。

The internal electronic polishing, fow without resistance
The sphere size and diameter,no sediment
The valve cone seal, the sealing effect is good
Simple connection, convenient maintenance and replacement parts

HLWS型食品卫生级调节阀
FOOD SANITATION GRADE CONTROL VALVE

结构与材料 Structure and Materials

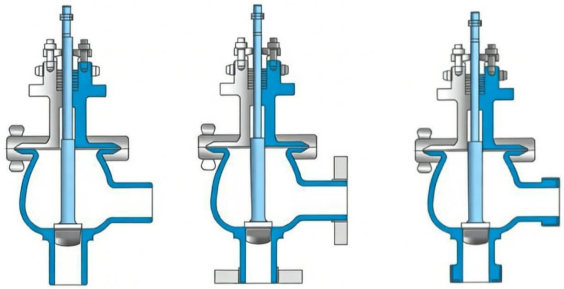


1	阀体 Body	304	316	316L
2	垫片 Gasket	304	316	316L
3	阀座 Seat	304	316	316L
4	阀芯 Plug	三元乙丙胶、PTFE		
5	垫片 Gasket	304	316	316L
6	阀盖 Bonnet	304	316	316L
7	填料 Packing	PTFE		
8	锁紧螺母 Lock nut	304	316	316L
9	压套Pressing sleeve	304	316	316L
10	压板 Plate	304	316	316L

注: 1、以上为标准配置结构，阀座为金属密封，阀座为软密封选用V级可选件。可提供喷焊硬质合金的阀内件。
2、常规材质为碳钢和不锈钢两种，可根据用户现场条件订制特殊材质控制阀产品

1. The above parameters for the standard confquration, sof seal can be specially made to order 6 seal, Valve inner part capable of providing spray welding hard alloy.
2. Conventional materials for carbon steel and stainless steel two, according to the user site conditions custom specialmaterial control valve products

可应用于不同工况的结构 Can be Applled to Different Conditions of the Struc:ture



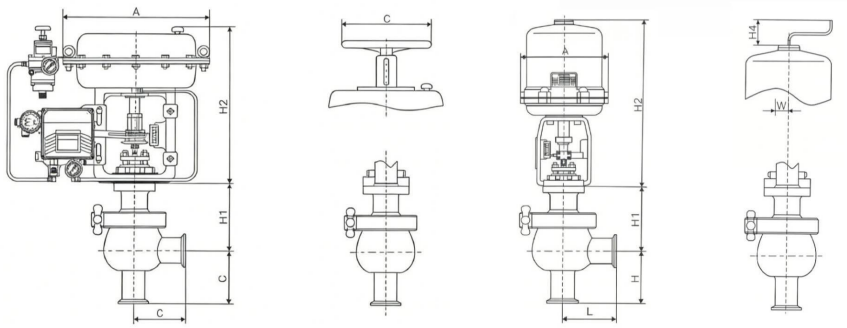
对焊连接：BW
Butt welding: BW

法兰连接：RF
Flange connection: RF

螺纹连接：G
Thread connection: G

执行机构参数 Actuator parameters

型号 Model	气动薄膜执行机构 Pneumatlc film actuator	电子式电动执行机构 Electronic electric actuator
形式 Form	HA B22~ HAB56	3810L、RSL
	多弹簧型 Multl sprlng	智能一体化型Intellgentintegratad :type
用途 Purpose	调节、开关Adjustment,swltch	调节 Regulating
驱动 Drlve	气压 (弹簧范围) Alrpressure(sprlng range) 140(20~100)KPa G 240(40~200)KPa G 280(80~240)KPa G	电源 Power supply: AC 220 V +10% 50HZ 电源Power supply: AC 380V+10%50HZ
接头 Jolnt	Rc 1/4	普通型 Common type:2-PF(G1/2") 隔爆型 Flameproof type:2-PF(G3/4")
正作用 Positive action	气压增加推动阀门关闭 Alr pressura Increases to push the valve to close	控制信号增加推动阀门关闭 Control signalincreases to push the valve to close
反作用 Reactlon	气压增加推动阀门开启 Air pressure increases to push the vaive open	控制信号增加推动阀门开启 Control signalincreases to push the valve open
控制信号 Control slgnal	4~20mA.DC(带定位器with posltlone・)	输入输出 Input output4~20mA.DC
滞后Lag	≤1% FS(带定位器 With posltloner)	≤0.8%FS
直线性 Llnearity	2% FS(带定位器 With posltlonar)	≤ ±1% FS
环境温度 Amblent tamperature	-10~+70℃	
表面涂层 Surface coatlng	阀体 Body:黑色碳化处理Black phosphating treatment 执行器 Actuator:丙烯酸聚氨酯漆 Acryllc polyurethane palnt	
选配附件 Optional accessorles	阀门定位器、手轮、电磁阀、行程开关、保位阀 Optlonal accessorles,Hand wheel,Magnetlc valve Travel switch.Lock up valve	加热器 Heater



气动调节阀尺寸表Pneumatic ValveSize Table

DN	25	40	50	65	80
L	100	105	105	155	155
H	100	125	125	175	175
H1	470	480	480	510	510
H2	180	180	180	236	236
A	200	200	200	240	240
C	282	282	282	360	360

电动调节阀尺寸表Electric Control Valve Size Table

DN	25	40	50	65	80
L	100	105	105	155	155
H	100	125	125	175	175
H1	470	480	480	510	510
H2	373	373	456	456	538
A	225	225	225	255	255
H4	90	90	90	90	90
W	45	45	45	45	45

注: 1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算，
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新资料请联系本公司索取。

1. The slze of the table is not the standard data of the accessorles,the size of the accessory is calculated accordingto the actual confguration
2. Due to the technical innovation and improvement of the product, the size may vary, please contact our to obtain the latest information.


SELF-
ACTUATED
SERIES
SELF-ACTUATED
SERIES
MACOT
MACOTANGO VALVE GROUP

产品概述 Product Overview

ZZYP/M系列自力式压力调节阀 无需外加能源，利用被控介质自身能量作为动力源，引入执行机构控制阀芯位置来改变流通面积，改变两 端的压差和流量，从而使阀前(或阀后)压力稳定在给定值。具有动作 灵敏、密封性好、压力波动小等优点。适用于小压差的调节范围

ZZYP/M series self operated pressure regulating valve does not need additional energy, uses the energy of the controlled medium itself as the power source, introduces an actuator to control the position of thevalve core to change the fow area, and changes the pressure difference and fow at both ends, so as to stabilize the Pressure in front of (or behind) the valve at a given value. The utllity model has theadvantages of sensitive action, good sealing Performance, smal pressure fluctuation, etc.

型号编制 Model Preparation

	结构型式
Z系列调节阀	P:平衡薄膜式调节阀 M:平衡活塞式调节阀
ZZY	structural style
Z serles contro valve	P: Balanced diaphragm control valve M: Balanced piston type control valve

产品概述 Product Overview

ZZYP/M型自力式压力平衡调节阀是不需要任何外加能源利用被调介质自身能量而实现自动调节的执行产品要求。该产品最大特点，能在无电、无气的场所工作，同时又节约了能源，压力设定值在运行中可随意调整。大流量压差控制，能均衡该阀前阀后压力的稳定性。采用快开流量特性，动作灵敏、密封性能好，因而它广泛应用于石油、化了、电力、冶金、食品、轻纺、机械制造与居民建筑楼群等各种是工业设备中用气体、液体及蒸汽介质减压、稳压(用于阀后调节)，或泄压、稳压(用于阀前调节)的自动控制。

Serial self-actuated control valve of the Company is subject to building block design,making it easy to assemble and maintaln and greatlyreducing cost.In addition,it operates autL >aly witnout need of energy and it is safer and more reliable that It can keep on operating curing the perlod of blackout.To satisfy speclal requlrements of customers, the company wlllcombine electrlcal actuated valve and self_actuated actuated valveto provlde fnal solutlon.Self-actuated actuated valve used in mbar range can achieveprotection of environment by unfailingly controlling inter gas reaction and storage tanks which contain easily oxidized, poisonous and explosive materials.Successof the Companyis regarded as footstone for explorationof better and more innovative solution, which embodies that thecompanyis being continually devoted to manufacturing superlor products.

产品特点 Products Features

计算与选型简单;
维护简单且方便;
设计紧凑合理，使用寿命长;
词体通径从 DN15~ 300(1/2"~12");
压力等级从 PN1.0~16.0MPa(ANSI150-900LB);
可供选择类型范围广泛。

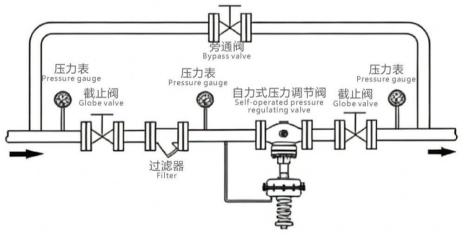
Simple calculation and selection;
Maintenanceis simple and converuent;
Reasonably compact design, long life;
Valve diameter from DN15 to 300(1/2"to 12);
Pressure rat:ing from PN1.0 to 16.0MPa (ANSI 150 to 900LB);
Choose from a wide variety range

应用范围 Applied Range

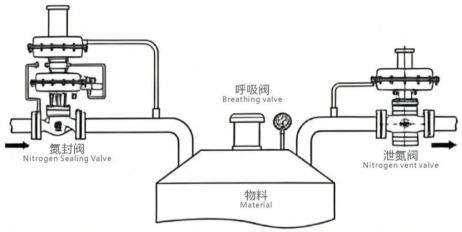
石油天然气、环保水处理、生物制药、化工、电力、食品、造纸、冶金、采矿、船舶及一般工业系统。

Petroleum and natural gas, environmental protection water treatment, bio pharmaceutical, chemical,electric power, food, paper, metallurgy, mining,shipping and general industrial systems

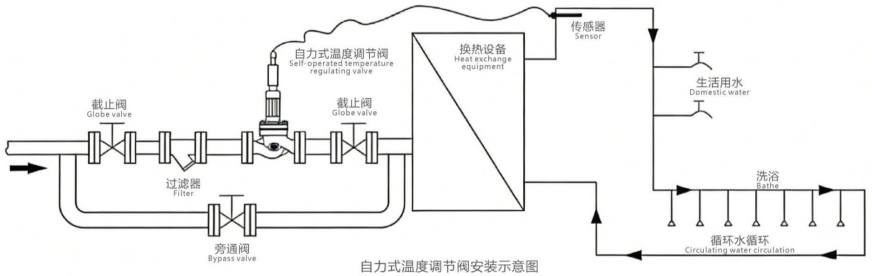
典型安装示意图 Typical Installation Diagram



自力式压力调节阀安装示意图
Installation diagram of self-operated pressure regulating valve

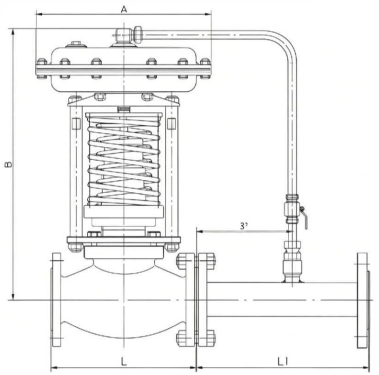


氮封阀安装示意图
Installation diagram of nitrogen sealing valve

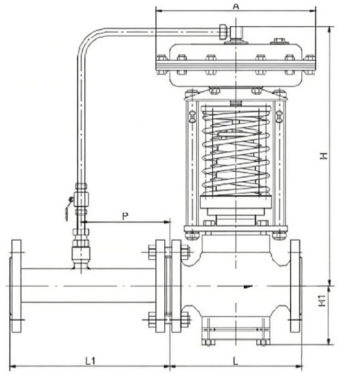


自力式温度调节阀安装示意图
Installation Diagram of Self-Operated Temperature Control Valve

外形尺寸及重量Overall dimensions and weight



压闭型(B型)
Compresslon type (B type)



压开型(K型)
Press open type (K type)

压闭型(B型) Compresslon type (B type)

公称通径DN		15	20	25	32	40	50	65	80	100	125	150	200	250	300
L	PN16	160	180	188	200	220	252	275	300	350	400	455	555	660	740
	PN40	160	180	188	200	220	252	275	310	370	410	475	600	670	750
	PN64/PN100	202	206	210	220	251	290	315	341	398	452	511	610	752	819
H		495	495	502	514	517	522	600	605	653	708	770	785	877	990
A		ϕ132、ϕ196、ϕ232、ϕ282、ϕ308													
L1		233	233	233	332	332	373	373	552	673	980	900	1200	1270	1600
P≥		45	45	70	102	140	185	185	325	425	550	660	900	1135	1350
重量WEIGHT		26	26	26	36	37	42	42	90	115	130	145	180	200	250

压开型(K型) Press open type (K type)

公称通径DN		15	20	25	32	40	50	65	80	100	125	150	200	250	300
L	PN16	160	180	188	200	220	252	275	300	350	400	455	555	660	740
	PN40	160	180	188	200	220	252	275	310	370	410	475	600	670	750
	PN64/PN100	202	206	210	220	251	290	315	341	398	452	511	610	752	819
H		495	495	502	514	517	520	600	605	653	708	770	785	877	990
H1		83	83	83	93	95	110	128	140	160	215	230	268	385	420
A		ϕ132、ϕ196、ϕ232、ϕ282、ϕ308													
L1		233	233	233	332	332	373	373	552	673	980	900	1200	1270	1600
P≥		45	45	70	102	140	185	185	325	425	550	660	900	1135	1350
重量WEIGHT		26	26	26	36	37	42	42	90	115	130	145	180	200	250

产品概述 Product Overview

V230Y型自力式压力(差压)调节阀、由阀体、阀座、阀芯部件等零部件和执行单元组成，是一种无需外来能源而只依靠被调介质自身的压力变化进行自动调节压力的节能型产品，可用于非腐蚀性(最高温度350℃)的液体、气体和蒸汽等介质的压力控制装置

V230Y self-operated pressure (differential pressure) control valve, composed of body, valve seat, valve core components and other parts and executive unit,is an energy-saving product that can automatically adjust the pressure without external energy and only rely on the pressure change of the regulated medium itself. It can be used as a pressure control device for non-corrosive (maximum temperature 350 ℃)liquid, gas, steam and other media

产品概述Product Overview

本公司生产的系列自力式压力调节阀无需外加能源，利用被调介质自身能量为动力源引入执行机构控制阀芯位置，改变两端的压差和流量，使阀前（或阀后）压力稳定。具有动作灵敏，密封性好，压力设定点波动力小等优点，本阀广泛应用于气体、液体及介质稳压或泄压稳压的自动控制，

WIthout requlrement of any external energy,serlal self-actuatedcontrol valve produced by the co mpany controls value spool posltlonby using self-energy ofthe adjusted medium as power producer andleadlngltinto actuator,and stabllzes upstream (downstream) pressureby changlng differenllal pressures and fluxes of both ends.WIthadvantages such as aglle action,perfectalrtlghtness and low waveforce of pressure set point.thls control valve wldelv applies to automaticcontrolof pres:sure stabl lzallon or pressure rellef and stablll.atlonofgases,liquids and mediums.

产品特点Product features

1、无需外加能源，节约了能源，
2、压力分段范围细且互相交叉，调节精度高，
3、压力设定值在运行期间可连续设定，
4、对阀后压力调节，阀前压力与阀后压力之比可为10:1-10:8。
5、橡胶膜片式检测，执行机构检测精度高、动作灵敏。
6、采用压力平衡机构，使调节阀反应灵敏、控制精确，，

1. Needing llt 'e extermal energy and seving energy.
2, Pressure subsectlon ranges are small and crosslng over one another,contributing to hlgh regulation precislon.
3. Pressure set velue can be successlvely set durlng operatlon process.
4. As to adjustment of pressure after valve match, proportlon of upstreampressure and downstream pressure can be 10:1-10:8.
5. In terms of rubber dlaphragm type detectlon, actuator can conductdetection of high precision and agile action.
6. Adopl ion of pressure balance mechanlsm makes actlon of thlscontrol valve sensi:ive and its control accurate.

技术参数Technical parameters

阀体形式 Body form	直通式铸造阀体 Stralght-through cast body
阀芯形式 Plug type	非平衡式单座阀芯Non-balanced slngle seat plug
公称通径NomInal dlameler	DN15~300mm NPS 1/2"-12*
公称压力Nominal pressure	PN1.6-4.0MPa:CLASS 150-1500LB
适用温度 Applicable temperature	-20~+350℃
连接形式 Type of connection	法兰式Flange
法兰距Flange dIstance	符合IEC 60534 Meet IEC 60534
泄漏等级Leakage level	按ASME B16.104规定As per ASME B16.104
设定值偏差 Setvalue devlatlon	+8%
执行器 Acluator	气动执行器(薄膜式、活塞式)Pneumatlc actuator (hlm type, plston type)

结构与材料Structure and Materials

公称通径DN(mm) Size (In)		15 1/2"	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"
额定流量系数Kv Rated flow coefficient		7	11	20	30	48	75	120	190	300	480	760	1100	1750
额定行程L（mm） Rated travel L(mm)		8		10		14	20		25	40		50	60	70
公称压力(MPa) Pressure(MPa)		1.6 、4.0												
压力调节范围(KPa) Pressure range(KPa)		15～50、40~80、60～100、80～140、120 - 180、160～220、200-260 240 - 300、280～350、330 - 400、380～450、430 - 500、480 - 560、540 - 620、 600 - 700、680-800、780-900、880 - 1000、600 - 1500、1000-2500												
固有流量特性 Flow characteristics		快开 Qulck open												
调节精度(%) AdJustment preclsion		±5												
使用温度（℃） Use temperature		≤350												
允许泄露量 Allowab leleakage	硬密封 Hard soal	单座：<10 $^{-4}$阀额定容量(IV级）、套筒：<5X10 $^{-3}$阀额定容量（II级） SIngle seat:<10 $^{-4}$Ratad valve capaclty(IV)、Sleeve:<5X10 $^{-3}$Ratad valva capaclty(II)												
	软密封 Soft seal	0.15		0.30		0.45	0.60	0.90	1.70	4.0		6.75	11.10	16.0

主要零件材料 Part material

阀体 Body	ZG230-450,ZG1Cr1 BNi9Ti,ZGCr18Ni1 2Mo2Ti
阀芯Plug	1Cr18Ni9Ti,Cr18Ni12Mo2TI
阀座Seat	1Cr18Ni9Ti,Cr18Ni12Mo2Ti
阀杆Stem	1Cr18Ni9Ti.Cr18Ni12Mo2Ti
执行器材质 Actuator material	A3,1Cr1 BNi9Ti
填料Packing	聚四氟乙烯、柔性石墨 PTFE.Flexible graphite
膜片 Dlaphregm	丁腈橡胶、耐油橡胶、氟橡胶 Nitrile rubbar,oil resistant rubber, fluorlne rubbar

注：常规材质为碳钢和不锈钢两种，可根据用户现场条件订制特殊材质控制阀产品。
The conventlonal materlal ls carbon steel and stalnlass steel,and the speclal materlal regulatlng valve products can be customized aocording tothe user's work conditions.

