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**COVNA®**

**诚招全球代理商**

COVNA Is Looking For Global Distributors.

**COVNA®**  
科威纳工业自动化有限公司

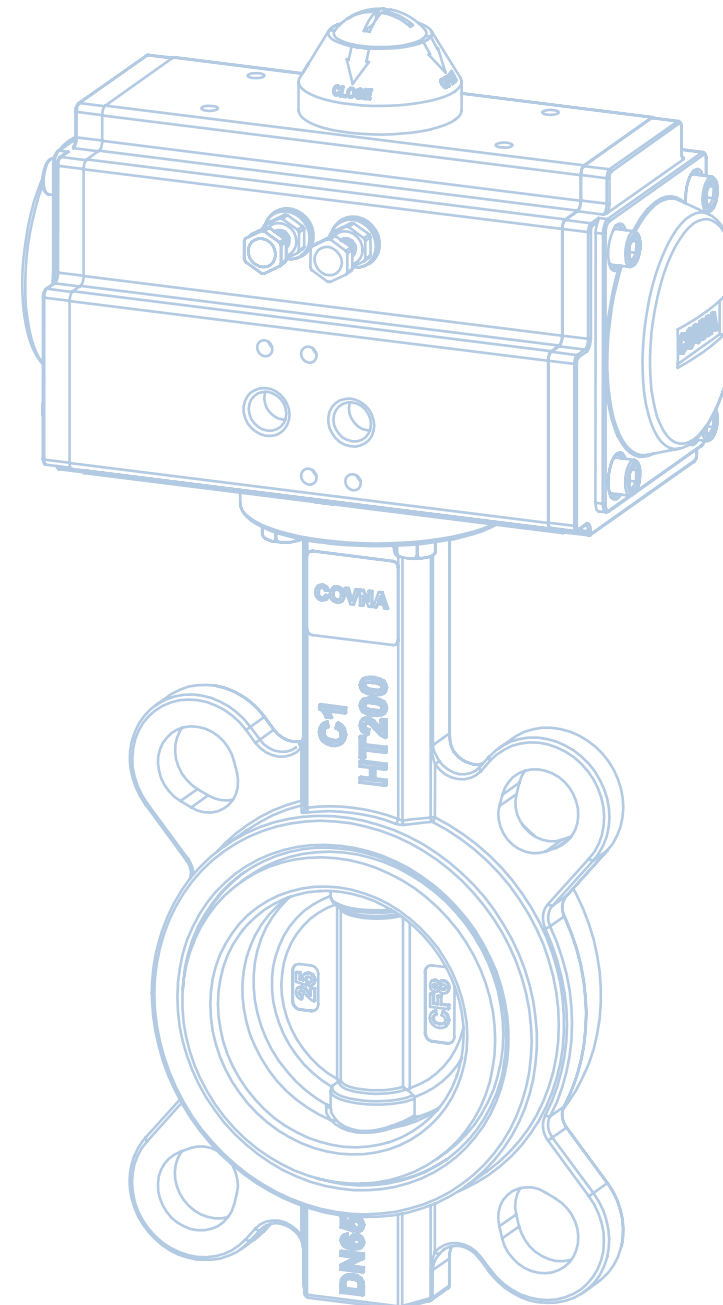
**科威纳 COVNA®**

**气动阀系列**

Pneumatic Actuator Valve Series

**德国技术 国际品牌**

German Technology International Brand



ISO9001 CE RoHS FDA

COVNA GROUP CO., LTD is a world-leading valve manufacturer which specialized in solenoid valves, pneumatic valves, and electric valves for pipeline fluid control. COVNA originated from German technology, has its own R&D, design, production, sales team, and aims to be the global automation application service provider.

In China, COVNA has one R&D Center, 3 production bases and 4 sales subsidiaries. Overseas, COVNA has long-term partnerships with more than 80 distributors to meet the growing demands for COVNA products on the global market.

COVNA production range includes solenoid valves, pneumatic valves, electric valves, gate valves, globe valves, butterfly valves, control valves, safety valves, and various special valves. COVNA products are widely used in Water & Waste water treatment, Automation, Petroleum, Chemical, Electric power, Metallurgy, Mining, Paper-making, Pharmaceutical Industries, etc.

COVNA team make a rapid response to customer's requirements, provide professional product selection guidance and reliable valve application solutions. So far, COVNA has achieved ISO 9001 Quality Management System Certification, CE Certification, RoHS Certification, SGS international certification, and US food safety FDA certification, and won the national high-tech enterprise in 2017. The company has more than 30 core patents and multi-national certifications. It has a reputation in more than 100 countries and regions around the world and has won the trust of customers.

## 科威纳工业自动化有限公司

### COVNA AUTOMATION INDUSTRIAL CO., LTD

科威纳是源自德国技术，集研发、设计、销售、服务于一体，专业生产管路流体控制的电磁阀、气动阀、电动阀等自动化设备配件，致力于全球自动化应用服务提供商。

在中国，我们拥有1个技术研发中心，3大阀门生产基地和4家子销售公司，销售网点遍布各大城市。在海外，我们与80多家代理商建立了长期战略合作伙伴关系，以满足国际市场对科威纳产品日益增长的需求。

科威纳阀门产品覆盖电磁阀、气动阀、电动阀、闸阀、截止阀、球阀、蝶阀、调节阀、安全阀以及各种特殊阀，产品广泛应用于石油、天然气、化工、电力、冶金、船舶、采矿、造纸、医药、水处理、工业系统等十几个行业及领域。

公司推行精益生产与信息化管理系统相结合的管理模式，快速响应客户要求，努力为客户提供专业、可靠的阀门产品和应用解决方案；并先后通过了ISO9001质量管理体系认证，CE安全认证，ROHS环保认证、SGS国际认证以及美国食品安全FDA认证，并在2017年荣获国家高新技术企业，公司拥有30多项核心专利及多国认证，口碑享誉全球100多个国家与地区，深得广大客户信赖。





# COVNA

今天，科威纳集团拥有：  
六家全资子公司，世界一流设施  
优秀的管理团队及技术研发团队  
30多名具备从业资格证书的工程师  
100多名经过专业培训的员工  
日本卧式加工中心 / 美国立式加工中心  
进口数控机床 / 进口六轴复合机  
全自动化装配生产线  
高新技术企业

Today, COVNA Group has:  
Six subsidiaries  
Advanced production facilities  
Talented management and R&D team  
More than 30 engineers with  
qualification certificates  
More than 100 professionally trained employees  
CNC machine center  
Fully automated assembly line



德国技术 国际品牌

GERMAN TECHNOLOGY  
INTERNATIONAL BRAND



# 专业自动化阀门生产商

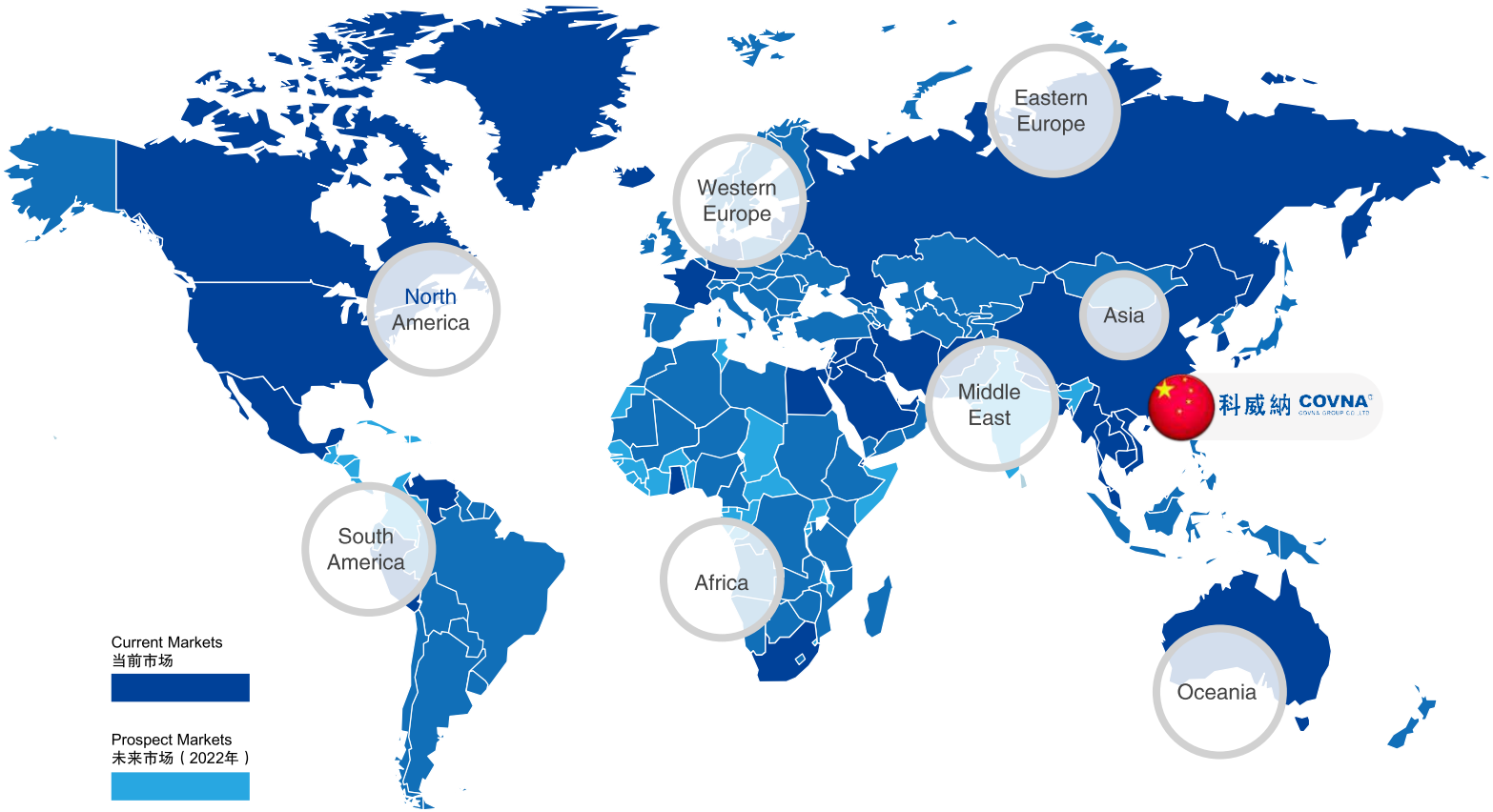
## SPECIALIZED FLUID CONTROL VALVE MANUFACTURER

### | 品牌优势

- 源自德国技术，严谨精湛；
- 集研发、设计、销售、服务于一体，一站式解决方案；
- 拥有30多项核心专利及多国认证，专业值得信赖；
- 口碑享誉全球100多个国家与地区；
- 受邀参加国际展会、自动化展示，备受行业推崇。

### BRAND ADVANTAGES

- ☐ COVNA is derived from German technology, which is rigorous and superb.
- ☐ COVNA focus on providing customers "ONE-STOP" solutions, including R&D, design, Sales, and Service.
- ☐ We have more than 30 patents of invention and multi-national certification. Trusted profession.
- ☐ World-renowned reputation in more than 100 countries and regions; Its business covered over 100 countries in the world, sharing a good reputation and being strongly recognized by customers all over the world.
- ☐ Invited to participate in international exhibitions, automated exhibitions, highly respected by the industry.



## 科威纳·连通全球

### COVNA CONNECTING THE WORLD

科威纳经过二十年的积累，公司在与国内外众多大型企业的合作交流中，发展和积累了一大批优质客户资源，深得广大客户信赖。

Thanks for your trust on COVNA. Let's build up our glorious future together!



### | 主营产品

- 电磁阀
- 气动阀
- 电动阀
- 手动阀

### MAIN PRODUCT

- ☐ Solenoid valve
- ☐ Pneumatic actuator valve
- ☐ Electric actuator valve
- ☐ Manual valve

科威纳成立于2000年，产品销往全世界100多个国家。在业内有着很高的知名度，公司还有着30多项的国家专利，无论是设备还是技术都是非常先进的。

科威纳一直注重与国际接轨，为了打造国际化水准的自动化阀门产品，科威纳引入了德国先进生产工艺，并不断自主研发新产品。科威纳自动化产品在“品牌化发展之路”上一路高歌，品牌影响力、市场占有率不断提升，公司发展迅速。为树立良好的企业形象，并迎合出口贸易的需要，科威纳积极的参与各种国际和行业的各项认证。以下展示的也仅仅是COVNA的部分证书。我们将一如既往，继续以优质的产品服务于客户。

COVNA was founded in 2000. Its products have been sold to more than 100 countries around the world with a high reputation in the industry. The company also has more than 30 national patents, advanced equipment and technology.

COVNA always pay attention to the integration with international standards. In order to create an international standard of automatic valve products, it has introduced German advanced production technology and continuously developed new products independently. COVNA develops rapidly with its brand influence and market share continue to increase. In order to establish a good corporate image and meet the needs of export trade, COVNA has been actively achieving various international and industry certifications. Shown below are just part of the COVNA certificates. We will, as always, continue to serve customers with high-quality products.

ISO9001 CE RoHS FDA



科威纳 COVNA®

国际品质 民族品牌

证书，不仅是一份认可和荣誉，更是一份责任。  
在“品牌化建设”与“致力全球自动化应用服务提供商”的道路上，  
科威纳一路向前！

Certificate is not only a recognition and honor,  
but also a responsibility.  
We will keep moving forward on brand building.



工厂展示  
Factory display



外国客户来访

Foreign Customers Visiting COVNA



科威纳海外参展

COVNA Attending Overseas Exhibitions



客户见证  
Customer witness



# 科威纳服务全球客户

## COVNA SERVE CUSTOMERS WORLDWIDE



☞ 气动球阀 PNEUMATIC BALL VALVE

气动二通球阀 Pneumatic 2-Way Ball Valve

|                                                                                     |                                                            |    |
|-------------------------------------------------------------------------------------|------------------------------------------------------------|----|
|    | HK55-F 气动二通法兰球阀 2-Way Flange Pneumatic Ball Valve          | 14 |
|    | HK56-3PS 气动三片式球阀 Pneumatic 3-PCS Ball Valve                | 20 |
|    | HK57 气动二通PVC球阀 Pneumatic 2-Way PVC Ball Valve              | 23 |
|    | HK57-PF 气动二通PVC法兰球阀 Pneumatic 2-Way PVC Flanged Ball Valve | 25 |
|    | HK56-G 气动二通高压球阀 Pneumatic 2-Way High-pressure Ball Valve   | 26 |
|    | HK56-2PS 气动二片式螺纹球阀 Pneumatic 2-PCS Ball Valve              | 27 |
|   | HK56-W 气动二通卫生级球阀 Pneumatic 2-Way Sanitary Ball Valve       | 28 |
|  | HK55-F-C 气动衬氟法兰球阀 Pneumatic PTFE-Lined Flanged Ball Valve  | 29 |
|  | HK54-B 气动意式薄型球阀 Pneumatic Wafer Thin Ball Valve            | 30 |
|  | HK55-V-F 气动V型法兰球阀 Pneumatic V-Povt Ball Valve              | 31 |
|  | HK59-D-K 气动真空球阀 Pneumatic Vacuum Ball Valve                | 33 |

气动三通球阀 Pneumatic 3-way ball valve

|                                                                                     |                                                           |    |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------|----|
|  | HK55-TF 气动三通法兰球阀 Pneumatic 3-Way Flanged Ball Valve       | 35 |
|  | HK56-T 气动三通螺纹球阀 Pneumatic 3-Way Thread Ball Valve         | 39 |
|  | HK56-WT 气动三通卫生级球阀 Pneumatic 3-Way Sanitary Ball Valve     | 40 |
|  | HK57-T 气动三通PVC球阀 Pneumatic 3-Way PVC Ball Valve           | 41 |
|  | HK56-GT 气动三通高压球阀 Pneumatic 3-Way High-pressure Ball Valve | 42 |

☞ 气动蝶阀 Pneumatic Butterfly Valve

|                                                                                       |                                                                 |    |
|---------------------------------------------------------------------------------------|-----------------------------------------------------------------|----|
|    | HK59-D 气动对夹式铸铁软密封蝶阀 Pneumatic Wafer Cast Iron Butterfly Valve   | 44 |
|    | HK59-D-S 气动对夹式软密封蝶阀 Pneumatic Wafer Soft Seal Butterfly Valve   | 45 |
|    | HK59-D-M 气动凸耳式蝶阀 Pneumatic Lugged Butterfly Valve               | 47 |
|    | HK59-D-F 气动法兰式蝶阀 Pneumatic Flanged Butterfly Valve              | 48 |
|    | HK59-D-C 气动衬氟蝶阀 Pneumatic Fluorine-lined Butterfly Valve        | 49 |
|    | HK59-D-G 气动硬密封蝶阀 Pneumatic Hard Seal Butterfly Valve            | 51 |
|    | HK59-D-GF 气动法兰硬密封蝶阀 Pneumatic Flanged Hard Seal Butterfly Valve | 53 |
|   | HK59-D-P 气动PVC蝶阀 Pneumatic PVC Butterfly Valve                  | 54 |
|  | HK59-D-W 气动卫生级蝶阀 Pneumatic Sanitary Butterfly Valve             | 55 |
|  | HK59-LD-W 立式气动卫生级蝶阀 Vertical Pneumatic Sanitary Butterfly Valve | 56 |

☞ 气动刀闸、截止、闸阀 Pneumatic Knife Gate/globe Valve/gate Value

|                                                                                       |                                           |    |
|---------------------------------------------------------------------------------------|-------------------------------------------|----|
|  | HK59-D-D 气动刀闸阀 Pneumatic Knife Gate Valve | 57 |
|  | HK59-Z 气动闸阀 Pneumatic Gate Valve          | 59 |
|  | HK59-S 气动截止阀 Pneumatic Globe Valve        | 60 |

☞ 气动调节阀 Pneumatic Control Valve

|                                                                                       |                                                        |    |
|---------------------------------------------------------------------------------------|--------------------------------------------------------|----|
|  | HK59-B-S 气动二通调节阀 Pneumatic 2 Way Control Valve         | 61 |
|  | HK59-B-TS 气动三通调节阀 Pneumatic 3 Way Control Valve        | 65 |
|  | HK59-ZLS 自力式压力调节阀 Self-operated Pressure Control Valve | 67 |

☞ 气动阀配件 Pneumatic Accessories

|                                                                                       |                                  |    |
|---------------------------------------------------------------------------------------|----------------------------------|----|
|  | 气源元件 Air Components              | 71 |
|  | 气动换向电磁阀 Reversing Solenoid Valve | 75 |
|  | 限位开关 Limit Switch                | 77 |
|  | 定位器 Positioner                   | 79 |
|  | 气动涡轮 Gear Box                    | 81 |

☞ 气动角座阀 Pneumatic Angle Seat Valve

Uses and Structural Features of Product

Pneumatic ball valve series are widely used in natural gas, oil, chemical industry, metallurgy, papermaking, power, mining, printing and dyeing, biological pharmacy, daily chemicals, foodstuff and beverage, water treatment and air treatment etc. For the automatic or adjustment control of fluid, together with automatic pneumatic meters.

The Structural Features of Pneumatic Ball Valves Series:

Pneumatic Actuator uses new-style AT pneumatic actuator, provided with both double-acting and single-acting types(spring reposition), driven by gear and rack with high dependability; big diameter valves are driven by AW pneumatic actuator on pull-extraction manner, with reasonable structure and large output torque as well as both double-acting and single-acting types(spring reposition).Refer to our stylebook of pneumatic actuator for more details information.

- **Shell Structure:**As per users' requirements and real working conditions, fixed ball valves can be designed to three structures including cast, forged and full-welded, and valves of full-welded structure are mainly applicable for buried use.  
Unique Sealing Structure of Valve Base Floating ball valve adopts the structure of lip-type elastic sealing ring to insure the sealing dependability. For ball valves used in low-tension, ultra-low-tension or vacuum conditions, the valve-base sealing structure with leaf spring loading is adopted to maintain long-time reliable sealing. The valve-base of high-or medium-temperature ball valve may use para-position polyphenylene or metal material.  
According to the difference in pressure, medium character and sealing requirements, fixed ball valve may choose structures of front-ball sealing, back-ball sealing or front-back double sealing. The valve base of high-or medium-temperature ball valve may use para-position polyphenylene or metal material.
- **Obstruction and Drainage:** When valve is in off-position, the valve bases at upper and lower stream will interdict the fluid, and the deposit in the cavity may be discharged by drainage device.  
Automatic Pressure-relieving Structure: In case of abnormal rise of pressure occurred in cloaca cavity, the mediums in it may drive the valve base with its self-thrust to realize automatic pressure relief, thus to ensure the safety of valve body.
- **Reliable Sealing of Stem:** Valve stem adopts the downward installation structure with back sealing. The sealing power increases along with the rise of medium pressure, thus to ensure reliable sealing of valve stem. In addition, stem will not burst forth in case of abnormal pressure rise.
- **Fireproof Structure:** Fireproof structure may be adopted for ball valve as per working conditions and users' requirements. The fireproof design conforms to API 6D and JB/T6899 standards etc. In case of soft sealing ring being damaged in fire, the fireproof structure can stop the large leakage of medium, thus to avoid further expansion of fire.
- **Anti-static Structure:** When operating, the friction between sphere and base may cause static charge accumulated on the sphere. To avoid static spark, static device is provided on the valve to educt the electric charge on the sphere.
- **Full Bore Structure and Reduced Bore Structure:** These two series are offered to meet users' different requirements. The passage inside diameter of full bore ball valve is the same as that of pipe, making it convenient for control and cleaning. The weight of reduced bore ball valve is relatively smaller, but the fluid resistance is only around 1/7 of that of stop valve with the same caliber. Therefore, the application prospect is much better for the latter.

