

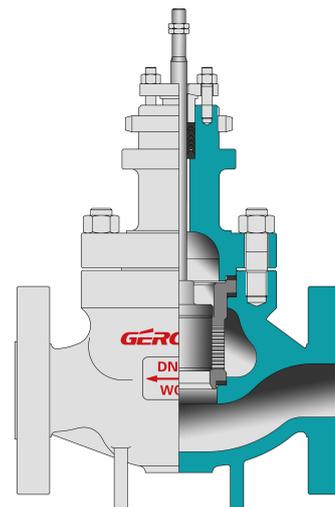
我们的 810L 多孔笼式调节阀，采用套筒导向，压力平衡式阀芯。是一种动态稳定性好，适合于苛刻工况的高性能控制阀。它具有工作平稳、允许压差大、流量特性精确噪音低等特点。特别适用于允许泄露小、要求噪音低、阀前后压差较大的工作场合。

Our 810L Porous cage type regulating valve, the use of sleeve oriented, pressure balanced spool. Is a kind of good dynamic stability, high performance control valve suitable for harsh working conditions It has the advantages of stable operation, allowing a large pressure difference, accurate flow characteristics of low noise characteristics Especially suitable for the work of allowing leakage of small, low noise, large pressure difference between front and rear.

## 产品特点 Product features

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的同时会产生很大的噪音。于是我们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。

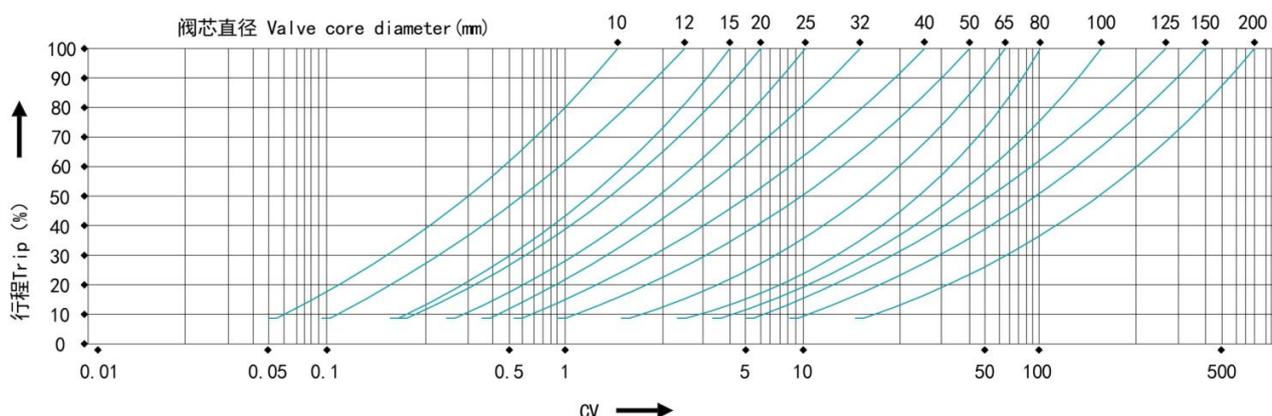
The larger the pressure difference is, the faster the flow velocity of the medium will cause serious erosion and damage to the valve internals. So we change the window type standard sleeve into the porous sleeve, the liquid flow is generally from the valve to the high and low out, through the porous throttle to make the medium in the sleeve collision, consumption can reduce the flow velocity. For the gas medium generally use low in and out, so that the gas medium through the porous sleeve throttling, after the valve seat has a volume expansion, so as to reduce the pressure of the media, reduce flow velocity.