V230Y型自力式压力调节阀
SELF-ACTUATED PRESSURE CONTROL VALVE

主要外形连接尺寸Main External Connection Dimensions

公称通径DN(mm) NPS(in)	15 1/2"	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"
L	160	180	188	200	220	252	275	300	350	400	455	555	660
H	52.5	52.5	57.5	70	75	82.5	92.5	100	110	125	125	170	202
H1	615	645	650	710	730	745	760	800	890	960	1050	/	/

注：1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算。
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新资料请联系本公司技术部。

Note:1.The dimensions in the table are standard data without accessories.The dimensions of accessories are calculated according to the actual configuration. 2. Due to the technical innovation and improvement of the product, the size may change. Please contact the technical department of the Company for the latest information.

V230L型自力式流量调节阀
SELF-OPERATED FLOW REGULATING VALVE

产品特点Product features

本公司生产的系列自力式流量控制阀，由一个带设定流量的控制阀门和执行器组成。适用于非腐蚀性的液体，在系统中起流量控制的作用控制。是一个新的调节阀种类，相对于手动调节阀，它的优点是能够自动调节；相对于电动调节阀，它的优点是不需要外部动力，属于节能型控制阀。

The serles of self-opereted flow control valves produced by our company conslstof a control valve and actuator with set flow.It Is app lcable to non-corroslvellquid and plays the rcle of fow control In the system.It is a new type of regulatingvalve.Comparad with manual ragulating valve,its advantage is that it can adjustautomatlcally;Compared with the electrlc control valve, Its advantage is that itdoes not need external power and belongs to the energy-saving control valve.

该系列调节阀是通过应用实践证明，在闭式水循环系统(如热水供暖系统，空调冷冻系统）中，正确使用这种阀门，可以很方便地实现系统的流量分配、动态平衡、大大简化系统的调试工作、稳定泵的工作状态等。

This serles of regulating valves has been proved by applicetlon practice thatIn closed waler c rculatlon system (such as hot water heatlng system.alrcondltioning and refrlgeratlon system), correct use of this valve can easilyroalize the flow distribution and dynamlc balanco of the systom, groatlysimpllfy the commlssloning of the systam,and stabllize the woiking state ofthe pump.

技术参数Technical parameters

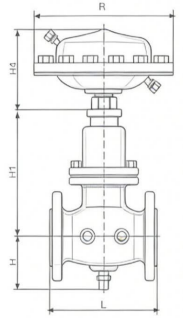
阀体形式：直通式铸造阀体	Body form:Straight casting valve body
公称通径：DN15~250NPS 1/2"~10"	Nominal dlameter:DN15~250NPS1/2"-10"
公称压力：PN1.6-4.0MPa:CALSS 150-300LB	Nominal pressure:PN1.6-4.0MPa;CALSS150-300 LB
适用温度：-30-+150℃	Applicable temperature:-30-+150℃
连接形式：法兰式	Connectlon form:Flange
法兰距：符合IEC 60534	Flange dlstance:Meet IEC 60534
泄漏等级：按ASME B16.104规定	Leakage level:Accordwlth ASME B16.104
设定值偏差：±8%	Set value blas :±8%
执行器：薄膜执行器(自力式)	Actuator:Thin fllm actuator (self operated)

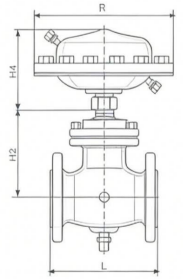
设计特点Design Features

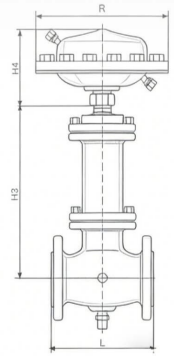
1、内置波纹管，具有压力平衡结构，灵敏度高，	Built in corrugated pipe,Pressure balance structure,High sensltivity.
2、结构紧凑，性能可靠，免于维护，	Compact structure,Rellable performance,Avold malntenance.
3、采用标准模块化设计。	Using standard modular deslgn.
4、根据节流阀结构设计，流量精准。	According to the throttle valve structure design,flow accuracy.
5、通过组合件，可以进行多项组合控制。	By assembly, Can be carrled out a number of combinatlon of control.

性能参数Performannce parameter

公称通径DN(mm) Size (In)		15 1/2"	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"
额定流量系数Kv Rated flow coefficient		4	6.3	8	16	20	32	50	80	125	160	280	320	400
有效压力下最大流量 MaxImumflow undereffective prossurie(m3/h)l	0.02MPA	1.5	2.5	3.5	5.5	9.0	14	22	36	55	70	125	180	250
	0.05MPA	2.5	2.5	5.5	9.0	12	22	36	55	85	110	180	-	-
噪音衡量系数Z值 Nolse FIgure		0.6	0.6	0.6	0.55	0.55	0.5	0.5	0.45	0.4	0.35	0.3	0.2	0.2
允许压差(MPa) Differential pressure	PN16	1.6								1.5		1.2	1.0	
	PN40	2.0												
有效面积Effective area (cm²)		250								630				
节流器压差(MPa)		0.02:0.05												
允许上下膜室之间最大压差 Maximum pressure differonce between the upper and lower flm chambers (Mpa)		0.4								0.15				
阀体材质Body materlal		WCB、304、316、316												
阀芯材质 Spool materlal		L304、316、316												
阀座材质Seat material		L304、316、316												
阀杆材质Stem matorlal		L304、316、316L												
执行器 Actuator		膜盖：钢板镀锌；膜片：EPDM或FKM夹纤维 Membrane cover: galvanized steel sheet; diaphragm:EPDM												
控制管线、接头 Control pipeline, Joint		铜管或钢管10x1;卡套式接头：R1/4" Brass or steel pipe 10*1、Card sleeve type connector: R1/4"												
控制精度 Control accuracy		±5%												
允许泄露量 Allowableleakage	硬密封 Hard soal	4x0.01%阀额定容量 4x 0.01% Valve rated capaclty												
	软密封 Soft seal	DN15-50 10气泡/min 10bubbles/min					DN65-125 20气泡/min 20bubbles/min			DN150-250 40气泡/min40 bubbles/min				







连接尺寸Connection size

DN Size (In)	15 1/2"	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"
L	160	180	188	200	220	252	275	300	350	400	455	555	660
H	50	52.5	57.5	70	75	82.5	92.5	100	110	125	125	170	202
H1	212	212	238	238	240	240	275	275	380	380	326	354	404
H2	-	-	-	-	-	-	-	-	-	-	326	354	404
H3	-	-	-	-	-	-	-	-	-	-	630	855	1205
H4	根据实际配置计算 Calculated according to actual configuration												
R	根据实际配置计算 Calculated according to actual configuration												

注：1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算。
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新资料请联系本公司技术部。

Note:1.The dimensions in the table are standard data without accessories.The dimensions of accessories are calculated according to the actual configuration.
2. Due to the technical innovation and improvement of the product, the size may change. Please contact the technical department of the Company for the latest information.

产品概述Product Overview

ZZVP-B系列自力式微压调节阀是一种无需外来能源的节能型产品，利用工业管道中介质的压力变化与信号进行调节，调节介质的压力与执行机构的输出力产生平衡，阀门压力至设定点，以达到稳定压力、和流量值值。

The serles of self operated mlcro pressure egulatlng valve produced bythe company is an energy-saving product without extemal energy.Thepressure change and signal of the medium in the process pipeline arecompared to make the force of the regulated medlum and the outputforce of the actuator balance,so as to achieve stable pressure anddifferentlal pressure.

ZZVP型自力式微压调节阀
RATED MICRO PRESSURE CONTROL VALVE

ZZVP-K泄氮阀，用罐内反馈结构、介质直接经过阀盖进入检测机构，介质在检测元件上产生一个作用力与预设弹簧预紧力相平衡。泄氮装溢压力设定点时，平衡被破坏，使阀芯下移，打开阀门，向外界泄放氮气；当蹯内压力降至泄氮装置压力设定点，由于预设弹簧力作用，弹簧力关闭阀门。

ZZVP-K nitrogen release valve uses a feedback structure inside the tank, and the medium directly enters the detection mechanism through the valve cover. The medium generates a force on the detection element that balances with the preset spring preload force. When the pressure set point for nitrogen release is exceeded, the balance is disrupted, causing the valve core to move downwards, opening the valve, and releasing nitrogen gas to the outside; When the internal pressure drops to the pressure set point of the nitrogen release device, the valve is closed by the preset spring force.

技术参数Technical Parameters

公称通径DN(mm) NPS(In)		15 1/2"	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"
额定流量系数Kv Rated flow coefficient		7	11	20	30	48	75	120	190	300	480	760
允许压差 MPa Allowable pressure differential	PN16	1.6								1.5		1.2
	PN40	2.0										
阀盖形式 Bonnet type		标准型 Standard type										
压盖型式 Gland type		螺栓压紧式 Bolt pressing iype										
密封填料 Sealing packing		聚四氟乙烯、柔性石墨 PTFE, Flexible graphite										
压力范围 Pressure range (Kpal)		0.5~6 5~10 9~15 12~19 18~25 22~30 28~35 32~40 38~50 48~60 58~72 70~100										
最小压差PM inimum Pressure difference		≥0.01(MPa)										
工作温度 Working temperature		≤80℃										
适合介质 Suitable medium		气体、蒸汽、低粘度液体 Gas，Steam, Low vliscosltyllquld										
阀芯形式 Plug form		单座、套筒型阀芯 Tho singlo soator，slo vo lypo valve										
流量特性 Flow characteristics		直线性 Stralght Ilne										

ZZVP型自力式微压调节阀
RATED MICRO PRESSURE CONTROL VALVE

主要性能参数 Main Performance Parameters

调节精度 Adjustment precislon		≤10%									
允许泄漏量 Allowable leakage	硬密封 Hard seal	4x0.01%阀额定容量Rated valve capaclty									
	软密封 Soft seal	DN(mm)									
		20	25	32	40	50	65	80	100	125	150	200
		0.15		0.3		0.45	0.6	0.9	1.7	4.0		6.75

主要外形连接尺寸MainExternal ConnectionDimensions

公称通径DN(mm) NPS(In)	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"
L	180	188	200	220	252	275	300	350
H	52.5	57.5	70	75	82.5	92.5	100	110
H1	413	440	475	500	515	645	665	690
A	308	308	308	308	308	394	394	394
导压管接口螺纹 Interface thread	M16x1.5							
重量G (Kg)	11	12	13	15	17	20	28	38

注：1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算。

2、由于产品的技术创新与改进，尺寸可能会有所变化，最新资料请联系本公司技术部。

Note:1.The dimensions in the table are standard data without accessories.The dimensions of accessories are calculated according to the actual configuration. 2. Due to the technical innovation and improvement of the product, the size may change. Please contact the technical department of the Company for the latest information.

ZZYVP型自力式氮封调节阀
SELF-OPERATED NITROGEN SEAL CONTROL VALVE

产品概述Product Overview

本公司生产的系列自力式氮封阀前压力通过过滤器减压阀进入指挥器，通过指挥器外连接管进入主阀气动执行器，打开主阀，进行供气，当阀后压力达到阀后设定值后，阀后压力通过指挥器，停止向主阀气动执行器供气源，主阀关闭，停止供气。当阀后压力低于设定值后，通过指挥器向主阀气动执行器提供气源，打开主阀进行供气，自行循环操作。达到稳定阀后压力的目的。

The series of self operated nitrogen valves produced by our company enter the controller through a filter pressure reducing valve, and then enter the pneumatic actuator of the main valve through the external connecting pipe of the controller. The main valve is opened for gas supply. When the pressure behind the valve reaches the set value behind the valve, the pressure behind the valve passes through the controller and stops the gas supply to the pneumatic actuator of the main valve. The main valve closes and stops the gas supply. When the pressure behind the valve is lower than the set value, the pneumatic actuator of the main valve is supplied with gas through the commander, and the main valve is opened for gas supply, with self circulation operation. To achieve the goal of stabilizing the pressure after the valve.

产品特点ProductsFeatures

储罐内压力升高至设定压力时，快速泄放阀迅速开启，将罐内多余压力泄放。微压调节阀在储罐内压力降低时，开启阀门，向罐内充注氮气。因微压调节阀必须使用在压力为0.1MPa压力以下，现场压力较高，必须安装V230Y型压力调节阀将压力调节阀将压力降低至0.1MPal以下才可使用。公称压力0.1MPa，压力可按分段设定，从0.5KPa至66KPal以下，介质温度≤80℃。

Vhen pressure In a storage tank ncreases to setting pressure, qulck rellef valve should be unlocked Instently to release excess pressure Inthistank. Valve of mlcro pressure regulal:lng valve requlres to be opened to fillthe tank wlth nltrogen Ifpressure decey occurs In t. On the condltlonthat mlcro pressure regulatlng valve must be used below O.1MPa whlle the feld pressure Is relatlvely hlgh, It can'tbe used unill pressure Isreduced below O.1MPa by Installed V23oY pressure regulatlng valve. The nomlnal pressure Is o.1MPa,and the pressure can be set Insecllons,from O.5kPato below 66kPa,and the medlum temperature Is <80℃.

技术参数Technical Parameters

公称通径DN(mm) NPS(In)	20 3/4"			40 1-1/2"						100 4"	150 6"	
阀座直径(mm) Valve seat diameter	6	15	20	25	32	40	50	65	80	100	125	150
额定流量系数Kv Rated flow coeficient	3.2	5	8	10	20	32	50	80	100	160	250	400
压力调节范围 Pres ure regulating range	0.4-0.5 5-10 9-14 13-19 18-24 22-28 27-33 36-44 42-51 49-58 56-66(KPa)											
公称压力 PNNominal pressure	1.0、1.6MPa											
介质温度 Applicable temperature	-30-150℃											
流量特性 Flow characteristics	快开型 Quick opening characterlstic											
调节精度(℃) Adjustment precision	≤5%											
允许压降(MPa) Allowable pressure drop	1.6			1.6		1.1		0. 6		0. 4		
薄膜有效面积(cm^2) Effective area of fim	200			280				400				
泄漏等级 Leakage leve	ASME B16.104 V(软密封 Soft seal)、ASME B16.104 IV(硬密封 Hard seal)											
阀体形式 Type of body	直通铸造阀 Stralght casting valve											
阀芯形式 Plug form	顶部导向平衡内件、先导式结构 Top guide balance Iner part, Pllot structure											
连接方式 Connectlon mode	法兰式Flenge type											

主要外形连接尺寸MainExternal ConnectionDimensions

公称通径DN(mm) NPS(In)	20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"
L	150	160	180	200	230	290	300	350	400	455
H	52.5	57.5	70	75	82.5	92.5	100	110	125	142
H1	710	720	730	730	750	790	840	890	930	970
A	308								394	

注：1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算。
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新资料请联系本公司技术部。

Note:1.The dimensions in the table are standard data without accessories.The dimensions of accessories are calculated according to the actual configuration. 2. Due to the technical innovation and improvement of the product, the size may change. Please contact the technical department of the Company for the latest information.

设计特色 Design Features

1、无需外加能源，能在无电、无气的场合工作，既方便又节约能源，降低成本，
2、氮封装置供氟，泄氮压力设定方便，可在连续生产的条件下进行。
3、压力检测膜片有效面积大，设定弹簧刚度小、动作灵敏、装置工作平衡。
4、采用无填料设计，阀杆所受磨擦力小、反应迅速、控制精度高。
5、供氮装置采用指挥器操作，减压比可达100:1，减压效果好、控制精度高。
6、为确保储罐的安全，需在罐顶设置呼吸阀。
7、呼吸阀可起安全作用，避免了常规氮封装置中启闭频繁易损坏的缺陷.

1.It can be operated on sltes lacklng of electrlclty and gas without any external anergy, whlch Is very convenlent and conduc ve to energy savingand cost reduction.
2.Ut Izatlon of nitrogen seal devlce to provldenltrogen makes pressure setting for releasing nitrogen convenlenteasy and llt able to be conductedduring successive production.
3. Pressure detection diaphragm has large active area wlth setting spring of low stiffness,agile actlon and balanced device operatlon.
4,Valve rod bears low frictional force, and embraces quick action and high control accuracy because non-padding design is adopted.
5.As nitrogen supply devlce uses dlrecting devlce to operate,pressure reducing ratlo can reach 1oo:1.In addltlon,perfect pressure reduclngeffect and high control preclslon are also achleved.
6.To ensure safety of a storage tank, breather valve needs to be Instelled on the top of thls tank.
7. Breather valve can exert safety function, stopping conventlonal nltrogen seal devlce from belng brlttle In the course of frequent start and stop.