Products Performance Specification

| Pressure grade      |                  | Nominal Pressure PN(MPa)                                                                                                                                                                                                                                                                                |      |     |                                            |      | Pound(Class) |                                            |      |      |
|---------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|--------------------------------------------|------|--------------|--------------------------------------------|------|------|
|                     |                  | 1.6                                                                                                                                                                                                                                                                                                     | 2.5  | 4.0 | 6.4                                        | 10.0 | 150          | 300                                        | 400  | 600  |
| Test Pressure (MPa) | Shell test       | 2.4                                                                                                                                                                                                                                                                                                     | 3.75 | 6.0 | 9.6                                        | 15.0 | 3.03         | 7.5                                        | 10.2 | 15.0 |
|                     | Sealing test     | 1.76                                                                                                                                                                                                                                                                                                    | 2.75 | 4.4 | 7.04                                       | 11.0 | 2.2          | 5.5                                        | 7.48 | 11.0 |
|                     | Air Sealing Test | 0.6(MPa)                                                                                                                                                                                                                                                                                                |      |     |                                            |      |              |                                            |      |      |
| Applicable medium   |                  | Material of Valve Body                                                                                                                                                                                                                                                                                  |      |     |                                            |      |              |                                            |      |      |
|                     |                  | CARBON STEEL                                                                                                                                                                                                                                                                                            |      |     | STAINLESS STEEL 304                        |      |              | STAINLESS STEEL 316                        |      |      |
|                     |                  | Water, Steam, oil and liquefied gas etc.                                                                                                                                                                                                                                                                |      |     | Corrosive mediums such as nitric acid etc. |      |              | Corrosive mediums such as nitric acid etc. |      |      |
| Special Medium      |                  | Natural gas containing sulphureted hydrogen; transportation system for coal powder or aluminum powder used for the smelting of steel and non-ferrous metal; mediums used for the transportation of paper pulp in papermaking industry as well as other mediums containing granules or staple fiber etc. |      |     |                                            |      |              |                                            |      |      |

产品用途及结构特点

系列气动球阀广泛适用于天然气、油品、化工、冶金、造纸、电力、矿业，印染、生物制药，日用化工，食品饮料，水处理及空气处理等行业的流体自动控制或调节控制，与自动化气动仪表配套使用。

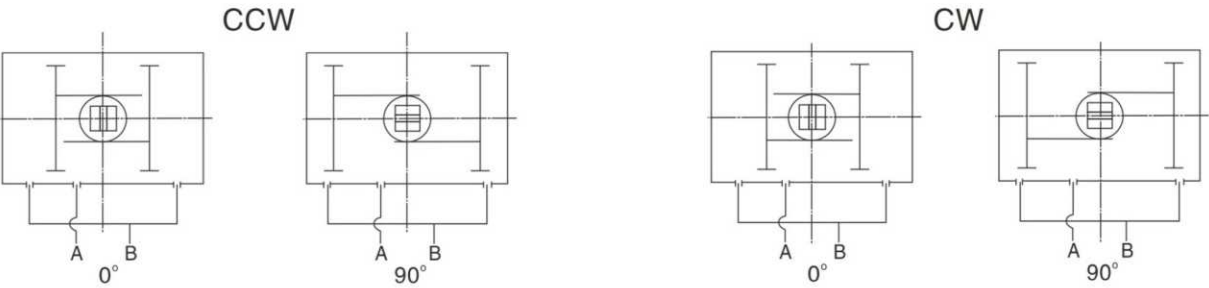
系列气动球阀结构特点为：

- **气动执行器：**采用新型AT系列气动执行器，其结构获得国家实用新型专利有双作用式和单作用式(弹簧复位),采用齿轮齿条式结构传动,性能更安全可靠；大口径阀门采用AW系列气动执行器，采用拨叉式结构传动，结构合理，输出扭矩大，有双作用式和单作用式(弹簧复位)；
- **壳体结构：**球阀的阀体根据使用需要及实际工况条件的不同可设计为铸造结构、锻造结构及全焊接结构三种形式，其中全焊接结构的球阀主要适用于埋地使用。
- **独特的阀座密封结构：**  
浮动式球阀采用唇型弹性密封圈结构设计，其结构获得国家实用新型专利更能保证密封的可靠性及使用寿命，对于低压、超低压或真空工况用球阀，采用板簧加载的阀座密封结构，能确保球阀长期使用的可靠密封。中、高温球阀的阀座材料可选用对位聚苯或金属材料。  
固定式球阀根据压力的大小、介质性质及密封要求的不同而选择球前密封结构、球密封结构或前后双密封结构。中、高温球阀的阀座材料可选用对位聚苯或金属材料。
- **阻塞与排泄：**当阀门处于关闭状态时，上下流侧的阀座使液体阻断，阀体中腔的积滞物可以通过排泄装置进行排泄。
- **自动泄压结构：**当中腔压力出现异常升高现象时，中腔介质能依靠本身的推力推动阀座而自动泄压，从而确保阀体的安全。
- **阀杆的可靠密封：**阀杆采用有倒密封的下装式结构，倒密封的密封力随介质压力的增高而增大，故能确保阀杆的可靠密封，而且，当阀门异常升压时，阀杆不会喷出。
- **防火结构：**根据工况及用户的需要，球阀可设计为防火结构。球阀的耐火设计执行API 6D及JB/T6899等标准的规定，一旦发生火灾而使软密封圈烧损时，球阀的防火结构可阻止介质的大量泄漏，防止火灾的进一步扩大。
- **防静电结构：**当操作阀门时，由于球体和阀座之间的磨擦，会产生静电电荷会积聚在球体上，为防止产生静电火花，特定阀门上设置防静电导出装置，将积聚在球体上的电荷导出。
- **全通径结构及缩径结构：**为满足用户的不同需要，科威纳公司球阀产品有全通径及缩径两种系列。全通径球阀的通道内径与管道内径一致，便于管理清扫，而缩径系列球阀的重量相对较轻，但流体阻力仅为相同口径截止阀的1/7左右，故缩径系列球阀的应用前景较为广泛。

产品性能规范

| 压力等级          |       | 公称压力PN(MPa)                                                   |      |     |           |      | 磅级(Class) |           |      |      |
|---------------|-------|---------------------------------------------------------------|------|-----|-----------|------|-----------|-----------|------|------|
|               |       | 1.6                                                           | 2.5  | 4.0 | 6.4       | 10.0 | 150       | 300       | 400  | 600  |
| 试验压力<br>(MPa) | 壳体试验  | 2.4                                                           | 3.75 | 6.0 | 9.6       | 15.0 | 3.03      | 7.5       | 10.2 | 15.0 |
|               | 密封试验  | 1.76                                                          | 2.75 | 4.4 | 7.04      | 11.0 | 2.2       | 5.5       | 7.48 | 11.0 |
|               | 气密封试验 | 0.6(MPa)                                                      |      |     |           |      |           |           |      |      |
| 适用介质          |       | 阀体材质                                                          |      |     |           |      |           |           |      |      |
|               |       | 碳钢                                                            |      |     | 不锈钢304    |      |           | 不锈钢316    |      |      |
|               |       | 水、蒸气、油品、液化气等                                                  |      |     | 硝酸类腐蚀性介质等 |      |           | 醋酸类腐蚀性介质等 |      |      |
| 特殊介质          |       | 含有硫化氢的天然气介质；用于钢铁及有色金属冶炼的煤粉、铝粉输送系统；用于造纸行业的纸浆输送及其它含有颗粒、短纤维的介质等。 |      |     |           |      |           |           |      |      |

Double Acting Actuators 双作用执行器



Air to Port A forces the pistons outwards, causing the pinion to turn counterclockwise while the air is being exhausted from Port B.  
Air to Port B forces the pistons inwards, causing the pinion to turn clockwise while the air is being exhausted from Port A.  
A口进气, 压缩空气推动活塞向外运动, 使执行器输出轴顺时针旋转(0°-90°), B口排气。  
B口进气, 压缩空气推动活塞向内运动, 使执行器输出轴逆时针旋转(90°-0°), A口排气。

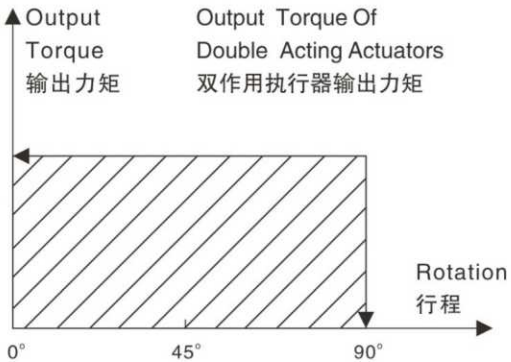
Air to Port A forces the pistons outwards, causing the pinion to turn clockwise while the air is being exhausted from Port B.  
Air to Port B forces the pistons inwards, causing the pinion to turn counterclockwise while the air is being exhausted from Port A.  
A口进气, 压缩空气推动活塞向外运动, 使执行器输出轴逆时针旋转(0°-90°), B口排气。  
B口进气, 压缩空气推动活塞向内运动, 使执行器输出轴顺时针旋转(90°-0°), A口排气。

Output Torque Of Double Acting Actuators 双作用执行器输出力矩(Unit:N.m)

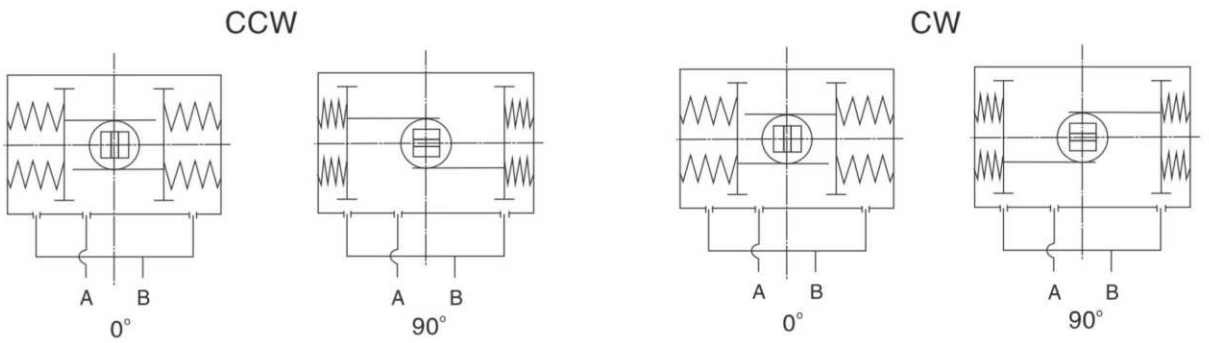
| Model<br>型号 | Air supply pressure (Unit: Bar) 输入气源压力(单位: 巴) |        |        |        |        |        |        |        |        |        |
|-------------|-----------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|             | 2                                             | 2.5    | 3      | 4      | 4.5    | 5      | 5.5    | 6      | 7      | 8      |
| AT52DA      | 8.0                                           | 10.0   | 12.0   | 16.0   | 18.0   | 20.0   | 21.9   | 23.9   | 27.9   | 31.9   |
| AT65DA      | 14.6                                          | 18.2   | 21.9   | 29.2   | 32.8   | 36.5   | 40.1   | 43.8   | 51.1   | 58.4   |
| AT75DA      | 20.1                                          | 25.1   | 30.1   | 40.1   | 45.1   | 50.2   | 55.2   | 60.2   | 70.2   | 80.3   |
| AT85DA      | 31.4                                          | 39.2   | 47.0   | 62.7   | 70.5   | 78.4   | 86.2   | 94.1   | 109.7  | 125.4  |
| AT92DA      | 45.1                                          | 56.4   | 67.7   | 90.3   | 101.6  | 112.9  | 124.1  | 135.4  | 158.0  | 180.6  |
| AT105DA     | 66.1                                          | 82.7   | 99.2   | 132.2  | 148.8  | 165.3  | 181.8  | 198.4  | 231.4  | 264.5  |
| AT125DA     | 100.3                                         | 125.4  | 150.5  | 200.6  | 225.7  | 250.8  | 275.9  | 301.0  | 351.1  | 401.3  |
| AT140DA     | 171.0                                         | 213.8  | 256.5  | 342.0  | 384.8  | 427.5  | 470.3  | 513.0  | 598.5  | 684.0  |
| AT160DA     | 266.0                                         | 332.5  | 399.0  | 532.0  | 598.5  | 665.0  | 731.5  | 798.0  | 931.0  | 1064.0 |
| AT190DA     | 425.6                                         | 532.0  | 638.4  | 851.2  | 957.6  | 1064.0 | 1170.4 | 1276.8 | 1489.6 | 1702.4 |
| AT210DA     | 532.0                                         | 665.0  | 798.0  | 1064.0 | 1197.0 | 1330.0 | 1463.0 | 1596.0 | 1862.0 | 2128.0 |
| AT240DA     | 769.5                                         | 961.9  | 1154.3 | 1539.0 | 1731.4 | 1923.8 | 2116.1 | 2308.5 | 2693.3 | 3078.0 |
| AT270DA     | 1169.6                                        | 1462.1 | 1754.5 | 2339.3 | 2631.7 | 2924.1 | 3216.5 | 3508.9 | 4093.7 | 4678.6 |

Selection of Double Acting Actuator:  
The suggested safety factor for double acting actuators under normal working conditions is 20%-30%.  
Example:  
• The torque needed by valve=100N.m  
• The torque considered safety factor (1+30%)=130N.m  
• Air Supply=5Bar  
According to the above table, we can choose the minimum model is AT160DA.

双作用执行器的选型:  
在正常操作条件下, 双作用执行器考虑的安全系数为20%-30%。  
示例:  
• 阀门力矩=100N.m  
• 安全力矩=100×(1+30%)=130N.m  
• 气源压力=5Bar  
对照双作用力矩表, 选配双作用执行器最小规格为AT160DA。



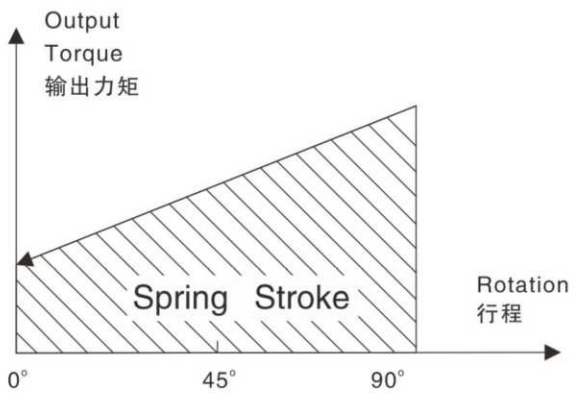
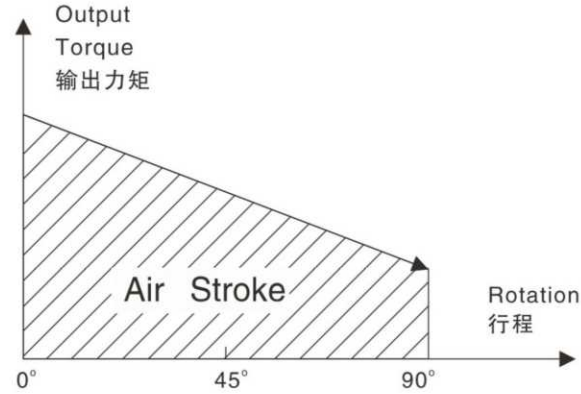
Spring Acting Actuators 单作用执行器



Air to port A forces the pistons outwards, causing the springs to compress, The pinion turns counter clockwise while air is being exhausted from port B.  
Loss of air pressure on port A, the stored energy in the springs forces the pistons inwards. The pinion turns clockwise while air is being exhausted from port A.  
A口进气, 压缩空气克服弹簧力, 推动活塞向外运动, 执行器输出轴逆时针转动(0°→90°), B口排气;  
执行器失气, 活塞在弹簧力的作用下向内运动, 执行器输出轴顺时针转动(90°→0°), A口排气。

Air to port B forces the pistons outwards, causing the springs to compress, The pinion turns counterclockwise while air is being exhausted from port B.  
Loss of air pressure on port A, the stored energy in the springs forces the pistons inwards. The pinion turns clockwise while air is being exhausted from port A.  
A口进气, 压缩空气克服弹簧力, 推动活塞向外运动, 执行器输出轴逆时针转动(0°→90°), B口排气;  
执行器失气, 活塞在弹簧力的作用下向内运动, 执行器输出轴逆时针转动(90°→0°), A口排气。

Output Torque Of Spring Return Actuators 单作用执行器输出力矩



NOTE:  
Make sure that the torque necessary to operate the valve is compatible with the actuator torque (It depends on both actuator type and air supply).  
Please note that the requested torque depends not only on the valve, but on the working conditions and the safety margins of the plant in question, too.

注意:  
确保执行器的输出扭矩和驱动阀门所需要的扭矩相符(执行器的型号和气源压力)。  
请注意, 选型扭矩不仅取决于阀门, 还要考虑相关工况、安全系数等参数。

■ Output Torque of Spring Return Actuators 单作用执行器输出力矩(Unit: N.m)

| Output torque of air to springs 气源克服弹簧输出力矩 |                            |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             | Springs' output<br>弹簧输出力矩 |  |
|--------------------------------------------|----------------------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|---------------------------|--|
| Air pressure<br>气源压力                       |                            | 2.5Bar      |           | 3Bar        |           | 4Bar        |           | 5Bar        |           | 6Bar        |           | 7Bar        |           | 8Bar        |           |             |                           |  |
| Model<br>型号                                | Spring<br>Q.ty<br>弹簧<br>数量 | 0°          | 90°       | 0°          | 90°       | 0°          | 90°       | 0°          | 90°       | 0°          | 90°       | 0°          | 90°       | 0°          | 90°       | 0°          | 90°                       |  |
|                                            |                            | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束                 |  |
| AT52SR                                     | 5                          | 5.7         | 3.8       | 7.6         | 5.7       |             |           |             |           |             |           |             |           |             |           | 6.2         | 4.3                       |  |
|                                            | 6                          | 4.9         | 2.5       | 6.9         | 4.5       | 10.9        | 8.5       |             |           |             |           |             |           |             |           | 7.4         | 5.0                       |  |
|                                            | 7                          | 4.0         | 1.3       | 6.0         | 3.3       | 9.8         | 7.3       | 14.0        | 10.4      |             |           |             |           |             |           | 8.6         | 5.9                       |  |
|                                            | 8                          |             |           | 5.2         | 2.0       | 9.2         | 6.0       | 13.2        | 9.1       | 17.2        | 14.1      |             |           |             |           | 9.9         | 6.7                       |  |
|                                            | 9                          |             |           | 4.3         | 0.8       | 8.3         | 4.8       | 12.3        | 7.9       | 16.3        | 12.8      | 20.3        | 16.8      |             |           | 11.1        | 7.6                       |  |
|                                            | 10                         |             |           |             |           | 7.4         | 3.6       | 11.5        | 6.7       | 15.5        | 11.6      | 19.5        | 15.6      |             |           | 12.4        | 8.5                       |  |
|                                            | 11                         |             |           |             |           | 6.6         | 2.3       | 10.6        | 5.4       | 14.6        | 10.4      | 18.6        | 14.3      | 22.6        | 18.3      | 13.6        | 9.3                       |  |
|                                            | 12                         |             |           |             |           |             |           | 9.7         | 4.2       | 13.8        | 9.1       | 17.8        | 12.2      | 21.8        | 17.1      | 14.8        | 10.2                      |  |
| AT65SR                                     | 5                          | 11.4        | 7.7       | 15.0        | 11.4      | 22.3        | 14.9      |             |           |             |           |             |           |             |           | 10.4        | 6.8                       |  |
|                                            | 6                          | 10.1        | 5.7       | 13.6        | 9.3       | 20.9        | 16.6      | 28.3        | 23.9      |             |           |             |           |             |           | 12.5        | 8.2                       |  |
|                                            | 7                          | 8.6         | 3.6       | 12.5        | 7.2       | 19.5        | 14.5      | 26.8        | 21.9      |             |           |             |           |             |           | 14.6        | 9.6                       |  |
|                                            | 8                          |             |           | 10.9        | 5.1       | 18.2        | 12.4      | 25.5        | 19.8      | 32.8        | 27.0      | 40.1        | 34.3      |             |           | 16.7        | 10.9                      |  |
|                                            | 9                          |             |           |             |           | 16.8        | 10.4      | 24.1        | 17.7      | 31.4        | 24.9      | 38.7        | 32.2      |             |           | 18.8        | 12.3                      |  |
|                                            | 10                         |             |           |             |           | 1.4         | 8.2       | 22.8        | 15.6      | 30.0        | 22.8      | 37.3        | 30.1      | 44.7        | 37.4      | 20.9        | 13.7                      |  |
|                                            | 11                         |             |           |             |           |             |           | 21.5        | 13.5      | 28.7        | 20.7      | 36.0        | 28.0      | 43.3        | 35.3      | 22.9        | 15.0                      |  |
|                                            | 12                         |             |           |             |           |             |           | 20.0        | 11.4      | 27.3        | 18.6      | 34.6        | 25.9      | 41.9        | 33.3      | 25.0        | 16.4                      |  |
| AT75SR                                     | 5                          | 14.5        | 10.6      | 19.4        | 15.5      | 29.5        | 25.7      |             |           |             |           |             |           |             |           | 14.5        | 10.5                      |  |
|                                            | 6                          | 12.4        | 7.6       | 17.3        | 12.6      | 27.4        | 22.7      | 37.5        | 32.8      |             |           |             |           |             |           | 17.4        | 12.7                      |  |
|                                            | 7                          | 10.4        | 4.8       | 15.2        | 9.7       | 25.3        | 19.9      | 35.4        | 29.9      |             |           |             |           |             |           | 20.3        | 14.8                      |  |
|                                            | 8                          |             |           | 13.1        | 6.8       | 23.1        | 16.9      | 33.3        | 27.0      | 43.2        | 37.0      | 53.3        | 47.0      |             |           | 23.2        | 16.9                      |  |
|                                            | 9                          |             |           |             |           | 21.0        | 14.1      | 31.2        | 24.1      | 41.1        | 34.1      | 51.2        | 44.2      |             |           | 26.1        | 19.0                      |  |
|                                            | 10                         |             |           |             |           | 19.0        | 11.1      | 28.8        | 21.2      | 39.0        | 31.2      | 49.1        | 41.2      | 59.1        | 51.2      | 29.0        | 21.1                      |  |
|                                            | 11                         |             |           |             |           |             |           | 27.0        | 18.3      | 37.0        | 28.3      | 47.0        | 38.4      | 57.0        | 48.4      | 31.9        | 23.2                      |  |
|                                            | 12                         |             |           |             |           |             |           | 24.9        | 15.4      | 34.9        | 25.4      | 44.9        | 35.4      | 54.9        | 45.4      | 34.7        | 25.3                      |  |
| AT85SR                                     | 5                          | 23.3        | 16.1      | 31.1        | 24.0      | 46.8        | 39.7      |             |           |             |           |             |           |             |           | 23.0        | 15.8                      |  |
|                                            | 6                          | 20.1        | 11.5      | 28.0        | 19.3      | 43.7        | 35.1      | 59.4        | 50.7      |             |           |             |           |             |           | 27.6        | 19.0                      |  |
|                                            | 7                          | 17.0        | 6.9       | 24.8        | 14.8      | 40.5        | 30.5      | 56.2        | 46.2      |             |           |             |           |             |           | 32.2        | 22.1                      |  |
|                                            | 8                          |             |           | 21.7        | 10.1      | 37.4        | 25.8      | 53.1        | 41.5      | 68.8        | 57.2      | 84.5        | 72.9      |             |           | 36.8        | 25.3                      |  |
|                                            | 9                          |             |           |             |           | 34.2        | 21.3      | 49.9        | 37.0      | 65.6        | 52.6      | 81.2        | 68.3      |             |           | 41.4        | 28.5                      |  |
|                                            | 10                         |             |           |             |           | 31.0        | 16.6      | 46.7        | 32.3      | 62.4        | 48.0      | 78.1        | 63.7      | 93.8        | 79.3      | 46.0        | 31.6                      |  |
|                                            | 11                         |             |           |             |           |             |           | 43.6        | 27.7      | 59.3        | 43.4      | 75.0        | 59.1      | 90.6        | 74.8      | 50.6        | 34.8                      |  |
|                                            | 12                         |             |           |             |           |             |           | 40.4        | 23.2      | 56.1        | 38.9      | 71.7        | 54.5      | 87.4        | 70.2      | 55.2        | 38.0                      |  |
| AT92SR                                     | 5                          | 33.1        | 22.0      | 44.2        | 33.2      | 66.8        | 55.9      |             |           |             |           |             |           |             |           | 34.4        | 23.3                      |  |
|                                            | 6                          | 28.4        | 15.2      | 39.6        | 26.4      | 62.2        | 49.0      | 84.8        | 71.6      |             |           |             |           |             |           | 41.2        | 28.0                      |  |
|                                            | 7                          | 23.8        | 8.2       | 34.9        | 19.4      | 57.5        | 42.1      | 80.2        | 64.7      |             |           |             |           |             |           | 48.1        | 32.7                      |  |
|                                            | 8                          |             |           | 31.3        | 12.6      | 52.9        | 35.2      | 75.5        | 57.9      | 98.1        | 80.5      | 120.7       | 103.0     |             |           | 55.0        | 37.3                      |  |
|                                            | 9                          |             |           |             |           | 48.2        | 28.4      | 70.9        | 51.0      | 93.5        | 73.6      | 116.0       | 96.1      |             |           | 61.9        | 42.0                      |  |
|                                            | 10                         |             |           |             |           | 43.6        | 21.5      | 66.2        | 44.1      | 88.8        | 66.7      | 111.3       | 89.2      | 134.0       | 111.8     | 68.7        | 46.7                      |  |
|                                            | 11                         |             |           |             |           |             |           | 61.5        | 37.2      | 84.1        | 59.9      | 106.6       | 82.4      | 129.2       | 105.0     | 75.6        | 51.4                      |  |
|                                            | 12                         |             |           |             |           |             |           | 56.8        | 30.4      | 79.4        | 53.0      | 101.9       | 75.5      | 124.5       | 98.1      | 82.5        | 56.0                      |  |
| AT105SR                                    | 5                          | 51.0        | 33.4      | 67.5        | 49.9      | 100.6       | 83.0      |             |           |             |           |             |           |             |           | 49.2        | 31.6                      |  |
|                                            | 6                          | 44.7        | 23.5      | 61.1        | 40.0      | 94.2        | 73.2      | 127.3       | 106.2     |             |           |             |           |             |           | 59.1        | 38.0                      |  |
|                                            | 7                          | 38.4        | 13.7      | 54.9        | 30.3      | 87.9        | 63.4      | 121.0       | 96.4      |             |           |             |           |             |           | 68.9        | 44.3                      |  |
|                                            | 8                          |             |           | 48.5        | 20.4      | 81.6        | 53.5      | 114.7       | 86.5      | 147.7       | 119.6     | 180.8       | 152.7     |             |           | 78.7        | 50.6                      |  |
|                                            | 9                          |             |           |             |           | 75.3        | 43.7      | 108.4       | 76.8      | 141.5       | 109.8     | 174.5       | 142.9     |             |           | 88.6        | 56.9                      |  |
|                                            | 10                         |             |           |             |           | 68.9        | 33.4      | 102.0       | 66.5      | 135.1       | 99.6      | 168.2       | 132.6     | 201.2       | 165.7     | 98.4        | 63.3                      |  |
|                                            | 11                         |             |           |             |           |             |           | 95.7        | 57.0      | 128.7       | 90.1      | 161.8       | 123.1     | 194.8       | 156.2     | 108.3       | 69.6                      |  |
|                                            | 12                         |             |           |             |           |             |           | 89.4        | 47.5      | 122.5       | 80.6      | 155.5       | 113.6     | 188.6       | 146.7     | 118.1       | 75.9                      |  |