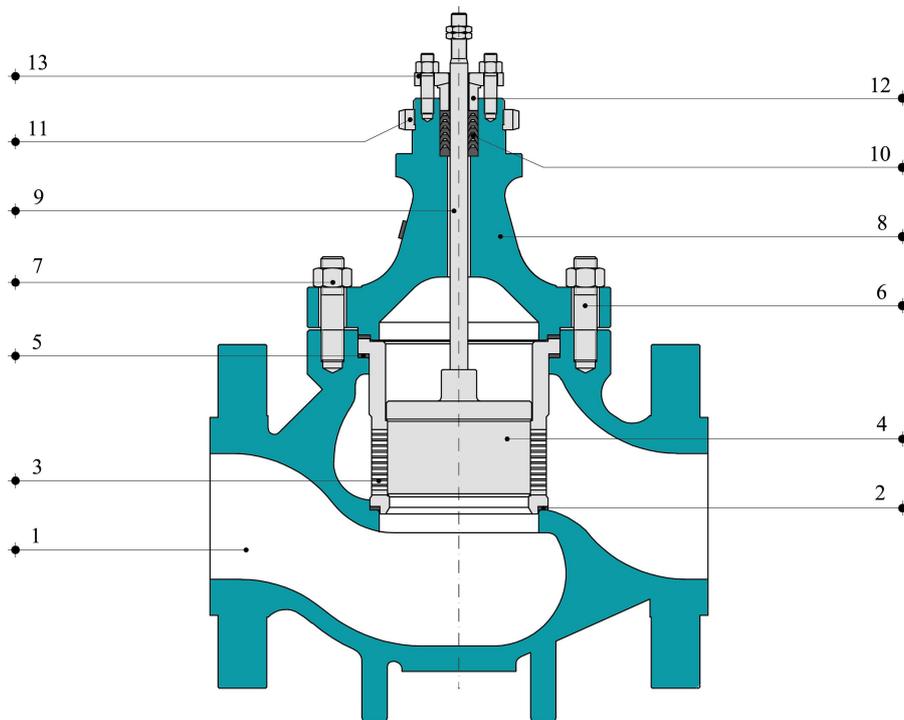
## 技术参数 Technical parameters

- |   |  |
|---|--|
| ● 阀体形式：直通 S 型铸造阀                            | Body form : Straight S type casting valve              |
| ● 阀芯形式：平衡型多孔式阀芯                             | Spool form : Balance type porous type valve            |
| ● 公称口径：DN25 ~ 300mm ; NPS 1 ~ 12"           | Nominal diameter : DN25 ~ 300mm ; NPS 1" ~ 12"         |
| ● 公称压力：PN1.6 ~ 16.0MPa ; CALSS 150 ~ 1500LB | Nominal pressure : PN1.6 ~ 32.0MPa ; CALSS 150 ~ 900LB |
| ● 适用温度：-196 ~ +550°C (按工矿可选)                | Applicable temperature : -196 ~ +550°C ( Optional )    |
| ● 连接形式：法兰、焊接、螺纹 (适用于 1"内)                   | Connection form : Flange, welding, thread              |
| ● 法兰距：符合 IEC 60534                          | Flange distance : Meet IEC 60534                       |
| ● 压盖形式：螺栓压紧式                                | Gland form : Bolt pressing type                        |
| ● 密封垫片：金属石墨缠绕垫片                             | Sealing gasket : Metal graphite wound gasket           |
| ● 填料：聚四氟乙烯、柔性石墨                             | Seal up : PTFE, flexible graphite                      |
| ● 执行器：气动执行器、电动执行器                           | Actuator : Pneumatic actuator, electric actuator       |

## 流量特性曲线图 Flow characteristic curve



结构与材料 Structure and materials



表一：本体材质为碳钢 Table 1 : Carbon steel valve body

1	阀体 Body	WCB	LCB	WC9
2	垫片 Shim	316+石墨 Graphite / FTFE		
3	阀笼 Valve cage	304	304	304
4	阀芯 Spool	304	304	304
5	垫片 Shim	316+石墨 Graphite / FTFE		
6	螺柱 Stud	304	304	304
7	螺母 Nut	304	304	304
8	阀盖 Valve cover	WCB	LCB	WC9
9	阀杆 Valve stem	304	304	304
10	填料 Filler	PTFE / 柔性石墨		
11	锁紧螺母 Lock nut	304	304	304
12	压套 Pressing ring	304	304	304
13	压板 Plate	304	304	304