ZZWPE型自力式电控温度调节阀
SELF-OPERATED ELECTRONIC CONTROL TEMPERATURE CONTROL VALVE

产品概述Product Overview

本公司生产的自力式电控温度调节阀最大的特点只需普通220V电源，利用介质自身热量，直接对蒸汽、热水、热油与气体等介质的温度实行自动调节和控制，也可使用在防止对过热或热交换场合，本产品结构简单，操作方便，选用温度范围广、响应时间快、密封性能可靠，并可在运行中随意进行调节，因而该阀广泛应用于化工、石油、食品、轻纺、宾馆与饭店等部门的热水供应。

The major characteristic of self-operated electronic control temperaturecontrol valve is that it realizes directly automatic adjustment and control oftemperatures of many mediums such as steam, hot water, hot oil and gasthrough using heat of mediums with requirement of 220v power supply.What's more, it can be used in the circumstance that overheating and heatexchange should be prevented. Because of its simple structure, easyoperation, wide selected temperature range, fast response time anidreliable sealing property as well as being optionally adjusted in service, itis widely used to provide hot water for many departments including chemicalengineering, petroleum, food, light textile, hotel and restaurant.

ZZWPE型自力式电控温度调节阀
SELF-OPERATED ELECTRONIC CONTROL TEMPERATURE CONTROL VALVE

产品特点ProductsFeatures

1、使用现场只须具有单相交流电源AC220V和温度传感器（温包）即可自成温控系统。
2、执行器内具有高度集成化的FDY-258T型温控模块，将温控仪和执行器合二为一，实现机电一体化，使温控系统简化。
3、控制精度高，响应速度快，性能稳定可靠，工作寿命长。
4、适应范围广，可在很宽温度范围内进行温度控制。
5、结构紧凑，安装调试、使用简便。

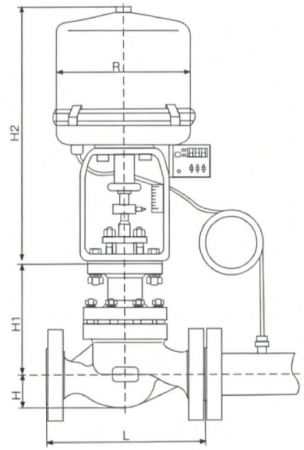
1. Temperature control system can be automatically formed as long as using single phase alternating current power supply AC22ov and temperaturesensor on the site.
2.FDY-258T temperature control module of high integration in actuator succeeds in uniting temperature controller and actuator as one, realizingelectromechanical integration and simplifying temperature control system.
3.It has the features of high control accuracy, rapid response speed, stable and reliable property, and long working life.
4. Possessed of broad subject range, it has the ability to conduct temperature control in extremely wide temperature range.
5. It is characterized by compact structure, easy installation and debugging, and simple usage.

技术参数Technical Parameters

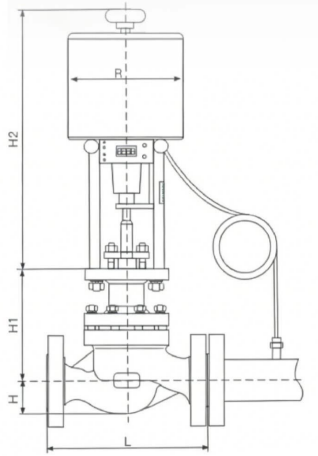
阀体形式 Body form	直通式铸造阀体 Straight-through cast body
阀芯形式 Plug form	非平衡式单座阀芯 Non-balanced single seat spool
公称通径 Nominal diameter	DN20~200mm NPS 3/4"~8*
公称压力 Nominal pressure	PN1.6-4.0MPa;CLASS 150-300LB
适用温度 Applicable temperature	-20~+425℃
连接形式Connection form	法兰式 Flange
法兰距 Flange distance	符合IEC 60534 Meet IEC 60534
泄漏等级 Leakage level	按ASME B16.104规定 As per ASME B16.104
设定值偏差 Set value deviation	±5%
执行器 Actuator	温控型电动执行器 Temperature-controlled electric actuator

技术参数Technical Parameters

公称通径DN(mm) NPS(In)		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"
流通能力(m^3/h) Cirulation ability		7	10	16	25	40	63	100	160	250	400	630
额定行程(mm) Rated travel		6		8	10	14		20		30	30	40
阀盖形式 Bonnet type		标准型-17-+230℃、高温型+230~+425℃ Standard type-17-+230℃,high temperature type +230-+425℃										
压盖型式 Gland type		螺栓压紧式 Bolt compression type										
密封填料 Sealing packing		V型聚四氟乙烯填料、含浸聚四氟乙烯填料、石棉编织填料、柔性石墨 V-type PTFE packing,impregnated PTFE packing, asbestos braided packing,flexible graphite										
阀芯形式 Plug form		单座、套筒式阀芯 The single seater,sleeve type valve										
流量特性 Flow characteristics		直线性 Straight line										
调节精度(℃) Adjustment precision		±1-±5										
使用介质 Using medium		蒸汽、水、油、气体 Steam, water, oil. qas										
允许泄漏量 Allowable leakage	硬密封 Hard seal	10^{-4}×阀额定容量 10^{-4}x valve rated capacity										
	软密封 Soft seal	"0"										
温包、毛细管材料T emperature package capillarv material		H62、1Cr18Ni9Ti										
毛细管长度 Capillary length		3米、5米、10米 3 meters,5 meters,10 meters										
温度控制范围 Temperature control range		0-250℃										
设定值偏差 Set value bias		+2℃										



配3810系列温控执行器
Nith 3810 serles of temperature control actuator



配GSW系列温控执行器
Nlth Gsw serles of temperature control actuator

主要外形连接尺寸MainExternal ConnectionDimensions

公称通径DN(mm) NPS(In)		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"
L	PN16/25	180	188	200	220	252	275	300	350	400	455	555
	PN40	180	188	200	220	252	275	310	370	410	475	600
	PN64	206	210	220	251	290	315	341	398	452	511	610
H	PN16	52.5	57.5	70	75	82.5	92.5	100	110	125	142	170
	PN40	52.5	57.5	70	75	82.5	92.5	100	117.5	135	150	187.5
	PN64	65	70	77	85	90	102.5	107.5	125	147.5	172	207.5
H		132	132	158	170	179	214	221	234	270	294	331
H2	3810L	373	373	495	495	495	700	700	700	725	725	725
	PSL	465	465	465	465	465	560	560	560	560	560	788
D	3810L	225	225	225	225	225	257	257	257	310	310	310
	PSL	177	177	177	177	177	182	182	182	182	182	218

注：1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算。
2、由于产品的技术创新与改进，尺寸可能会有所变化，最新资料请联系本公司技术部。

Note:1.The dimensions in the table are standard data without accessories.The dimensions of accessories are calculated according to the actual configuration. 2. Due to the technical innovation and improvement of the product, the size may change. Please contact the technical department of the Company for the latest information.


SHUT-OFF
VALVE
SERIES
SHUT-OFF VALVE
SERIES
DN125
16
CF8
MACOT
MACOTANGO VALVE GROUP

产品概述Product Overview

气动薄膜切断阀是采用顶导向结构，配用多弹簧薄膜执行机构。阀体结构形式有单座、三通等二种结构。具有结构紧凑、重量轻、动作灵敏、流体通道呈S流线型、压降损失小、阀容量大、拆装方便等优点。该阀接收来自调节仪表的信号，切断、开启或改变介质流向，达到对压力、流量、温度或液位等工艺参数自动控制。广泛应用于环保水处理、石油、化工、冶金、电力、轻工、纺织等各种工业部门的生产过程自动控制和远程控制系统中。

The pneumatic diaphragm cut-off valve adopts a top guide structure and is equipped with a multi spring diaphragm actuator. There are two types of valve body structures: single seat and three-way. It has the advantages of compact structure, light weight, sensitive action, S-shaped fluid channel, low pressure drop loss, large valve capacity, and easy disassembly and assembly. This valve receives signals from the regulating instrument, cuts off, opens, or changes the flow direction of the medium, achieving automatic control of process parameters such as pressure, flow rate, temperature, or liquid level. Widely used in automatic and remote control systems for production processes in various industrial sectors such as environmental water treatment, petroleum, chemical, metallurgical, power, light industry, textile, etc.

型号编制 Model Preparation

Z	结构形式
M	S:气动活塞执行机构 M气动薄膜执行机构 R:电动3410L执行机构 D:电动PSL执行机构
B	B:套筒式 P:单座式
Q	Q:切断型
Z	structural style
M	S:Pneumatic piston actuator M:Pneumatic thin film actuator R:Electric 3810L actuator D:Electric PSL actuator
B	B:Sleeve type P:Single seat type
Q	Q:Cut off type

产品特点ProductsFeatures

1、整体高度可减小约30%，重量可减轻约30%。
2、阀体按流体力学原理设计成等截面低流阻流道，额定流量系统数增大30%。
3、密封形式为软、硬密封2种，采用聚四氟乙烯或对位聚苯密封，硬密封堆焊硬质合金，密封性能好，
4、平衡型阀内件，提高了切断阀的许用压差。

1. The overall height of the valve can be reduced by about 30%;and the weight can be reduced by about 30%.
2.The valve body is dosignad as a low flow roslstanco passage with constant cross seclon according to the fluid machanics principle; and its ratedflow coefficlent Increases by 30%.
3.There are soft and hard two klnds of sealing forms. PTFE or PPPs are used for soft sealing.Hard sealng Is overlald with hard alloy.The sealingperformance Is better.
4. Balanced valve trlm Improves the allowable pressure difference of cut-off valve.

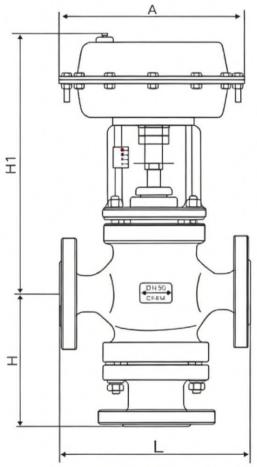
主要零件材料 Part material

阀体 Body	ZG230-450、ZG1Cr18Ni9TI、ZGCr18NI12Mo2TI
阀芯 Plug	1Cr18NI9Ti、Cr18NI12Mo2TI
座Seat	1Cr18NI9Ti、Cr18NI12Mo2TI
阀杆 Stem	1Cr18NI9Ti、Cr18NI12Mo2TI
执行器材质Actuator materlal	A3、1Cr18Ni9TI
填 料Packing	聚四氟乙烯、柔性石墨PTFE、Flexlble grophito
膜片Dlaphragm	丁晴橡胶、耐油橡胶、氟橡胶Nitrle rubber,ol resistant rubber,fluorine rubber

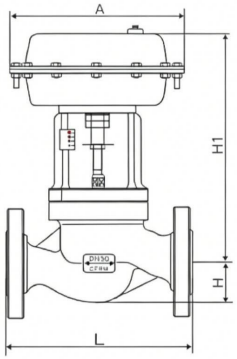
注：常规材质为碳钢和不锈钢两种，可根据用户现场条件订制特殊材质控制阀产品。
The conventional material is carbon steel and stainless steel, and the special material regulating valve products can be customized accordingto the user's work conditions.

技术参数Technical Parameters

公称通径DN(mm) NPS(In)		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"
公称压力(MPa) Nominal pressure		PN1.6、2.5、4.0、6.4MPa										
额定流量系数Kv Rated flow coefficient	单座 Single seat	7	11	20	30	48	75	120	190	300	480	760
	套筒 Sleeve	8	11	20	30	48	75	120	190	300	480	760
	三通 Tee	8	12	17	29	43	70	110	165	275	440	690
额定行程mm Rated travel		8			12		20		25	40		60
活塞有效面积cm^2 Effectlve cross-area of piston		100			200		400			600		1000
允许泄漏量 Allowable leakage	硬密封 Hard seal	一般：10^{-4}×阀额定容量　严密型：单座：$1.2X10^{-7}$ General: 10^{-4}x valve rated capacity; seal type: single seat: $1.2X10^{-7}$										
	软密封 Soft seal	VI级										
允许压差 MPa Allowable pressure differential	正作用 Positive effect	5.09	2.91	1.85	2.18	1.33	1.52	0.99	0.62	0.60	0.69	0.39
	反作用 Counter action	6.4	3.88	2.47	2.91	1.77	2.03	1.32	0.83	0.80	0.92	0.52
信号压力KPa Signal pressure		0 或 400-600 0 or 400-600										
阀盖形式 Bonnet type		标准型(-17~+250℃)、高温型(+250~+450℃)、低温型(-40~-196℃)、波纹管密封型(-40+350℃) Standard type(-17-+250℃),High temperature type (+250-+450℃) Low temperalure type (-40~-196℃),Bel ows seal type (-40~+350℃)										
压盖型式 Gland type		螺栓压紧式 Bolt compression type										
密封填料 Sealing packing		V型聚四氟乙烯填料、含浸聚四氟乙烯填料、石棉编织填料、柔性石墨 V-type PTFE packing,impregnated PTFE packing, asbestos braided packing,flexible graphite										
阀芯形式 Plug form		单座锥式阀芯 Single seat cone valve										
流量特性 Flow characteristics		快开特性 Quick opening characteristic										



三通结构
Three way structure



二通式结构
Straight through structure

(单座式、套筒式)连接尺寸(Single seater，sleeve type)connection dimensions

公称通径DN(mm) NPS(In)		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"
A		196			232		308			394		498
L	PN16	180	188	200	220	252	275	300	350	400	455	555
H		53	58	70	75	83	93	100	110	125	143	170
H1		340	345	370	380	390	475	490	500	765	825	927

(三通式)连接尺寸(Threeway structure)connecting dimensions

公称通径DN(mm) NPS(In)		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"
A		196			232		308			394		498
L	PN16	180	188	200	220	252	275	300	350	400	455	555
H		132	132	135	140	150	160	160	170	325	450	495
H1		340	345	370	380	390	475	490	500	765	825	927

注：1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算。
　　2、由于产品的技术创新与改进，尺寸可能会有所变化，最新资料请联系本公司技术部。

Note:1.The dimensions in the table are standard data without accessories.The dimensions of accessories are calculated according to the actual configuration. 2. Due to the technical innovation and improvement of the product, the size may change. Please contact the technical department of the Company for the latest information.

产品概述Product Overview

本公司生产的系列气动活塞切断阀是属于组合仪表中的执行单元。它接收来自调节仪表的信号，控制工艺管道内流体的切断与接通。该系列阀具有设计新颖，流阻小、额定流量系数大、用压差大、密封性能好等优点。因而本产品广泛应用于石油、化工、冶金、电力、轻纺等工业部门的生产过程自动控制与远程控制系统中。

The series of pneumatic piston cut-off valves produced by our company belong to the execution order in the combination instrumentYuan. It receives signals from the regulating instrument and controls the cutting and connection of fluids in the process pipelineTong. This series of valves features innovative design, low flow resistance, high rated flow coefficient, and large pressure differenceAdvantages such as good sealing performance. Therefore, this product is widely used in petroleum, chemical, metallurgical, and electrical industriesIn the production process automatic control and remote control systems of industrial sectors such as power and textile.

型号编制 Model Preparation

Z	结构形式
S	S:气动活塞执行机构 M气动薄膜执行机构 R:电动3410L执行机构 D:电动PSL执行机构
P	P:单座锥式阀芯 B:套筒式阀芯
Q	Q:切断型
Z	structural style
S	S:Pneumatic piston actuator M:Pneumatic thin film actuator R:Electric 3810L actuator D:Electric PSL actuator
P	B:Sleeve type P:Single seat type
Q	Q:Cut off type

产品特点ProductsFeatures

气动快速切断阀是国内首次推出的由气动多弹簧活塞执行机构与双重密封切断阀组成的工业控制阀门，该阀门以压缩空气为动力源，支持常开或常闭状态切换，具备紧急切断功能，可与可燃气体泄漏监测仪、消防报警系统联动实现快速关闭。执行机构动作速度快、推力大，含手操机构及自复位功能，配备GT型齿轮齿条执行器或AW型拨叉式执行器。阀体采用新颖独特的低流阻轴流式设计，配有弹性与刚性串级密封结构，适用介质包含空气、煤气、液化石油气等，阀体材质涵盖WCB碳钢、304不锈钢及钛合金，工作温度范围-196至650，泄漏量符合/级标准。形成快速动作、严密切断的安全可靠结构。

1.The overa l height of the valve can be reduced by about 30%; and the welght canbe reduced by about 30%.
2. The valve body is designed as a low flow resistance passage with constant crosssect on according to the fluld mechanlcs prlnciple; and Its rated flow coeffclentIncreases by 30%.
3. There are soft and hard two kinds of seallng forms. PTFE or PPPs are used for softsealing. Hard sealing Is overlald wlth hard al oy.The sealing performance Is better
4.Balanced valve trlm improves the al lowable pres ure dlfference of sut-off valve.

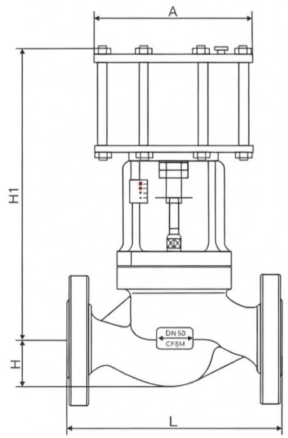
主要零件材料 Part material

阀体 Body	HT200、QT450、WCB、
阀芯 Plug	304、316、316L
座Seat	304、316、316L
阀杆 Stem	304、316、316L
执行器材质Actuator materlal	304、316、316LZG230-450(WCB)
填 料Packing	聚四氟乙烯、柔性石墨PTFE、FlexIble grophito
活塞 Piston	ZAISi12

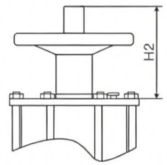
注：常规材质为碳钢和不锈钢两种，可根据用户现场条件订制特殊材质控制阀产品。
The conventional material is carbon steel and stainless steel, and the special material regulating valve products can be customized accordingto the user's work conditions.

