

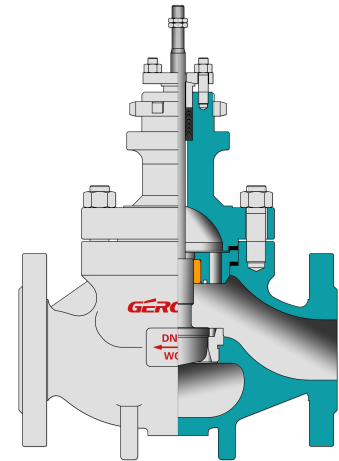
810D 顶部导向型单座调节阀，采用顶部导向不平衡式结构，具有高强度、重载荷、S 型流道、压降损失小、流量系数大、可调范围广、流量特性精度高。此调节阀适用于工况压差较小的场合，关闭严密，适用于对介质流量或者压力的调节。

810D top guide type single seat control valve, the top guide not balanced structure and has high strength, heavy load, an S-shaped channel, pressure drop, flow coefficient, can adjust in a wide range, flow characteristics of high precision. This type of adjustment valve is suitable for the condition of small pressure difference, close the tight, suitable for the adjustment of medium flow or pressure.

## 产品特点 Product features

阀座采用螺纹拧入式结构，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 is made of screw in structure, has the advantages of reliable performance, convenient replacement and maintenance, etc., to solve the problem of the traditional no valveseat body leakage can not be replaced. Extended service life. The open design, the media tendsto open the valve opening direction, good controllability, flow characteristics and small distortion. According to the working condition, the electric or pneumatic actuators can be controlled.