表二：本体材质为不锈钢 Table 2 : Stainless steel body

1	阀体 Body	CF8	CF8M	CF3M
2	垫片 Shim	316+石墨 Graphite / FTFE		
3	阀笼 Valve cage	304	316	316L
4	阀芯 Spool	304	316	316L
5	垫片 Shim	316+石墨 Graphite / FTFE		
6	螺柱 Stud	304	316	316L
7	螺母 Nut	304	316	316L
8	阀盖 Valve cover	CF8	CF8M	CF3M
9	阀杆 Valve stem	304	316	316L
10	填料 Filler	PTFE / 柔性石墨		
11	锁紧螺母 Lock nut	304	316	316L
12	压套 Pressing ring	304	316	316L
13	压板 Plate	304	316	316L

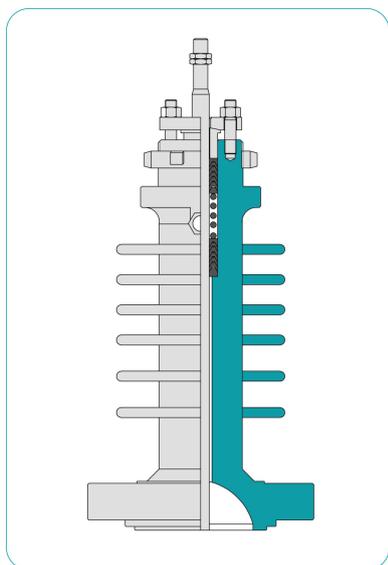
注：1、以上为标准配置结构，阀座为金属密封，阀座为软密封选用V1级可选件。可提供喷焊硬质合金的阀内件。

The above parameters for the standard configuration, soft seal can be specially made to order 6 seal. Valve inner part capable of providing spray welding hard alloy.

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。

Conventional materials for carbon steel and stainless steel two, according to the user site conditions custom special material control valve products.

## 可应用于不同工况的结构 Can be applied to different conditions of the structure



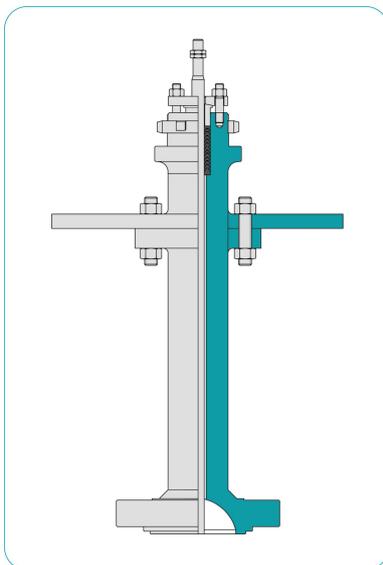
高温型 High temperature type

适用介质：蒸汽、热油等

Medium: Steam, hot oil etc.

适用温度：+250 ~ 550°C

Temperature : +250 ~ 550°C



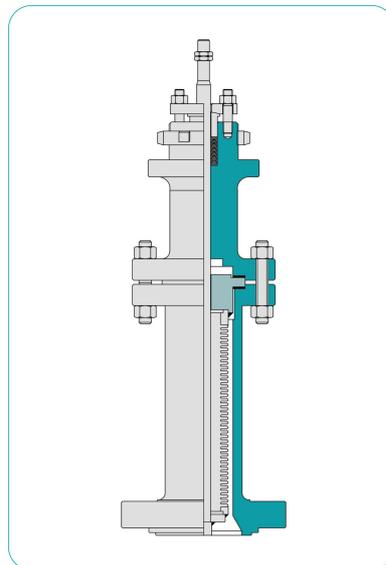
低温型 Low temperature type

适用介质：液氮、液氧等

Medium: Liquid nitrogen etc.