技术参数Technical Parameters

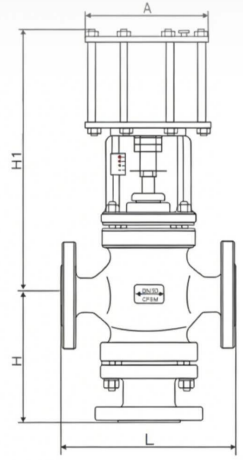
公称通径DN(mm) NPS(In)		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"
公称压力(MPa) Nominal pressure		PN1.6、2.5、4.0、6.4MPa										
额定流量系数Kv Rated flow coefficient	单座 Single seat	7	11	20	30	48	75	120	190	300	480	760
	套筒 Sleeve	8	11	20	30	48	75	120	190	300	480	760
	三通 Tee	8	12	17	29	43	70	110	165	275	440	690
额定行程mm Rated travel		8			12		20		25	40		60
活塞有效面积cm² Effective cross-area of piston		150			175		305			700		1245
允许泄漏量 Allowable leakage	硬密封 Hard seal	一般：10^{-4}×阀额定容量　严密型：单座：$1.2X10^{-7}$ General: 10^{-4}x valve rated capacity; seal type: single seat: $1.2X10^{-7}$										
	软密封 Soft seal	VI级										
允许压差MPa Allowable pressure differential		≤公称压力Nominal pressure										
信号压力KPa Signal pressure		0 或 400-600 0 or 400-600										
阀盖形式 Bonnet type		标准型(-17~+250℃)、高温型(+250~+450℃)、低温型(-40~-196℃)、波纹管密封型(-40+350℃) Standard type(-17-+250℃),High temperature type (+250-+450℃) Low temperalure type (-40~-196℃),Bel ows seal type (-40~+350℃)										
压盖型式 Gland type		螺栓压紧式 Bolt compression type										
密封填料 Sealing packing		V型聚四氟乙烯填料、含浸聚四氟乙烯填料、石棉编织填料、柔性石墨 V-type PTFE packing,impregnated PTFE packing, asbestos braided packing,flexible graphite										
阀芯形式 Plug form		单座锥式阀芯、套筒双座阀芯、三通结构 Single seat cone valve, sleeve double seat valve core and three-way structure										
流量特性 Flow characteristics		快开特性 Quick opening characteristic										
可配附件 Optional Accessories		手轮机构、限位开关、电磁阀、阀位传送器、气动加速器、保位阀、其它 Hand-wheel mechanism, limit switch,solenoid valve, valve position transmltter, pneumatic accelerator,lock up valve, other										



二通式结构
Straight through structure



带手动机构
Belt hand mechanism



三通结构
Three way structure

(单座式、套筒式)连接尺寸(Single seater，sleeve type)connection dimensions

公称通径DN(mm) NPS(In)		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"
A		125			160		200			250		320
L	PN16	180	188	200	220	252	275	300	350	400	455	555
H		53	58	70	75	83	93	100	110	125	143	170
H1		220	220	235	235	240	250	260	265	350	400	500
H2		120	120	120	155	155	200	200	200	230	230	230

(三通式)连接尺寸(Threeway structure)connecting dimensions

公称通径DN(mm) NPS(In)		20 3/4"	25 1"	32 1-1/4"	40 1-1/2"	50 2"	65 2-1/2"	80 3"	100 4"	125 5"	150 6"	200 8"
A		125			160		200			250		320
L	PN16	180	188	200	220	252	275	300	350	400	455	555
H		80	80	80	75	95	105	105	105	150	195	250
H1		220	220	235	235	240	250	260	265	350	400	500
H2		120	120	120	155	155	200	200	200	230	230	230

注：1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算。
　　2、由于产品的技术创新与改进，尺寸可能会有所变化，最新资料请联系本公司技术部。

Note:1.The dimensions in the table are standard data without accessories.The dimensions of accessories are calculated according to the actual configuration. 2. Due to the technical innovation and improvement of the product, the size may change. Please contact the technical department of the Company for the latest information.

产品概述Product Overview

本产品动作可靠，适用于气、液介质输送管路的紧急切断或排放，可用在高温、高压、防爆、防腐蚀等环境条件下安全可靠作业。已广泛应用于石油、化工、电力、冶金、轻纺、油库及军工等部门。本公司经过多年的生产研发，在结构性能上不断改进，新技术不断的融入，使该产品质量、使用性能已有所提高。

This product acts reliably and is suitable for emergency cut-off ordischarge of gas and liquid medium transmission pipelines.It can beused for safe and reliable operation under high temperature, highpressure,explosion-proof,anti-corrosion and other environmentalconditions.It has been widely used in petroleum,chemical,electricpower, metallurgy, light textile, oil depot, military and other departments.After years of production and research, the company has continuouslyimproved its structure and performance, and the continuous integrationof new technologies has improved the quality and performance of theproduct.

标准规范 Standard specification

标准Standard	设计与制造 Design and manufacturing	结构长度 Face to face	法兰尺寸 Flange dimensions	压力温度等级 Pressure temperature class	检验与试验 Test and inspection
国标与行业标准 National and industrial standards	GB/T 12234	GB/T 12221	GB/T 9113 HG/T 20592 HG/T 20615 JB/T79	GB/T 12224	GB/T26480
美国标准 USA Standards	API600	ASME B16.10	ASME B16.5 ASME B16.47	ASME B16.34	API598

注：1、根据用户的需要，法兰连接尺寸也可按SH/T3406等标准提供；
2、检验与试验也可按用户要求按GB/T13927或API6D标准。

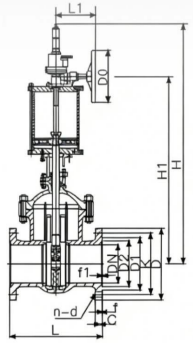
Note:1. According to the user's needs, flange connection dimensions can also be provided according to SH/T 3406 and other standards;
2. The inspection and test can also be conducted according to GB/T 13927 or API 6D according to the user's requirements.。

主要性能参数 Main performance parameters

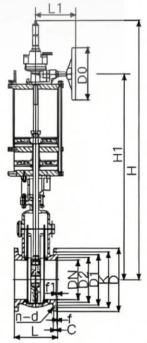
气动阀门气缸单程参考耗气量(m) Single pass reference air consumption of pneumatic valve cylinder	DN(mm)	≤50	65-80	100	125	150	200	250	300
	耗气量Air consumption	0.003	0.008	0.012	0.023	0.027	0.078	0.096	0.165
	DN(mm)	350	400	450	500	600	700	800	900
	耗气量Air consumption	0.185	0.261	0.292	0.505	0.869	1.051	1.568	1.809
适用介质Applicable media		水、蒸汽、油品、气体等water,steam,oil ges, etc							
适用介质温度(℃)Applicable medium temperature		低温Low temperature:-46~345、中温Moderate temperature:-29~425、高温High temperature:450~600							
气缸气源压力(MPa)Air supply pressure of cylinder		0.3~0.7							
阀门开关全行程切断时间(s) Full stroke cut-off time of valve switchr	DN15-32(mm)	<2							
	DN40~100(mm)	<4							
	DN125~200(mm)	<8							
	DN250~400(mm)	<16							
	DN450~600(mm)	<26							
	DN700-900(mm)	<40							
阀门泄漏等级Valve leakage level		按照GB/T 4213、FCI70-2(ASME B16.104)标准，泄漏等级为V级							
气源接口尺寸(mm) Air supply interface size		<Dn100	DN150 - DN200		DN250-DN400			>Dn400	
		NPT1/4-Φ8	NPT1/4~NPT3/8-Φ8		NPT3/8-NPT1/2-Φ10/Φ12			NPT1/2-Φ16	

注：1.表中阀门开关全行程切断时间，按阀门压力PN1.6MPa计；
2.m为换算成标准状态下的立方数，气缸气源压力取0.4MPa计算；
3.阀门开关全行程切断时间只作参考，也可根据用户要求进行调整。
4.阀门泄漏等级VI级作为特殊订货。

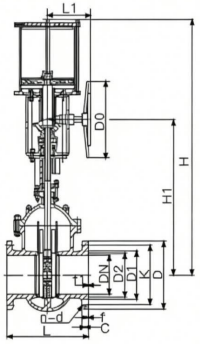
Note: 1.The full stroke cut-off time of valve switch in the table is calculated according to the valve pressure PN1.6MPa;
2. m^3 is the cubic number converted to the standard state, and the air supply pressure of the cylinder is calculated as 0.4 Mpa;
3. The ful stroke cut-off time of valve switch is only for reference, and can also be adjusted according to user requirements.
4. Valve leakage class VI is a special order.



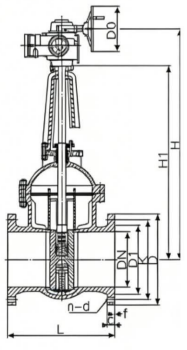
气动双作用带手动
(顶装锥齿轮传动)
Pneumatic double-acting with manual operation (top-mounted bevel gear drive)



平行式双闸板闸阀
Parallel double gate valve



气动单缸双作用中置式手动
(锥齿轮传动)
Pneumatic single-cylinder double-acting centrally-mounted manual (bevel gear drive)



电动平行式双闸板闸阀
Electric parallel double gate valve

平行式双闸板闸阀外形连接尺寸Boundary connection dimensions of parallel double gate valve

单位：mm

公称压力 PN (MPa)	公称通径 DN	外形尺寸Overall dlmensions L		H	H1	L1	D0	连接尺寸Connoction slze D	K	n-d	C	密封面（RF）Sealing surface D1	f	参考重量 (kg) Reference weight
		3(短)	1/15(长)											
1.6	15	108	130	472	380	185	250	95	65	4-14	16	45	2	27
	20	117	150	485	390	185	250	105	75	4-14	18	58	2	30
	25	127	160	490	400	185	250	115	85	4-14	18	68	2	32
	32	140	180	530	414	185	250	140	100	4-18	18	78	2	35
	40	165	240	600	430	185	250	150	110	4-18	18	88	2	42
	50	178	250	729	488	185	250	165	125	4-18	18	102	2	57
	65	190	270	802	550	185	250	185	145	8-18	18	122	2	68
	80	203	280	891	604	185	250	200	160	8-18	20	138	2	80
	100	229	300	1051	710	185	250	220	180	8-18	20	158	2	100
	125	254	325	1283	740	185	250	250	210	8-18	22	188	2	125
	150	267	350	1385	925	185	250	285	240	8-22	22	212	2	155
	200	292	400	1700	1119	258	350	340	295	12-22	24	268	2	265
	250	330	450	1904	1226	258	350	405	355	12-26	26	320	2	350
	300	356	500	2245	1438	258	350	460	410	12-26	28	378	2	470
	350	381	550	2620	1640	290	400	520	470	16-26	30	428	2	640
	400	406	600	2715	1400*	290	400	580	525	16-30	32	490	2	840
	450	432	650	2840	1550*	445	650	640	585	20-30	40	550	2	1200
	500	457	700	3220	1700*	445	650	715	650	20-33	44	610	2	1380
	600	508	800	3750	1900*	480	650	840	770	20-36	54	725	2	1620
	700	610	900	4365	2280*	480	650	910	840	24-36	42	795	2	2780
	800	660	1000	4890	2504*	525	900	1025	950	24-39	42	900	2	4215
	900	711	1100	5305	2725*	530	900	1125	1050	28-39	44	1000	2	4850

注：表中带“*”号标记为中置式双作用气动平行式双闸板闸阀。以上表格数据仅供参考，实际工况请来电咨询技术部，特此声明！
Note: The table marked with "*" indicates a mid mounted double acting pneumatic parallel double gate valve.
The above table data is for reference only. For actual working conditions, please call the technical department for consultation.
We hereby declare!

平行式双闸板闸阀外形连接尺寸Boundary connection dimensions of parallel double gate valve

单位：mm

公称压力 PN (MPa)	公称通径 DN	外形尺寸Overall dlmensions L		H	H1	L1	D0	连接尺寸Connoction slze D	K	n-d	C	密封面（RF）Sealing surface D1	f	参考重量 (kg) Reference weight
		3(短)	1/15(长)											
2.5	15	108	130	472	380	185	250	95	65	4-14	16	45	2	27
	20	117	150	485	390	185	250	105	75	4-14	18	58	2	30
	25	127	160	490	400	185	250	115	85	4-14	18	68	2	32
	32	140	180	530	414	185	250	140	100	4-18	18	78	2	35
	40	165	240	600	430	185	250	150	110	4-18	18	88	2	42
	50	178	250	729	488	185	250	165	125	4-18	20	102	2	57
	65	190	270	802	550	185	250	185	145	8-18	22	122	2	77
	80	203	280	891	604	185	250	200	160	8-18	24	138	2	84
	100	229	300	1051	710	185	250	235	190	8-22	24	162	2	105
	125	254	325	1283	740	185	250	270	220	8-26	26	188	2	130
	150	267	350	1385	925	185	250	300	250	8-26	28	218	2	160
	200	292	400	1700	1119	258	350	360	310	12-26	30	278	2	282
	250	330	450	1904	1226	258	350	425	370	12-30	32	335	2	377
	300	356	500	2089	1066*	290	400	485	430	12-30	34	395	2	475
	350	381	550	2235	1213*	290	400	555	490	16-33	38	450	2	660
	400	406	600	2715	1400*	290	400	620	550	16-36	40	505	2	920
	450	432	650	2840	1550*	445	650	670	600	20-36	46	555	2	1212
	500	457	700	3220	1700*	445	650	730	660	20-36	48	615	2	1400
	600	508	800	3755	1900*	480	650	845	770	20-39	58	720	2	1632
	700	610	900	4365	2280*	480	650	960	875	24-42	50	820	2	2780
	800	660	1000	4890	2504*	525	900	1085	990	24-48	54	930	2	4215
	900	711	1100	5305	2725*	530	900	1185	1090	28-48	58	1030	2	4850

平行式双闸板闸阀外形连接尺寸Boundary connection dimensions of parallel double gate valve

单位：mm

公称压力 PN (MPa)	公称通径 DN	外形尺寸Overall dlmensions L		H	H1	L1	D0	连接尺寸Connoction slze D	K	n-d	C	密封面（RF）Sealing surface D1	f	D2	f	参考重量 (kg) Reference weight
		3(短)	1/15(长)													
4.0	15	140	140	490	390	185	250	95	65	4-14	16	45	2	40	4	29
	20	152	152	500	398	185	250	105	75	4-14	18	58	2	51	4	32
	25	165	165	510	410	185	250	115	85	4-14	18	68	2	58	4	34
	32	178	178	540	420	185	250	140	100	4-18	18	78	2	66	4	38
	40	190	240	613	442	185	250	150	110	4-18	18	88	2	76	4	55
	50	216	250	748	503	185	250	165	125	4-18	20	102	2	88	4	69
	65	241	280	860	573	185	250	185	145	8-18	22	122	2	110	4	80
	80	283	310	1014	706	185	250	200	160	8-18	24	138	2	121	4	88
	100	305	350	1170	810	185	250	235	190	8-22	24	162	2	150	4.5	110
	125	381	400	1306	888	185	250	270	220	8-26	26	188	2	176	4.5	135
	150	403	450	1417	954	258	350	300	250	8-26	28	218	2	204	4.5	165
	200	419	550	1789	1192	258	350	375	320	12-30	34	285	2	260	4.5	345
	250	457	650	1987	1289	258	350	450	385	12-30	38	345	2	313	4.5	450
	300	502	750	2116	1073*	290	400	515	450	16-33	42	410	2	364	4.5	620
	350	762	850	2353	1227*	290	400	580	510	16-36	46	465	2	422	5	680
	400	838	950	2715	1400*	445	650	660	585	18-39	50	535	2	474	5	100
	450	914	1050	3010	1645*	445	650	685	610	20-39	57	560	2	524	5	1320
	500	991	1150	3235	1725*	445	650	755	670	20-42	57	615	2	576	5	1812
	600	1143	1350	3749	1947*	480	650	890	795	20-48	72	735	2	676	6	2300

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The above table data is for reference only. For actual working conditions, please call the technical department for consultation.
We hereby declare!