■ Output Torque of Spring Return Actuators 单作用执行器输出力矩(Unit: N.m)

| Output torque of air to springs 气源克服弹簧输出力矩 |                           |             |           |             |           |             |           |             |           |             |           |             |           |             |           |             | Springs' output<br>弹簧输出力矩 |      |
|--------------------------------------------|---------------------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|---------------------------|------|
| Air pressure<br>气源压力                       |                           | 2.5Bar      |           | 3Bar        |           | 4Bar        |           | 5Bar        |           | 6Bar        |           | 7Bar        |           | 8Bar        |           |             |                           |      |
| Model<br>型号                                | Spring<br>Qty<br>弹簧<br>数量 | 0°          | 90°       | 0°          | 90°       | 0°          | 90°       | 0°          | 90°       | 0°          | 90°       | 0°          | 90°       | 0°          | 90°       | 0°          | 90°                       |      |
|                                            |                           | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束 | Start<br>开始 | End<br>结束                 |      |
| AT125SR                                    | 5                         | 73          | 47        | 98          | 72        | 148         | 122       |             |           |             |           |             |           |             |           |             | 79                        | 52   |
|                                            | 6                         | 63          | 31        | 88          | 56        | 138         | 107       | 188         | 157       |             |           |             |           |             |           |             | 94                        | 63   |
|                                            | 7                         | 52          | 15        | 77          | 40        | 127         | 90        | 178         | 141       |             |           |             |           |             |           |             | 110                       | 73   |
|                                            | 8                         |             |           |             | 67        | 25          | 117       | 75          | 167       | 125         | 217       | 176         | 268       | 226         |           |             | 125                       | 84   |
|                                            | 9                         |             |           |             |           |             | 107       | 59          | 157       | 109         | 207       | 159         | 257       | 210         |           |             | 141                       | 94   |
|                                            | 10                        |             |           |             |           |             | 96        | 44          | 146       | 94          | 196       | 144         | 247       | 194         | 297       | 245         | 157                       | 105  |
|                                            | 11                        |             |           |             |           |             |           |             | 136       | 78          | 186       | 128         | 236       | 178         | 286       | 228         | 173                       | 115  |
|                                            | 12                        |             |           |             |           |             |           |             | 125       | 63          | 176       | 113         | 226       | 163         | 276       | 213         | 188                       | 125  |
| AT140SR                                    | 5                         | 128         | 85        | 171         | 127       | 256         | 213       |             |           |             |           |             |           |             |           |             | 129                       | 86   |
|                                            | 6                         | 111         | 59        | 154         | 102       | 239         | 187       | 325         | 273       |             |           |             |           |             |           |             | 155                       | 103  |
|                                            | 7                         | 94          | 33        | 137         | 76        | 222         | 162       | 308         | 247       |             |           |             |           |             |           |             | 181                       | 120  |
|                                            | 8                         |             |           |             | 120       | 50          | 205       | 136         | 291       | 221         | 376       | 307         | 462       | 392         |           |             | 206                       | 137  |
|                                            | 9                         |             |           |             |           |             | 187       | 110         | 273       | 196         | 358       | 281         | 444       | 367         |           |             | 232                       | 155  |
|                                            | 10                        |             |           |             |           |             | 170       | 84          | 256       | 169         | 341       | 255         | 427       | 340         | 512       | 426         | 258                       | 172  |
|                                            | 11                        |             |           |             |           |             |           |             | 238       | 143         | 324       | 229         | 409       | 314         | 495       | 400         | 284                       | 189  |
|                                            | 12                        |             |           |             |           |             |           |             | 221       | 118         | 307       | 203         | 392       | 289         | 478       | 374         | 310                       | 206  |
| AT160SR                                    | 5                         | 193         | 124       | 259         | 191       | 392         | 324       |             |           |             |           |             |           |             |           |             | 208                       | 140  |
|                                            | 6                         | 165         | 83        | 232         | 149       | 365         | 282       | 498         | 415       |             |           |             |           |             |           |             | 250                       | 168  |
|                                            | 7                         | 137         | 41        | 203         | 107       | 336         | 240       | 469         | 373       |             |           |             |           |             |           |             | 292                       | 196  |
|                                            | 8                         |             |           |             | 176       | 66          | 309       | 199         | 442       | 237         | 575       | 465         | 708       | 598         |           |             | 333                       | 223  |
|                                            | 9                         |             |           |             |           |             | 280       | 157         | 413       | 290         | 546       | 423         | 679       | 556         |           |             | 375                       | 251  |
|                                            | 10                        |             |           |             |           |             | 253       | 115         | 386       | 248         | 519       | 381         | 652       | 514         | 785       | 647         | 417                       | 279  |
|                                            | 11                        |             |           |             |           |             |           |             | 358       | 207         | 491       | 340         | 624       | 473         | 757       | 606         | 458                       | 307  |
|                                            | 12                        |             |           |             |           |             |           |             | 330       | 165         | 463       | 298         | 596       | 431         | 729       | 564         | 500                       | 335  |
| AT190SR                                    | 5                         | 332         | 222       | 438         | 329       | 651         | 542       |             |           |             |           |             |           |             |           |             | 309                       | 200  |
|                                            | 6                         | 292         | 161       | 398         | 267       | 611         | 480       | 824         | 693       |             |           |             |           |             |           |             | 371                       | 240  |
|                                            | 7                         | 252         | 99        | 358         | 205       | 571         | 418       | 784         | 631       |             |           |             |           |             |           |             | 433                       | 280  |
|                                            | 8                         |             |           |             | 318       | 143         | 531       | 356         | 744       | 569         | 957       | 782         | 1169      | 995         |           |             | 495                       | 320  |
|                                            | 9                         |             |           |             |           |             | 491       | 295         | 704       | 507         | 917       | 720         | 1130      | 933         |           |             | 557                       | 360  |
|                                            | 10                        |             |           |             |           |             | 451       | 233         | 664       | 446         | 877       | 658         | 1090      | 871         | 1302      | 1084        | 618                       | 400  |
|                                            | 11                        |             |           |             |           |             |           |             | 624       | 384         | 837       | 597         | 1050      | 809         | 1263      | 1022        | 680                       | 440  |
|                                            | 12                        |             |           |             |           |             |           |             | 584       | 322         | 797       | 535         | 1010      | 748         | 1223      | 960         | 742                       | 480  |
| AT210SR                                    | 5                         | 390         | 285       | 523         | 418       | 789         | 684       |             |           |             |           |             |           |             |           |             | 380                       | 275  |
|                                            | 6                         | 335         | 209       | 468         | 342       | 734         | 608       | 1000        | 874       |             |           |             |           |             |           |             | 456                       | 330  |
|                                            | 7                         | 280         | 133       | 413         | 266       | 679         | 532       | 945         | 798       |             |           |             |           |             |           |             | 532                       | 385  |
|                                            | 8                         |             |           |             | 358       | 190         | 624       | 456         | 890       | 722         | 1156      | 988         | 1422      | 1254        |           |             | 608                       | 440  |
|                                            | 9                         |             |           |             |           |             | 569       | 380         | 835       | 646         | 1101      | 912         | 1367      | 1178        |           |             | 684                       | 495  |
|                                            | 10                        |             |           |             |           |             | 514       | 304         | 780       | 570         | 1046      | 836         | 1312      | 1102        | 1578      | 1368        | 760                       | 550  |
|                                            | 11                        |             |           |             |           |             |           |             | 725       | 494         | 991       | 760         | 1257      | 1026        | 1523      | 1292        | 836                       | 605  |
|                                            | 12                        |             |           |             |           |             |           |             | 670       | 418         | 936       | 684         | 1202      | 950         | 1468      | 1216        | 912                       | 660  |
| AT240SR                                    | 5                         | 552         | 409       | 744         | 600       | 1129        | 985       |             |           |             |           |             |           |             |           |             | 554                       | 410  |
|                                            | 6                         | 470         | 297       | 662         | 489       | 1047        | 874       | 1432        | 1259      |             |           |             |           |             |           |             | 665                       | 492  |
|                                            | 7                         | 388         | 187       | 580         | 379       | 964         | 764       | 1349        | 1149      |             |           |             |           |             |           |             | 775                       | 575  |
|                                            | 8                         |             |           |             | 498       | 268         | 883       | 653         | 1267      | 1037        | 1652      | 1422        | 2037      | 1807        |           |             | 886                       | 656  |
|                                            | 9                         |             |           |             |           |             | 800       | 542         | 1185      | 926         | 1569      | 1311        | 1954      | 1696        |           |             | 998                       | 739  |
|                                            | 10                        |             |           |             |           |             | 718       | 431         | 1103      | 816         | 1488      | 1201        | 1872      | 1586        | 2257      | 1970        | 1108                      | 821  |
|                                            | 11                        |             |           |             |           |             |           |             | 1021      | 705         | 1406      | 1090        | 1791      | 1474        | 2176      | 1859        | 1219                      | 903  |
|                                            | 12                        |             |           |             |           |             |           |             | 939       | 594         | 1323      | 979         | 1708      | 1363        | 2093      | 1748        | 1330                      | 985  |
| AT270SR                                    | 5                         | 903         | 675       | 1195        | 968       | 1779        | 1552      |             |           |             |           |             |           |             |           |             | 787                       | 560  |
|                                            | 6                         | 790         | 519       | 1083        | 811       | 1667        | 1396      | 2252        | 1981      |             |           |             |           |             |           |             | 943                       | 672  |
|                                            | 7                         | 679         | 361       | 972         | 654       | 1556        | 1238      | 2141        | 1823      |             |           |             |           |             |           |             | 1101                      | 783  |
|                                            | 8                         |             |           |             | 860       | 497         | 1444      | 1081        | 2029      | 1666        | 2614      | 2252        | 3199      | 2836        |           |             | 1258                      | 895  |
|                                            | 9                         |             |           |             |           |             | 1332      | 923         | 1917      | 1509        | 2502      | 2094        | 3087      | 2678        |           |             | 1416                      | 1007 |
|                                            | 10                        |             |           |             |           |             | 1220      | 767         | 1805      | 1352        | 2390      | 1937        | 2974      | 2521        | 3560      | 3107        | 1572                      | 1119 |
|                                            | 11                        |             |           |             |           |             |           |             | 1693      | 1194        | 2278      | 1779        | 2862      | 2364        | 3448      | 2949        | 1730                      | 1231 |
|                                            | 12                        |             |           |             |           |             |           |             | 1582      | 1037        | 2167      | 1623        | 2751      | 2207        | 3336      | 2792        | 1887                      | 1342 |

### ■ Selection of Single Acting Actuator

The suggested safety factor for spring return actuator under normal working conditions is 30%–50%.

#### Example:

The torque needed by valve=80N.m

The torque consider safety factor=80(1+30%)=104N.m

Air Supply=5Bar

According to the table of spring return actuators' output, we find output torque of AT140SR K7 is:

Air stroke 0° =308N.m

Air stroke 90° =247N.m

Spring stroke 90° =181N.m

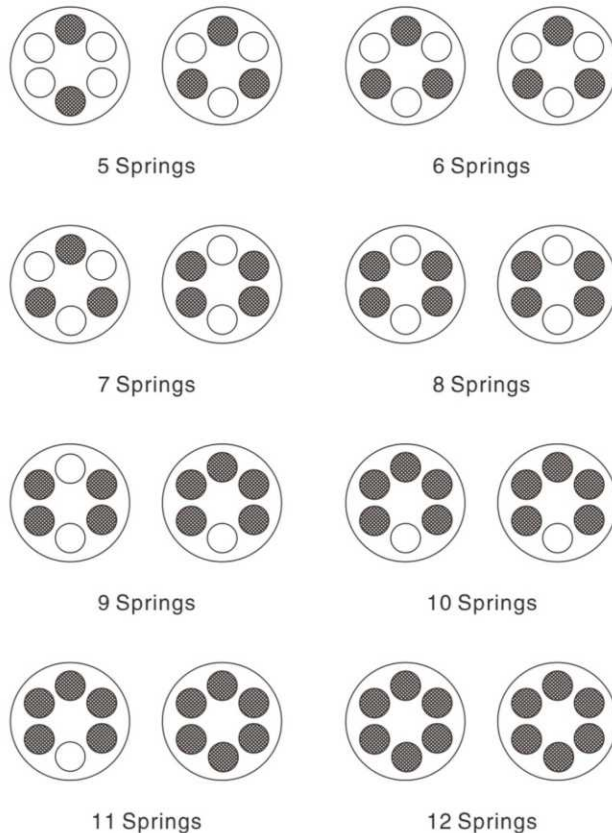
Spring stroke 0° =120N.m

All the output torque is larger than we needed.

#### Attention:

During the spring reset of the single acting actuator, the actuator B port ventilation does not affect the actuator output torque, instead, it helps the spring reset.

### ■ Single Acting Actuator Spring Installation 单作用执行器弹簧安装形式



### ■ 单作用执行器的选型

在正常工作条件下，单作用执行器考虑的安全系数为30%–50%。

#### 例如：

阀门需要力矩=80N.m

安全力矩=80(1+30%)=104N.m

气源压力=5Bar

对照单作用执行器输出力矩表，我们可以查到AT140SRK7输出力矩为：

空气行程0° =308N.m

空气行程90° =247N.m

弹簧行程90° =181N.m

弹簧行程0° =120N.m

所有输出力矩均大于我们需求。

#### 注意：

单作用执行器弹簧复位过程中，执行器B口通气不影响执行器输出力矩，相反帮助弹簧的复位。

During selecting the spring return actuators, we can choose the more reasonable and more economical actuators, if we know the different torque needed by the valve working at opening, operating and closing.

在单作用执行器的选配过程中，如果能够了解阀门在开启、运行和关闭时的扭矩分配，我们就可以更加经济、更加合理地选配执行器。

#### Example:

The max torque needed by the butterfly valve=104N.m

The torque after opened (operating)104x30%=32N.m

Air Supply=5Bar

We can select the AT125SR K11 output torque is:

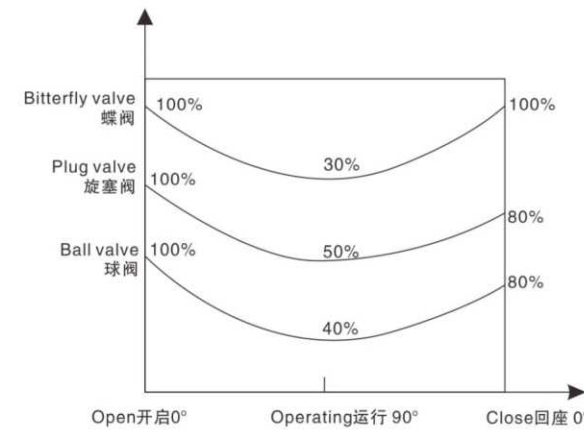
● Air stroke 0° =136N.m >104N.m

● Air stroke 90° =78N.m >32N.m

● Spring stroke 90° =173N.m >32N.m

● Spring stroke 0° =115N.m >104N.m

The above datas show the actuator's torque can satisfy the requirement of the butterfly valve.



#### 例如：

蝶阀原最大扭矩=104N.m

打开后扭矩104x30%=32N.m

气源压力=5Bar

我们可以选择AT125SR K11

● 空气行程0° =136N.m >104N.m

● 空气行程90° =78N.m >32N.m

● 弹簧行程90° =173N.m >32N.m

● 弹簧行程0° =115N.m >104N.m

以上数据显示可以满足该蝶阀的正常启闭。

### ■ Operating Conditions

#### 1. Operating media

Dry or lubricated air, or the non-corrosive gases the maximum particle diameter must less than 30 μm.

#### 2. Air supply pressure the minimum supply pressure is 2.5 Bar, the maximum supply pressure is 8 Bar.

#### 3. Operating temperature

Standard: -20°C~+80°C

Low temperature: -35°C~+80°C

High temperature: -15°C~+150°C

#### 4. Travel adjustment

Have adjustment range of ±5° for the rotation at 0° and 90°.

#### 5. Application

Either indoor or outdoor.

### ■ 工作技术条件

#### 1、工作介质

干燥或润滑的空气或无腐蚀性气体介质中杂质微粒小于30 μm。

#### 2、气源压力

最小气源压力2.5巴，最大气源压力8巴。

#### 3、介质环境温度

标准：-20°C~+80°C

低温：-35°C~+80°C

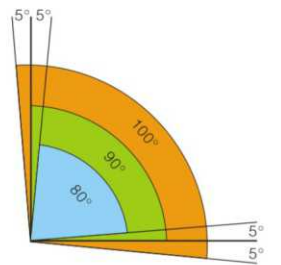
高温：-15°C~150°C

#### 4、行程调节

0°和90°两个位置有±5°的

调节范围。

#### 5、使用场合室内或室外安装。



### ■ Operating type(Single action and double action) 动作形式(单作用和双作用)



Air supply connection is designed in accordance with NAMUR Standard to install solenoid valves.

气源接口符合NAMUR标准，可简单方便地安装电磁阀。

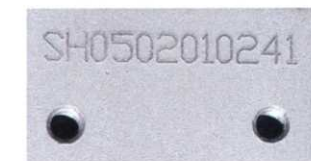
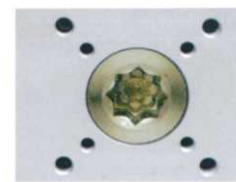
The Namur drive pinion and the Namur top mounting connection permit direct installation of accessories such as limit switch box and positioner.

输出轴的NAMUR标准槽和缸体上部标准安装孔，可使限位开关、定位器直接啮合和安装。

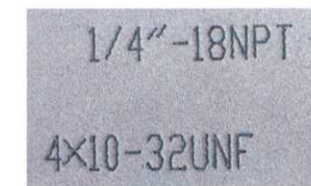


Bottom mounting connection is designed in accordance with ISO5211 and DIN3337 standards for direct mounting with valve gear boxes or mounting brackets.

底部安装孔设计符合ISO5211和DIN3337标准，可以直接安装离合器(气动手轮机构)或安装支架。

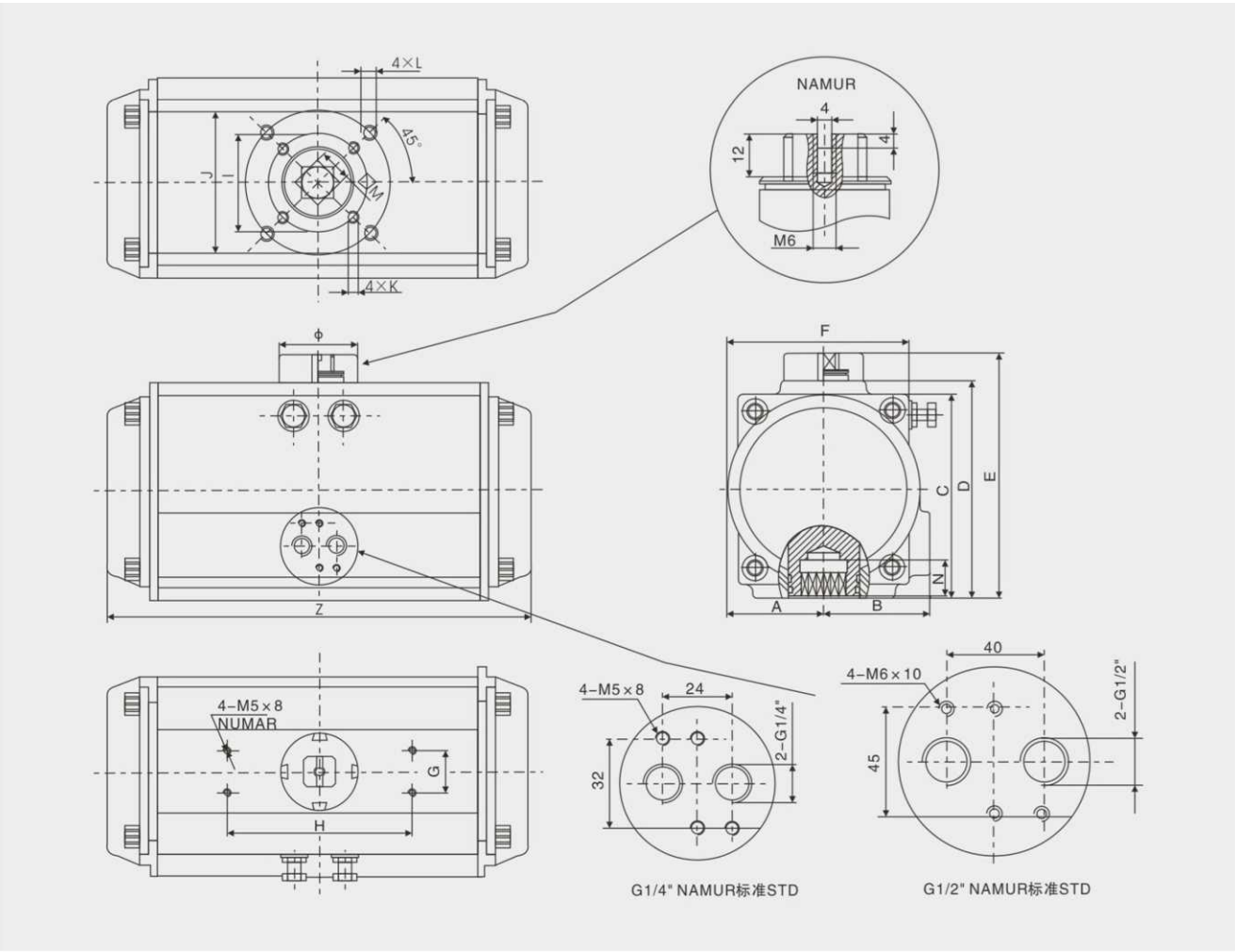


Each actuator is marked with a serial number, air connection and bottom mounting holes are marked for easy track and distinction.