适用温度：-70 ~ -196°C

Temperature : -70 ~ -196°C

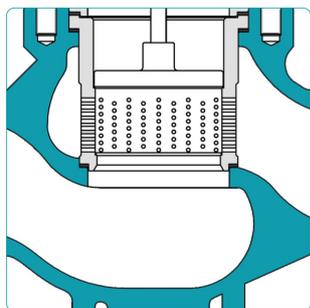


波纹管型 Corrugated pipe type

适用介质：易燃易爆气体、有毒液体、腐蚀性介质等

Medium: Inflammable and explosive gas,

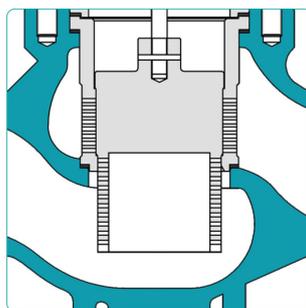
Toxic liquid, Corrosive medium etc.



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 type sleeve structure:

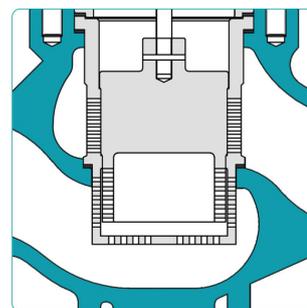
suitable for large and medium pressure clean and free of impurities. The higher requirement on the medium.



单级笼式结构：适用于高温高压且工作压力 $\leq$ PN16.0MPa 的场合中。对介质要求较高。

Single cage structure:

suitable for high temperature and high pressure and working pressure is less than PN16.0MPa occasions. The higher requirement on the medium.



二级笼式结构：适用于高温高压且工作压力 $\leq$ PN32.0MPa 的场合。非常适合阀前后压差较大的工矿中。对介质要求较高。

Two cage structure:

suitable for high temperature and high pressure and working pressure is less than PN32.0MPa. Very suitable for the pressure valve before and after the great occasion. The higher requirement on the medium.

规格参数 Specification 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 Straight line	10	16	25	40	63	100	160	250	400	630	1000	1400
	等百分 Percent	11	17.6	27.5	44	69	110	176	275	440	690	1100	1500
口径(DN) Diameter (in)	行程 Travel	可选流量系数 CV (★ 标准型 ● 推荐 ○ 订制) Optional flow coefficient CV (★ Standard type ● Recommend ○ Customized)											
		25 1	16 mm	★									
32 1-1/4	25 mm	○	★										
40 1-1/2		○	●	★									
50 2		○	●	●	★								
65 2-1/2	40 mm		○	○	○	★							
80 3			○	○	○	●	★						
100 4			○	○	○	●	●	★					
125 5	60 mm					○	○	○	★				
150 6							○	○	●	★			
200 8								○	○	●	●	★	
250 10	100 mm								○	●	●	★	
300 12										○	●	●	★
气动执行机构 Pneumatic actuator		HA/B-23 350 cm <sup>2</sup>				HA/B-34 560 cm <sup>2</sup>			HA/B-45 900 cm <sup>2</sup>			HA/B-56 1400 cm <sup>2</sup>	
作用方式 Mode of action	弹簧范围 Spring range	金属密封允许压差 (Mpa) Metal seal allows differential pressure (Mpa)											
气开式 Gas opening	20-100Kpa	3.0	2.25	2.25	1.95	2.36	2.04	1.67	1.41	1.41	1.14	0.65	0.55
	40-200Kpa	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	1.55	1.4
	80-240Kpa	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	4.08	4.08
气关式 Gas off	20-100Kpa	1.5	1.13	1.13	0.98	1.18	1.02	0.84	0.71	0.71	0.57	0.65	0.55
	40-200Kpa	4.5	3.38	3.38	2.93	3.54	3.06	2.51	2.12	2.12	1.71	0.8	1.55
	80-240Kpa	6.4	6.4	6.4	6.4	6.4	6.4	5.85	4.94	4.94	4.0	4.08	3.65
电动执行机构 Electric actuator		金属密封允许压差 (Mpa) Metal seal allows differential pressure (Mpa)											
推力 (N) Thrust (N)	800	6.4	6.4										
	2000	6.4	6.4	6.4	5.1								
	3000	6.4	6.4	6.4	6.4	5.7	4.76						
	5000			6.4	6.4	6.4	6.4	6.25					
	6500							6.4	6.4	4.23	3.23		
	10000									6.4	6.1	3.31	2.07
	16000											6.0	4.0