ANGLE STROKE SERIES

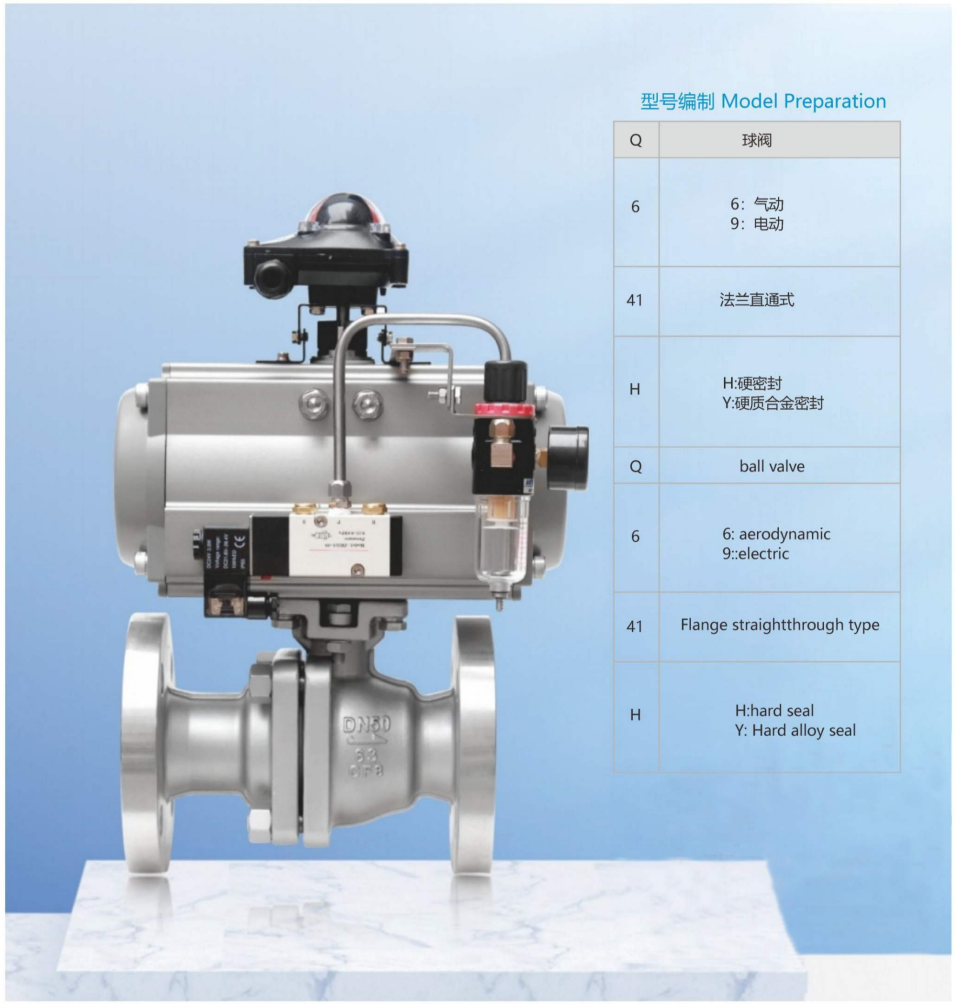
ANGLE STROKE SERIES

MACOT
MACOTANGO VALVE GROUP

产品概述Product Overview

气动O型切断球阀具有流通能力大、结构紧凑、密封性能好、寿命长等特点，经济实用、易于维护。广泛应用于石油、化工、天然气、电力、冶金、食品、制药等要求严密切断的场合，也可适用于水、蒸汽、油品、液化气、天然气、煤气等介质。另外可根据客户的需求选择防火型、特殊硬化处理型，提供更安全、更广泛的应用。

Pneumatic O-type cut-off ball valve has the characteristics of high flow capacity, compact structure, good sealing performance, long service life, etc. It is economical, practical, and easy to maintain. Widely used in applications such as petroleum, chemical, natural gas, electricity, metallurgy, food, pharmaceuticals, etc. that require strict cutting off, it can also be applied to media such as water, steam, oil products, liquefied gas, natural gas, and coal gas. In addition, fire-resistant and special hardening treatment types can be selected according to customer needs, providing safer and wider applications.



型号编制 Model Preparation

Q	球阀
6	6：气动 9：电动
41	法兰直通式
H	H:硬密封 Y:硬质合金密封
Q	ball valve
6	6: aerodynamic 9::electric
41	Flange straightthrough type
H	H:hard seal Y: Hard alloy seal

产品特点 Products Features

1、阀体采用精密铸造或锻造，结构紧凑、外观美观。固定式O型球阀阀芯、阀杆做旋转运动，转动阀芯时阀芯阀座始终紧密接触，具有极强的剪切能力；

2、阀座由圆柱弹簧或蝶簧预载，具有自动补偿、自密封和阀门中腔自动泄压功能，适用于高温、高压场合；

3、阀球固定能够保证阀球运行平稳，减小操作扭矩；

4、双关双断设计保证阀球完全开启和完全关闭。多种密封结构可选择，保证使用寿命及可靠性。密封结构可选用阀前间座密封推荐)，阀后阀座密封，阀前阀后同时密封(特定工况使用）。密封有软硬密封可选择，密封表面可硬化处理，适用于多种工况；

5、阀门中腔自动泄压设计，阀门体腔停留介质温度升高而引起异常升压时，不需通过安全阀，而仅靠阀座功能就可自动泄压，提高阀门在输送液体介质时的安全性；

6、紧急注脂救护，在有些特殊场合，由于介质中的异物或火灾造成阀座密封意外失效，注脂阀提供了与注脂枪快速连接，方便快捷地将密封脂注入到阀座密封部位，缓解泄漏；

7、可选用防火结构、防静电结构、防阀杆吹出结构设计；

8、加长型阀杆设计，可适用于低温场合。

1. The valve body is made of precision casting or forging, with a compact structure and beautiful appearance. The fixed O-type ball valve has a rotating valve core and stem, and the core and seat are always in close contact when the valve core is rotated, with extremely strong shear capacity;
2. The valve seat is preloaded by a cylindrical spring or butterfly spring, and has automatic compensation, self sealing, and automatic pressure relief functions in the valve chamber, suitable for high temperature and high pressure applications;
3. Fixing the valve ball can ensure smooth operation and reduce operating torque;
4. The double double break design ensures that the valve ball is fully open and fully closed. Multiple sealing structures can be selected to ensure service life and reliability. The sealing structure can be recommended to use a valve front seat seal, a valve rear seat seal, and a valve front and valve rear simultaneous seal (for specific operating conditions). There are soft and hard seals to choose from, and the sealing surface can be hardened, suitable for various working conditions;
5. The automatic pressure relief design in the valve chamber allows for automatic pressure relief without the need for a safety valve when the temperature of the medium inside the valve chamber rises and causes abnormal pressure rise. The valve seat function alone can improve the safety of the valve when transporting liquid media;
6. Emergency grease injection rescue, in some special occasions, due to foreign objects or fire in the medium, the valve seat seal may accidentally fail. The grease injection valve provides a quick connection with the grease injection gun, making it convenient and quick to inject sealing grease into the valve seat sealing area to alleviate leakage;
7. Fireproof structure, anti-static structure, and anti valve stem blowing structure design can be selected;
8. Extended stem design, suitable for low-temperature applications.

技术参数Technical Parameters

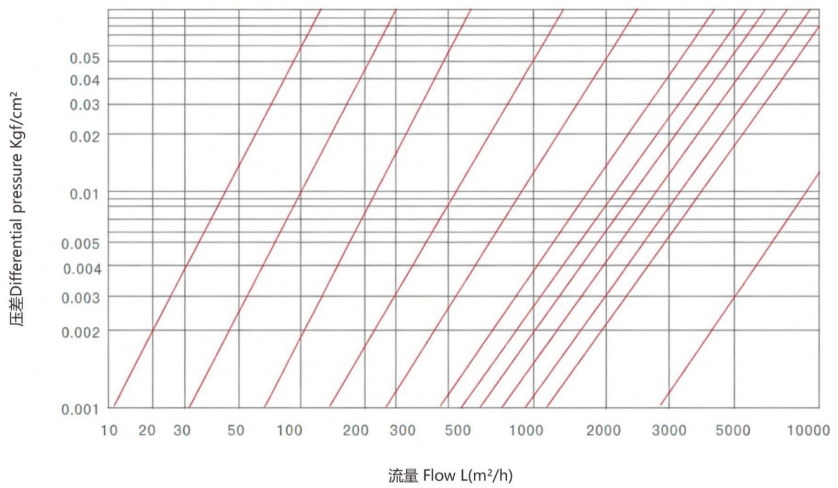
公称压力 PN	PN1.6-6.4MPa、ANSI150LB-600LB
公称通径 DN	DN 15-DN 400
连接方式 connection method	法兰式PN16凸面、PN40、64凹凸面、ANSI B16.5 RF\RJFF\LG Flang PN16 convex surface,PN40,64 Concave corvex sur lace
阀体材料 Body matarial	LCB、WCB、CF8、CF8M、CF3、CF3M
流量特性 flow characteristics	ON-OFF
开度 opening	90°
阀芯动作 Valve core action	顺时针转动阀闭 Closo tho velvo clockwls
阀座形式 Valve seat form	软阀座、金属阀座(密封面硬化处理) Soft seat,metal seat (seal cover hardening)
适用温度 Applicable Temperature	软阀座:-20-+250℃金属阀座：-60-+450℃ Soft seat:-20-+250℃ Metal seat:-60-+450℃
泄漏等级 Leakage level	软阀座：ANSIVI金属阀座：ANSIIV Soft seat:ANSI VI Metal seat: ANSIIV
设计标准 design standards	GB/T 12237、ASME B16.34

结构长度 Face To Face	GB/T12221、ASME B16.10
测试标准 Test standard	GB/T13927、API598
操作方式 Operation method	手柄、齿轮、气动 Handlo,goor, Pneumatic
气动附件 Pneumatic accessories	电磁阀、限位开关、空气过滤减压阀、保位阀、手动操作机构、快排阀等Electromagnetic valve, limit switch,air filter pressure reducing valve, holding valve, manual operating mechanism, quick release valve, etc
可选项 optional	□防火防静电设计 □Firoproof antistatic doslgn □禁油、禁水处理 □Oil, water and water treatment □带手动操作装置 □Manual operation device □禁铜处理 □Forbidden copper processing □球面特殊处理 □Spharicalasjudlal troatmec, □特殊接口、配管 □SpeclalInterface,plping □按客户要求涂漆 □Apply the paint according to the customer's requlrement □真空条件下使用 □Under vacuum conditions □特殊检测要求 □Special test requirements □防砂防尘 □Sand dust □寒冷地区用 □Cold area □耐盐腐蚀 □Resistance to salt corroslon

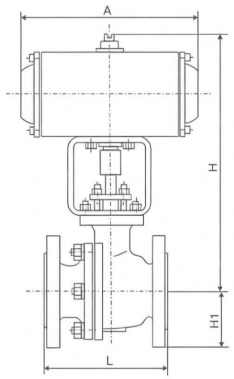
主要零件材料 Part Material

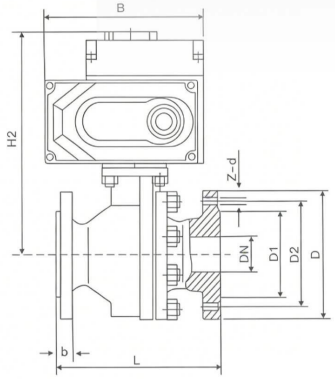
零件名称 Part name	材 料 Materials
阀体 Body	WCB、CF8、CF8M、CF3、CF3M
球体 Ball	2Cr13、304、316、316+ STL等 Etc
密封圈 Seallng rIng	PTFE、PPL、304、316、316+STL等 Etc.
阀杆Stem	2Cr13、304、316 等 Etc.
阀座弹簧 Seat spring	Inconel 等Etc.
阀座支撑圈 Seat support ring	2Cr13、304、316
垫圈Gasket	不锈钢缠绕石墨 Stainless steel wraps around graphite
止推轴衬 Thrust bushing	PTFE、石墨 Graphite
填 料 Packing	V-PTFE、石墨 Graphite

流量特性Flow Characteristics



Q641H/Y型气动O型球阀
PNEUMATIC O-TYPE CUT-OFF BALL VALVE





主要外形连接尺寸Main External Connection Dimensions

单位Unit:mm

公称通径 DN(mm) Nominal diameter	L 浮动球 Floating ball PN16	L 固定球 Fixed ball PN40.64	D	D1	D2	b	Z-d	H	H1	H2	A	B
25	150	165	115	65	85	14	4-14	320	60	182	222	161
32	165	178	135	78	100	16	4-18	350	70	188	222	161
40	180	190	145	85	110	16	4-18	370	75	198	294	161
50	200	216	160	100	125	16	4-18	380	85	203	294	161
65	220	241	180	120	145	18	4-18	410	95	222	300	188
80	250	283	195	135	160	20	8-18	420	105	237	300	188
100	280	305	215	155	180	20	8-18	555	115	281	380	268
125	320	381	245	185	210	22	8-18	660	125	300	380	268
150	360	403	280	210	240	24	8-23	724	140	300	450	268
200	400	502	35	265	295	26	12-23	774	170	368	603	268
250	533	568	405	320	335	30	12-25	885	205	418	683	268

Q641F46/PFA型气动衬氟0型球阀
PNEUMATIC FLUORINE LINING O-TYPE CUT-OFF BALL VALVE

产品概述Product Overview

气动衬氟O型切断球阀是一种360度直角回转的高级切断阀，在与流体接触的阀体内壁和阀内组件均果用高温模压衬氟塑工艺，包覆一层聚全氟乙丙烯（F46）、聚四氟乙烯（PTFE)、可溶性聚四氟乙烯(PFA）等防腐蚀材料，完全能达到切断腐蚀性介质与阀体外壳的接触，具有密封性能好，动作灵敏、流体通道呈直线型，流通能力大，与二位五通电磁阀及控制箱配套使用，可实现开关控制。广泛适用于酸、碱等强腐蚀性介质和有毒、易挥发、易渗透等气体、液体类介质的控制。

Pneumatic fluorine lined O-type cut-off ball valve is an advanced cut-off valve with a 360 degree right angle rotation. The inner wall of the valve body and the components inside the valve that come into contact with the fluid are coated with a layer of corrosion-resistant materials such as polypropylene (F46), polytetrafluoroethylene (PTFE), soluble polytetrafluoroethylene (PFA), etc. It can completely cut off the contact between corrosive media and the valve body shell. It has good sealing performance, sensitive action, linear fluid channel, high flow capacity, and can be used in conjunction with a two position five way solenoid valve and control box to achieve switch control. Widely applicable for controlling highly corrosive media such as acids and alkalis, as well as toxic, volatile, and permeable gas and liquid media.

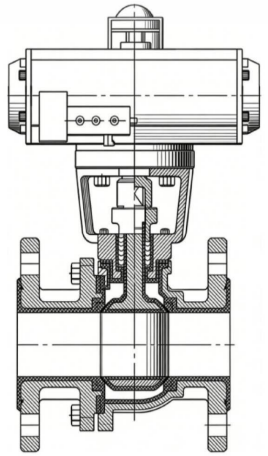
型号编制Model Preparation

Q	球阀
6	6：气动 9：电动
41	法兰直通式
F46	F46：聚全氟乙丙烯 PFA:可熔性聚四氟乙烯
Q	ball valve
6	6: aerodynamic
41	Flange straightthrough type
F46	F46:FEP PFA: PFA

Q641F46/PFA型气动衬氟0型球阀
PNEUMATIC FLUORINE LINING O-TYPE CUT-OFF BALL VALVE

产品特点Products Features

1、耐腐蚀：几乎能耐所有的介质(包括浓硝酸和王水)的腐蚀；
2、流通能力大，且介质流向不受限制；
3、密封性能好、泄漏量小：密封悯座采用聚四氟乙烯，具有可靠的密封性和自润滑性，泄漏量低；
4、除适用于一般的气、液体外，更适用于高粘度以及带有纤维状和悬浮软质颗粒的介质；
5、结构简单维修方便；
6、配多弹簧的齿轮齿条气动执行机构，以及角行程的电动执行机构，方便各种环境适用，是目前用量相当大的控制和切断系统。



1.Corroslon reslstance:It can reslst the corroslon of almost al medla (Includlngconcentrated nltrlc acld and aqua regla);
2.Large flow capaclty,and not llmit the flow directlon of medlum;
3.Good seal ng performance and small eakage: the sea lng valve seat is subjectto PTFE,which has relable sealing and self-lubrication,and low leakage;
4.In additlon to general gas and llquld,í ls more sultable for medlum wlth highviscosity and fbrous and suspended soft partlcles;
5.Slmple structure and easy malnten ance;
6. Equlpped with rack and plnlon pneumatlc actuator wlth multl-sprlng,and electrlcactuator wlth angular travel, It ls convenlont for a lklnds ofenvironments,andIt lls a control and cut-off system wlth a large amount of consumptlona present.

技术参数Technical Parameters

公称通径DN(mm) Nominal dlameter		15	20	25	32	40	50	65	80	100	125	150	200	250	300
额定流量系数Kv Rated fkw coefficiert		19	38	72	110	170	270	450	510	940	1400	2200	3500	5650	8000
配气动执行机构 Vit pneumatic actuators	双作用 Double-acting	AT52	AT52	AT63S	AT63S	AT75S	AT83	AT92	AT105	AT125	AT140	AT160	AT210	AT270	AT300
	单作用 single-acting	AT63S	AT63S	AT75S	AT83S	AT92S	AT105S	AT125S	AT140S	AT160S	AT160S	AT190S	AT240S	AT300S	AT350S
电动执行机构 Electric actuator		05			10		16	20	40	50	60	100	160	200	
流量特性 Flow characteristics		快开 Qulck opening													
公称压力(MPa) Nominal pressure		0.6MPa、1.0MPa、1.6MPa、2.5MPa、150Lb													
球芯转角 Core angle		90°													
允许压差MPa Allowable pressure diterential		为介质工作压力 For tha modum prisauro													
允许泄漏等级 Allowable leak level		次密封：VI级(或无泄漏) Soft suet grade vi (or no leakage)													
动作时间（S） Actlon time															
信号接管划业/牌作压力 Sgeloetradipratrgpuu		M10x11/400-800KPa(0.4—0.8MPa)													

主要性能参数Main Performance Parameters

项目 Project	技术指标 TechnlcalIndlcators	
基本误差 Intrinsic error%	不带定位器 No locator	带定位器 With the locator
回差Return difference %	±10	±1.5
死区Dead zone %	8	1.5
泄漏量Leakage	6	0.6
允许泄漏量 Allowable leakage	VI级(或无泄漏)Class VI(or no laakage)	10^{-4}x阀额定容量Rated capaclty
可配附件Accessorles avallable	VI级(或无泄漏)Class VI(or no leakage)	$5x10^{-6}$x阀额定容量 Rated capacly
额定流量系数Kv偏差(%) Rated flow coafficlent Kv davlatlon (%)	电气定位器或电/气转换器、空气过滤减压器、电磁阀、手轮机构等 Electrlcal posltioner or electrical/gas converter,alr fiter unloader, solenold valve,an sm,et.	