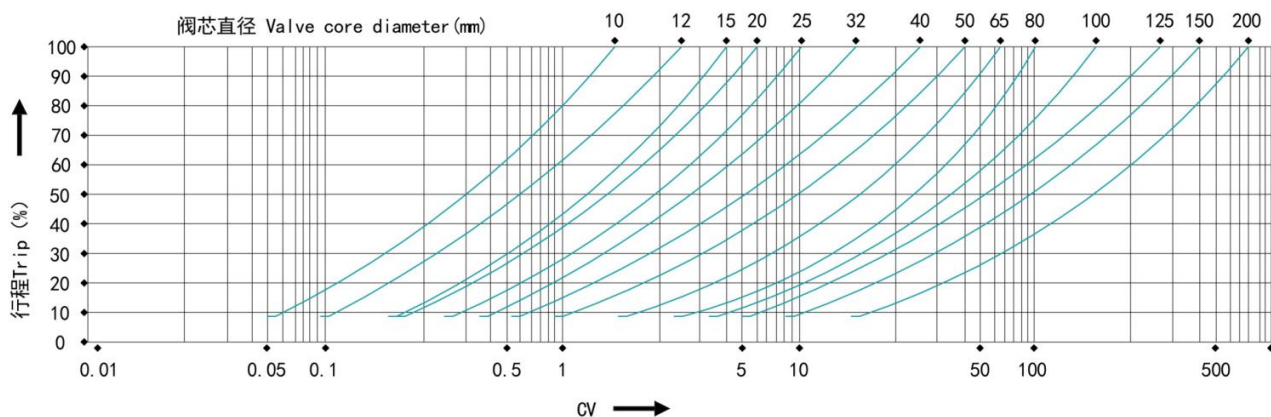


## 技术参数 Technical parameters

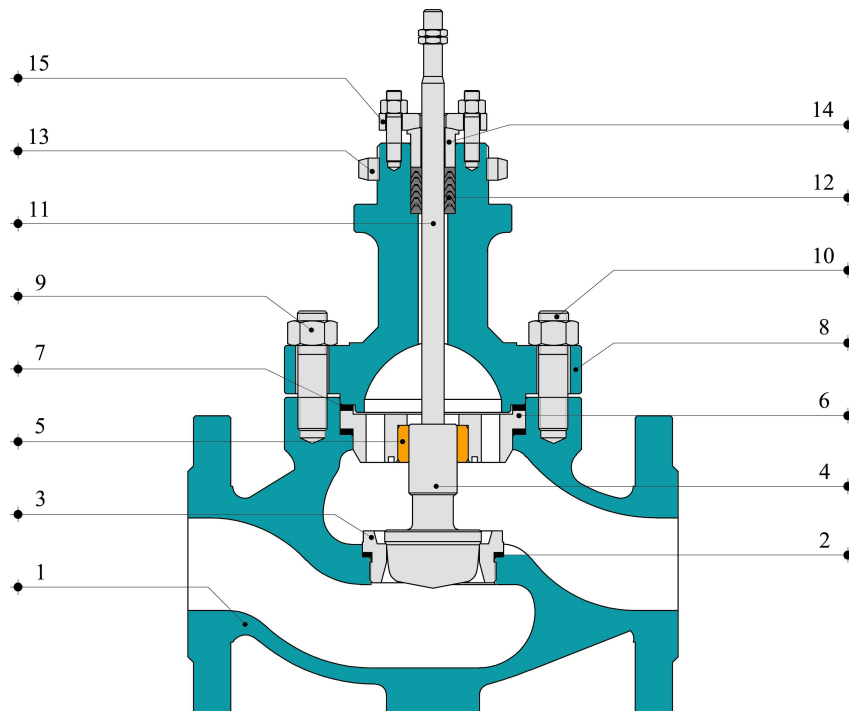
- 阀体形式：直通 S 型铸造阀
- 阀芯形式：不平衡式单座柱塞阀芯
- 公称口径：DN15 ~ 300mm；NPS 1/2 ~ 12"
- 公称压力：PN1.6 ~ 6.4MPa；CALSS 150 ~ 300LB
- 适用温度：-196 ~ +550°C（按工矿可选）
- 连接形式：法兰、焊接、螺纹（适用于 1"内）
- 法 兰 距：符合 IEC 60534
- 压盖形式：螺栓压紧式
- 密封垫片：金属石墨缠绕垫片
- 填 料：聚四氟乙烯、柔性石墨
- 执 行 器：气动执行器、电动执行器

- Body form：Straight S type casting valve
- Spool form：Unbalanced type single seat plunger valve
- Nominal diameter：DN15 ~ 300mm；NPS 1/2 ~ 12"
- Nominal pressure：PN1.6 ~ 6.4MPa；CALSS 150 ~ 300LB
- Applicable temperature：-196 ~ +550°C ( Optional )
- Connection form：Flange, welding, thread
- Flange distance：Meet IEC 60534
- Gland form：Bolt pressing type
- Sealing gasket：Metal graphite wound gasket
- Seal up：PTFE, flexible graphite
- 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	阀座 Seat	304	304	304
4	阀芯 Spool	304	304	304
5	铜套 Copper sleeve	Cu / 316L		
6	导向套 Guide sleeve	304	304	304
7	垫片 Shim	316+石墨 Graphite / FTFE		
8	阀盖 Valve cover	WCB	LCB	WC9
9	螺母 Nut	304	304	304
10	螺柱 Stud	304	304	304
11	阀杆 Valve stem	304	304	304
12	填料 Packing	石墨 Graphite / FTFE		
13	锁紧螺母 Lock nut	304	304	304
14	压套 Pressing ring	304	304	304
15	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	阀座 Seat	304	316	316L
4	阀芯 Spool	304	316	316L
5	铜套 Copper sleeve	Cu / 316L		
6	导向套 Guide sleeve	304	316	316L
7	垫片 Shim	316+石墨 Graphite / FTFE		
8	阀盖 Valve cover	CF8	CF8M	CF3M
9	螺母 Nut	304	316	316L
10	螺柱 Stud	304	316	316L
11	阀杆 Valve stem	304	316	316L
12	填料 Packing	石墨 Graphite / FTFE		
13	锁紧螺母 Lock nut	304	316	316L
14	压套 Pressing ring	304	316	316L
15	压板 Plate	304	316	316L

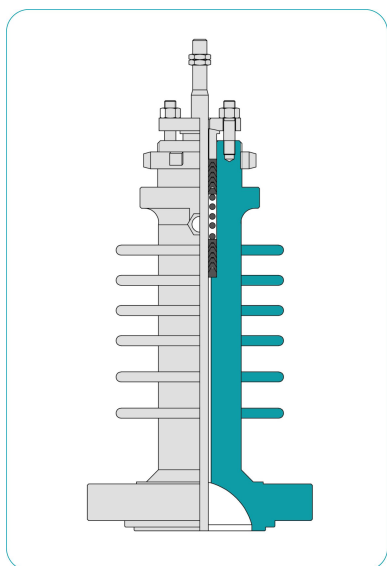
注：1、以上为标准配置结构，阀座为金属密封，阀座为软密封选用VI级可选件。可提供喷焊硬质合金的阀内件。

The above parameters for the standard configuration, soft seal can be specially made to order VI 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定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