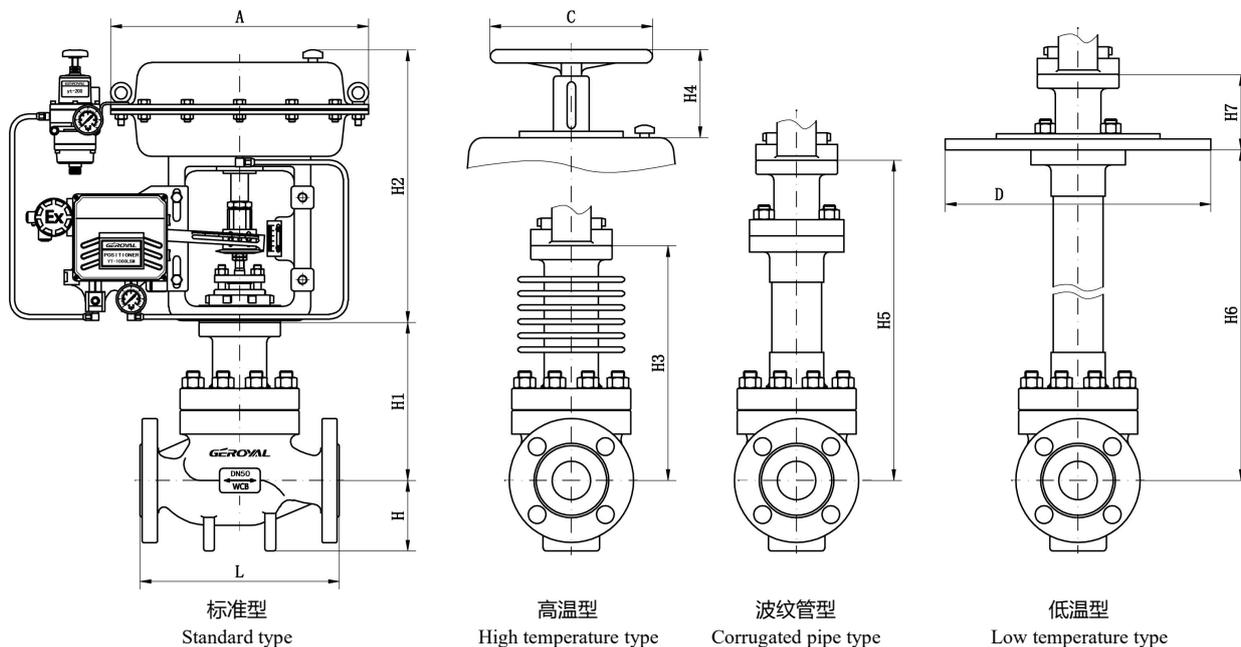
## 执行机构参数 Executing agency

形式 Form	型号 Model	气动薄膜执行机构 Pneumatic actuator	电子式电动执行机构 Electronic electric actuator
		ZH23 ~ ZH56	3810L RSL
		多弹簧型 Multi spring type	智能一体化型 Intelligent integration
用途 Use		调节 Regulating、开关 Switch	调节 Regulating
驱动 Drive		气压 pressure ( 弹簧范围 range of spring ) 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 380 V ±10% 50Hz
接头 Joint		Rc 1/4	普通型 Popular type : 2-PF ( G1/2" ) 隔爆型 Explosion proof type : 2-PF ( G3/4" )
正作用 Positive effect		气压增加推动阀门关闭 Air pressure increase to drive the valve close	控制信号增加推动阀门关闭 Control signal increase to drive the valve close
反作用 Reaction		气压增加推动阀门开启 Air pressure increase to drive the valve open	控制信号增加推动阀门开启 Control signal increase to drive the valve open
控制信号 Control signal		4 ~ 20mA.DC ( 带定位器 Tape locator )	输入输出 Input output 4 ~ 20mA.DC
滞后 Hysteresis		≤ 1% FS ( 带定位器 Tape locator )	≤ 0.8% FS
直线性 Linearity		2% FS ( 带定位器 Tape locator )	≤ ±1% FS
环境温度 Temperature		-10 ~ +70°C	
表面涂层 Surface coating		体 Body : 黑色磷化处理 Black phosphating treatment 执行器 Actuator : 丙烯酸聚氨酯漆 acrylic polyurethane enamel	
选配附件 Optional accessories		阀门定位器 Valve positioner 手轮 Handwheel 电磁阀 Solenoid valve 行程开关 Travel switch 保位阀 Position valve	加热器 Heater

## 性能 Performance

流量特性 Flow characteristics	等百分比 Equal percentage、直线 Straight line		
可调范围 Adjustable range	50:1		