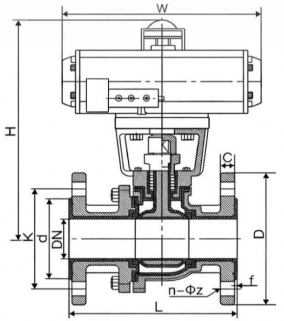
主要零件材料PartMaterial

名称 Name	材质 Material
阀体、阀盖、球芯 Body、 bonnet、 ball core	WCB、LCB、CF8、CFBM、CF3M
衬里材料 Linlng materlal	PO、PE、PP、F46、F4、PFA
密封圈、填料、垫片 Soaling ring、 Packing、Gasket	聚四氟乙烯PTEE

主要外形连接尺寸Main External Connection Dimensions

PN10

DN	NPS	L	D	K	d	C	f	n-Φz	W	H
15	1/2"	140	95	65	45	16	2	4-Φ14	145	205
20	3/4"	140	105	75	55	18	2	4-Φ14	145	208
25	1"	150	115	85	65	18	2	4-Φ14	169	210
32	1 1/4"	165	140	100	75	18	2	4-Φ18	169	232
40	1 1/2"	180	150	110	85	18	3	4-Φ18	201	274
50	2"	200	165	125	100	18	3	4-Φ18	209	287
65	2 1/2"	220	185	145	120	18	3	8-Φ18	242	327
80	3"	250	200	160	135	20	3	8-Φ18	275	363
100	4"	280	220	180	155	20	3	8-Φ18	332	398
125	5"	320	250	210	185	22	3	8-Φ18	385	432
150	6"	360	285	240	210	22	3	8-Φ22	450	475
200	8"	400	340	295	265	24	3	8-Φ22	562	615
250	10"	450	395	350	320	26	3	12-Φ22	722	740
300	12"	610	445	400	370	26	4	12-Φ22	830	885



主要外形连接尺寸Main External Connection Dimensions

PN16

DN	NPS	L	D	K	d	C	f	n-Φz	W	H
15	1/2"	140	95	65	45	16	2	4-Φ14	145	205
20	3/4"	140	105	75	55	18	2	4-Φ14	145	208
25	1"	150	115	85	65	18	2	4-Φ14	169	210
32	1 1/4"	165	140	100	75	18	2	4-Φ18	169	232
40	1 1/2"	180	150	110	85	18	3	4-Φ18	201	274
50	2"	200	165	125	100	18	3	4-Φ18	209	287
65	2 1/2"	220	185	145	120	18	3	8-Φ18	242	327
80	3"	250	200	160	135	20	3	8-Φ18	275	363
100	4"	280	220	180	155	20	3	8-Φ18	332	398
125	5"	320	250	210	185	22	3	8-Φ18	385	432
150	6"	360	285	240	210	22	3	8-Φ22	450	475
200	8"	400	340	295	265	24	3	12-Φ22	562	615
250	10"	450	405	355	320	26	3	12-Φ26	722	740
300	12"	610	460	410	375	28	4	12-Φ26	830	885

主要外形连接尺寸Main External Connection Dimensions

PN25

DN	NPS	L	D	K	d	C	f	n-Φz	W	H
15	1/2"	140	95	65	45	16	2	4-Φ14	145	205
20	3/4"	140	105	75	55	18	2	4-Φ14	145	208
25	1"	150	115	85	65	18	2	4-Φ14	169	210
32	1 1/4"	165	140	100	75	18	2	4-Φ18	169	232
40	1 1/2"	180	150	110	85	18	3	4-Φ18	201	274
50	2"	200	165	125	100	20	3	4-Φ18	209	287
65	2 1/2"	220	185	145	120	22	3	8-Φ18	242	327
80	3"	250	200	160	135	24	3	8-Φ18	275	363
100	4"	280	235	190	160	24	3	8-Φ22	332	398
125	5"	320	270	220	190	26	3	8-Φ26	385	432
150	6"	360	300	250	215	28	3	8-Φ26	450	475
200	8"	400	360	310	275	30	3	12-Φ26	562	615
250	10"	450	425	370	335	32	3	12-Φ30	722	740
300	12"	610	485	430	395	34	4	16-Φ30	830	885

产品概述Product Overview

V型调节球阀是球阀的一种，它的关闭件是半球体上开有V字型开口，V型开口具有锋利的刃口，在球体回转过程中，关闭件之间有擦拭作用，对介质具有强有力的切断力，球体的V型开口与阀座流道形成一个扇形区域，通过楔形剪切作用实现白洁功能在回转过程中可改变流道截面积，形成对介质的精确调节，它是一种角回转的调节阀，其密封性能与普通球阀相同，使它同时风备调节和开关两种功能，与气动或电动执行器配套，广泛使用于工业过程自控系统中。

V-shaped regulating ball valve is a type of ball valve, and its closing component is a hemispherical opening with a V-shaped openingThe V-shaped opening has a sharp cutting edge, and during the rotation of the sphere, there is a wiping action between the closing partslt has a strong cutting force on the medium, and the V-shaped opening of the sphere forms a fan-shaped area with the valve seat flow channel. Through the wedge-shaped shear effect, the white cleaning function is achieved. During the rotation process, the cross-sectional area of the flow channel can be changed to form precise adjustment of the medium. It is an angle rotating regulating valve with the same sealing performance as ordinary ball valves, which enables it to have both regulating and switching functions. It is matched with pneumatic or electric actuators and widely used in industrial process control systems.

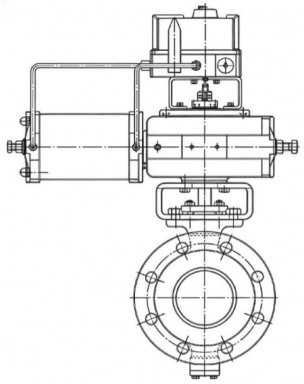
VQ647H/Y型V型调节球阀
V-TYPE CONTROL BALL VALVE

型号编制方法Model CompilationMethod

产品 Product	VQ	647	16	K	25	执行器大类 Actuator cla is
驱动方式 Drive Type		气动 Pneumatic	6			气动活塞式Pnaumatic plston type
		电动 Electric	9			电动Electric
连接方式 connection method		法兰 Flange	41			球阀Ball valve
		对夹 Laminated Pancake	71			两端三位式球阀Three positlon ball valves at both ends
补充结构型式(可多种组合) Supplementary structure (multiple combinations)			H/Y			硬密封 Hard seal/合金alloy
			B			夹套保温型 Jacket Insulation type
			D			低温型 Low temperature lype
公称压力 Nominal pressure			16			1.6MPa
			40			4.0MPa
			64			6.4MPa
			100			10.0MPa
整机作用方式 Machine action mode			K			气开式Gas open
			B			气关式 Gas closed type
			KD			双作用气开 Double acting gas opening
公称通径DN Nominal diamoter			25			举例表示For example,sald
			100			
阀体材质 Body materlal			C			WCB
			P			CF8
			M			CF8M
			L			CF3M

例：1、VQ647Y-16K 25C表示：“ VQ”-V型球阀， “6”-气动， “4”-法兰， “7”-固定式， “Y”-密封面材料为硬质合金，
“16”-公称压力PN1.6MPa，“K”-气开式， “25”公称通径DN25， “C”-阀体材质WCB。

Example:1.VQ647Y-16K 25C indicates: "VQ" - V-type ball valve, "6" - pneumatic, "4" - flange, "7" - fixed type, "Y" - sealing surface material is hard alloy, "16" - nominal pressure PN1.6MPa, "K" - air-to-open, "25" - nominal diameter DN25, "C" - valve body material WCB.



产品特点Product Features

1.阀体：采用一片式阀体设计，对夹式和法兰式V型球阀体都是整体侧装结构，结构刚性强，不易引起变形和外泄；

2.阀杆：外圆采用精磨技术，与填料之间的配合磨擦系数小，阀杆与阀芯采用花键连接，具有对中性好，承载扭矩大，花键连接有效消除了阀杆与阀芯之间的配合间隙，提高了阀门调节精度；

3.自润滑轴承：上下阀杆采用自润滑固定，具有回转精度高和转动稳定性好、使阀门运转更加顺畅；

4.密封座盖：侧装式密封座盖设计，使阀门维修更加方便；

5.V型阀芯：设计成带特殊形状的V形切口，使阀门具有近似等百分比的流量特性，带切口的球面与阀座之间有剪切作用，能够切断及刮除含纤维介质、高粘度介质、含固体颗粒的流体，使之畅通无阻经过阀门，V型阀球表面硬化处理，经磨削抛光，平滑耐磨；

6.阀座：采用波形弹簧预紧，使密封座始终与阀芯紧密接触，密封性能好，可对在长期使用中密封副磨损起到自动补偿作用；

7.软密封阀座和金属阀座可互换以满足不同工况；

8.更换阀座步骤简单方便；

9.小流量精确控制：通过对小口径阀芯特殊V型开口的加工，可实现小Cv值精确控制。

1.Body: the use of a one-plece valve bodydeslgn,both the dual and fangev-shaped ball valve bodles are the overall slde structure,the structurels rlgid,not easy to cause deformatlon and leakage;

2.Stem: the outer clrcle adopts fno grlndlng tochnology. and the frlctlon coefficlont botweon tho packing Is small,tho valve stem and the valvecore USES splIne co nectlon,wlth good neutral, bearlng torque Islarge,spline connectlon efectlvely ellmlnate the valve stem and valve corebetwean the coordinatlon gap,Improve the valve regulation preclsion;

3.Self-lubrlcal Ing beerlng: the upper and lower stem Is fxed wlth self-lubrlcatlon,wlthhlgh rotary preclslon and good rotatlonal stabl lty, maklngthe valve run more smoothly;

4.Sealng seat cover: side-mounted seallng seat cover deslgn makes valve malntenance more convenient;

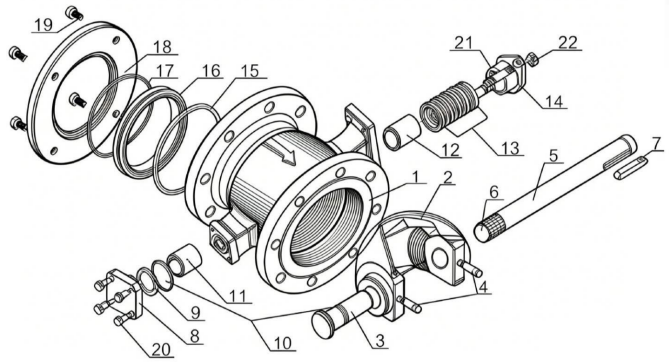
5.V type valve core:deslgned to take a speclalshape of thev-shaped Inolslon,so that thevalve hasapproxlmately the same percentage of theflow characteristics,with an Inclsion between the ball and theseat has a shear effect,can cut of and scrape the fber medium,high vlscosltymedlum,contalnlng so ld partlcles of the fluld,make It pass through the valve unlmpeded. V-ball surface hardening treatment,grlnding andpolishing,smooth wear;

6.Seal:preload wlth waveform sprlng, so that the seal seat Is always In close contact with the valve core,seallng performance Is good,canplay an autometlc compensal on role In the long-lerm use of the seal wear;

7.Soft seal seat andmetal seat are Interchangeable to meet diffarent working conditlons;

8.The valveseat roplacamentstepls slmple and convanlent;

9,Sma I flow rate accurate control through the processlng of sma I dlameter valve core wlth speclal v-shaped openlng,small Cv value can



序号NO.	零件名称Part name	数量(件) Quantity (pleces)	材料Material
1	阀体Body	1	WCB、CF8、CF8M、CF3、CF3M
2	阀芯Spool	1	CF8M+镀硬铬或超音速喷涂Hard chrome piating or supersonic spra
3	后阀杆Backstem	1	17-4PH、SS316
4	圆柱销Cyllndrical pin	2	SS304、SS316
5	前阀杆Frontstem	1	17-4PH、SS316
6	花键Spline	1	17-4PH、SS316
7	平键 Flat kay	1	SS304、45#
8	后压盖Back gland	1	CF8、CF8M
9	O型圈O-rings	1	氟橡胶Fluorine rubber
10	调整垫 Adjusting pad	各1	PTFE
11	自润滑轴承 Self-l ricating bearlng	1	复合材料Composite materlals
12	自润滑轴承 Self-l ricating bearlng	1	复合材料Composlte materlals
13	填料Packlng	1组	PTFE
14	填料压盖 Packlng gland	1	CF8
15	O型圈O-rlngs	1	氟橡胶 Fluorine rubber
16	密封圈 Seallng rlng	1	SS304、SS316+镀硬铬或超音速喷涂Hard chrome piating or supersonic spra
17	密封座弹簧Seal seat spring	1	SS316
18	密封座盖 Seal seat cover	1	Q235、SS304、SS316
19	内六角螺钉Hexagon sockat screw	/	SS304
20	六角螺钉 Hexagon screws	4	SS304
21	双头螺钉Double screw	2	SS304
22	六角螺钉Hexagon screws	2	SS304

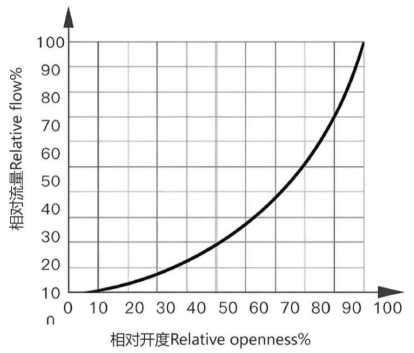
阀座最大允许泄漏量MaximumAllowableSeatLeakage

软密封阀座：0.6MPa压缩空气，无泄漏;
硬密封阀座:1.按客户要求制作 2.在无特殊要求情况下按GB/T4312V级密封，具体泄漏量如下表：
Soft seal seat: 0.6mpa compressed air,no leakage:
Hard sealed seat:1.Made according to customer's requirements 2.Sealed according to GB/T4312V class wlthout speclalrequlrements,the spec ncjeakage amqunt is as tollows

规格 Specificatlons	硬密封最大允许泄漏量Max.allowable leakage of hard seal
DN25(1")	0.15mL/min
DN32(11/4")	0.18mL/min
DN40(11/2")	0.24mL/min
DN50(2")	0.30mL/min
DN65(21/2")	0.39mL/min
DNB0(3")	0.48mL/min
DN100(4")	0.60mL/min
DN125(5")	0.75mL/min
DN150(6")	0.90mL/min
DN200(8")	1.20mL/min
DN250(10")	1.50mL/min
DN300(12")	1.80mL/min
DN350(14")	2.10mL/min
DN400(16")	2.40mL/min
DN450(18")	2.60mL/min
DN500(20")	3.00mL/min

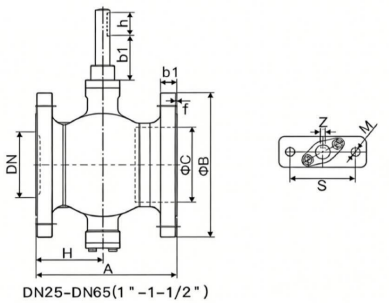
流量特性Flow Characteristic

V型调节阀固有的流量特性为近似等百分比特性,如下图所示,
The inherent flow characterlstlcs of the v-type regulator are pproxlmatelv equal percentage characteristics.as shown in the followlng figure

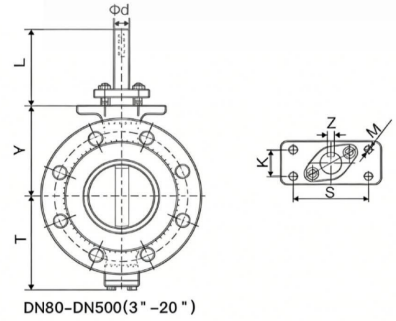


标准产品CV值表CV Value Table of Standard Products

规格 Specificatlons	Cv值 Value
DN25(1")	30
DN32(11/4")	50
DN40(11/2")	90
DN50(2")	110
DN65(21/2")	140
DNB0(3")	230
DN100(4")	370
DN125(5")	600
DN150(6")	950
DN200(8")	1540
DN250(10")	2400
DN300(12")	3900
DN350(14")	6150
DN400(16")	9800
DN450(18")	11900
DN500(20")	14800



DN25-DN65(1"-1-1/2")



DN80-DN500(3"-20")

主要外形连接尺寸 Main External Connection Dimensions

DN	A	B	b1	f	C	T	Y	L	Φd	h	S	K	M	Z
25	102	115	16	2	38	81	73	75	16	35	75	/	2-M10	5
32	102	140	18	2	45	86	78	75	16	35	75	/	2-M10	5
40	114	150	18	2	50	90	80	75	16	35	75	/	2-M10	5
50	124	165	20	2	62	93	90	75	16	35	75	/	2-M10	5
65	145	185	20	2	73	108	105	75	16	35	75	/	2-M10	5
80	165	200	20	2	90	123	118	75	20	35	90	28	4-M10	6
100	194	220	22	2	115	138	130	75	20	35	90	28	4-M10	6
125	194	250	22	2	134	148	145	80	25	40	90	28	4-M10	8
150	229	285	24	2	64	170	170	94	30	50	110	40	4-M12	8
200	243	340	24	2	206	200	201	94	30	50	110	40	4-M12	8
250	297	405	26	2	260	240	237	98	40	60	135	40	4-M16	12
300	338	460	28	2	316	286	282	98	40	60	135	40	4-M16	12
350	400	520	30	2	372	330	337	125	50	60	140	64	4-M16	14
400	400	580	32	2	420	367	372	172	60	80	170	80	4-M20	18
450	520	640	40	2	470	422	432	172	70	90	190	90	4-M24	20
500	600	715	44	2	516	490	498	180	80	100	190	90	4-M24	22

