

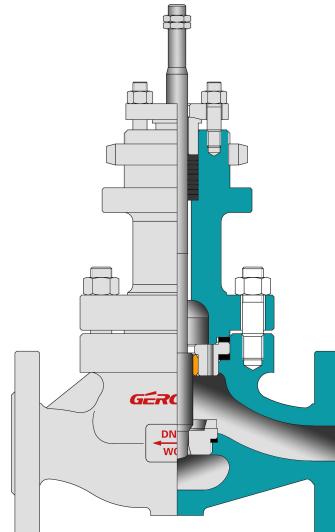
我们的 880L 超小流量针式调节阀是一种顶导向单阀座调节阀，具有结构简单、密封性能好、使用可靠等特点。有效而足够的顶部导向系统克服小开度时的震动，有效使用寿命更长。更小的流量系数选择增加了该阀的使用。可选择多弹簧气动薄膜机构或电动执行机构等。

Our 880L ultra small flow needle valve is a kind of top guide single seat valve, it has a simple structure, good sealing performance, reliable use and so on. The top guide system is effective enough to overcome the small opening shock, effective and long service life. A smaller flow coefficient is chosen to increase the use of the valve. Multi spring pneumatic film mechanism or electric actuator can be selected.

## 产品特点 Product features

本阀是采用 GEROYAL 原厂技术，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，内螺纹结构更加便于安装及拆卸。整体具有体积小、重量轻、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、蒸汽等介质的主流量调节场合。

The valve is the use of GEROYAL technology, professional development of a small flow of the operating conditions of a product. The body is small in size and light in weight, and the inner screw thread structure is more convenient to be installed and disassembled. The whole body has the characteristics of small size, light weight, high performance and precise control of micro flow. Does not apply to the medium of the more dirty occasions, adjusting the media containing granular media, should be aimed at the problem of small throttle clearance, pay attention to prevent the occurrence of blocking card phenomenon. Especially suitable for liquid, steam and other media in the mainstream of the regulation.



## 技术参数 Technical parameters

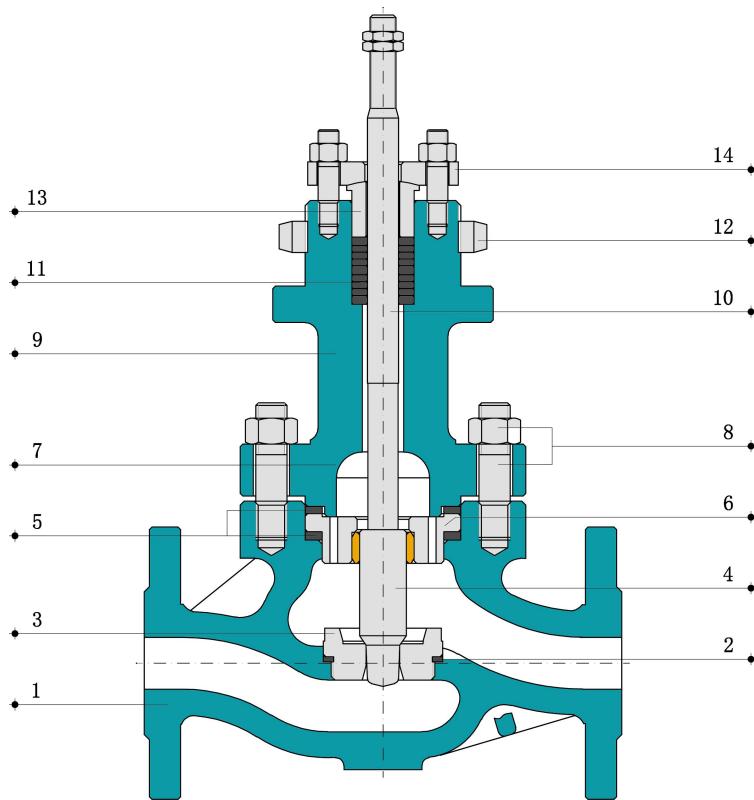
- 阀体形式：直通式锻造阀体
- 阀芯形式：非平衡式单座阀芯
- 公称通径：DN8~25 NPS 1/4"~ 1"
- 公称压力：PN1.6 ~ 32.0MPa ; CALSS 150 ~ 1500 LB
- 适用温度：-196 ~ +650°C ( 按工矿可选 )
- 连接形式：螺纹、焊接、法兰
- 法 兰 距：符合 IEC 60534、非标定制
- 压盖形式：螺栓压紧式
- 密封垫片：金属石墨垫片、聚四氟乙烯
- 填 料：聚四氟乙烯、柔性石墨
- 执 行 器：气动执行器、电动执行器