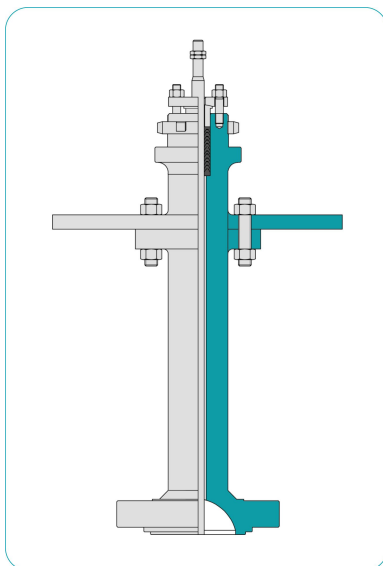
高温型 High temperature type

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



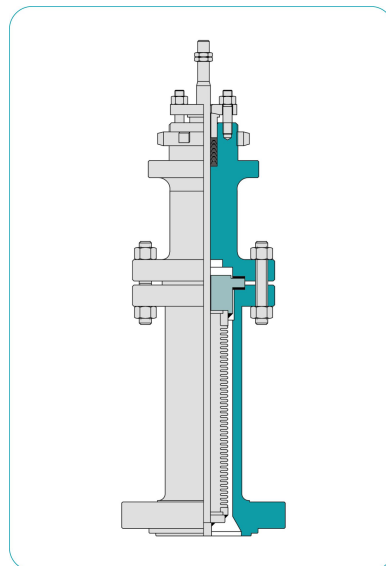
低温型 Low temperature type

适用介质：液氮、液氧等

Medium: Liquid nitrogen etc.

适用温度：-70 ~ -196°C

Temperature : -70 ~ -196°C

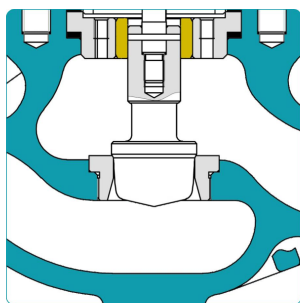


波纹管型 Corrugated pipe type

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,

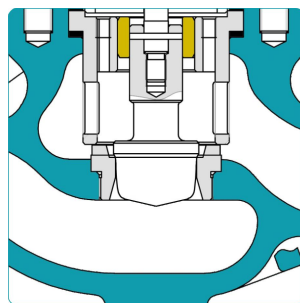
Toxic liquid, Corrosive medium etc.



标准单座结构：适用于阀前后压差较小，允许少量软性杂质的场合。此结构操作稳定、流量特性好、调节范围大等优点。

The standard single seat structure:

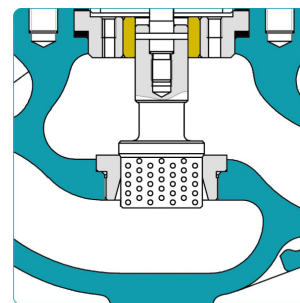
Applicable to the valve before and after the pressure is smaller, allowing a small amount of soft impurities occasion. This structure has the advantages of stable operation, good flow characteristic, large adjustment range and so on.



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:

Applicable to the valve before and after the pressure is smaller, allowing a small amount of soft impurities occasion. This structure has the advantages of good dynamic stability 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:

Suitable for pressure difference between the front and back of the valve, the medium clean occasions. The design of this structure has the advantages of double direction, high stability and low leakage.

规格参数 Specification parameter

阀座直径 (mm)		20	25	32	40	50	65	80	100	125	150	200	250	300
Inside diameter (in)		3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12
流量系数(KV) Flow coefficient	直线 Straight 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 ○ 订制) Optional flow coefficient CV (★ Standard type ● Recommend ○ Customized)												
20 3/4	16 mm	★												
25 1		●	★											
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-22		HA/B-23			HA/B-34			HA/B-45			HA/B-56	
		350 cm <sup>2</sup>		350 cm <sup>2</sup>			560 cm <sup>2</sup>			900 cm <sup>2</sup>			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	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
	40-200Kpa	3.34	2.14	1.31	0.84	0.53	0.51	0.33	0.21	0.21	0.15	0.09	0.06	0.04
	80-240Kpa	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	20-100Kpa	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
	40-200Kpa	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) Metal seal allows differential pressure (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