D643H/Y型气动三偏心硬密封蝶阀
PNEUMATIC TRI-ECCENTRIC METAL SEAT BUTTERFLY VALVE

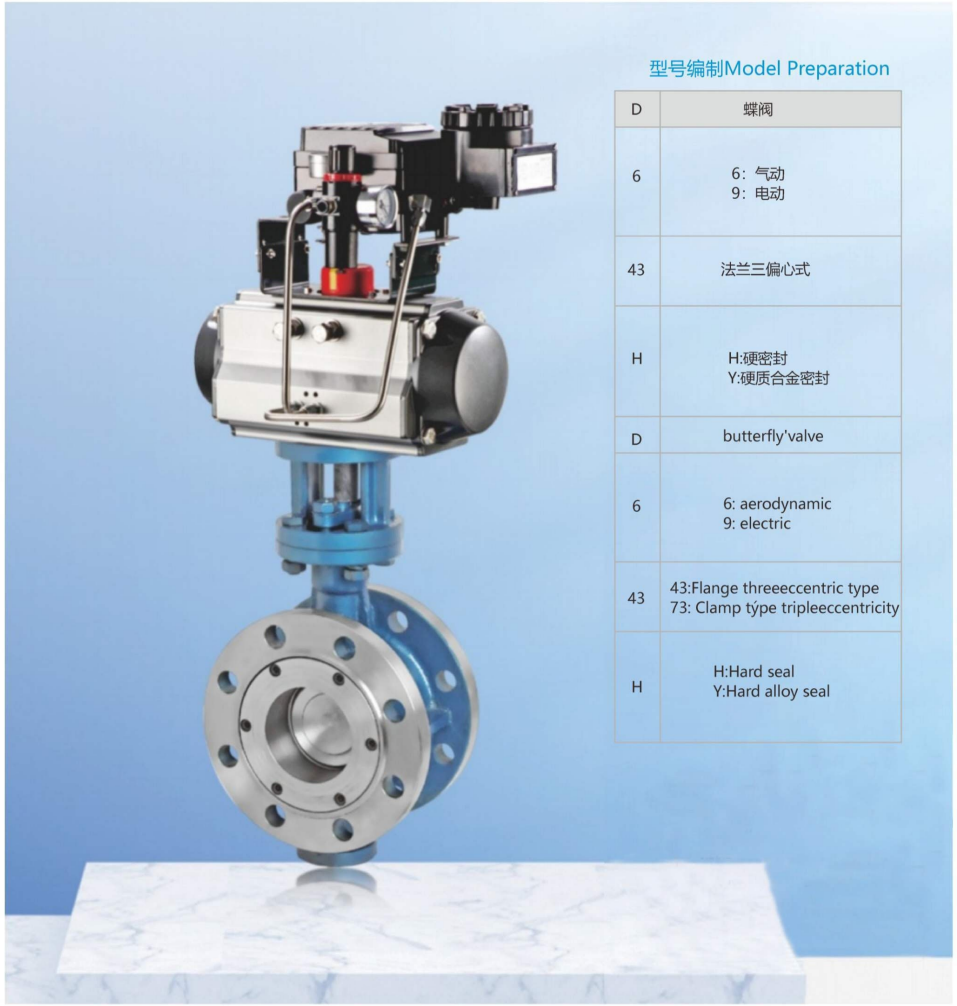
产品概述 Product Overview

气动三偏心硬密封蝶阀是在二偏心硬密封蝶阀基础上生成一个角度(密封面为斜锥面)，从而形成三偏心硬密封蝶阀。该结构在启闭过程中无机械磨损和擦伤，其关闭力矩小、切断性能好、使用寿命长，同时具有调节和切断两种功能。

本系列产品广泛应用于石油、化工、电力、冶金、环保、轻纺、造纸等工业部门的自动化控制系统中。适用于液体、气体、煤气、天然气、蒸汽等介质进行截止或调节流量控制。

The pneumatic three eccentric hard seal butterfly valve is formed on the basis of the two eccentric hard seal butterfly valve by generating an angle (with a sealing surface of a conical surface), thereby forming a three eccentric hard seal butterfly valve. This structure has no mechanical wear and scratches during the opening and closing process, with low closing torque, good cutting performance, and longservice life. It also has two functions: adjustment and cutting.

This series of products is widely used in automation control systems for industrial sectors such as petroleum, chemical, power, metallurgy, environmental protection, textile, and papermaking. Suitable for cutting off or regulating flow control of liquids, gases, coal gas, natural gas, steam and other media.



型号编制Model Preparation

D	蝶阀
6	6：气动 9：电动
43	法兰三偏心式
H	H:硬密封 Y:硬质合金密封
D	butterfly'valve
6	6: aerodynamic 9: electric
43	43:Flange threeeccentric type 73: Clamp type tripleeccentricity
H	H:Hard seal Y:Hard alloy seal

D643H/Y型气动三偏心硬密封蝶阀
PNEUMATIC TRI-ECCENTRIC METAL SEAT BUTTERFLY VALVE

产品特点 Products Features

1、采用三维偏心的密封结构，阀座与蝶板之间磨损小，且密封面耐磨损，延长了使用寿命；

2、根据连接方式分为气动对夹式三偏心蝶阀和气动法兰三偏心蝶阀，可分别使用于不同的工艺管道中；

3、大口径蝶阀蝶板可采用绞架的结构，具有强度高，过流面积大，流阻小的特点；

4、采用双向压三偏心多层次硬密封结构，具有双向密封的功能，安装时不受介质流向的限制，也不受空间位置的影响，可在任何方向安装；

5、具有金属硬密封和弹性密封的双重优点、无论在低温和高温的情况下，均具有优良的密封性能、具有耐腐蚀，使用寿命长等特点。

1.With the three-dlmenslonal eccentrlc sealing struc:ure,the wear between the seat and the dlsc ls small; and the sealng surface ls wear-reslstant,extending the service llfe;

2.According to the connection mode,it can be dlvided lnto pneumatic wafer type trl-eccentrlc buttorfly valve and pneumatlc flange trl-eccentrlcbutterfly valve,whlch can be used ln dlfferent process plpes respectively

3.The disc of large callbor butterfly valve can be subJect to the truss structure,whlch has the characterlstics of high strength,large flow areaand small flow resistance

4.Double dlrectlon pressure trl-eccentrlc multi-level hard sealing structure is adopted,which has the functlon of double dlrectlon sealing.Itcan be Installed ln any dlrec' on wlthout the restrlctlon of medium flow directlon and the Influence of space posltlon;

5.It has the double advantages of metal hard seallng and elastic seallng.It has excellent seallng performance,corroslon reslstance and longsorvice life no matter in low temperature or high temperature.

技术参数Technical Parameters

型 式 Type	三偏心型 Trlple eccentrlc type
公称通径Nomlnal dlametar	DN100~DN2000
公称压力Nominal pressure	PN 系列：0.6MPa、1.0MPa、1.6MPa、2.5MPa、4.0MPa、 Class系列：Class150、Class300 PN Sorlos:0.6MPa、1.0MPa、1.6MPa、2.5MPa、4.0MPa、 Class serias: Class150,Class300
连接方式Connectlon mode	对夹式、法兰式Clamp typa,flange type
阀体、阀内件材质 Material of valve body and valve Internals	WCB、WC9、CF8、CF8M
上阀盖形式 Top bonnet type	标准型：-60℃~+200℃ Standard type:-60℃~+200℃ 高温型：+200℃~+500℃ High temperature type:+200℃~+500℃ 但必须注意各材质的使用温度·压力范围， But you must pay al entlon to he temperature and pressure rang of each materlal.
填 料Packing	聚四氟乙烯：-5-+230℃ Toflon asbostos-5~230℃ 聚四氟乙烯石棉：-5~+230℃ Teflon:-5-+230℃ 柔性石墨：-196℃-+600℃ Flex ble graph te:-196℃-+600℃

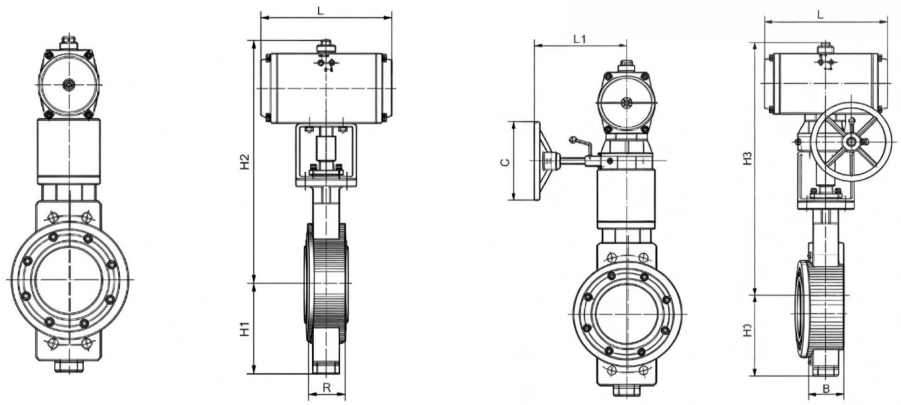
阀体、阀内件材质组合及使用温度•阀座允许泄漏量
Body, valve parts and material combination of operating temperature and seat leakage.

本体部分材质:碳钢 body material: carbon steel

阀体材质 Body materlal		WCB, WCC, WC6, WC9, LCB			
阀板 Plate	材质 Matarial	WCB, WCC, WC6, WC9, LCB			
	处理 Handla	堆焊司钛莱合金 Welding Si Ti Lai alloy			
阀杆材质 Stom matorlal		3Cr13/304/17-4PH			
密封圈材质 Saaling rlng matarial		不锈钢+石墨 Stainless steel+graphite	不锈钢+增强聚四氟乙烯 Stainless steel Reinforced PTEE	增强聚四氟乙烯 Reinforced PTEE	不锈钢 stainless steel
填料材质 Packing matorlal		柔性石墨 Flexible graphite	聚四氟乙烯 Teflon	聚四氟乙烯 Teflon	柔性石墨 Flexible graphite
垫片材质Gaskot matorial		XB450/F4/石墨缠绕垫片 XB450/F4/graphite wrapped gasket	XB450/F4/石墨缠绕垫片 XB450/F4/graphite wrapped gasket	F4/石墨缠绕垫片 F4/graphite wrapped gasket	石墨缠绕垫片 Graphite wrapped gasket
允许泄漏量 Allowable leakage	等级 Grade	VI	VI	VI	V
	采用标准Use standard	GB/T4213			
使用温度(℃) Use temperature	WCB, WCC	-20~160	-20~200	-20~200	-20~425
	WC6, WC9	-20~160	-20~200	-20~200	-20~425
	LCB	-20~160	-45~200	-45~200	-45~425

本体部分材质:不锈钢 Body material: stainless steel

阀体材质 Body materlal		CF3、CF8、CF3M、CF8M			
阀板 Plate	材质 Matarial	CF3、CF8、CF3M、CF8M			
	处理 Handla	堆焊司钛莱合金 Welding Si Ti Lai alloy			
阀杆材质 Stom matorlal		20Cr13/304/17-4PH			
密封圈材质 Saaling rlng matarial		不锈钢+石墨 Stainless steel+graphite	不锈钢+增强聚四氟乙烯 Stainless steel Reinforced PTEE	增强聚四氟乙烯 Reinforced PTEE	不锈钢 stainless steel
填料材质 Packing matorlal		柔性石墨 Flexible graphite	聚四氟乙烯 Teflon	聚四氟乙烯 Teflon	柔性石墨 Flexible graphite
垫片材质Gaskot matorial		XB450/F4/石墨缠绕垫片 XB450/F4/graphite wrapped gasket	XB450/F4/石墨缠绕垫片 XB450/F4/graphite wrapped gasket	F4/石墨缠绕垫片 F4/graphite wrapped gasket	石墨缠绕垫片 Graphite wrapped gasket
允许泄漏量 Allowable leakage	等级 Grade	VI	VI	VI	V
	采用标准Use standard	GB/T4213			
使用温度(℃)Use temperature		-100~500℃	-45~200℃	-20~180℃	-45~500℃



主要外形连接尺寸 Main External Connection Dimensions

单位Unlt mm

公称通径 DN(mm) Nominel diameter	H1	H2	H3	B*		执行机构 Actuating mechanlsm		
				对夹 Wafor	法兰 Flange	L	L1	C
100	110	100	488	56	127	204	190	200
125	137	125	542	64	140	260	190	200
150	172	150	598	70	140	298	225	200
200	205	200	675	71	152	390	233	300
250	250	250	775	76	165	458	233	300
300	270	300	943	83	178	722	285	600
350	300	350	983	92	190	722	285	600
400	330	400	1125	102	216	860	285	600
450	370	450	1165	114	222	860	285	600
500	400	500	1235	127	229	860	285	600
600	455	600	1250	154	267	860	285	600
700	495	700	1725	165	292	2500	350	800
800	597	800	1900	190	318	3200	350	800
900	647	900	2045	203	330	3200	350	800
1000	720	1000	2290	216	410	3800	350	800

注:B*开档尺寸可按用户要求定制，公称通径DN1000请电话咨询，

Note: B* Open slze can be customlzed according to usor regulrements, the nominal dlameter greatar than or equal to DN1000 please cal

D641F46/PFA型气动衬氟调节蝶阀
PNEUMATIC FLUORINE LINING CONTROL BUTTERFLY VALVE

产品概述Product Overvlew

气动衬氟调节蝶阀是由气动活塞式执行器及四氟密封蝶阀组成。适用于温度≤180℃的腐蚀性或洁净度有一定要求的工况。气动衬氟蝶阀是在过流部件、阀体、蝶板、阀杆上采用衬里技术衬里较厚的高分子材料，防腐蚀性能优良，可适用于任何浓度的酸、碱、盐及氧化剂、还原剂、有机溶剂等介质、气动衬氟蝶阀是化工、石油、医药、食品、钢铁冶炼、造纸、水电等系统的气体、液体、半流体的管路和容器上作截流和调节设备使用的理想产品。

The pneumatic fluorine lined regulating butterfly valve is composed of a pneumatic piston actuator and a PTFE sealed butterfly valve. Suitable for corrosive or clean conditions with temperature ≤ 180 ℃. Pneumatic fluorine lined butterfly valve is a high-performance polymer material lined with thick lining technology on the overcurrent components, valve body, butterfly plate, and valve stem. It has excellent anti-corrosion performance and can be applied to any concentration of acid, alkali, salt, oxidant, reducing agent, organic solvent and other media. Pneumatic fluorine lined butterfly valve is an essential product used as a cut-off and regulating equipment for gas, liquid, and semi fluid pipelines and containers in chemical, petroleum, pharmaceutical, food, steel smelting, papermaking, hydropower and other systems.

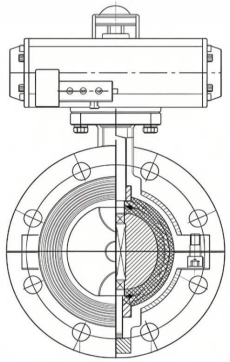
型号编制ModelPreparation

D	蝶阀
6	6：气动 9：电动
41	41：法兰中线式 71：对夹中线式
F46	F46：聚全氟乙丙烯 PFA：可溶性聚四氟乙烯
D	butterfly'valve
6	6: aerodynamic 9: electric
41	41: Flange threeeccentric type 71: Mid line clamp type
F46	F46: FEP PFA: PFA

D641F46/PFA型气动衬氟调节蝶阀
PNEUMATIC FLUORINE LINING CONTROL BUTTERFLY VALVE

产品特点Products Features

1、体积小、重量轻、操作轻巧、便于安装、维修；
2、密封性能优良可靠、零泄漏，使用寿命长；
3、流量特性趋于直线，调节性能最优；
4、结构简单，开关迅速，90度旋转启闭；
5、可代替闸阀、截止阀、旋塞阀、胶管阀及隔膜阀等各种阀门的使用；
6、可根据用户要求配置气动、电动装置，满足遥控和程控的需要；
7、衬氟蝶阀通过合理选材和采用特殊工艺结构，更换零件衬里材质可适用于各种介质。



1. Small size, light weight, easy operation, convenient installation and maintenance;
2. Excellent and reliable sealing performance, zero leakage, and long service life;
3. The flow characteristics tend towards a straight line, and the regulation performance is optimal;
4. Simple structure, quick switch, 90 degree rotation for opening and closing;
5. Can replace the use of various valves such as gate valves, globe valves, plug valves, hose valves, and diaphragm valves;
6. Pneumatic and electric devices can be configured according to user requirements to meet the needs of remote control and program control;
7. The fluorine lined butterfly valve can be suitable for various media by selecting materials reasonably and adopting special process structures, and replacing the lining material of parts.