- Body form : Straight through type forging valve body
- Spool form : Non balance type single seat valve
- Nominal diameter : DN8~25 NPS 1/4"~ 1"
- Nominal pressure : PN1.6 ~ 32.0MPa ; CALSS 150 ~ 1500 LB
- Applicable temperature : -196 ~ +650°C ( Optional )
- Connection form : Flange, welding, screw thread
- Flange distance : Meet IEC 60534、Non-standard customization
- Gland form : Bolt pressing type
- Sealing gasket : Metal graphite gasket, PTFE
- Seal up : PTFE, flexible graphite
- Actuator : Pneumatic actuator, electric actuator

## 设计特色 Design features

- 小开度范围内可连续调节
  - 采用顶部导向结构，抗震动
  - 阀芯采用锥面密封，密封效果好
  - 阀芯多元化设计，调节性能好
  - 阀芯阀座喷焊硬质合金，耐冲蚀，寿命长
  - 体积精小，重量轻、便于安装
  - 电气动执行器可互换安装
- The small opening range can be adjusted continuously
  - The top guide structure, anti vibration
  - The valve cone seal, the sealing effect is good
  - Multi word design, good adjustment performance
  - Valve seat spray welding hard alloy, corrosion resistance, long life
  - Small size, light weight, easy to install
  - The actuator mounted interchangeable

## 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	垫片 Shim	316+石墨 Graphite / FTFE		
6	导向套 Guide sleeve	304	304	304
7	铜套 Copper sleeve	Cu / 316L		
8	螺丝 Screw	304	304	304
9	阀盖 Valve cover	WCB	LCB	WC9
10	阀杆 Valve stem	304	304	304
11	填料 Packing	石墨 Graphite / FTFE		
12	锁紧螺母 Lock nut	304	304	304
13	压套 Pressing ring	304	304	304
14	压板 Plate	304	304	304

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 6 seal. Valve inner part capable of providing spray welding hard alloy.

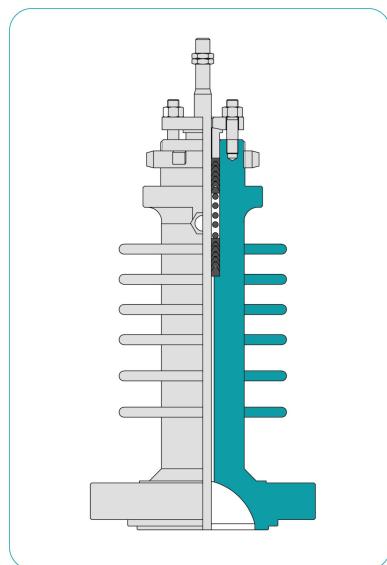
2、常规材质为碳钢和不锈钢两种，可根据用户现场条件订制特殊材质控制阀产品。

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

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	垫片 Shim	316+石墨 Graphite / FTFE		
6	导向套 Guide sleeve	304	316	316L
7	铜套 Copper sleeve	Cu / 316L		
8	螺丝 Screw	304	316	316L
9	阀盖 Valve cover	CF8	CF8M	CF3M
10	阀杆 Valve stem	304	316	316L
11	填料 Packing	石墨 Graphite / FTFE		
12	锁紧螺母 Lock nut	304	316	316L
13	压套 Pressing ring	304	316	316L
14	压板 Plate	304	316	316L