产品序列号、气源接口及底部安装孔全部电脑打字，易于辨识和跟踪服务。





Dimension Table 尺寸表

| 型号<br>Model | A    | B    | C     | D     | E     | F     | G  | H   | I     | J     | K        | L        | M  | N  | Z   | φ    | 气源接口<br>Air connection |
|-------------|------|------|-------|-------|-------|-------|----|-----|-------|-------|----------|----------|----|----|-----|------|------------------------|
| AT52        | 30   | 41.5 | 65.5  | 72    | 92    | 65    | 30 | 80  | φ 36  | φ 50  | 4-M5×8   | 4-M6×10  | 11 | 14 | 147 | φ 40 | NAMUR G1/4"            |
| AT65        | 37.5 | 46   | 81    | 89    | 109   | 73.5  | 30 | 80  | φ 50  | φ 70  | 4-M6×10  | 4-M8×13  | 14 | 18 | 170 | φ 40 | NAMUR G1/4"            |
| AT75        | 42   | 53   | 94    | 100   | 120   | 81    | 30 | 80  | φ 50  | φ 70  | 4-M6×10  | 4-M8×13  | 14 | 18 | 184 | φ 40 | NAMUR G1/4"            |
| AT85        | 46   | 57   | 98.5  | 108.5 | 128.5 | 92    | 30 | 80  | φ 50  | φ 70  | 4-M6×10  | 4-M8×13  | 17 | 21 | 206 | φ 40 | NAMUR G1/4"            |
| AT92        | 50   | 58.5 | 111   | 116.5 | 136.5 | 98    | 30 | 80  | φ 50  | φ 70  | 4-M6×10  | 4-M8×13  | 17 | 21 | 262 | φ 40 | NAMUR G1/4"            |
| AT105       | 57.5 | 64   | 122.5 | 134   | 154   | 109.5 | 30 | 80  | φ 70  | φ 102 | 4-M8×13  | 4-M10×16 | 22 | 26 | 282 | φ 40 | NAMUR G1/4"            |
| AT125       | 71   | 74.5 | 150   | 160   | 180   | 133.5 | 30 | 80  | φ 70  | φ 102 | 4-M8×13  | 4-M10×16 | 22 | 26 | 304 | φ 55 | NAMUR G1/4"            |
| AT140       | 75   | 77   | 162   | 174   | 194   | 137.5 | 30 | 80  | φ 102 | φ 125 | 4-M10×16 | 4-M12×20 | 27 | 31 | 396 | φ 55 | NAMUR G1/4"            |
| AT160       | 87   | 87   | 185   | 198.5 | 218.5 | 158.5 | 30 | 80  | φ 102 | φ 125 | 4-M10×16 | 4-M12×20 | 27 | 31 | 445 | φ 55 | NAMUR G1/4"            |
| AT190       | 103  | 103  | 216   | 232   | 262   | 189   | 30 | 130 |       | φ 140 |          | 4-M16×25 | 36 | 50 | 532 | φ 80 | NAMUR G1/4"            |
| AT210       | 113  | 113  | 235.5 | 257   | 287   | 210   | 30 | 130 |       | φ 140 |          | 4-M16×25 | 36 | 50 | 536 | φ 80 | NAMUR G1/4"            |
| AT240       | 130  | 130  | 264.5 | 292   | 322   | 245   | 30 | 130 |       | φ 165 |          | 4-M20×25 | 46 | 60 | 602 | φ 80 | NAMUR G1/4"            |
| AT270       | 147  | 147  | 299   | 332   | 362   | 273   | 30 | 130 |       | φ 165 |          | 4-M20×25 | 46 | 60 | 722 | φ 80 | NAMUR G1/2"            |

Air Consumption 耗气量

开向体积和关向体积 Air volume opening & closing

单位Unit:L

| Model<br>型号 | Air volume opening<br>开向体积 (升) | Air volume closing<br>关向体积 (升) | Model<br>型号 | Air volume opening<br>开向体积 (升) | Air volume closing<br>关向体积 (升) |
|-------------|--------------------------------|--------------------------------|-------------|--------------------------------|--------------------------------|
| AT52        | 0.12                           | 0.16                           | AT140       | 2.5                            | 2.2                            |
| AT65        | 0.21                           | 0.23                           | AT160       | 3.7                            | 3.2                            |
| AT75        | 0.3                            | 0.34                           | AT190       | 5.9                            | 5.4                            |
| AT85        | 0.43                           | 0.47                           | AT210       | 7.5                            | 7.5                            |
| AT92        | 0.64                           | 0.73                           | AT240       | 11                             | 9                              |
| AT105       | 0.95                           | 0.88                           | AT270       | 17                             | 14                             |
| AT125       | 1.6                            | 1.4                            |             |                                |                                |

Air consumption rest with Air Supply. Air volume and Action cycle times, expressions:

L/Min=Air volume(Air volume Opening+Air volume closing)

$$\times \left[ \frac{\text{Air Supply (Kpa)}+101.3}{101.3} \right] \times \text{Action cycle times(/min)}$$

耗气量取决于供气压力、开关行程、体积及动作次数，计算如下：

升/分=气缸体积（开向体积+关向体积）

$$\times \left[ \frac{\text{供气压力(Kpa)}+101.3}{101.3} \right] \times \text{次数/分钟}$$

| Series<br>系列 | Model<br>型号 | Spring Q.ty<br>弹簧数量 | Options 选项                                        |
|--------------|-------------|---------------------|---------------------------------------------------|
| AT □ DA      | 52          | K5                  | 120°,140°,180°<br>for special<br>degree operation |
|              | 65          | K6                  |                                                   |
|              | 75          | K7                  |                                                   |
| AT □ SR □    | 85          | K8                  | SS                                                |
|              | 92          | K9                  |                                                   |
| AT □ □ Ni    | 105         | K10                 | Stainless<br>Steel Pinion                         |
|              | 125         | K11                 |                                                   |
|              |             | K12                 |                                                   |

| Series<br>系列 | Model<br>型号 | Spring Q.ty<br>弹簧数量 | Options 选项                                        |
|--------------|-------------|---------------------|---------------------------------------------------|
| AT □ DA      | 140         | K5                  | 120°,140°,180°<br>for special<br>degree operation |
|              | 160         | K6                  |                                                   |
|              | 190         | K7                  |                                                   |
| AT □ SR □    | 210         | K8                  | SS                                                |
|              | 240         | K9                  |                                                   |
| AT □ □ Ni    | 270         | K10                 | Stainless<br>Steel Pinion                         |
|              |             | K11                 |                                                   |
|              |             | K12                 |                                                   |

Weight Table 重量表

| Model<br>型号 | AT52(φ 52) | AT65(φ 65) | AT75(φ 75) | AT85(φ 85) | AT92(φ 92) | AT105(φ 105) | AT125(φ 125) |
|-------------|------------|------------|------------|------------|------------|--------------|--------------|
| 重量(DA)      | 1.38kg     | 2.03kg     | 2.7kg      | 3.13kg     | 4.6kg      | 6.77kg       | 8.9kg        |
| 重量(SR)      | 1.45kg     | 2.05kg     | 2.9kg      | 3.6kg      | 5.22kg     | 6.85kg       | 10.11kg      |

| Model<br>型号 | AT140(φ 140) | AT160(φ 160) | AT190(φ 190) | AT210(φ 210) | AT240(φ 240) | AT270(φ 270) |
|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 重量(DA)      | 13.25kg      | 20.14kg      | 31.3kg       | 46.80kg      | 67.28kg      | 96.9kg       |
| 重量(SR)      | 15.55kg      | 24kg         | 35.25kg      | 54.8kg       | 80.2kg       | 118kg        |

注：1、SR为12根弹簧；2、重量为净重量。Note: 1. SR is 12 springs; 2. Weight is net weight.

阀座密封材料温度额定值 Temperature Rating of Seat Sealing Material

| 代号 Code | 材料 Material                                         | 适用温度(℃) Applicable Temperature |
|---------|-----------------------------------------------------|--------------------------------|
| F       | 增强聚四氟乙烯<br>Reinforced Polytetrafluoroethylene(PTFE) | -40~180                        |
| P       | 对位聚苯<br>Para-potion polyphenylene                   | -40~300                        |
| Y       | 硬质合金<br>Hard Alloy                                  | -40~425                        |

附件的选项 Optional Accessories

根据不同控制和要求可选择下列附件:

切断型附件: 单电控电磁阀、双电控电磁阀、限位开关回讯器。

调节型附件: 电气定位器、气动定位器、电气转换器。

气源处理附件: 空气过滤减压阀、气源处理三联件。

手动机构: XLHJ系列

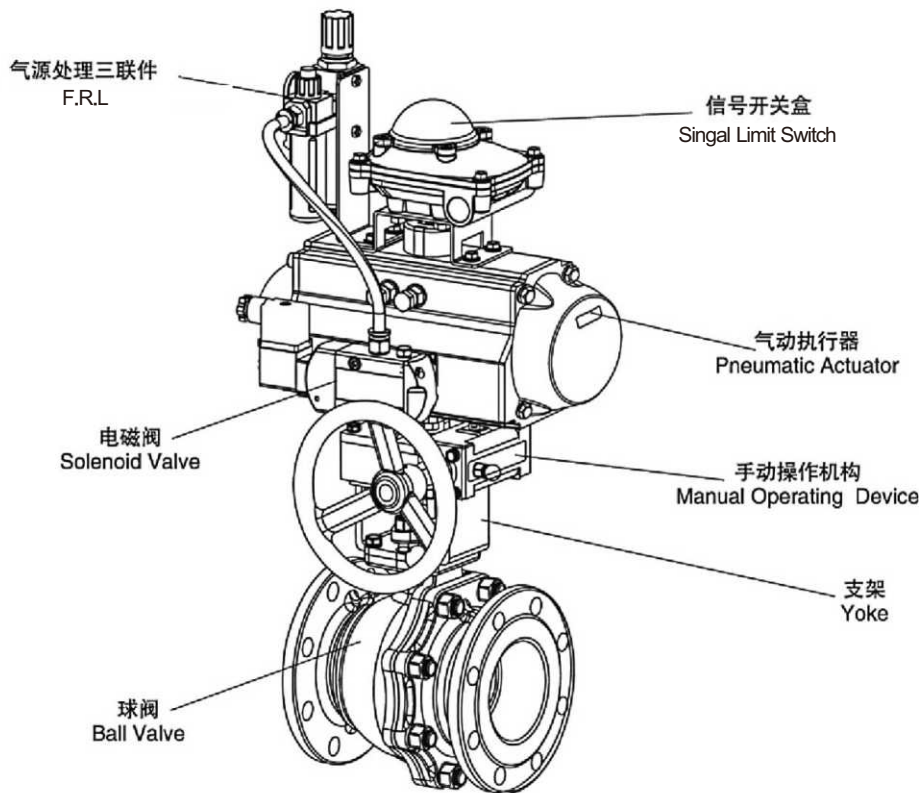
According to the different control and the request can choose the following accessories:

Cut-off Accessories: Single coil solenoid valve, Double electrically-controlled Solenoid valve, Limit Switch

Adjusting Accessories: Electropneumatic positioner, Pneumatic positioner, Electric-pneumatic Converter.

Air-supply Treatment Accessories: Air-filtering reducing valve, F.R.L.

Manual Device: XLHJ Series



技术规范 Technical Parameter

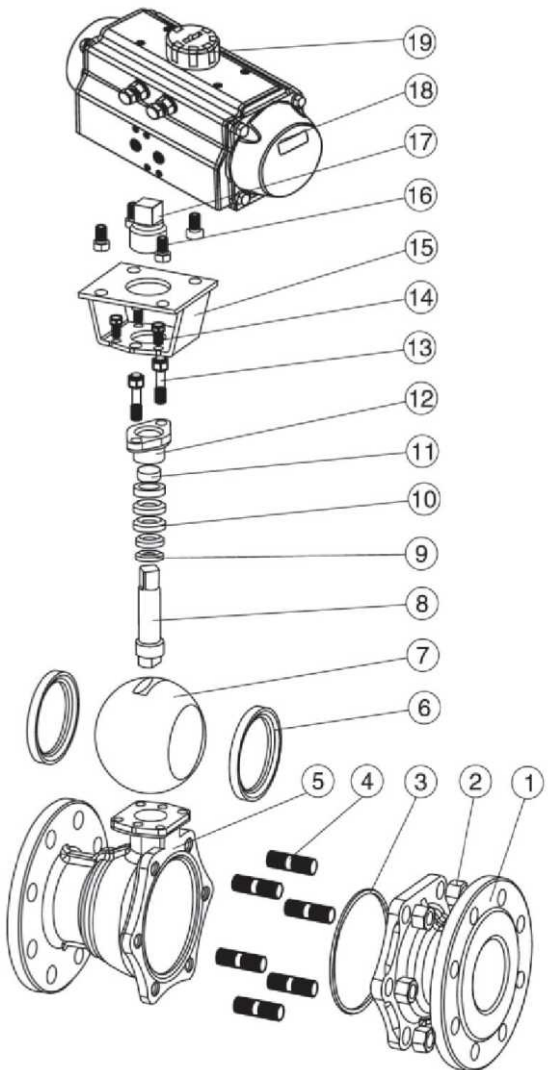
|                                      |                                  |                     |
|--------------------------------------|----------------------------------|---------------------|
| 设计依据<br>Design Basis                 |                                  | API, ANSI           |
| 设计标准<br>Design Standard              |                                  | API 6D, ANSI B16.34 |
| 结构长度<br>Face To<br>Face<br>Dimension | 法兰<br>连接<br>Flange<br>Connecting | API 6D, ANSI B16.10 |
| 连接法兰尺寸<br>Connecting Flange Size     |                                  | ANSI B16.5          |
| 试验和检验<br>Test & Inspection           |                                  | API 6D, API 598     |

※注: 系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

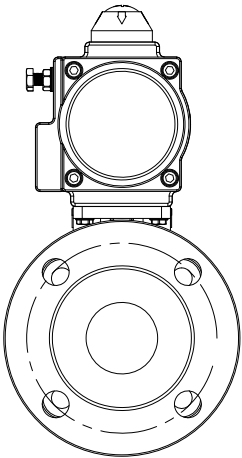
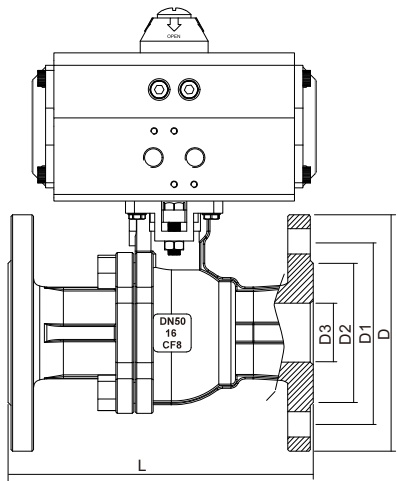
| 序号<br>No. | 零件名称<br>Component           | 材质 Material                                  |           |           |
|-----------|-----------------------------|----------------------------------------------|-----------|-----------|
|           |                             | C                                            | P         | R         |
| 1         | 右阀体<br>Right valve          | A216-WCB                                     | A351-CF8  | A351-CF8M |
| 2         | 螺母<br>Nut                   | A194-2H                                      | A276-304  | A276-316  |
| 3         | 垫片<br>Gasket                | PTFE、石墨金属复合垫<br>Graphite Metal Composite Pad |           |           |
| 4         | 螺栓<br>Screw                 | A193-B7                                      | A276-304  | A276-316  |
| 5         | 阀体<br>Body                  | A216-WCB                                     | A351-CF8  | A351-CF8M |
| 6         | 阀座<br>Seat                  | PTFE、对位聚苯(PPL)<br>硬质合金 Hard Alloy            |           |           |
| 7         | 球体<br>Ball                  | A182-F304                                    | A182-F304 | A182-F316 |
| 8         | 阀杆<br>Stem                  | A276-410                                     | A276-410  | A276-316  |
| 9         | 垫片<br>Gasket                | A276-304                                     | A276-304  | A276-316  |
| 10        | 填料<br>Packing               | PTFE、柔 石墨 Flexible Graphite                  |           |           |
| 11        | 衬套<br>Bushing               | PTFE复合轴承 Composite Beartings                 |           |           |
| P2        | 压盖<br>Gland                 | A216-WCB                                     | A351-CF8  | A351-CF8M |
| 13        | 螺栓<br>Screw                 | A194-2H                                      | A276-304  | A276-304  |
| 14        | 连接支架<br>Connecting Yoke     | A351-CF8                                     | A351-CF8  | A351-CF8  |
| 15        | 连接套<br>Connecting Set       | A351-CF8                                     | A351-CF8  | A351-CF8  |
| 16        | 气动装置<br>Pneumatic Device    | AT系列、AW系列<br>AT Series、AW Series             |           |           |
| 17        | 位置指示器<br>Location Indicator | 塑料 Plastic                                   |           |           |

※注: 系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.



HK55-F 气动二通法兰球阀 国标

2-Way Penumatic Flange Ball Valve GB



主要外形及连接法兰尺寸 HK55-F-GB-PN16  
Main Outline and Connecting Flange Size-PN16

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150   | 200    |
| D2    | 45    | 55    | 65    | 78     | 85     | 100   | 120    | 135   | 155   | 185   | 210   | 265    |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145    | 160   | 180   | 210   | 240   | 295    |
| D     | 95    | 105   | 115   | 135    | 145    | 160   | 180    | 195   | 215   | 245   | 280   | 335    |
| L     | 130   | 140   | 150   | 165    | 180    | 200   | 222    | 250   | 280   | 320   | 360   | 400    |
| n-φd  | 4-φ14 | 4-φ14 | 4-φ14 | 4-φ18  | 4-φ18  | 4-φ18 | 4-φ18  | 8-φ18 | 8-φ18 | 8-φ18 | 8-φ18 | 12-φ23 |

主要外形及连接法兰尺寸 HK55-F-GB-PN25  
Main Outline and Connecting Flange Size-PN25

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150   | 200    |
| D2    | 45    | 55    | 65    | 78     | 85     | 100   | 120    | 135   | 160   | 190   | 220   | 250    |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145    | 160   | 190   | 220   | 250   | 310    |
| D     | 95    | 105   | 115   | 140    | 150    | 160   | 180    | 195   | 230   | 270   | 300   | 360    |
| L     | 130   | 130   | 140   | 165    | 180    | 200   | 222    | 250   | 280   | 320   | 360   | 457    |
| n-φd  | 4-φ14 | 4-φ14 | 4-φ14 | 4-φ18  | 4-φ18  | 4-φ18 | 8-φ18  | 8-φ18 | 8-φ23 | 8-φ25 | 8-φ25 | 12-φ25 |

\*注:  
系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质, 适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门, 硬密封阀门的配置及数据请咨询本公司。

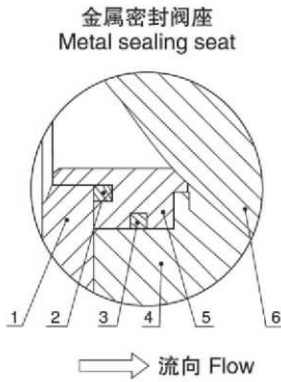
Note:  
The structural length and connecting flange size of ball valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

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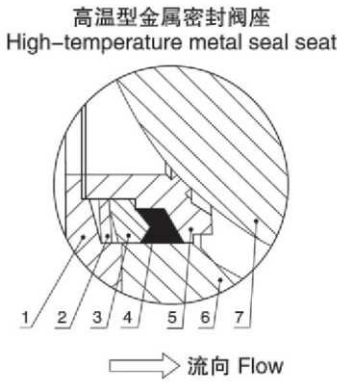
科威納 COVNA®

HK55-F 气动二通法兰球阀 国标

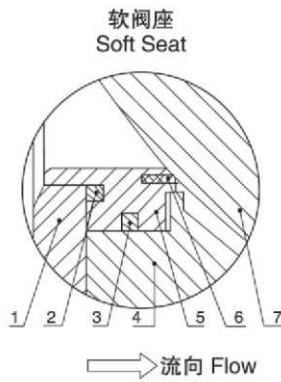
2-Way Flange Pneumatic Ball Valve GB



温度范围 -20~160°C/230°C  
Temperature Range



温度范围 -20~425°C  
Temperature Range



温度范围 -20~160°C  
Temperature Range

主要外形及连接法兰尺寸 HK55-F-GB-PN40  
Main Outline and Connecting Flange Size-PN40

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150   | 200    |
| D2    | 45    | 55    | 65    | 78     | 85     | 100   | 120    | 135   | 160   | 188   | 218   | 282    |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145    | 160   | 190   | 220   | 250   | 320    |
| D     | 95    | 105   | 115   | 135    | 145    | 160   | 180    | 195   | 230   | 270   | 300   | 375    |
| L     | 140   | 152   | 165   | 178    | 190    | 216   | 241    | 283   | 305   | 381   | 403   | 419    |
| n-φd  | 4-φ14 | 4-φ14 | 4-φ14 | 4-φ18  | 4-φ18  | 4-φ18 | 8-φ18  | 8-φ18 | 8-φ23 | 8-φ25 | 8-φ25 | 12-φ34 |

主要外形及连接法兰尺寸 HK55-F-GB-PN63  
Main Outline and Connecting Flange Size-PN63

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150   | 200    |
| D2    | 55    | 68    | 78    | 82     | 95     | 105   | 13     | 140   | 168   | 202   | 240   | 300    |
| D1    | 75    | 90    | 100   | 110    | 125    | 135   | 160    | 170   | 200   | 240   | 280   | 345    |
| D     | 105   | 125   | 135   | 150    | 165    | 175   | 200    | 210   | 250   | 295   | 340   | 405    |
| L     | 140   | 152   | 165   | 178    | 190    | 216   | 241    | 283   | 305   | 381   | 403   | 419    |
| n-φd  | 4-φ14 | 4-φ18 | 4-φ18 | 4-φ23  | 4-φ23  | 4-φ23 | 8-φ23  | 8-φ23 | 8-φ25 | 8-φ30 | 8-φ34 | 12-φ34 |

\*注:  
系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质, 适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门, 硬密封阀门的配置及数据请咨询本公司。

Note:  
The structural length and connecting flange size of ball valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

HK55-F 气动二通法兰球阀 德标

2-Way Penumatic Flange Ball Valve DIN

科威納 COVNA®

主要外形及连接法兰尺寸 HK55-F-DIN-PN16  
Main Outline and Connecting Flange Size-PN16

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150   | 200    |
| D2    | 45    | 58    | 68    | 78     | 85     | 102   | 122    | 138   | 158   | 188   | 212   | 268    |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145    | 160   | 180   | 210   | 240   | 295    |
| D     | 95    | 105   | 115   | 140    | 150    | 165   | 185    | 200   | 220   | 250   | 285   | 340    |
| L     | 115   | 120   | 125   | 130    | 140    | 150   | 170    | 180   | 190   | 325   | 350   | 400    |
| n-φd  | 4-φ14 | 4-φ14 | 4-φ14 | 4-φ18  | 4-φ18  | 4-φ18 | 4-φ18  | 8-φ18 | 8-φ18 | 8-φ18 | 8-φ22 | 12-φ22 |

主要外形及连接法兰尺寸 HK55-F-DIN-PN25  
Main Outline and Connecting Flange Size-PN25

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100  | DN125 | DN150 | DN200   |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|--------|-------|-------|---------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"     | 5"    | 6"    | 8"      |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100    | 125   | 150   | 200     |
| D2    | 45    | 58    | 68    | 78     | 88     | 102   | 122    | 138   | 162    | 188   | 218   | 278     |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145    | 160   | 190    | 220   | 250   | 310     |
| D     | 95    | 105   | 115   | 140    | 150    | 165   | 185    | 200   | 235    | 270   | 300   | 360     |
| L     | 115   | 120   | 125   | 130    | 140    | 150   | 170    | 180   | 190    | 325   | 350   | 400     |
| n-φd  | 4-φ14 | 4-φ14 | 4-φ14 | 4-φ18  | 4-φ18  | 4-φ18 | 8-φ18  | 8-φ18 | 8-φ 22 | 8-φ26 | 8-φ26 | 12-φ 26 |

主要外形及连接法兰尺寸 HK55-F-DIN-PN40  
Main Outline and Connecting Flange Size-PN40

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150   | 200    |
| D2    | 45    | 55    | 65    | 78     | 85     | 100   | 120    | 135   | 160   | 188   | 218   | 282    |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145    | 160   | 190   | 220   | 250   | 320    |
| D     | 95    | 105   | 115   | 135    | 145    | 160   | 180    | 195   | 230   | 270   | 300   | 375    |
| L     | 115   | 120   | 125   | 130    | 140    | 150   | 170    | 180   | 190   | 325   | 350   | 400    |
| n-φd  | 4-φ14 | 4-φ14 | 4-φ14 | 4-φ18  | 4-φ18  | 4-φ18 | 8-φ18  | 8-φ18 | 8-φ23 | 8-φ25 | 8-φ25 | 12-φ34 |