额定 Cv 值 Rated Cv value	等百分比 The percentage etc : 10 ~ 1400 直线 Straight line : 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 Metallic seal : IV (0.01% valve rated flow) ; soft seal: V		
性能指标 Performance index	驱动方式 Driving mode	气动 Pneumatic	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 Switch deviation %	± 2.5	± 2.5
	额定行程偏差 Deviation of stroke %	≤ 2.5	≤ 2.5

气动调节阀连接尺寸 Pneumatic regulating valve connection size



DN	20	25	32	40	50	65	80	100	125	150	200	250	300	
In	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12	
L	PN16/25	181	184	200	222	254	276	298	352	410	451	600	650	700
	PN40	181	184	200	222	254	276	298	352	410	451	600	670	770
	PN64	210	210	210	251	286	311	337	394	440	508	650	690	800
H	PN16/25	52.5	57.5	75	75	85.5	92.5	100	110	142.5	158	170	195	230
	PN40	52.5	57.5	75	75	82.5	92.5	100	117.5	150	167.5	187.5	205	245
	PN64	65	40	85	85	90	102.5	107.5	125	172.5	195	207.5	230	260
H1	132	132	158	170	179	214	221	234	270	294	331	390	450	
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	
H6	700 (根据实际温度定制)													
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	200	200	200	200	200	240	240	240	350	350	350	450	450	
C	282	282	282	282	282	360	360	360	470	470	470	650	650	
法兰 Flange	可执行: GB、HG、JB、DIN、JIS、ANSI 等相应标准 Executable: GB、HG、JB、DIN、JIS、ANSI Corresponding standard													