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



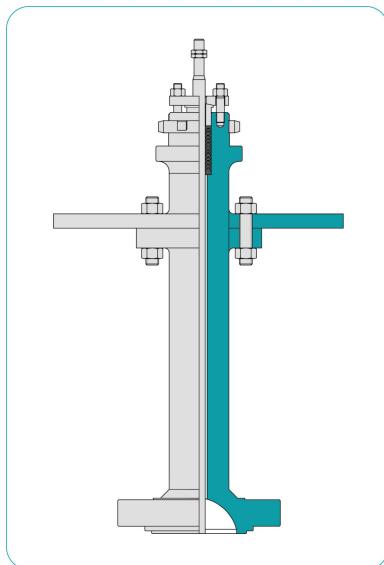
高温型 High temperature type

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



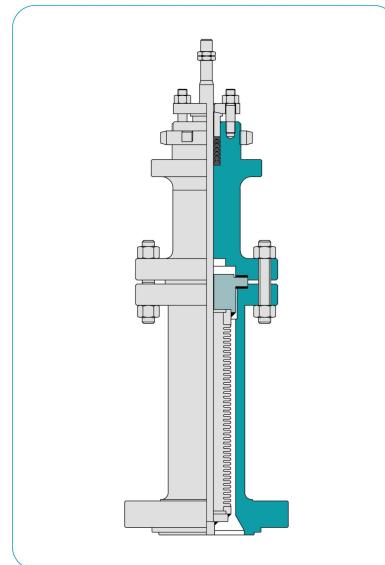
低温型 Low temperature type

适用介质：液氮、液氧等

Medium: Liquid nitrogen etc.

适用温度：-70 ~ -196°C

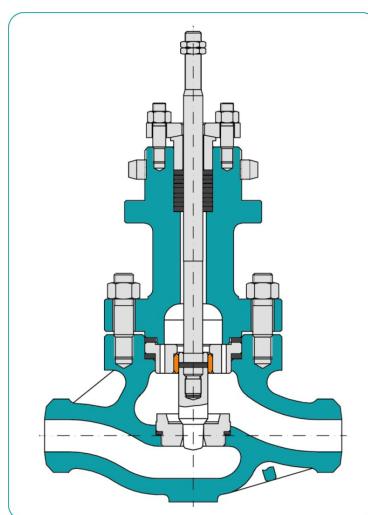
Temperature : -70 ~ -196°C



波纹管型 Corrugated pipe type

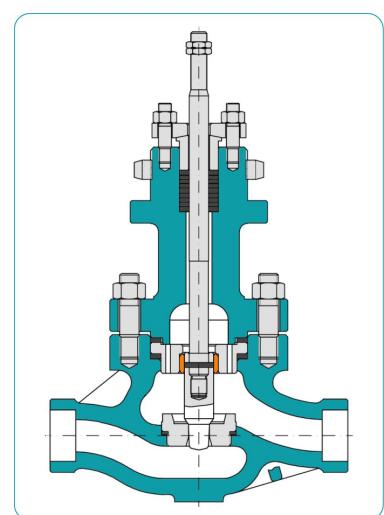
适用介质：易燃易爆气体、有毒液体、腐蚀性介质等

Medium: Inflammable and explosive gas, Toxic liquid, Corrosive medium etc.



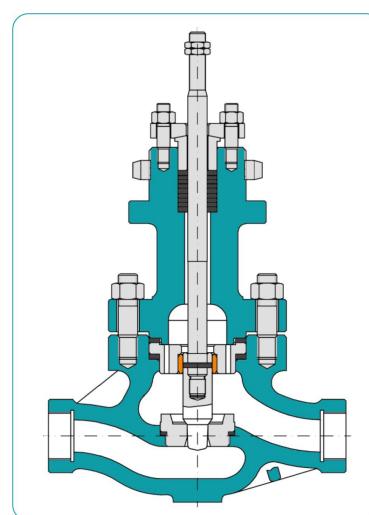
对焊连接：BW

Butt welding : BW



承插焊连接：SW

Socket welding joint : SW



内螺纹连接：G

Pipe thread connection : G

880L

超小流量针式调节阀

Ultra small flow needle type regulating valve

GEROYAL

高性能调节阀系列  
High performance control valve series

## 规格参数 Specification parameter

流量系数 ( CV ) Flow coefficient	等百分 Percent 直线 Straight line									
		0.01	0.04	0.1	0.16	0.25	0.1	0.4	0.63	1.0
口径 DN ( in )	行程 trip	可选流量系数 CV ( ★ 符合 IEC • 推荐 ) Optional flow coefficient CV ( ★ Conform to IEC • Recommend )								
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 Executing agency

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	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 Leakage standard : GB/T4213