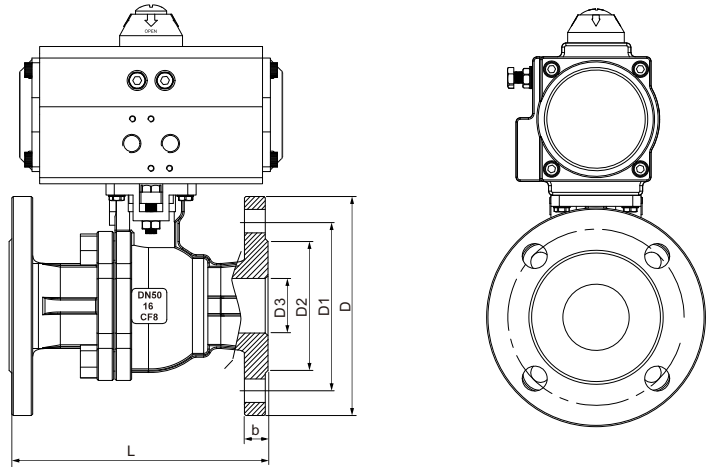
\*注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note: The structural length and connecting flange size of ball valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

科威納 COVNA®

HK55-F 气动二通法兰球阀 日标

2-Way Flange Pneumatic Ball Valve JIS



主要外形及连接法兰尺寸 HK55-F-10K  
Main Outline and Connecting Flange Size-10K

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125   | DN150   | DN200   | DN250  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|---------|---------|---------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"      | 6"      | 8"      | 10"    |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125     | 150     | 200     | 250    |
| D2    | 52    | 58    | 70    | 80     | 85     | 100   | 120    | 130   | 155   | 185     | 215     | 265     | 325    |
| D1    | 70    | 75    | 90    | 100    | 105    | 120   | 140    | 150   | 175   | 210     | 240     | 290     | 355    |
| D     | 95    | 100   | 125   | 135    | 140    | 155   | 175    | 185   | 210   | 250     | 280     | 330     | 400    |
| L     | 108   | 117   | 127   | 140    | 165    | 178   | 190    | 203   | 229   | 330/356 | 340/394 | 450/457 | 533    |
| b     | 12    | 14    | 14    | 16     | 16     | 16    | 18     | 18    | 18    | 20      | 22      | 22      | 24     |
| n-φd  | 4-φ15 | 4-φ15 | 4-φ19 | 4-φ19  | 4-φ19  | 4-φ19 | 4-φ19  | 8-φ19 | 8-φ19 | 8-φ23   | 8-φ23   | 12-φ23  | 12-φ25 |

主要外形及连接法兰尺寸 HK55-F-20K  
Main Outline and Connecting Flange Size-20K

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150  | DN200  | DN250  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|--------|--------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"     | 8"     | 10"    |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150    | 200    | 250    |
| D2    | 52    | 58    | 70    | 80     | 85     | 100   | 120    | 135   | 160   | 195   | 230    | 275    | 345    |
| D1    | 70    | 75    | 90    | 100    | 105    | 120   | 140    | 160   | 185   | 225   | 260    | 305    | 380    |
| D     | 95    | 100   | 125   | 135    | 140    | 155   | 175    | 200   | 225   | 270   | 305    | 350    | 430    |
| L     | 140   | 152   | 165   | 178    | 190    | 216   | 241    | 282   | 305   | 381   | 403    | 502    | 568    |
| b     | 14    | 16    | 16    | 18     | 18     | 18    | 20     | 22    | 24    | 26    | 28     | 30     | 34     |
| n-φd  | 4-φ15 | 4-φ15 | 4-φ19 | 4-φ19  | 4-φ19  | 8-φ19 | 8-φ19  | 8-φ23 | 8-φ23 | 8-φ25 | 12-φ25 | 12-φ25 | 12-φ27 |

\*注：  
系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note:  
The structural length and connecting flange size of ball valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

HK55-F 气动二通法兰球阀 美标

2-Way Penumatic Flange Ball Valve ANSI

科威纳 COVNA®

主要外形及连接法兰尺寸 HK55-F-150#  
Main Outline and Connecting Flange Size-150#

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200 | DN250  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|-------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"    | 10"    |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150   | 200   | 250    |
| D2    | 34.9  | 42.9  | 50.8  | 63.5   | 73     | 92.1  | 104.8  | 127   | 157.2 | 185.7 | 215.9 | 269.9 | 323.8  |
| D1    | 60.3  | 69.9  | 79.4  | 88.9   | 98.4   | 120.7 | 139.7  | 152.4 | 190.5 | 215.9 | 241.3 | 298.5 | 362    |
| D     | 90    | 100   | 110   | 115    | 125    | 150   | 180    | 190   | 230   | 255   | 280   | 345   | 405    |
| L     | 108   | 117   | 127   | 140    | 165    | 178   | 190    | 203   | 229   | 356   | 394   | 457   | 533    |
| b     | 11.5  | 13    | 14.5  | 17.5   | 17.5   | 19.5  | 22.5   | 24    | 24    | 24    | 25.5  | 29    | 30.5   |
| n-φd  | 4-φ16 | 4-φ16 | 4-φ16 | 4-φ16  | 4-φ16  | 4-φ19 | 4-φ19  | 4-φ19 | 8-φ19 | 8-φ22 | 8-φ22 | 8-φ22 | 12-φ25 |

主要外形及连接法兰尺寸 HK55-F-ANSI-300#  
Main Outline and Connecting Flange Size-300#

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150  | DN200  | DN250  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|--------|--------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"     | 8"     | 10"    |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150    | 200    | 250    |
| D2    | 34.9  | 42.9  | 50.8  | 63.5   | 73     | 92.1  | 104.8  | 127   | 157.2 | 185.7 | 215.9  | 269.9  | 323.8  |
| D1    | 66.7  | 82.6  | 88.9  | 98.4   | 114.3  | 127   | 149.2  | 168.3 | 200   | 235   | 269.9  | 330.2  | 387.4  |
| D     | 95    | 115   | 125   | 135    | 155    | 165   | 190    | 210   | 255   | 280   | 320    | 380    | 445    |
| L     | 140   | 152   | 165   | 178    | 190    | 216   | 241    | 282   | 305   | 381   | 403    | 502    | 568    |
| b     | 14.5  | 16    | 17.5  | 19.5   | 21     | 22.5  | 25.5   | 29    | 32    | 35    | 37     | 41.5   | 48     |
| n-φd  | 4-φ16 | 4-φ19 | 4-φ19 | 4-φ19  | 4-φ22  | 8-φ19 | 8-φ22  | 8-φ22 | 8-φ22 | 8-φ22 | 12-φ22 | 12-φ25 | 16-φ29 |

主要外形及连接法兰尺寸 HK55-F-ANSI-600#  
Main Outline and Connecting Flange Size-600#

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150  | DN200  | DN250  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|--------|--------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"     | 8"     | 10"    |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150    | 200    | 250    |
| D2    | 34.9  | 42.9  | 50.8  | 63.5   | 73     | 92.1  | 104.8  | 127   | 157.2 | 185.7 | 215.9  | 269.9  | 323.8  |
| D1    | 66.7  | 82.6  | 88.9  | 98.4   | 114.3  | 127   | 149.2  | 168.3 | 215.9 | 266.7 | 292.1  | 349.2  | 431.8  |
| D     | 95    | 115   | 125   | 135    | 155    | 165   | 190    | 210   | 275   | 330   | 355    | 420    | 510    |
| L     | 165   | 190   | 216   | 229    | 241    | 292   | 330    | 356   | 432   | 508   | 559    | 660    | 787    |
| b     | 21    | 23    | 24    | 27.5   | 29     | 32    | 35     | 38.5  | 45    | 51.5  | 54.5   | 62     | 70     |
| n-φd  | 4-φ16 | 4-φ19 | 4-φ19 | 4-φ19  | 4-φ22  | 8-φ19 | 8-φ22  | 8-φ22 | 8-φ25 | 8-φ29 | 12-φ29 | 12-φ32 | 16-φ35 |

\*注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note: The structural length and connecting flange size of ball valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

科威纳 COVNA®

HK56-3PS 气动三片式球阀

3-PCS Pneumatic Ball Valve

技术规范 Technical Parameter

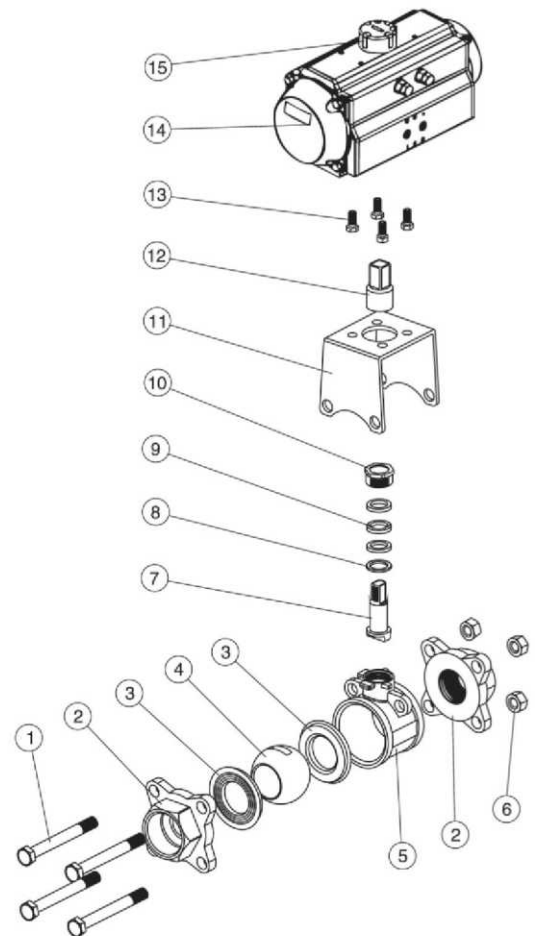
|                            |          |             |
|----------------------------|----------|-------------|
| 设计依据<br>Design Basis       | GB       | ANSI        |
| 设计标准<br>Design Standard    | GB/12237 | ANSI B16.34 |
| 试验和检验<br>Test & Inspection | JB/T9092 | API 598     |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                               |
|-----------|-----------------------------|-----------------------------------------------------------|
| 1         | 螺栓<br>Screw                 | 不锈钢304 Stainless Steel 304                                |
| 2         | 接头<br>Connector             | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |
| 3         | 阀座<br>Seat                  | PTFE、对位聚苯(PPL)<br>硬质合金(H/Y)                               |
| 4         | 球体<br>Ball                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 5         | 阀体<br>Body                  | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |
| 6         | 螺母<br>Nut                   | 不锈钢304<br>Stainless Steel 304                             |
| 7         | 阀杆<br>Stem                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304、316、316L  |
| 8         | 垫片<br>Gasket                | 不锈钢304、316L<br>Stainless Steel 304、316L                   |
| 9         | 填料<br>Packing               | PTFE                                                      |
| 10        | 压盖<br>Gland                 | 不锈钢304、316L<br>Stainless Steel 304、316L                   |
| 11        | 连接支架<br>Connecting Yoke     | 不锈钢CF8<br>Stainless Steel CF8                             |
| 12        | 连接套<br>Connecting Set       | 不锈钢304<br>Stainless Steel 304                             |
| 13        | 螺栓<br>Screw                 | 不锈钢304<br>Stainless Steel 304                             |
| 14        | 气动执行器<br>Pneumatic Actuator | AT Series                                                 |
| 15        | 位置指示器<br>Location Indicator | 塑料 Plastic                                                |

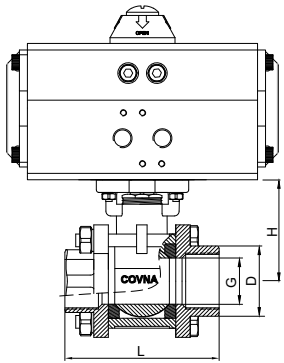
※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.



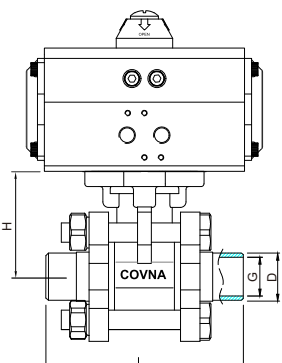
HK56-3PS 气动三片式球阀

3-PCS Pneumatic Ball Valve ANSI

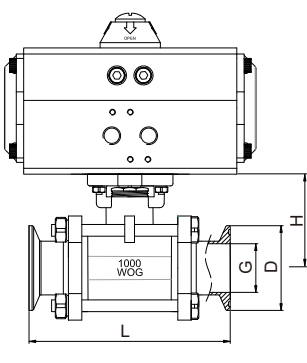
科威纳 COVNA®



螺纹型 Threaded Type



对焊型 Butt-welded  
承插焊 Socket-welded



卡箍型 Clamped Type

螺纹型链接尺寸

Dimension of Threaded Type

| SIZE     | DN08 | DN10 | DN15 | DN20 | DN25 | DN32   | DN40   | DN50 | DN65   | DN80 | DN100 |
|----------|------|------|------|------|------|--------|--------|------|--------|------|-------|
| Actuator | AT52 | AT52 | AT52 | AT52 | AT52 | AT65   | AT65   | AT75 | AT83   | AT92 | AT92  |
| G        | 1/4" | 3/8" | 1/2" | 3/4" | 1"   | 1-1/4" | 1-1/2" | 2"   | 2-1/2" | 3"   | 4"    |
| D        | 11.2 | 12.5 | 15   | 20   | 25   | 32     | 40     | 50   | 65     | 80   | 100   |
| L        | 60   | 60   | 72   | 82   | 90   | 112    | 120    | 145  | 185    | 210  | 268   |
| H        | 42   | 42   | 42   | 48.5 | 58.5 | 63     | 71     | 78   | 100    | 109  | 140   |

对焊型链接尺寸

Dimension of Butt-Welded Type

| SIZE     | DN08 | DN10 | DN15 | DN20 | DN25 | DN32   | DN40   | DN50 | DN65   | DN80 | DN100 |
|----------|------|------|------|------|------|--------|--------|------|--------|------|-------|
| Actuator | AT52 | AT52 | AT52 | AT52 | AT52 | AT65   | AT65   | AT75 | AT83   | AT92 | AT92  |
| G        | 1/4" | 3/8" | 1/2" | 3/4" | 1"   | 1-1/4" | 1-1/2" | 2"   | 2-1/2" | 3"   | 4"    |
| D        | 12.5 | 17.5 | 22   | 27   | 34   | 42.5   | 48.5   | 61   | 73     | 90   | 115   |
| L        | 65   | 65   | 75   | 83   | 90   | 113    | 115    | 140  | 160    | 180  | 215   |
| H        | 33   | 34   | 38   | 45   | 55   | 60     | 70     | 85   | 100    | 112  | 140   |

卡箍型链接尺寸

Dimension of Clamped Type

| SIZE     | DN15    | DN20    | DN25 | DN32   | DN40   | DN50 | DN65   | DN80   | DN100 |
|----------|---------|---------|------|--------|--------|------|--------|--------|-------|
| Actuator | AT52    | AT52    | AT52 | At52   | AT65   | AT75 | AT83   | AT92   | AT92  |
| G        | 1/2"    | 3/4"    | 1"   | 1-1/4" | 1-1/2" | 2"   | 2-1/2" | 3"     | 4"    |
| D        | 34/50.5 | 34/50.5 | 50.5 | 50.5   | 50.5   | 64   | 77/91  | 91/106 | 119   |
| L        | 100     | 100     | 120  | 130    | 140    | 156  | 196    | 228    | 242   |
| H        | 55      | 60      | 70   | 82     | 90     | 105  | 120    | 132    | 158   |

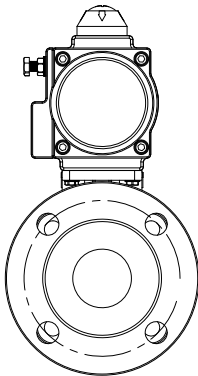
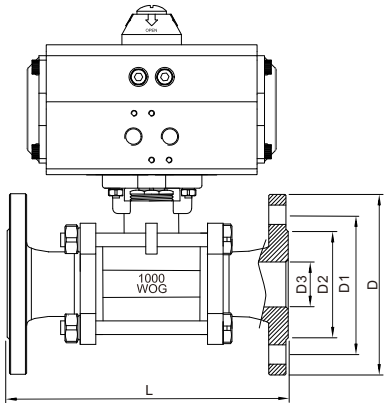
\*注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note: The structural length and connecting flange size of ball valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

科威纳 COVNA®

HK56-3PS 气动三片式球阀

3-PCS Pneumatic Ball Valve



法兰型主要外形及连接法兰尺寸 GB-PN16

Flange Type Main Outline and Connecting Flange Size-PN16

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65    | DN80    | DN100   | DN125 | DN150 |
|-------|-------|-------|-------|--------|--------|-------|---------|---------|---------|-------|-------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2"  | 3"      | 4"      | 5"    | 6"    |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65      | 80      | 100     | 125   | 150   |
| D2    | 45    | 58    | 65    | 78     | 88     | 102   | 122     | 138     | 158     | 185   | 210   |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145     | 160     | 180     | 210   | 240   |
| D     | 95    | 105   | 115   | 140    | 150    | 165   | 185     | 200     | 220     | 250   | 285   |
| L     | 130   | 150   | 160   | 180    | 200    | 230   | 250/290 | 280/310 | 320/350 | 400   | 480   |
| n-φd  | 4-φ14 | 4-φ14 | 4-φ14 | 4-φ18  | 4-φ18  | 4-φ18 | 4-φ18   | 4-φ18   | 8-φ18   | 8-φ18 | 8-φ23 |

法兰型主要外形及连接法兰尺寸 ANSI-150#

Flange Type Main Outline and Connecting Flange Size-150#

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65    | DN80    | DN100   | DN125 | DN150 |
|-------|-------|-------|-------|--------|--------|-------|---------|---------|---------|-------|-------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2"  | 3"      | 4"      | 5"    | 6"    |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65      | 80      | 100     | 125   | 150   |
| D2    | 34.9  | 42.9  | 50.8  | 63.5   | 73     | 92.1  | 104.8   | 127     | 157.2   | 185.7 | 215.9 |
| D1    | 60.4  | 69.9  | 79.4  | 88.9   | 98.4   | 120.7 | 139.7   | 152.4   | 190.5   | 215.9 | 241.3 |
| D     | 89    | 98    | 108   | 117    | 127    | 152   | 178     | 190     | 229     | 255   | 280   |
| L     | 130   | 150   | 160   | 180    | 200    | 230   | 250/290 | 280/310 | 320/350 | 400   | 480   |
| n-φ d | 4-φ16 | 4-φ16 | 4-φ16 | 4-φ16  | 4-φ16  | 4-φ19 | 4-φ19   | 4-φ19   | 8-φ19   | 8-φ22 | 8-φ22 |

\*注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

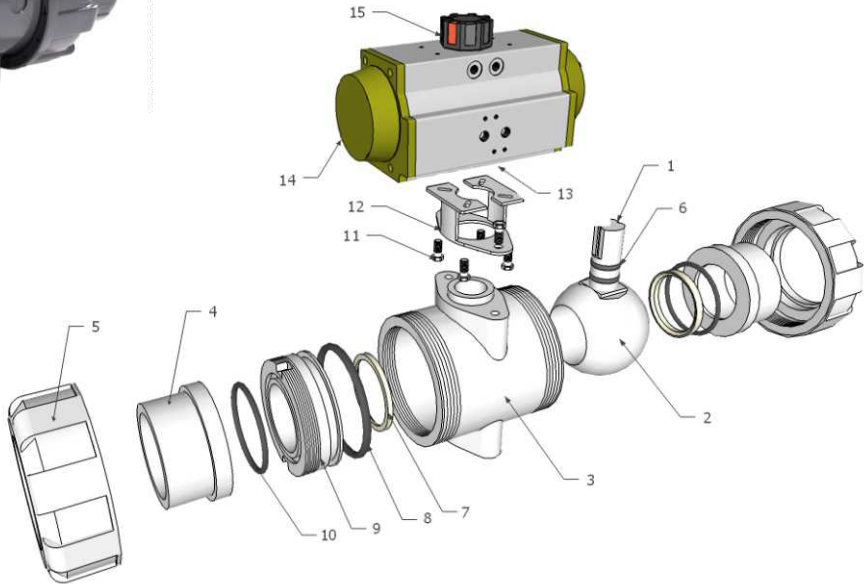
Note: The structural length and connecting flange size of ball valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.



技术规范 Technical Parameter

|                                  |                |             |
|----------------------------------|----------------|-------------|
| 设计依据<br>Design Basis             | GB             | ANSI        |
| 设计标准<br>Design Standard          | GB/12237       | ANSI B16.34 |
| 连接法兰尺寸<br>Connecting Flange Size | GB/9113 JB/T79 | ANSI B16.5  |
| 试验和检验<br>Test & Inspection       | JB/T9092       | API 598     |

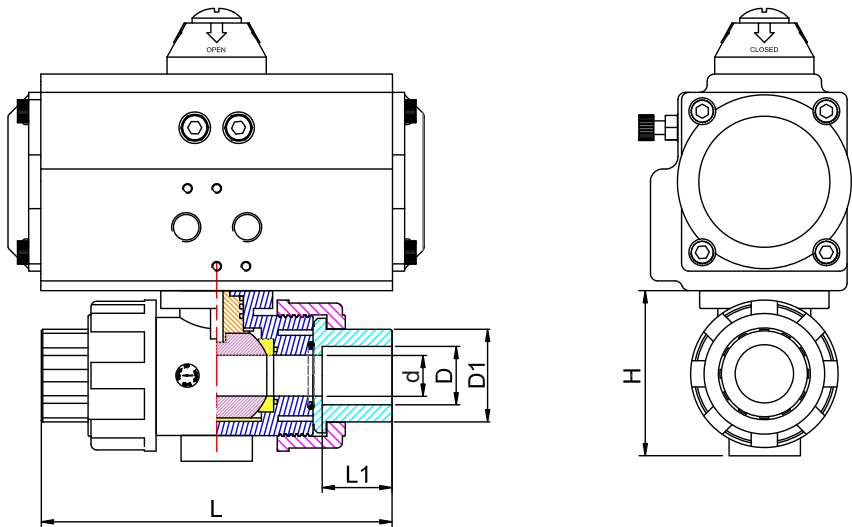
※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.



主要零件材质表 Main Parts Materials

| 序号 No. | 零件名称  | Component          | 材质 Material         |
|--------|-------|--------------------|---------------------|
| 1      | 阀杆    | Stem               | SS304、304L、316、316L |
| 2      | 阀芯    | Ball               | UPVC/PPH/CPVC/PVDF  |
| 3      | 阀体    | Body               | UPVC/PPH/CPVC/PVDF  |
| 4      | 接管    | Endconnector       | UPVC/PPH/CPVC/PVDF  |
| 5      | 锁母    | Union Nut          | UPVC/PPH/CPVC/PVDF  |
| 6      | O型环   | O-Ring             | PTFE                |
| 7      | 球密封   | Seat Seal          | EPDM/FPM            |
| 8      | 密封支架  | SEAL CARRIER       | UPVC/PPH/CPVC/PVDF  |
| 9      | 阀座    | Seat               | UPVC/PPH/CPVC/PVDF  |
| 10     | O型环   | O-Ring             | EPDM/FPM            |
| 11     | 螺栓    | Screw              | 不锈钢304 SS304        |
| 12     | 连接支架  | Connecting Yoke    | 不锈钢304 SS304        |
| 13     | 连接套   | Connecting Set     | 不锈钢304 SS304        |
| 14     | 气动执行器 | Pneumatic Actuator | AT Series           |
| 15     | 位置指示器 | Location Indicator | 塑料 Plastic          |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.