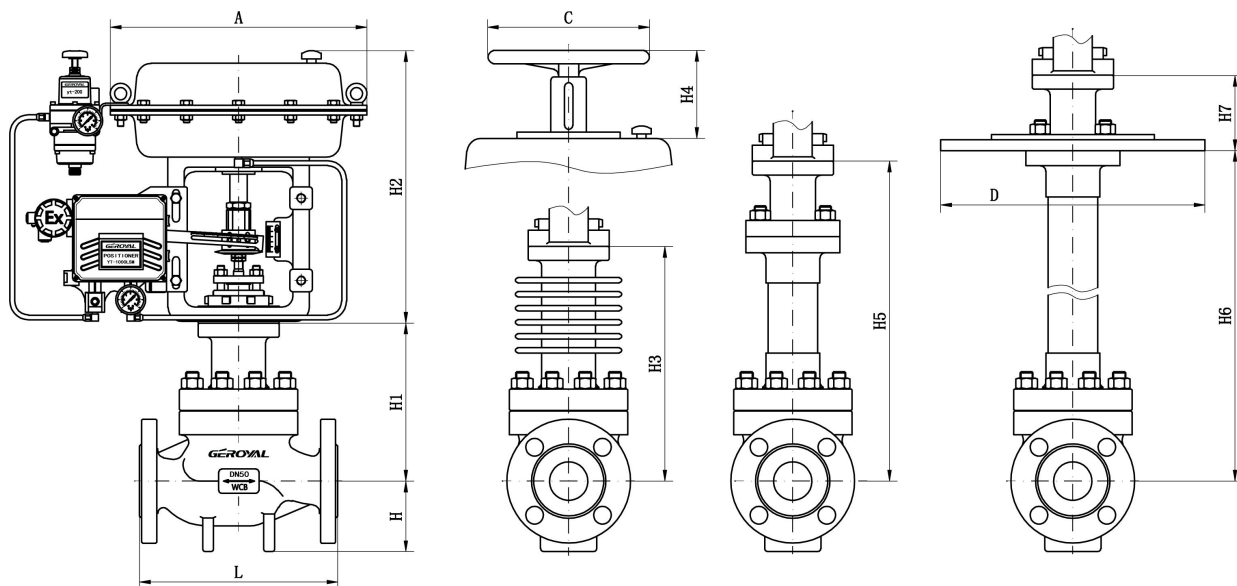
## 执行机构参数 Executing agency

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
		ZH22 ~ 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 限位阀 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													

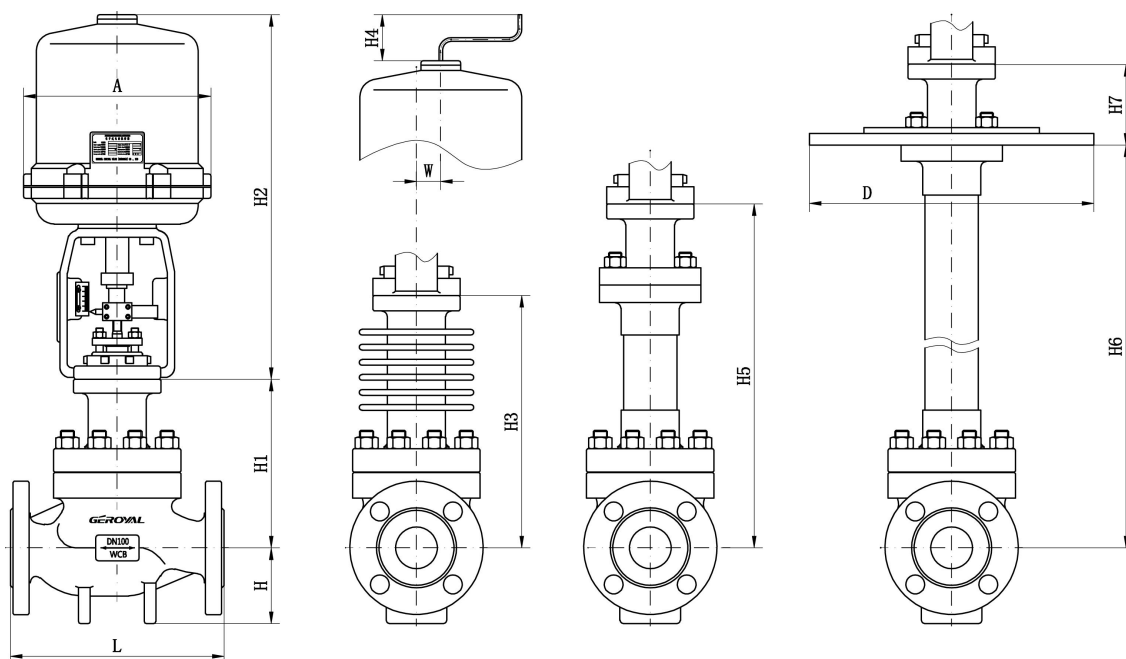
注：1、表中尺寸为不带附件标准数据，附件尺寸根据实际配置计算。

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，最新资料请联系 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



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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