技术参数Technlcal Parameters

阀体形式 Body form	直通铸造蝶阀 Stralght through cesting butterfly valve
公称通径 Nominal dlameter	DN50-1000mm
公称压力 No minal pressure	PN1.0、1.6MPa、Class150Lb
法兰标准 Flange standard	HG/T20592-2009、ANSI B16.5、JIS B220
连接形式 Iconnection forn	法兰式、对夹式 Flange type,clamp type
阀盖形式 Bonnetform	一体式A pose
压盖型式 Gland type	压压紧式 Glond prebauro lypo
密封填料 Seallng packlng	V型聚四氟乙烯填料、柔性石墨填料 V-type polyte trafluoroethylene packlng, flexible graphite packing
阀板形式 Plate form	垂直板式（蝶形)Vonlcal plale(buttomy)

流量特性 Flow characteristic	等百分比、快开、线性 Equal percent,fast stert,llnear
执行器型号 Actuator type	GT系列、SR系列、AT系列、AW系列、T HQGSY系列单双作用气动执行器 GT series, SR series, AT series, AW series, THQGSY series single and double acting pneumatic actuators
供气压力 Alr supply pressure	400~700KPa
气源接口 Alr Interface	G1/4"、G1/8"、G3/8"、G1/2"
环境温度 Ambient temperature	-30～+70℃
作用形式 Rale form	单作用执行机构：气关式（B）一失气时阀位开【FO;气关式（K）——失气时阀位开（FC） Single acting actuator: gas closed type (B) - valve position open when gas is lost [FO]; gas closed type (K) - valve position open when gas is lost (FC)
	双作用执行机构：气关式（B）一失气时阀位保持(FL);气开式(K)一失气时阀位保持（FL） Double acting actuator: gas closed type (B) maintains valve position when gas is lost (FL); Valve position maintenance (FL) when gas loss occurs in the pneumatic opening (K)
可配附件 Can be equipped with accessories	定位器、电磁阀、空气过滤减压器、保位阀、行程开关、阀位传感器 Positioner, solenoid valve, air filter pressure reducer Position protection device, travel switch, valve position sensor

主要零件材料 Part Material

名称 Name	材质 Material
阀体、阀座 Body,seat	WCB、LCB、CF8、CFBM、CF3、CF3M
碟板 Buttemly plata	WCB、304、316、316L
密封圈 Soaling ring	氟橡胶、聚四氟 Fluerinerubber,PTFE
衬里材料 Linlng materlal	PO、PE、PP、F46、F4、PFA
阀杆 Stem	17-4PH、2Cr13、不锈钢 Stalnlass steel
填料 Packing	V型聚四氟乙烯填料 v-type ptfe packing

主要性能参数 Main Performance Parameters

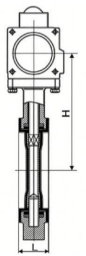
公称通径(mm) Nominal diameter	50-500			
公称压力 Nominal Pressurer	PN(MPa)	0.6	1.0	1.6
试验压力 Test pressure	强度试验 strength test	0.9	1.5	2.4
	密封试验 Seallng tast	0.66	1.1	1.76
	低压气密试验 Low prassure air itest	0.6	0.6	0.6
适用介质 Applicable madlum	浓硫酸、盐酸、硝酸、氢氟酸、王水及多种有机溶剂和其它强腐蚀性介质, tonceniratad sulfuric acid, hydrochloric acid, nltric acid, nydrofluoric acid, aqua regia and a variaty of organic solvents and other corroslve media.			

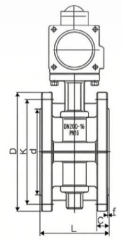
项目 Project	技术指标 TechnlcalIndlcators
回差Return difference %	带定位器:小于全行程的2%Withlocator:lass than 2% of the full travel
基本误差 Intrinsic error%	带定位器:小于全行程的±2%WIth posiiloner:lass than ±2% of full travel
泄漏量Leakage	符号ANSI B16.1041V级标准SymbolANSI B16.104classIVstandard
可调范围 Adjustable range	50:1

主要外形连接尺寸 Main External Connection Dimensions

PN10

DN	NPS	L	D	K	d	C	f	n-Φz	H
50	2"	108	165	125	100	18	3	4-Φ18	63
65	2 1/2"	112	185	145	120	18	3	8-Φ18	70
80	3"	114	200	160	135	20	3	8-Φ18	83
100	4"	127	220	180	155	20	3	8-Φ18	105
125	5"	140	250	210	185	22	3	8-Φ18	115
150	6"	140	285	240	210	22	3	8-Φ22	137
200	8"	152	340	295	265	24	3	8-Φ22	164
250	10"	165	395	350	320	26	3	12-Φ22	206
300	12"	178	445	400	370	26	4	12-Φ22	230
350	14"	190	505	460	430	26	4	16-Φ22	248
400	16"	216	565	515	480	26	4	16-Φ22	289
450	18"	222	615	565	530	28	4	20-Φ26	320
500	20"	229	670	620	580	28	4	20-Φ26	343
600	24"	267	780	725	680	34	5	20-Φ30	413





主要外形连接尺寸 Main External Connection Dimensions

PN16

DN	NPS	L	D	K	d	C	f	n-Φz	H
50	2"	108	165	125	100	18	3	4-Φ18	63
65	2 1/2"	112	185	145	120	18	3	8-Φ18	70
80	3"	114	200	160	135	20	3	8-Φ18	83
100	4"	127	220	180	155	20	3	8-Φ18	105
125	5"	140	250	210	185	22	3	8-Φ18	115
150	6"	140	285	240	210	22	3	8-Φ22	137
200	8"	152	340	295	265	24	3	12-Φ22	164
250	10"	165	405	355	320	26	3	12-Φ26	206
300	12"	178	460	410	375	28	4	12-Φ26	230
350	14"	190	520	470	435	30	4	16-Φ26	248
400	16"	216	580	525	480	32	4	16-Φ30	289
450	18"	222	640	585	550	40	4	20-Φ30	320
500	20"	229	715	650	610	44	5	20-Φ33	343
600	24"	267	840	770	720	54	5	20-Φ36	413

主要外形连接尺寸 Main External Connection Dimensions

PN25

DN	NPS	L	D	K	d	C	f	n-Φz	H
50	2"	108	165	125	100	20	3	4-Φ18	63
65	2 1/2"	112	185	145	120	22	3	8-Φ18	70
80	3"	1 14	200	160	135	24	3	8-Φ18	83
100	4"	127	235	190	160	24	3	8-Φ22	105
125	5"	140	270	220	190	26	3	8-Φ26	115
150	6"	140	300	250	215	28	3	8-Φ26	137
200	8"	152	360	310	275	30	3	12-Φ26	164
250	10"	165	425	370	335	32	3	12-Φ30	206
300	12"	178	485	430	395	34	4	16-Φ30	230
350	14"	190	555	490	450	38	4	16-Φ33	248
400	16"	216	620	550	505	40	4	16-Φ36	289
450	18"	222	670	600	550	46	4	20-Φ36	320
500	20"	229	730	660	610	48	5	20-Φ36	343
600	24"	267	845	770	720	58	5	20-Φ39	413

控制阀公称压力对照表 Comparison Table for Nominal Pressure of Control Valve

美国标准磅级 American standard class	150	300	400	600	900	1500	2500
日本标准K级 Japanese standards K class	10	20	30	40	63	100	
中国标准 Mpa Chinese standards	1.6(2.0)	4.0(5.0)	6. 3(6. 8)	10. 0	16. 0(15.0)	25. 0	42. 0

注:由于公称压力和磅级的温度基准不同，因此两者没有严格的对应关系，只是大致参数的对应关系。
Note: Nominal pressure and class are different in temperature criterla, Therefore they have no strict corresponding relationships except corr-espondingrelationships of their rough parameters.

阀门测试试验压力表(国标、美标)
Test Pressure Gage for Valve Testing(National standards,American standard)

试验项目 Pilot project	公称压力Nominal pressure(MPa)							公称压力Nominal pressure(MPa)						
	0.6	1.0	1.6	2.5	4.0	6.4	10.0	150	300	400	600	800	900	1500
壳体(强度)/压力试验 Shell(strength) pressure test(MPa)	0.9	1.5	2.4	3.8	6.0	9.6	15.0	3.1	7.8	10.3	15.3	20.1	23.0	38.4
高压密封/上密封压力试验 High pressure seal on seal pressure test(MPa)	0.7	1.1	1.8	2.8	4.4	7.1	11.0	2.2	5.5	7.6	11.2	14.7	17.1	28.1
低压(气)密封/压力试验 Low pressure(gas)seal Pressure test(MPa)	0.5~0.7							0.5~0.7						

注: 1、壳体压力试验100'F(38°C)时,不低于额定值的1.5倍。
2、密封压力试验100°F(38°C)时,不低于额定值的1.1倍。
Note: 1.Under a shell pressure test of 100^F (38'c), it is reguired to be no less than 1.5 times of the rating value.
2. Under a seal pressure test of 100°= (38'c), it is reguired to be no less than 1.1 times of the rating value.

控制阀泄漏量参照表 Control Valve Spillage Reference Table

泄漏等级 Leakage level	最大阀座泄漏量 Maximum seatleakage				试验介质 Test medium	试验压力 Test pressure
II	0.5%额定 Ratad Cv				10~52℃空气或水 Air or water	压差0.35MPa或工作压差,两者取较小值 Among differential pressure of 0.35 Mpa oroperatina differential pressure. it is naeded to choose tha one with smaller value
III	0.1%额定 Rated Cv					
IV	0.01%额定 Rated Cv					
V	5x10m1/min/in(阀座直径 Seat diameter)/psi(压差);				10-52℃水 Water	工作压差Working pressure difference
VI	阀座直径 Seat dlameter		mL/min	每分钟气泡数 Number of bubbles per minute	0~52℃空气或氮水 0-52℃ air or nitrogen water	压差0.35MPa 或工作压差, 两者取较小值 Among differential pressure of 0.35 MPa or operating differential pressure.it is needed to choose the one with smaller value
	in	mm				
	1"	25	0.15	1		
	1/2"	38	0.30	2		
	2"	51	0.45	3		
	3"	76	0.90	6		
	4"	102	1.70	11		
	6"	152	4.00	27		
	8"	203	6.75	45		

日标阀体材质温度压力对照表
Temperature and Pressure Comparison Table for Body Materials Under Japanese Standards

温度 Temperature ℃	10K	20K	30K		40K	
	SCPH2	SCPH2	SCPH2	SCPH21	SCPH2	SCPH21
-10~120	1.37	3.33	4.99	4.99	6.66	6.66
~220	1.17	3.03	4.50	4.50	6.07	6.07
~300	0.98	2.84	4.21	4.21	5.58	5.58
~350		2.54	3.82	3.82	5.09	5.09
~400		2.25	3.33	3.75	4.50	4.99
~425		1.96	2.94	3.52	3.92	4.70
~450						4.41
~475						4.11
~490						3.92
~500						3.72
~510						3.52

温度 Temperature ℃	PN16	PN40	PN63	PN100
	zG230-450			
-10~120	1.60	4.00	6.30	10.00
~250	1.40	3.50	5.40	9.00
~300	1.20	3.00	4.80	7.50
~350	1.10	2.60	4.00	6.60
~400	0.90	2.30	3.70	5.80
~425	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

国标阀体材质温度压力对照表
Temperature and Pressure Comparison Table for Body Materials Under National Standards

温度 Temperature°C	PN16	PN40	PN63	PN100
	ZG0Cr18Ni9			
-50~200	1.60	4.00	6.30	10.00
~300	1.40	3.50	5.40	9.00
~400	1.20	3.00	4.80	7.50
~480	1.10	2.60	4.00	6.60
~520	0.90	2.30	3.70	5.80
~560	0.80	2.00	3.20	5.00

所谓气开式（K型）是指进执行机构的气压越大，阀门开度越大，而在失气时阀门关闭，称为FC（Fail Close);
气关式（B型）是指进执行机构的气压越大，阀门开度越小，而在失气时阀门全开，称为FO（Fail Open)。选用何种调节阀，要根据具体工艺情况来定。
FC— 供气故障时调节阀关;
FO— 供气故障时调节阀开;
FL— 供气中断时调节阀位置不变（保位）。
FLC— 供气中断时调节阀位置不变（保位），小信号时阀关。
FLO— 供气中断时调节阀位置不变（保位），小信号时阀开。
LC 是指锁定在关闭状态，这种状态是不允许打开的;
NC 常闭是指在通常状态下是关闭的，但特殊条件下可能打开;
LO 是锁定于开启状态下，也就是说该阀门不允许关闭，其前后一般是不安装就地阀门的;
NO 是常开阀门，但在特殊情况时可能关闭。

Air-to-open (type K) refers to that the greater the air-pressure Into the actuator is, the greater the valve opening is;when the air is lost, the valve is closed,which is called FC (Fail Close).
Air-to-close (Type B) refers to that the greater the air-pressure into the actuator is, the smaller the valve opening is;the valve is fully open when the air is lost,which is called FO (Fail Open). The selection of control valve shall be determined according to the specifc process conditions.
FC-The control valve is closed in case of air feed failure;
FO-The control valve Is opened In case of air feed fallure;
FL- When the air feed is interrupted,the position of the control valve remains unchanged (holding position);
FLC-When the air feed is interrupted,the position of the control valve remains unchanged (holding position);the valve is closed in case of small signal;
FLO-When the air feed is interrupted, the position of the control valve remains unchanged (holding position); the valve is opened in case of small signal;
LC Refers to the valve Is locked In the closed state,which is not allowed to be open;
NC is normally closed,refers to that the valve is closed in general, but may be opencd in special cases;
LO refers to that the valve is locked in the open state. That is to say,the valve is not allowed to be closed,and local valves are generally not installed before and after it;
NO refers to normally open valve,but may be closed in special cases.

额定压力与饱和蒸汽温度对照表Comparison Table of Rated Pressure and Saturated Steam Temperature

压力 Pressure Mpa	温度 Temperature ℃	压力 Pressure Mpa	温度 Temperature ℃	压力 Pressure Mpa	温度 Temperature ℃	压力 Pressure Mpa	温度 Temperature ℃	压力 Pressure Mpa	温度 Temperature ℃
0.1	119.61	2.3	220.75	4.5	257.56	6.7	282.52	8.9	301.90
0.2	132.87	2.4	222.90	4.6	258.87	6.8	283.50	9.0	302.69
0.3	142.92	2.5	224.99	4.7	260.16	6.9	284.47	9.1	303.48
0.4	151.11	2.6	227.01	4.8	261.44	7.0	285.42	9.2	304.26
0.5	158.07	2.7	228.98	4.9	262.69	7.1	286.37	9.3	305.03
0.6	164.17	2.8	230.89	5.0	263.92	7.2	287.31	9.4	305.79
0.7	169.60	2.9	232.76	5.1	265.14	7.3	288.23	9.5	306.55
0.8	174.53	3.0	234.57	5.2	266.34	7.4	289.15	9.6	307.30
0.9	179.03	3.1	236.34	5.3	267.52	7.5	290.06	9.7	308.05
1.0	183.20	3.2	238.07	5.4	268.68	7.6	290.96	9.8	308.79
1.1	187.08	3.3	239.76	5.5	269.83	7.7	291.85	9.9	309.52
1.2	190.71	3.4	241.42	5.6	270.96	7.8	292.73	10.0	310.25
1.3	194.13	3.5	243.03	5.7	272.08	7.9	293.60	10.5	313.82
1.4	197.36	3.6	244.62	5.8	273.19	8.0	294.47	11.0	317.26
1.5	200.43	3.7	246.17	5.9	274.27	8.1	295.32	11.5	320.57
1.6	203.35	3.8	247.68	6.0	275.35	8.2	296.17	12.0	323.87
1.7	206.14	3.9	249.17	6.1	276.41	8.3	297.01	12.5	336.89
1.8	208.82	4.0	250.63	6.2	277.46	8.4	297.85	13.0	339.90
1.9	211.39	4.1	252.07	6.3	278.50	8.5	298.67	13.5	342.82
2.0	213.85	4.2	253.48	6.4	279.52	8.6	299.49	14.0	345.66
2.1	216.23	4.3	254.86	6.5	280.53	8.7	300.30		
2.2	218.53	4.4	256.22	6.6	281.53	8.8	301.11		

MACOTANGO VALVE GROUP

		项目名称 PROJECT		项目编号 ITEM	
		合同编号 CONT.NO		设计阶段 DES.STAGE	
编制 PRER.		调节阀数据表 SPECIFICATION FOR CONTROL VALVE		图 号 DWG.NO	
校对CHK.					
审核 REV.					
			阀体组件 BODY		
位号 TAG №			阀型式 Valve type		
数量 Quantity			型号Mode №		
用途 Service			阀体直径 Body Size		
管道编号P&ID №			阀座直径 Ports Size		
管道材质 Line Material			公称压力 Rating		
管道规格 Line Size			法兰标准 Connect		
操作条件 OPERATION			阀体材质 Body Material		
工艺介质 Fluid Name			阀芯材质 Plug Material		
流体状态 Fluid State			阀座材质 Seat Material		
操作温度 Opera Temp(℃)			泄漏等级 Leakage Class		
流量单位 Flow rate Unit			流量特性 Charac teristic		
最大流量 Max Flow rate			上阀盖形 Bonnet Type		
正常流量 Nor Flow rate			填料Packing		
最小流量 Min Flow rate			额定Cv值 Valve Cv		
阀前压力 In Press (MPa)(A)	最大流量时F max		制造厂 Manu Factory		
	正常流量时F nor		执行机构 ACTUATOR		
	最小流量时F min		型 式Type		
阀后压力 Out Press (MPa)(A)	最大流量时F max		型号Mode №		
	正常流量时F nor		作用型式 Action		
	最小流量时F min		弹簧范围 Spring(KPa)		
最大压差 Max DPAP(Mpa)			供气压力 Air Supply(KPa)		
正常压差 Nor DPAP(Mpa)			手轮Hand wheel		
最小压差 Min DPΔP(Mpa)			制造厂 Manu Factory		
关闭压力 Shut off Press(Mpa)			定位器 POSITONER		
操作密度 Opera Density(Kg/m')			型式Type		
标准密度 ST Density			型号Mode №		
比重SP，Gr.			输入信号 Input Signal(mA)		
气体分子量 M，W			供气压力 Air Supply(KPa)		
动力粘度 Dynamic Viscosity cp			防爆等级 EXP，Class		
等熵指数 Spec Heats Ratio			电气接口尺寸 ELEC.CONN		
压缩系数 Compress Factor			附 件ACCESSORY		
汽化压力Vapor Pressure (Mpa)			过滤器减压阀 Air Set		
临界压力 Critical Press(MPa)			电 磁 阀 Solenoid	型号 Mode №	
计算Cv值 CalculateCv	最大 Max			电压 Electric Voltage	
	正常 Nor		备注 Remarks:		
	最小 Min				
选择Cv值 Selected Cv					
阀门开度 Travel(%)	最大 Max				
	正常 Nor				
	最小 Min				
最大噪音 Noise Level(dB)					
气源故障时阀位 Air Fail P					

修改标记	REVISIONS		
校对	CHK.		
签名	BT		
日期	DATE		