主要外形及连接尺寸 HK57 -PN16(1.6MPa)  
Dimension of 2 way pneumatic UPVC ball valve-PN16

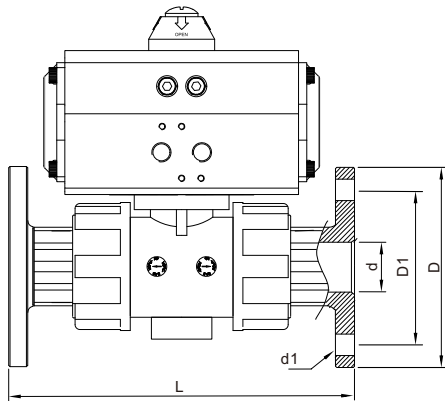
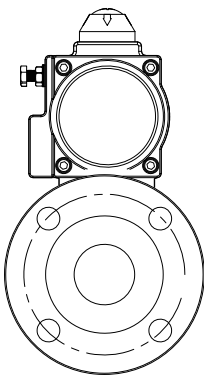
| MEDLE   |   | DN15   | DN20   | DN25  | DN32   | DN40   | DN50 | DN65   | DN80 | DN100 | DN125 | DN150 | DN200 |
|---------|---|--------|--------|-------|--------|--------|------|--------|------|-------|-------|-------|-------|
| G       |   | 1/2"   | 3/4"   | 1"    | 1-1/4" | 1-1/2" | 2"   | 2-1/2" | 3"   | 4"    | 5"    | 6"    | 8"    |
| GB= DIN | d | 16     | 20     | 25    | 30     | 38     | 50   | 63     | 78   | 100   | 125   | 150   | 200   |
|         | D | 20     | 25     | 32    | 40     | 50     | 63   | 75     | 90   | 110   | 141.3 | 168.3 | 225   |
| ANSI    | d | 16     | 20     | 25    | 30     | 38     | 50   | 63     | 78   | 100   | 125   | 150   | 200   |
|         | D | 21.3   | 26.7   | 33.4  | 42.2   | 48.3   | 60.3 | 73     | 88.9 | 114.3 | 141.3 | 168.3 | 219   |
| JIS     | d | 16     | 20     | 25    | 30     | 38     | 50   | 63     | 78   | 100   | 125   | 150   | 200   |
|         | D | 22     | 26     | 32    | 38     | 48     | 60   | 76     | 89   | 114   | 140   | 165   | 216   |
| UK      | d | 16     | 20     | 25    | 30     | 38     | 50   | 63     | 78   | 100   | 125   | 150   | 200   |
|         | D | 22     | 26     | 34    | 42     | 48     | 60   | 76     | 89   | 114   | 140   | 165   | 216   |
| D1      |   | 30     | 36     | 45    | 55     | 64     | 77   | 96     | 112  | 141   |       |       |       |
| L1      |   | 22. 8  | 25     | 28.5  | 32     | 34.8   | 39   | 46     | 48   | 64.5  |       |       |       |
| L       |   | 121. 8 | 134. 5 | 150.2 | 166.8  | 179    | 205  | 233    | 257  | 309   |       |       |       |
| H       |   | 61     | 74     | 90    | 104    | 121    | 146  | 169    | 220  | 255   |       |       |       |

\*注：  
系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。  
Note:  
The structural length and connecting flange size of ball valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

HK57-PF 气动三通PVC法兰球阀

2-Way Penumatic PVC Flange Ball Valve

科威纳 COVNA®



主要外形及连接尺寸

Main Outline and Connecting Flange Size

| MEDLE | DN25  | DN50  | DN65   | DN80  | DN100 |
|-------|-------|-------|--------|-------|-------|
| G     | 1"    | 2"    | 2-1/2" | 3"    | 4"    |
| d     | 25    | 52.3  | 64.2   | 77.5  | 94.5  |
| D     | 117   | 163.3 | 184    | 199.1 | 228   |
| D1    | 75    | 111.1 | 130.3  | 143.2 | 169.7 |
| d1    | 16    | 19    | 19     | 19    | 20    |
| L     | 183.8 | 243   | 276.4  | 302.3 | 353   |

技术规范 Technical Parameter

| 设计依据<br>Design Basis             | GB             | ANSI        |
|----------------------------------|----------------|-------------|
| 设计标准<br>Design Standard          | GB/12237       | ANSI B16.34 |
| 连接法兰尺寸<br>Connecting Flange Size | GB/9113 JB/T79 | ANSI B16.5  |
| 试验和检验<br>Test & Inspection       | JB/T9092       | API 598     |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

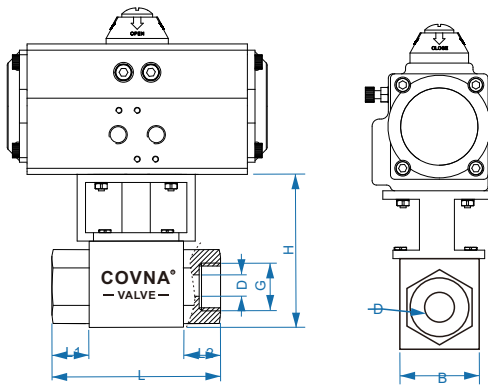
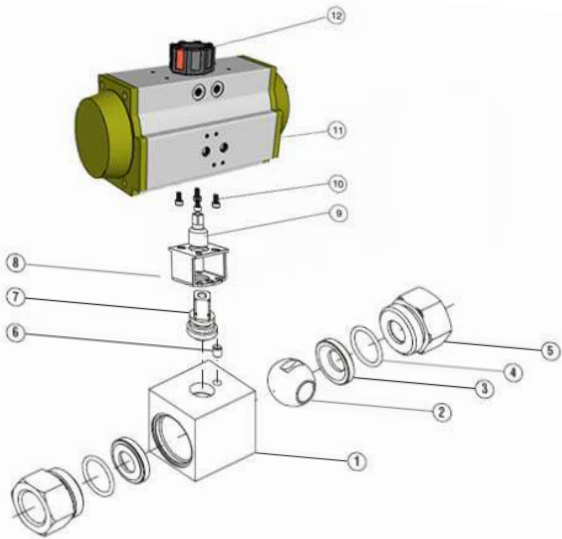
| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                              |
|-----------|-----------------------------|----------------------------------------------------------|
| 1         | 位置指示器<br>Location Indicator | 塑料 Plastic                                               |
| 2         | 气动执行器<br>Pneumatic Actuator | AT Series                                                |
| 3         | 连接套<br>Connecting Set       | 不锈钢304<br>Stainless Steel 304                            |
| 4         | 阀杆<br>Stem                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304、316、316L |
| 5         | 螺栓<br>Screw                 | 不锈钢304、316L<br>Stainless Steel 304、316L                  |
| 6         | 填料<br>Packing               | 聚四氟乙烯(PTFE)                                              |
| 7         | O型环<br>O-Ring               | EPDM/FPM                                                 |
| 8         | 阀座<br>Seat                  | UPVC/PPH/CPVC                                            |
| 9         | 球体<br>Ball                  | UPVC/PPH/CPVC                                            |
| 10        | 锁母<br>Union Nut             | UPVC/PPH/CPVC                                            |
| 11        | 接管<br>Endconnector          | UPVC/PPH/CPVC                                            |
| 12        | 阀体<br>Body                  | UPVC/PPH/CPVC                                            |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.

科威纳 COVNA®

HK56-G 气动三通高压球阀

Pneumatic 2-Way High-pressure Ball Valve



技术规范 Technical Parameter

| 设计依据<br>Design Basis       | GB       | ANSI        |
|----------------------------|----------|-------------|
| 设计标准<br>Design Standard    | GB/12237 | ANSI B16.34 |
| 试验和检验<br>Test & Inspection | JB/T9092 | API 598     |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                               |
|-----------|-----------------------------|-----------------------------------------------------------|
| 1         | 主阀体<br>Body                 | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 2         | 球体<br>Ball                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 3         | 阀座<br>Seat                  | 聚四氟乙烯(PTFE)、对位聚苯(PPL)                                     |
| 4         | O型环<br>O-Ring               | 聚四氟乙烯(PTFE)                                               |
| 5         | 分阀体<br>Body                 | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |
| 6         | 圆柱销<br>Cylindrical Pin      | 不锈钢304、316<br>Stainless Steel 304、316                     |
| 7         | 阀杆<br>Stem                  | 不锈钢304、316、316L<br>Stainless Steel 304、316、316L           |
| 8         | 连接支架<br>Connecting Yoke     | 不锈钢304、316<br>Stainless Steel 304、316                     |
| 9         | 连接套<br>Connecting Set       | 不锈钢304、316<br>Stainless Steel 304、316                     |
| 10        | Screw<br>螺栓                 | 不锈钢304、316<br>Stainless Steel 304、316                     |
| 11        | 气动执行器<br>Pneumatic Actuator | AT Series                                                 |
| 12        | 位置指示器<br>Location Indicator | 塑料 Plastic                                                |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.

主要外形及连接尺寸

Dimension of 2 way high-pressure pneumatic ball valve

| MEDLE | DN08 | DN10 | DN15 | DN20 | DN25 | DN32   | DN40   | DN50 |
|-------|------|------|------|------|------|--------|--------|------|
| G     | 1/4" | 3/8" | 1/2" | 3/4" | 1"   | 1-1/4" | 1-1/2" | 2"   |
| D     | 6    | 8    | 10   | 14.6 | 19.6 | 24.8   | 30     | 39.6 |
| B     | 45   | 45   | 45   | 55   | 66   | 77     | 95     |      |
| H     | 43   | 43   | 43   | 53   | 64   | 70     | 79     |      |
| L     | 80   | 80   | 82   | 101  | 120  | 127    | 150    |      |
| L1    | 19   | 19   | 20   | 25   | 29   | 30     | 28     |      |
| L2    | 19   | 19   | 20   | 25   | 29   | 30     | 28     |      |

HK56-2PS 气动二片式螺纹球阀

Pneumatic 2-PCS Ball Valve

科威纳 COVNA®

科威纳 COVNA®

HK56-W 气动三通卫生级球阀

Pneumatic 2-Way Sanitary Ball Valve

技术规范 Technical Parameter

| 设计依据<br>Design Basis       | GB       | ANSI        |
|----------------------------|----------|-------------|
| 设计标准<br>Design Standard    | GB/12237 | ANSI B16.34 |
| 试验和检验<br>Test & Inspection | JB/T9092 | API 598     |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

技术规范 Technical Parameter

| 设计依据<br>Design Basis       | GB       | ANSI        |
|----------------------------|----------|-------------|
| 设计标准<br>Design Standard    | GB/12237 | ANSI B16.34 |
| 试验和检验<br>Test & Inspection | JB/T9092 | API 598     |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

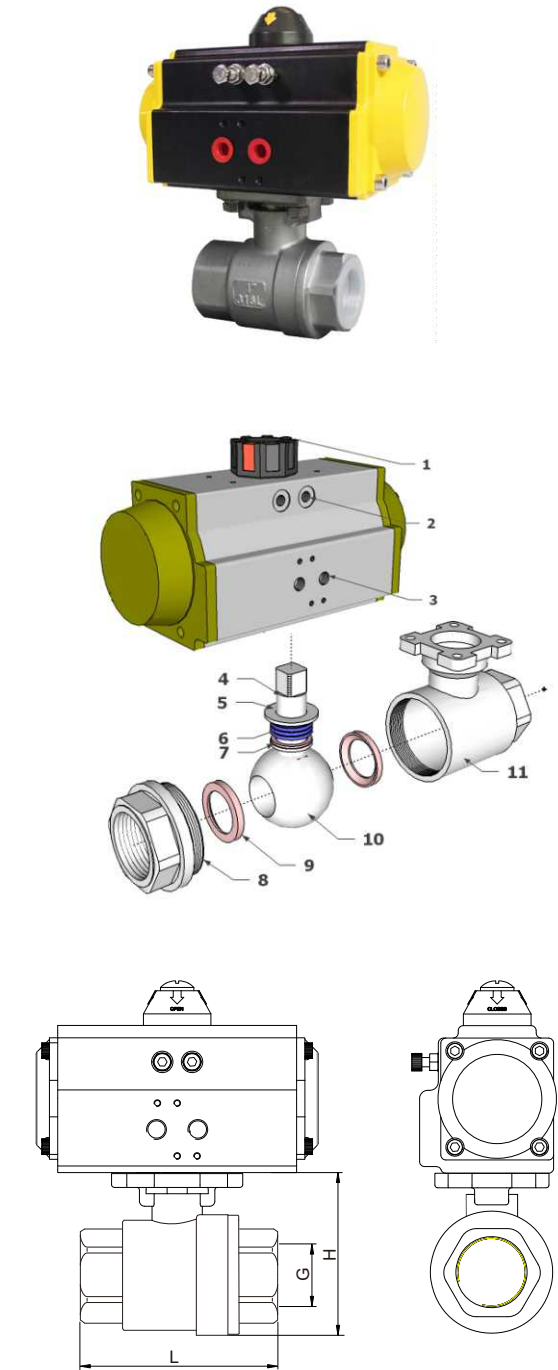
| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                               |
|-----------|-----------------------------|-----------------------------------------------------------|
| 1         | 位置指示器<br>Location Indicator | 塑料 Plastic                                                |
| 2         | 气动执行器<br>Pneumatic Actuator | AT Series                                                 |
| 3         | 连接套<br>Connecting Set       | 不锈钢304<br>Stainless Steel 304                             |
| 4         | 阀杆<br>Stem                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304、316、316L  |
| 5         | 垫片<br>Gasket                | 不锈钢304、316L<br>Stainless Steel 304、316L                   |
| 6         | 填料<br>Packing               | 聚四氟乙烯(PTFE)                                               |
| 7         | 压盖<br>Gland                 | 不锈钢304、316L<br>Stainless Steel 304、316L                   |
| 8         | 左阀体<br>Body                 | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |
| 9         | 阀座<br>Seat                  | PTFE、对位聚苯(PPL)<br>硬质合金(H/Y)                               |
| 10        | 球体<br>Ball                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 11        | 右阀体<br>Body                 | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.

主要零件材质表 Main Parts Materials

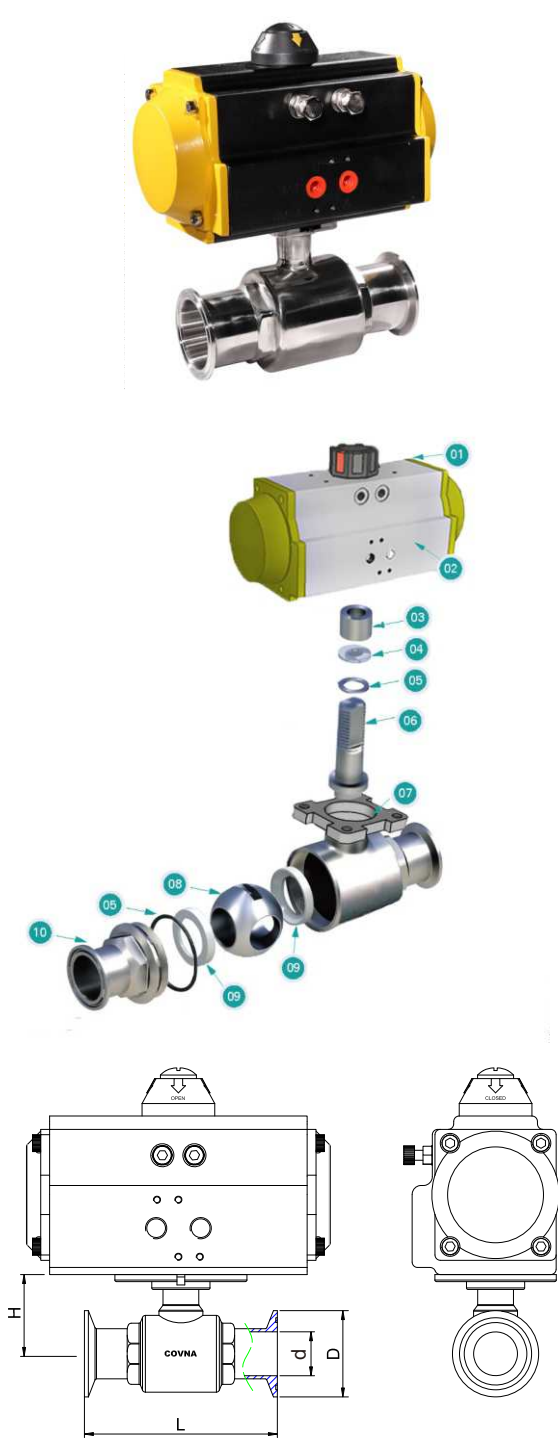
| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                               |
|-----------|-----------------------------|-----------------------------------------------------------|
| 1         | 位置指示器<br>Location Indicator | 塑料 Plastic                                                |
| 2         | 气动执行器<br>Pneumatic Actuator | AT Series                                                 |
| 3         | 连接套<br>Connecting Set       | 不锈钢304<br>Stainless Steel 304                             |
| 4         | 填料<br>Packing               | 聚四氟乙烯(PTFE)                                               |
| 5         | O型环<br>O-Ring               | EPDM/FPM                                                  |
| 6         | 右阀体<br>Body                 | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |
| 7         | 阀杆<br>Stem                  | 不锈钢304、316、316L<br>Stainless Steel 304、316、316L           |
| 8         | 球体<br>Ball                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 9         | 阀座<br>Seat                  | PTFE、SIL(硅胶)                                              |
| 10        | 左阀体<br>Body                 | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.



主要外形及连接尺寸1.6MPa  
Main Outline and Connecting 1.6MPa

| MEDLE | DN08 | DN10 | DN15 | DN20 | DN25 | DN32   | DN40   | DN50 | DN65   | DN80 | DN100 |
|-------|------|------|------|------|------|--------|--------|------|--------|------|-------|
| G     | 1/4" | 3/8" | 1/2" | 3/4" | 1"   | 1-1/4" | 1-1/2" | 2"   | 2-1/2" | 3"   | 4"    |
| D     | 8    | 10   | 15   | 20   | 25   | 32     | 40     | 50   | 65     | 80   | 100   |
| L     | 55   | 55   | 55   | 73   | 84   | 98     | 106    | 121  | 160    | 180  | 220   |
| H     | 30   | 30   | 37   | 40   | 49   | 53     | 62     | 70   | 93     | 106  | 126   |



主要外形及连接卡箍尺寸1.6MPa  
Main Outline and Connecting 1.6MPa

| Size | 3/4" | 1"   | 1-1/4" | 1-1/2" | 1-3/4" | 2"   | 2-1/4" | 2-1/2" | 3"  | 3-1/2" | 4"   |
|------|------|------|--------|--------|--------|------|--------|--------|-----|--------|------|
|      | Ø19  | Ø25  | Ø32    | Ø38    | Ø45    | Ø51  | Ø57    | Ø63    | Ø76 | Ø89    | Ø102 |
| d    | 16.5 | 22   | 28.5   | 35     | 41     | 47.5 | 52     | 58.2   | 72  | 84.8   | 98.3 |
| D    | 50.5 | 50.5 | 50.5   | 50.5   | 64     | 64   | 77.5   | 77.5   | 91  | 106    | 119  |
| L    | 101  | 117  | 125    | 140    | 155    | 165  | 170    | 176    | 200 | 240    | 270  |
| H    | 45   | 50   | 51     | 64     | 67     | 70   | 74     | 80     | 100 | 107    | 122  |

HK55-F-C 气动衬氟法兰球阀

Pneumatic PTFE-Lined Flanged Ball Valve

科威纳 COVNA®



技术规范 Technical Parameter

|                                      |                                  |                     |
|--------------------------------------|----------------------------------|---------------------|
| 设计依据<br>Design Basis                 |                                  | API, ANSI           |
| 设计标准<br>Design Standard              |                                  | API 6D, ANSI B16.34 |
| 结构长度<br>Face To<br>Face<br>Dimension | 法兰<br>连接<br>Flange<br>Connecting | API 6D, ANSI B16.10 |
| 连接法兰尺寸<br>Connecting Flange Size     |                                  | ANSI B16.5          |
| 试验和检验<br>Test & Inspection           |                                  | API 6D, API 598     |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Name                    | 材质 Material                                  |
|-----------|---------------------------------|----------------------------------------------|
| 1         | 主阀体<br>Body                     | 铸铁、铸钢、不锈钢<br>Cast Iron, WCB, Stainless Steel |
| 2         | 球体<br>Ball                      | 铸铁、铸钢、不锈钢<br>Cast Iron, WCB, Stainless Steel |
| 3         | 内衬材料/阀座<br>Lining Material/Seat | 聚四氟乙烯(PTFE)                                  |
| 4         | 填料<br>Packing                   | 聚四氟乙烯(PTFE)                                  |
| 5         | 压盖<br>Cap                       | 铸铁、铸钢、不锈钢<br>Cast Iron, WCB, Stainless Steel |
| 6         | 阀杆<br>Stem                      | 不锈钢304、316<br>Stainless Steel 304、316        |
| 7         | 连接套<br>Connecting Set           | 不锈钢304、316<br>Stainless Steel 304、316        |
| 8         | Screw<br>螺栓                     | 不锈钢304、316<br>Stainless Steel 304、316        |
| 9         | 气动执行器<br>Pneumatic Actuator     | AT Series                                    |
| 10        | 位置指示器<br>Location Indicator     | 塑料 Plastic                                   |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.

主要外形及连接法兰尺寸 1.6MPa  
Main Outline and Connecting Flange Size 1.6MPa

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80    | DN100 | DN125 | DN150 | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|---------|-------|-------|-------|--------|
| Inch  | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"      | 4"    | 5"    | 6"    | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80      | 100   | 125   | 150   | 200    |
| D2    | 45    | 55    | 65    | 78     | 85     | 100   | 120    | 135     | 155   | 185   | 210   | 265    |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145    | 160     | 180   | 210   | 240   | 295    |
| D     | 95    | 105   | 115   | 135    | 145    | 160   | 180    | 195     | 215   | 245   | 280   | 335    |
| b     | 14    | 16    | 16    | 18     | 18     | 20    | 20     | 22      | 22    | 24    | 24    | 26     |
| L     | 140   | 140   | 150   | 165    | 180    | 200   | 220    | 250     | 280   | 320   | 360   | 400    |
| n-φd  | 4-φ14 | 4-φ14 | 4-φ14 | 4-φ18  | 4-φ18  | 4-φ18 | 4-φ18  | 4/8-φ18 | 8-φ18 | 8-φ18 | 8-φ23 | 12-φ23 |

科威纳 COVNA®

HK54-B 气动意式薄型球阀

Pneumatic Wafer Thin Ball Valve



技术规范 Technical Parameter

|                                      |                                  |                     |
|--------------------------------------|----------------------------------|---------------------|
| 设计依据<br>Design Basis                 |                                  | GB                  |
| 设计标准<br>Design Standard              |                                  | GB/12237            |
| 结构长度<br>Face to<br>Face<br>Dimension | 法兰<br>连接<br>Flange<br>Connecting | API 6D, ANSI B16.10 |
| 连接法兰尺寸<br>Connecting Flange Size     |                                  | GB/9113 JB/T79      |
| 试验和检验<br>Test & Inspection           |                                  | JB/T9092            |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

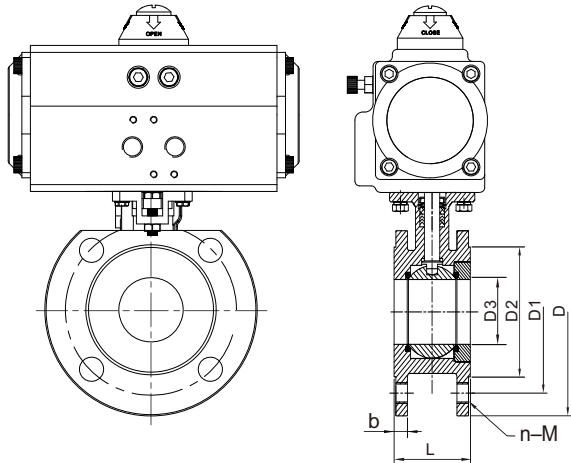
主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                               |
|-----------|-----------------------------|-----------------------------------------------------------|
| 1         | 主阀体<br>Body                 | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 2         | 球体<br>Ball                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 3         | 阀座<br>Seat                  | PTFE、对位聚苯(PPL)                                            |
| 4         | O型环<br>O-Ring               | 聚四氟乙烯(PTFE)                                               |
| 5         | 填料<br>Packing               | 聚四氟乙烯(PTFE)                                               |
| 6         | 阀杆<br>Stem                  | 不锈钢304、316、316L<br>Stainless Steel 304、316、316L           |
| 7         | 连接套<br>Connecting Set       | 不锈钢304、316<br>Stainless Steel 304、316                     |
| 8         | Screw<br>螺栓                 | 不锈钢304、316<br>Stainless Steel 304、316                     |
| 9         | 气动执行器<br>Pneumatic Actuator | AT Series                                                 |
| 10        | 位置指示器<br>Location Indicator | 塑料 Plastic                                                |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.