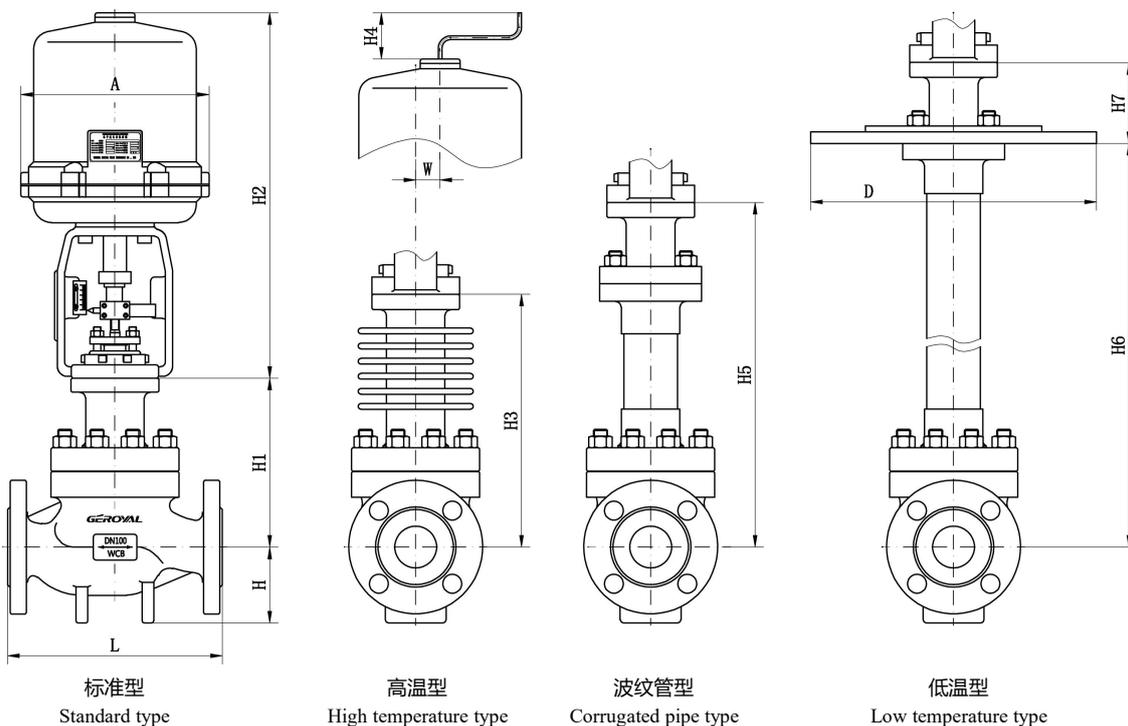
注: 1、表中尺寸为不带附件标准数据, 附件尺寸根据实际配置计算。

The size of the table is not the standard data of the accessories, the size of the accessory is calculated according to the actual configuration.

2、由于产品的技术创新与改进, 尺寸可能会有所变化, 最新资讯请联系 GEROYAL 公司索取。

Due to the technical innovation and improvement of the product, the size may vary, please contact GEROYAL to obtain the latest information.

## 电动调节阀连接尺寸 Electric regulating valve connection size



	标准型 Standard type	高温型 High temperature type	波纹管型 Corrugated pipe type	低温型 Low temperature type										
DN	20	25	32	40	50	65	80	100	125	150	200	250	300	
In	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12	
L	PN16/25	181	184	200	222	254	276	298	352	410	451	600	640	880
	PN40	181	184	200	222	254	276	298	352	410	451	600	640	880
	PN64	210	210	210	251	286	311	337	394	440	508	650	810	950
H	PN16/25	52.5	57.5	75	75	85.5	92.5	100	110	142.5	158	170	195	230
	PN40	52.5	57.5	75	75	82.5	92.5	100	117.5	150	167.5	187.5	205	245
	PN64	65	40	85	85	90	102.5	107.5	125	172.5	195	207.5	230	260
H1	132	132	158	170	179	214	221	234	270	294	331	390	450	
H2	373	373	456	456	538	538	548	548	725	725	725	795	795	
H3	208	208	224	228	228	334	334	342	408	453	482	520	550	
H4	90	90	90	90	90	90	90	90	90	90	90	90	90	
H5	336	338	402	402	405	627	628	635	698	702	728	755	790	
H6	700 (根据实际温度定制)													
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、ANSI 等相应标准 Executable：GB、HG、JB、DIN、JIS、ANSI Corresponding standard													

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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