主要外形及连接法兰尺寸 1.6MPa  
Main Outline and Connecting Flange Size 1.6MPa

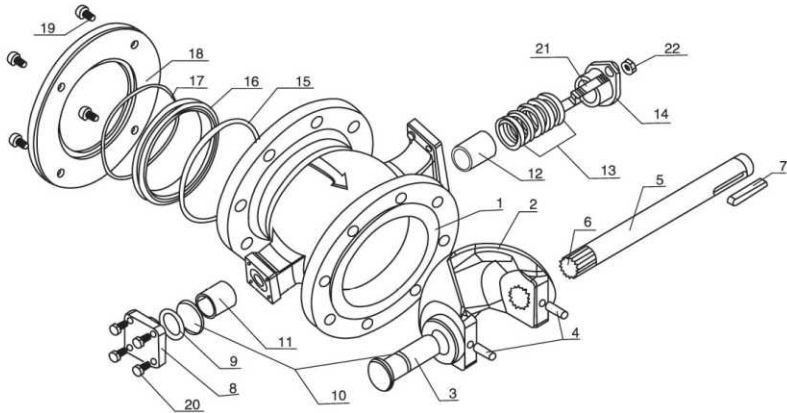
| MEDLE | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 |
|-------|-------|--------|--------|-------|--------|-------|-------|
| G     | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    |
| D3    | 23.5  | 31     | 36     | 44    | 55     | 70    | 88    |
| D2    | 68    | 76     | 90     | 103   | 123    | 138   | 159   |
| D1    | 85    | 100    | 110    | 125   | 145    | 160   | 180   |
| D     | 98.5  | 135    | 128    | 142   | 158    | 187   | 206   |
| L     | 44    | 53     | 63     | 72    | 95     | 120   | 139   |
| b     | 16    | 16     | 18     | 18    | 18     | 21    | 21    |
| n-M   | 4-M10 | 4-M14  | 4-M14  | 4-M14 | 4-M14  | 8-M14 | 8-M14 |



技术规范 Technical Parameter

|                                  |                |             |
|----------------------------------|----------------|-------------|
| 设计依据<br>Design Basis             | GB             | ANSI        |
| 设计标准<br>Design Standard          | GB/12237       | ANSI B16.34 |
| 连接法兰尺寸<br>Connecting Flange Size | GB/9113 JB/T79 | ANSI B16.5  |
| 试验和检验<br>Test & Inspection       | JB/T9092       | API 598     |

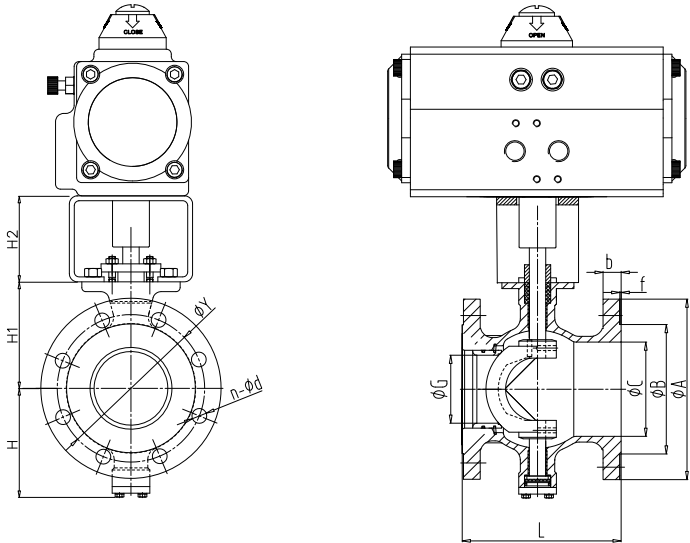
※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirements.



主要零件材质表 Main Parts Materials

| 序号 No. | 零件名称  | Component                 | 数量 Qty | 材质 Material             |
|--------|-------|---------------------------|--------|-------------------------|
| 1      | 阀体    | Body                      | 1      | WCB、CF8、CF8M、CF3、CF3M   |
| 2      | 球体    | Ball                      | 1      | CF8、CF8M+镀硬铬或超音速喷涂      |
| 3      | 后阀杆   | Rear Stem                 | 1      | 17-4PH、SS316            |
| 4      | 圆柱销   | Cylindrical Pin           | 1      | SS304、S3316             |
| 5      | 前阀杆   | Front Stem                | 2      | 17-4PH、SS316            |
| 6      | 花键    | Spline                    | 1      | 17-4PH、SS316            |
| 7      | 平键    | Flat Key                  | 1      | SS304、45#               |
| 8      | 后压键   | After Gland               | 1      | CF8、CF8M                |
| 9      | O形圈   | O-Ring                    | 1      | 氟橡胶 Viton               |
| 10     | 调整垫   | Adjust Pad                | 各1     | 聚四氟乙烯(PTFE)             |
| 11     | 自润滑轴承 | Self-Lubricating Bearings | 1      | 复合材料 Composite Material |
| 12     | 自润滑轴承 | Self-Lubricating Bearings | 1      | 复合材料 Composite Material |
| 13     | 填料    | Packing                   | 1组     | 聚四氟乙烯(PTFE)             |
| 14     | 填料压盖  | Gland                     | 1      | CF8                     |
| 15     | O形圈   | O-Ring                    | 1      | 氟橡胶 Viton               |
| 16     | 密封座   | Seal Block                | 1      | PTFE、CF8、CF8M+镀硬铬或超音速喷涂 |
| 17     | 密封座弹簧 | Seal Block Spring         | 1      | SS316                   |
| 18     | 密封座盖  | Sealing Lid               | 1      | Q235、SS304、S3316        |
| 19     | 内六角螺钉 | Inner Hexagon Screw       |        | SS304                   |
| 20     | 六角螺钉  | Hexagon Screw             | 4      | SS304                   |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.



主要外形及连接法兰尺寸 – 1.6MPa  
Main Outline and Connecting Flange Size – 1.6MPa

| MEDLE | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  |
|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------|
| Inch  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     |
| A     | 115   | 140    | 150    | 165   | 185    | 200   | 220   | 250   | 285   | 340    |
| B     | 65    | 76     | 84     | 99    | 118    | 132   | 156   | 184   | 211   | 266    |
| C     | 38    | 45     | 50     | 62    | 73     | 90    | 115   | 134   | 164   | 206    |
| G     | 20    | 25     | 32     | 40    | 55     | 62    | 80    | 100   | 125   | 155    |
| Y     | 85    | 100    | 110    | 125   | 145    | 160   | 180   | 210   | 240   | 295    |
| b     | 16    | 18     | 18     | 20    | 20     | 20    | 22    | 22    | 24    | 24     |
| f     | 2     | 2      | 2      | 2     | 2      | 2     | 2     | 2     | 2     | 2      |
| n-φd  | 4-φ14 | 4-φ18  | 4-φ18  | 4-φ18 | 8-φ18  | 8-φ18 | 8-φ18 | 8-φ18 | 8-φ22 | 12-φ22 |
| L     | 102   | 102    | 114    | 124   | 145    | 165   | 194   | 194   | 229   | 243    |
| H     | 81    | 86     | 90     | 93    | 108    | 123   | 138   | 128   | 170   | 200    |
| H1    | 178   | 183    | 185    | 195   | 210    | 223   | 235   | 250   | 270   | 320    |

主要外形及连接法兰尺寸 – 150 Class  
Main Outline and Connecting Flange Size– 150 Class

| MEDLE | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  |
|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------|
| Inch  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     |
| A     | 108   | 115    | 127    | 152   | 180    | 191   | 230   | 255   | 280   | 340    |
| B     | 50.8  | 63.5   | 73     | 92.1  | 104.8  | 127   | 157.2 | 185.7 | 215.9 | 269.9  |
| C     | 79.4  | 88.9   | 98.4   | 120.7 | 139.7  | 152.4 | 190.5 | 215.9 | 241.3 | 298.5  |
| G     | 20    | 25     | 32     | 40    | 55     | 62    | 80    | 100   | 125   | 155    |
| Y     | 85    | 100    | 110    | 125   | 145    | 160   | 180   | 210   | 240   | 295    |
| b     | 16    | 18     | 18     | 20    | 20     | 20    | 22    | 22    | 24    | 24     |
| f     | 2     | 2      | 2      | 2     | 2      | 2     | 2     | 2     | 2     | 2      |
| n-φd  | 8-φ14 | 8-φ18  | 8-φ18  | 8-φ18 | 8-φ18  | 8-φ18 | 8-φ18 | 8-φ18 | 8-φ22 | 12-φ22 |
| L     | 102   | 102    | 114    | 124   | 145    | 165   | 194   | 194   | 229   | 243    |
| H     | 81    | 86     | 90     | 93    | 108    | 123   | 138   | 128   | 170   | 200    |
| H1    | 178   | 183    | 185    | 195   | 210    | 223   | 235   | 250   | 270   | 320    |

HK59-D-K 气动真空球阀

Pneumatic Vacuum Ball Valve

科威纳 COVNA®



技术规范 Technical Parameter

|                            |          |             |
|----------------------------|----------|-------------|
| 设计依据<br>Design Basis       | GB       | ANSI        |
| 设计标准<br>Design Standard    | GB/12237 | ANSI B16.34 |
| 试验和检验<br>Test & Inspection | JB/T9092 | API 598     |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users' requirements.

主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                               |
|-----------|-----------------------------|-----------------------------------------------------------|
| 1         | 位置指示器<br>Location Indicator | 塑料 Plastic                                                |
| 2         | 气动执行器<br>Pneumatic Actuator | AT Series                                                 |
| 3         | 连接套<br>Connecting Set       | 不锈钢304<br>Stainless Steel 304                             |
| 4         | 阀杆<br>Stem                  | 不锈钢304、316、316L<br>Stainless Steel 304、316、316L           |
| 5         | 垫片<br>Gasket                | 不锈钢304、316L<br>Stainless Steel 304、316L                   |
| 6         | 填料<br>Packing               | 聚四氟乙烯(PTFE)                                               |
| 7         | 分阀体<br>Body                 | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |
| 8         | 阀座<br>Seat                  | PTFE、对位聚苯(PPL)<br>硬质合金(H/Y)                               |
| 9         | 球体<br>Ball                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 10        | 右阀体<br>Body                 | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users' special requirements.

主要外形及连接法兰尺寸 GB-1.6MPa  
Main Outline and Connecting Flange Size-1.6MPa

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65    | DN80    | DN100   | DN125 | DN150 |
|-------|-------|-------|-------|--------|--------|-------|---------|---------|---------|-------|-------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2"  | 3"      | 4"      | 5"    | 6"    |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65      | 80      | 100     | 125   | 150   |
| D2    | 45    | 58    | 65    | 78     | 88     | 102   | 122     | 138     | 158     | 185   | 210   |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145     | 160     | 180     | 210   | 240   |
| D     | 95    | 105   | 115   | 140    | 150    | 165   | 185     | 200     | 220     | 250   | 285   |
| L     | 130   | 150   | 160   | 180    | 200    | 230   | 250/290 | 280/310 | 320/350 | 400   | 480   |
| n-φd  | 4-φ14 | 4-φ14 | 4-φ14 | 4-φ18  | 4-φ18  | 4-φ18 | 4-φ18   | 4-φ18   | 8-φ18   | 8-φ18 | 8-φ23 |

科威纳 COVNA®

气动三通球阀

Pneumatic 3-Way Ball Valve

气动三通球阀是由角行程活塞式气动执行器及三通球阀组成，是一种旋转类切断、调节阀门，具有关闭严密，结构紧凑，重量轻，维修方便等优点。

气动三通球阀是一种三通道的回转型球阀,用于介质分流、合流及流向切换，任何一个管道都可以作为入口或出口。气动三通球阀分有气动三通L型球阀和气动三通T型球阀两种，可以满足不同的生产工艺要求; L型球阀是对三条管道中的两条管道进行切断，T型球阀实现把三条连通管道进行合流与分流。

气动三通球阀可配以阀门定位器输入控制信号(4-20mADC或1-5VDC)气源即可控制运转。亦可配行程限位开关、电磁阀、减压阀及0.4-0.7MPa气源可实现开关操作，并送出二对无源触点信号指示阀门的开关。

The pneumatic three-way ball valve is composed of a quarter-stroke piston pneumatic actuator and a three way ball valve. It is a rotary cut-off and regulating valve. It has the advantages of tight closing, compact structure, light weight and convenient maintenance.

Pneumatic three-way ball valve is a three-channel rotary ball valve, used for media splitting, merging and flow direction switching. Any pipe can be used as an inlet or an outlet. Pneumatic three-way ball valves are divided into pneumatic three-way L-type ball valves and pneumatic three-way T-type ball valves, which can meet the requirements of different production processes; L-type ball valves cut off two of the three pipelines, and T-type ball valves realize Three connecting pipelines merge and diverge.

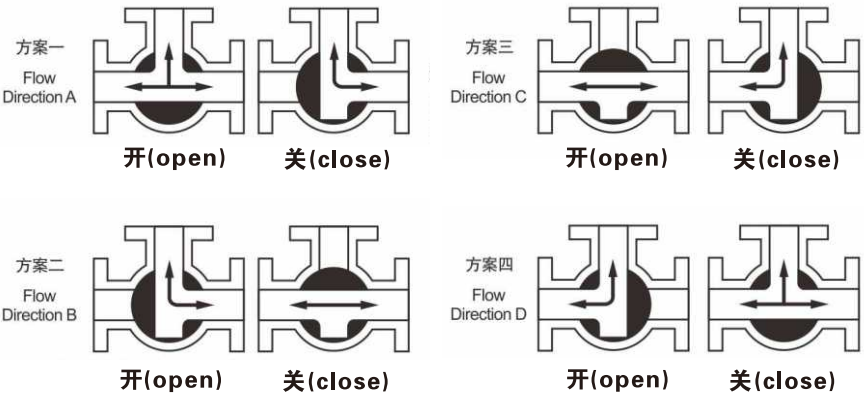
Pneumatic three-way ball valve can be equipped with valve positioner input control signal (4-20mADC or 1-5VDC) air source to control operation. It can also be equipped with stroke limit switch, solenoid valve, pressure reducing valve and 0.4-0.7MPa air source to realize switch operation, and send out two pairs of passive contact signals to indicate the switch of the valve.

三通球阀介质流向示意图 Sketch of Medium Flow-Direction of Three-Way Ball Valve

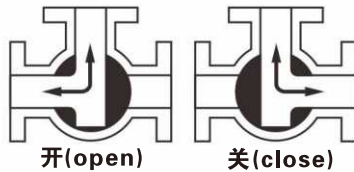
气动三通球阀分L型和T型，介质流通方向见下图。L型适用于介质流向的切换，能使相互垂直的两个通道连通；T型适用于介质的分流、合流或流向切换，T型孔道可以使三个通道互相连通或使其中两个通道连通。

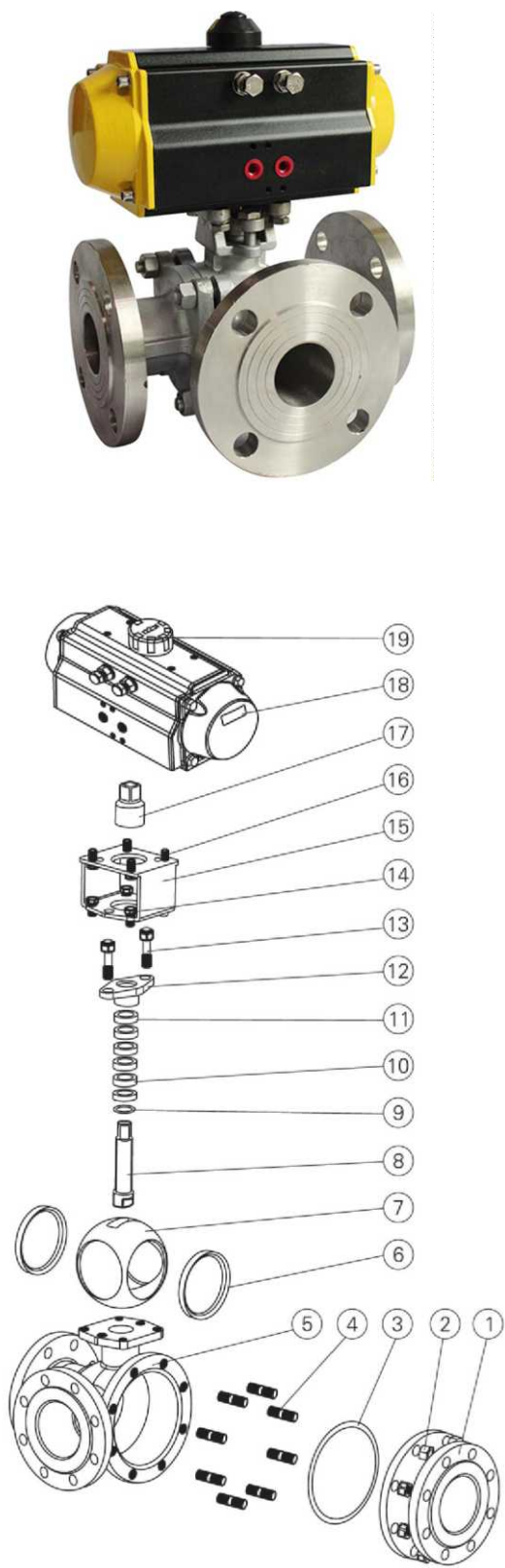
Pneumatic three-way ball valve is divided into L type and T type, the flow direction of the medium is shown in the figure below. L type is suitable for medium flow switching and can connect two mutually perpendicular channels: T type is suitable for medium diversion, merging or flow direction switching. T-shaped channels can connect three channels or two of them.

T型三通球阀流向图  
T-Pattern Flow Direction Diagram



L型三通球阀流向图  
L-Pattern Flow Direction Diagram





技术规范 Technical Parameter

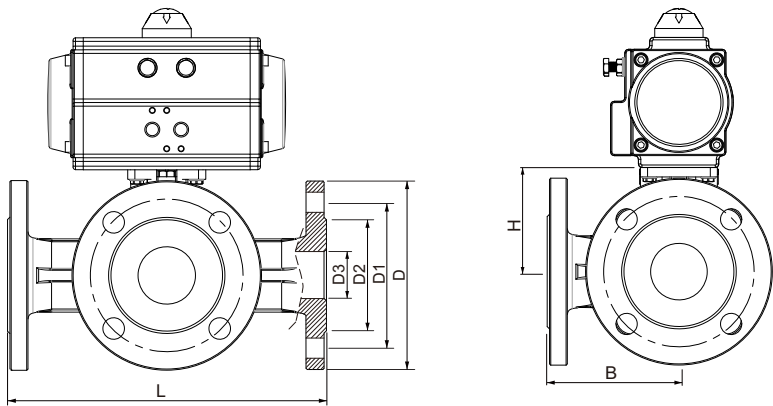
|                                  |                |             |
|----------------------------------|----------------|-------------|
| 设计依据<br>Design Basis             | GB             | ANSI        |
| 设计标准<br>Design Standard          | GB/12237       | ANSI B16.34 |
| 连接法兰尺寸<br>Connecting Flange Size | GB/9113 JB/T79 | ANSI B16.5  |
| 试验和检验<br>Test & Inspection       | JB/T9092       | API 598     |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Component           | 材质 Material                                         |     |     |
|-----------|-----------------------------|-----------------------------------------------------|-----|-----|
|           |                             | C                                                   | P   | R   |
| 1         | 右阀体<br>Right Valve          | WCB                                                 | 304 | 304 |
| 2         | 螺母<br>Nut                   | 35                                                  | 3.6 | 3.6 |
| 3         | 垫片<br>Gasket                | 聚四氟乙烯(PTFE)、石墨金属复合垫<br>Graphite Metal Composite Pad |     |     |
| 4         | 螺栓<br>Screw                 | 35                                                  | 3.6 | 3.6 |
| 5         | 阀体<br>Body                  | WCB                                                 | 304 | 304 |
| 6         | 阀座<br>Seat                  | PTFE、对位聚苯(PPL)<br>硬质合金 Hard Alloy                   |     |     |
| 7         | 球体<br>Ball                  | 1Cr18Ni9Ti                                          | 3.6 | 3.6 |
| 8         | 阀杆<br>Stem                  | 1Cr13                                               | 3.6 | 3.6 |
| 9         | 垫片<br>Gasket                | 1Cr18Ni9Ti                                          | 3.6 | 3.6 |
| 10        | 填料<br>Packing               | 聚四氟乙烯(PTFE)、柔 石墨 Flexible Graphite                  |     |     |
| 11        | 衬套<br>Bushing               | 聚四氟乙烯(PTFE)<br>复合轴承 Composite Bearings              |     |     |
| 12        | 压盖<br>Gland                 | WCB                                                 | 304 | 304 |
| 13        | 螺栓<br>Screw                 | 35                                                  | 3.6 | 3.6 |
| 14        | 螺栓<br>Screw                 | 35                                                  | 3.6 | 3.6 |
| 15        | 连接支架<br>Connecting Yoke     | 1Cr18Ni9Ti                                          | 3.6 | 3.6 |
| 16        | 螺栓<br>Screw                 | 35                                                  | 3.6 | 3.6 |
| 17        | 连接套<br>Connecting Set       | 1Cr18Ni9Ti                                          | 3.6 | 3.6 |
| 18        | 气动装置<br>Pneumatic Device    | AT Series、AW Series                                 |     |     |
| 19        | 位置指示器<br>Location Indicator | 塑料Plastic                                           |     |     |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.



主要外形及连接法兰尺寸 HK55-TF-GB-PN16  
Main Outline and Connecting Flange Size-PN16

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150   | 200    |
| D2    | 45    | 55    | 65    | 78     | 85     | 100   | 120    | 135   | 155   | 185   | 210   | 265    |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145    | 160   | 180   | 210   | 240   | 295    |
| D     | 95    | 105   | 115   | 135    | 145    | 160   | 180    | 195   | 215   | 245   | 280   | 335    |
| L     | 150   | 164   | 180   | 200    | 220    | 240   | 260    | 280   | 320   | 380   | 440   | 550    |
| H     | 53    | 58.5  | 70    | 77.5   | 88.5   | 92    | 107    | 119   | 150   | 200   | 240   | 300    |
| B     | 72    | 80    | 90    | 100    | 110    | 120   | 130    | 140   | 160   | 190   | 220   | 260    |
| n-φd  | 4-φ14 | 4-φ14 | 4-φ14 | 4-φ18  | 4-φ18  | 4-φ18 | 4-φ18  | 8-φ18 | 8-φ18 | 8-φ18 | 8-φ18 | 12-φ23 |

主要外形及连接法兰尺寸 HK55-TF-GB-PN25  
Main Outline and Connecting Flange Size-PN25

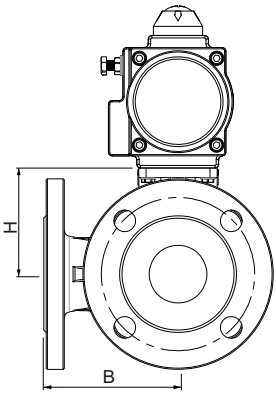
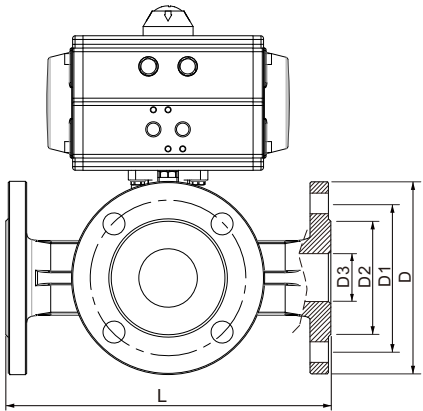
| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150   | 200    |
| D2    | 45    | 55    | 65    | 78     | 85     | 100   | 120    | 135   | 160   | 190   | 220   | 250    |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145    | 160   | 190   | 220   | 250   | 310    |
| D     | 95    | 105   | 115   | 140    | 150    | 160   | 180    | 195   | 230   | 270   | 300   | 360    |
| L     | 150   | 164   | 180   | 200    | 220    | 240   | 260    | 280   | 320   | 380   | 440   | 550    |
| H     | 53    | 58.5  | 70    | 77.5   | 88.5   | 92    | 107    | 119   | 150   | 200   | 240   | 300    |
| B     | 72    | 80    | 90    | 100    | 110    | 120   | 130    | 140   | 160   | 190   | 220   | 260    |
| n-φd  | 4-φ14 | 4-φ14 | 4-φ14 | 4-φ18  | 4-φ18  | 4-φ18 | 8-φ18  | 8-φ18 | 8-φ23 | 8-φ25 | 8-φ25 | 12-φ25 |

\*注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note: The structural length and connecting flange size of ball valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

HK55–TF气动三通法兰球阀 日标

Pneumatic 3–Way Flanged Ball Valve JIS



主要外形及连接法兰尺寸 HK55–TF–JIS–10K  
Main Outline and Connecting Flange Size–10K

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150   | 200    |
| D2    | 52    | 58    | 70    | 80     | 85     | 100   | 120    | 130   | 155   | 185   | 215   | 265    |
| D1    | 70    | 75    | 90    | 100    | 105    | 120   | 140    | 150   | 175   | 210   | 240   | 290    |
| D     | 95    | 100   | 125   | 135    | 140    | 155   | 175    | 185   | 210   | 250   | 280   | 330    |
| L     | 150   | 164   | 180   | 200    | 220    | 240   | 260    | 280   | 320   | 380   | 440   | 550    |
| H     | 53    | 58.5  | 70    | 77.5   | 88.5   | 92    | 107    | 119   | 150   | 200   | 240   | 300    |
| B     | 72    | 80    | 90    | 100    | 110    | 120   | 130    | 140   | 160   | 190   | 220   | 260    |
| n–φd  | 4–φ15 | 4–φ15 | 4–φ19 | 4–φ19  | 4–φ19  | 4–φ19 | 4–φ19  | 8–φ19 | 8–φ19 | 8–φ23 | 8–φ23 | 12–φ23 |

主要外形及连接法兰尺寸 HK55–TF–JIS–20K  
Main Outline and Connecting Flange Size–20K

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150   | 200    |
| D2    | 52    | 58    | 70    | 80     | 85     | 100   | 120    | 135   | 160   | 195   | 230   | 275    |
| D1    | 70    | 75    | 90    | 100    | 105    | 120   | 140    | 160   | 185   | 225   | 260   | 305    |
| D     | 95    | 100   | 125   | 135    | 140    | 155   | 175    | 200   | 225   | 270   | 305   | 350    |
| L     | 150   | 164   | 180   | 200    | 220    | 240   | 260    | 280   | 320   | 380   | 440   | 550    |
| H     | 53    | 58.5  | 70    | 77.5   | 88.5   | 92    | 107    | 119   | 150   | 200   | 240   | 300    |
| B     | 72    | 80    | 90    | 100    | 110    | 120   | 130    | 140   | 160   | 190   | 220   | 260    |
| n–φd  | 4–φ15 | 4–φ15 | 4–φ19 | 4–φ19  | 4–φ19  | 8–φ19 | 8–φ19  | 8–φ23 | 8–φ23 | 8–φ25 | 8–φ25 | 12–φ25 |

\*注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note: The structural length and connecting flange size of ball valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft–sealed valves(F, N, P), contact COVNA for hard–sealed valves data.

HK55–TF 气动三通法兰球阀 美标

Pneumatic 3–Way Flanged Ball Valve ANSI

主要外形及连接法兰尺寸 HK55–TF–ANSI–Class150  
Main Outline and Connecting Flange Size–Class150

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200 |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|-------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"    |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150   | 200   |
| D2    | 34.9  | 42.9  | 50.8  | 63.5   | 73     | 92.1  | 104.8  | 127   | 157.2 | 185.7 | 215.9 | 269.9 |
| D1    | 60.3  | 69.9  | 79.4  | 88.9   | 98.4   | 120.7 | 139.7  | 152.4 | 190.5 | 215.9 | 241.3 | 298.5 |
| D     | 90    | 100   | 110   | 115    | 125    | 150   | 180    | 190   | 230   | 255   | 280   | 345   |
| L     | 150   | 164   | 180   | 200    | 220    | 240   | 260    | 280   | 320   | 380   | 440   | 550   |
| H     | 53    | 58.5  | 70    | 77.5   | 88.5   | 92    | 107    | 119   | 150   | 200   | 240   | 300   |
| B     | 72    | 80    | 90    | 100    | 110    | 120   | 130    | 140   | 160   | 190   | 220   | 260   |
| n–φd  | 4–φ16 | 4–φ16 | 4–φ16 | 4–φ16  | 4–φ16  | 4–φ19 | 4–φ19  | 4–φ19 | 4–φ19 | 8–φ22 | 8–φ22 | 8–φ22 |

主要外形及连接法兰尺寸 HK55–TF–ANSI–Class300  
Main Outline and Connecting Flange Size–Class300

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150  | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|--------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"     | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150    | 200    |
| D2    | 34.9  | 42.9  | 50.8  | 63.5   | 73     | 92.1  | 104.8  | 127   | 157.2 | 185.7 | 215.9  | 269.9  |
| D1    | 66.7  | 82.6  | 88.9  | 98.4   | 114.3  | 127   | 149.2  | 168.3 | 200   | 235   | 269.9  | 330.2  |
| D     | 95    | 115   | 125   | 135    | 155    | 165   | 190    | 210   | 255   | 280   | 320    | 380    |
| L     | 150   | 164   | 180   | 200    | 220    | 240   | 260    | 280   | 320   | 380   | 440    | 550    |
| H     | 53    | 58.5  | 70    | 77.5   | 88.5   | 92    | 107    | 119   | 150   | 200   | 240    | 300    |
| B     | 72    | 80    | 90    | 100    | 110    | 120   | 130    | 140   | 160   | 190   | 220    | 260    |
| n–φd  | 4–φ16 | 4–φ19 | 4–φ19 | 4–φ19  | 4–φ22  | 4–φ19 | 8–φ22  | 8–φ22 | 8–φ22 | 8–φ22 | 12–φ22 | 12–φ25 |

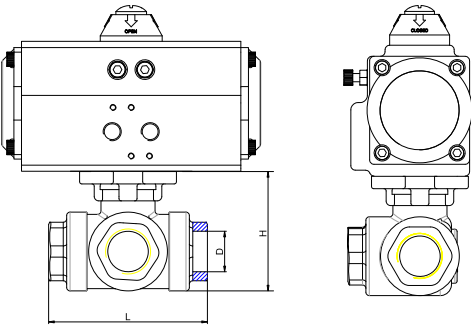
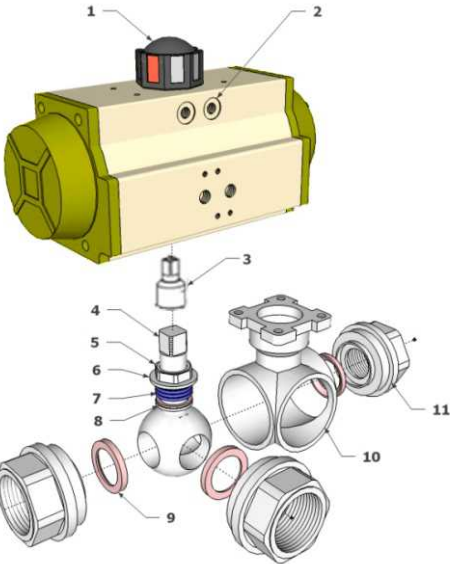
主要外形及连接法兰尺寸 HK55–TF–Class600  
Main Outline and Connecting Flange Size–Class600

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150  | DN200  |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|--------|--------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"     | 8"     |
| D3    | 15    | 20    | 25    | 30     | 40     | 50    | 65     | 80    | 100   | 125   | 150    | 200    |
| D2    | 34.9  | 42.9  | 50.8  | 63.5   | 73     | 92.1  | 104.8  | 127   | 157.2 | 185.7 | 215.9  | 269.9  |
| D1    | 66.7  | 82.6  | 88.9  | 98.4   | 114.3  | 127   | 149.2  | 168.3 | 215.9 | 266.7 | 292.1  | 349.2  |
| D     | 95    | 115   | 125   | 135    | 155    | 165   | 190    | 210   | 275   | 330   | 355    | 420    |
| L     | 150   | 164   | 180   | 200    | 220    | 240   | 260    | 280   | 320   | 380   | 440    | 550    |
| H     | 53    | 58.5  | 70    | 77.5   | 88.5   | 92    | 107    | 119   | 150   | 200   | 240    | 300    |
| B     | 72    | 80    | 90    | 100    | 110    | 120   | 130    | 140   | 160   | 190   | 220    | 260    |
| n–φd  | 4–φ16 | 4–φ19 | 4–φ19 | 4–φ19  | 4–φ22  | 8–φ19 | 8–φ22  | 8–φ22 | 8–φ25 | 8–φ29 | 12–φ29 | 12–φ32 |

HK56-T 气动三通螺纹球阀

Pneumatic 3-Way Threaded Ball Valve

科威纳 COVNA®



主要外形及连接尺寸  
Main Outline and Connecting

| MEDLE | DN08 | DN10 | DN15 | DN20 | DN25 | DN32   | DN40   | DN50 | DN65   |
|-------|------|------|------|------|------|--------|--------|------|--------|
| G     | 1/4" | 3/8" | 1/2" | 3/4" | 1"   | 1-1/4" | 1-1/2" | 2"   | 2-1/2" |
| D     | 10   | 12   | 12   | 15   | 20   | 25     | 32     | 38   | 48.5   |
| L     | 71   | 71   | 74   | 88   | 92   | 124    | 138    | 154  | 180    |
| H     | 56   | 56   | 58   | 60   | 70   | 82     | 95     | 100  | 180    |

技术规范 Technical Parameter

| 设计依据<br>Design Basis             | GB             | ANSI        |
|----------------------------------|----------------|-------------|
| 设计标准<br>Design Standard          | GB/12237       | ANSI B16.34 |
| 连接法兰尺寸<br>Connecting Flange Size | GB/9113 JB/T79 | ANSI B16.5  |
| 试验和检验<br>Test & Inspection       | JB/T9092       | API 598     |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

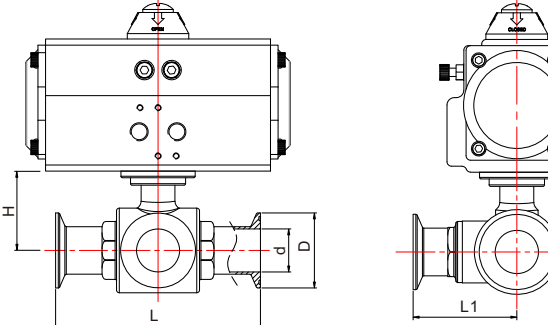
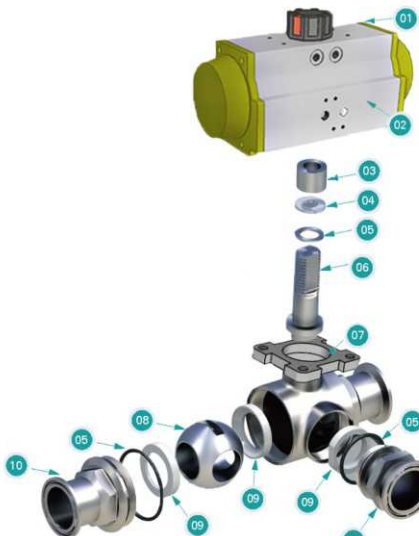
| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                               |
|-----------|-----------------------------|-----------------------------------------------------------|
| 1         | 位置指示器<br>Location Indicator | 塑料 Plastic                                                |
| 2         | 气动执行器<br>Pneumatic Actuator | AT Series                                                 |
| 3         | 连接套<br>Connecting Set       | 不锈钢304<br>Stainless Steel 304                             |
| 4         | 阀杆<br>Stem                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304、316、316L  |
| 5         | 螺栓<br>Screw                 | 不锈钢304、316L<br>Stainless Steel 304、316L                   |
| 6         | 压盖<br>Gland                 | 不锈钢304、316L<br>Stainless Steel 304、316L                   |
| 7         | 填料<br>Packing               | 聚四氟乙烯(PTFE)                                               |
| 8         | 球体<br>Ball                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 9         | 阀座<br>Seat                  | PTFE、对位聚苯(PPL)<br>硬质合金(H/Y)                               |
| 10        | 主阀体<br>Body                 | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |
| 11        | 分阀体<br>Body                 | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.

科威纳 COVNA®

HK56-WT 气动三通卫生级球阀

Pneumatic 3-Way Sanitary Ball Valve



技术规范 Technical Parameter

| 设计依据<br>Design Basis       | GB       | ANSI        |
|----------------------------|----------|-------------|
| 设计标准<br>Design Standard    | GB/12237 | ANSI B16.34 |
| 试验和检验<br>Test & Inspection | JB/T9092 | API 598     |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                               |
|-----------|-----------------------------|-----------------------------------------------------------|
| 1         | 位置指示器<br>Location Indicator | 塑料 Plastic                                                |
| 2         | 气动执行器<br>Pneumatic Actuator | AT Series                                                 |
| 3         | 连接套<br>Connecting Set       | 不锈钢304<br>Stainless Steel 304                             |
| 4         | 填料<br>Packing               | 聚四氟乙烯(PTFE)                                               |
| 5         | O型环<br>O-Ring               | EPDM/FPM                                                  |
| 6         | 主阀体<br>Body                 | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |
| 7         | 阀杆<br>Stem                  | 不锈钢304、316、316L<br>Stainless Steel 304、316、316L           |
| 8         | 球体<br>Ball                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 9         | 阀座<br>Seat                  | PTFE、SIL(硅胶)                                              |
| 10        | 分阀体<br>Body                 | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.

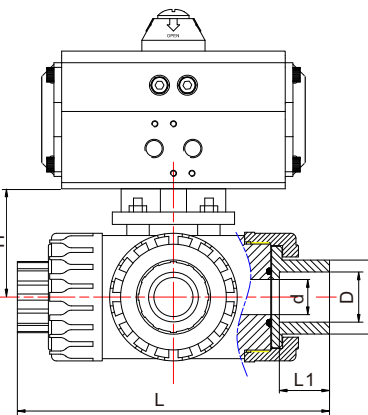
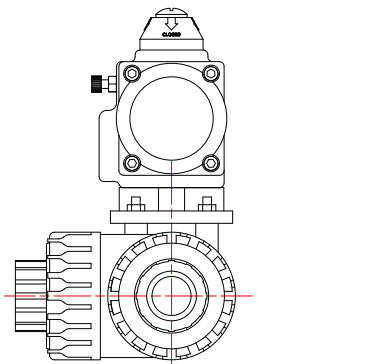
主要外形及连接尺寸  
Main Outline and Connecting

| Size | 3/4" | 1"   | 1-1/4" | 1-1/2" | 2"   | 2-1/2" | 3"  | 3-1/2" | 4"   |
|------|------|------|--------|--------|------|--------|-----|--------|------|
| d    | Ø19  | Ø25  | Ø32    | Ø38    | Ø51  | Ø63    | Ø76 | Ø89    | Ø102 |
| D    | 16.5 | 22   | 28.5   | 35     | 47.5 | 58.2   | 72  | 84.8   | 98.3 |
| L    | 50.5 | 50.5 | 50.5   | 50.5   | 64   | 77.5   | 91  | 106    | 119  |
| L1   | 105  | 126  | 137    | 155    | 184  | 184    | 220 | 240    | 266  |
| H    | 60   | 61.5 | 69     | 77     | 90   | 92     | 122 | 135    | 150  |
| H    | 45   | 48   | 52.5   | 65     | 74   | 84     | 102 | 112    | 122  |

HK57-T 气动三通PVC球阀

Pneumatic 3-Way PVC Ball Valve

科威纳 COVNA®



技术规范 Technical Parameter

| 设计依据<br>Design Basis             | GB             | ANSI        |
|----------------------------------|----------------|-------------|
| 设计标准<br>Design Standard          | GB/12237       | ANSI B16.34 |
| 连接法兰尺寸<br>Connecting Flange Size | GB/9113 JB/T79 | ANSI B16.5  |
| 试验和检验<br>Test & Inspection       | JB/T9092       | API 598     |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                              |
|-----------|-----------------------------|----------------------------------------------------------|
| 1         | 位置指示器<br>Location Indicator | 塑料 Plastic                                               |
| 2         | 气动执行器<br>Pneumatic Actuator | AT Series                                                |
| 3         | 连接套<br>Connecting Set       | 不锈钢304<br>Stainless Steel 304                            |
| 4         | 阀杆<br>Stem                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304、316、316L |
| 5         | 螺栓<br>Screw                 | 不锈钢304、316L<br>Stainless Steel 304、316L                  |
| 6         | 填料<br>Packing               | 聚四氟乙烯(PTFE)                                              |
| 7         | O型环<br>O-Ring               | EPDM/VITON                                               |
| 8         | 阀座<br>Seat                  | UPVC/PPH/CPVC                                            |
| 9         | 球体<br>Ball                  | UPVC/PPH/CPVC                                            |
| 10        | 锁母<br>Union Nut             | UPVC/PPH/CPVC                                            |
| 11        | 接管<br>Endconnector          | UPVC/PPH/CPVC                                            |
| 12        | 阀体<br>Body                  | UPVC/PPH/CPVC                                            |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.

主要外形及连接尺寸  
Main Outline and Connecting

| MEDLE | DN15 | DN20 | DN25 | DN32   | DN40   | DN50 |
|-------|------|------|------|--------|--------|------|
| G     | 1/2" | 3/4" | 1"   | 1-1/4" | 1-1/2" | 2"   |
| d     | 14   | 20   | 25   | 30     | 38     | 50   |
| D     | 20   | 25   | 32   | 40     | 50     | 63   |
| D1    | 30   | 36   | 45   | 55     | 64     | 77   |
| L1    | 22.8 | 25   | 28.5 | 32     | 34.8   | 39   |
| L     | 163  | 172  | 200  | 208    | 240    | 246  |
| H     | 69   | 69   | 72   | 72     | 110    | 110  |

科威纳 COVNA®

HK56-GT 气动三通高压球阀

3-Way Pneumatic High-pressure Ball Valve



技术规范 Technical Parameter

| 设计依据<br>Design Basis       | GB       | ANSI        |
|----------------------------|----------|-------------|
| 设计标准<br>Design Standard    | GB/12237 | ANSI B16.34 |
| 试验和检验<br>Test & Inspection | JB/T9092 | API 598     |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

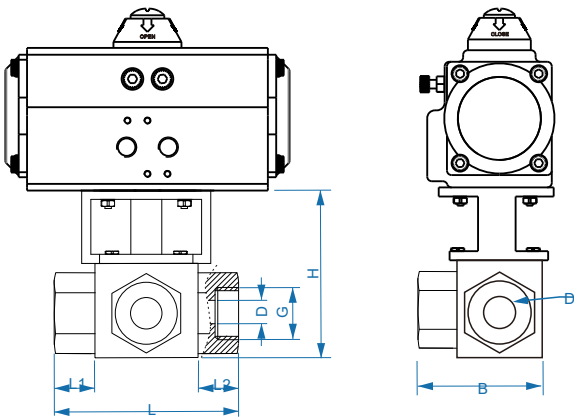
主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                               |
|-----------|-----------------------------|-----------------------------------------------------------|
| 1         | 主阀体<br>Body                 | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 2         | 球体<br>Ball                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 3         | 阀座<br>Seat                  | PTFE、对位聚苯(PPL)                                            |
| 4         | O型环<br>O-Ring               | 聚四氟乙烯(PTFE)                                               |
| 5         | 分阀体<br>Body                 | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |
| 6         | 圆柱销<br>Cylindrical Pin      | 不锈钢304、316<br>Stainless Steel 304、316                     |
| 7         | 阀杆<br>Stem                  | 不锈钢304、316、316L<br>Stainless Steel 304、316、316L           |
| 8         | 连接支架<br>Connecting Yoke     | 不锈钢304、316<br>Stainless Steel 304、316                     |
| 9         | 连接套<br>Connecting Set       | 不锈钢304、316<br>Stainless Steel 304、316                     |
| 10        | Screw<br>螺栓                 | 不锈钢304、316<br>Stainless Steel 304、316                     |
| 11        | 气动执行器<br>Pneumatic Actuator | AT Series                                                 |
| 12        | 位置指示器<br>Location Indicator | 塑料 Plastic                                                |

※注：系列球阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of ball valve series can be designed for options as per real working conditions and users'special requirements.

主要外形及连接尺寸  
Main Outline and Connecting

| MEDLE | DN08 | DN10 | DN15 | DN20 | DN25 | DN32   | DN40   | DN50 |
|-------|------|------|------|------|------|--------|--------|------|
| G     | 1/4" | 3/8" | 1/2" | 3/4" | 1"   | 1-1/4" | 1-1/2" | 2"   |
| D     | 8    | 10   | 15   | 20   | 25   | 32     | 40     | 50   |
| B     | 64   | 64   | 65   | 80   | 95   | 107    | 123    |      |
| H     | 43   | 43   | 43   | 53   | 64   | 70     | 79     |      |
| L     | 80   | 80   | 82   | 101  | 120  | 127    | 150    |      |
| L1    | 19   | 19   | 20   | 25   | 29   | 30     | 28     |      |
| L2    | 19   | 19   | 20   | 25   | 29   | 30     | 28     |      |



产品用途及结构特点 Uses and Structural Features of Product

系列气动蝶阀广泛用于天然气、油品、化工、冶金、造纸、电办、矿业，印染、生物制药，日用化工，食品饮料，水处理及空气处理等行业的流体自动控制或调节控制，与自动化气动仪表配套使用。

系列气动蝶阀结构特点为：

●**气动执行器**：采用新型AT系列气动执行器，有双作用式和单作用式(弹簧复位)，采用齿轮齿条式结构传动，性能更安全可靠；大口径阀门采用AW系列气动执行器，采用拨叉式结构传动，结构合理，输出扭矩大，有双作用式和单作用式(弹簧复位)；详细参数请参考本公司AT系列及AW系列气动执行器样本。

●**中线弹性密封**：密封材料分橡胶和氟塑料或全衬橡胶和氟塑料，弹性阀座配高精度蝶板确保零泄漏，阀杆底、中、上部配有衬套，用于支撑和旋转滑动，保持最小摩擦力。产品重量轻，体积小，启闭迅速。

●**三偏心结构密封**：阀座密封材料分金属密封和氟塑料密封。金属密封蝶阀有弹性密封圈阀座与多层复合蝶板，三维偏心密封结构启闭摩擦小，密封性能可靠，抗磨损耐高温，具有自定心作用，泄漏最小，使用寿命长。产品结构合理重量轻，体积小，安装尺寸小，操作简便，启闭迅速，是目前发展最快适用最广泛的流体控制阀门。

Pneumatic butterfly valves are widely used in natural gas, oil chemical industry, metallurgy, papermaking,power, mining, print ing and dying, biological pharmacy, daily chemicals, foodstuff and beverage,water treatment and air treatment etc. For automatic control and adjustment control of fluid, together with automatic pneumatic meters.

●**The Structural Features of Pneumatic Butterfly Valves**:Pneumatic Actuator uses new-style AT pneumatic actuator, with double-acting and single-acting types (spring reposition),driven by gear and rack with high drpendability;big diameter valves are driven by AW pneumatic actuator on pull-extraction manner,with reasonable stucture and large output torque as well as double-acting and single-acting types (spring reposition). Refer to our stylebook of pneumatic actuator.

●**Center-line Resilient Seal**:uses rubber and fluoroplastic of full-lining rubber and fluoroplastic as sealing material.Elastic Seat is furnished with high-precision butterfly plate to insure zero leakage.Bushings are mounted on the bottom, middle and upper parts of valve stem for supporting and rotary slippage, thus to retain minimum friction. The products are light-weighted,small-sized and quick to start and close.

●**Three-eccentricity Structure Seal**:using metal and fluoroplastic for seat sealing. Metal sealed butterfly valves incorp orate seat with elastic sealing ring and multilayer composite butterfly plate.3-D eccentric sealing structure functions small friction upon starting and closing , dependable sealing, anti-friction, high-temperature resistance, self-centering effect, little leakage and ling life-span. Provided with the advantages of reasonable structure, lightweight, small sie, dapper installation dmension, easy operat-ion and quick on-and-off,the fluid control valves have been rapidly developed and most widely used.

产品性能规范 Products Performance Specifucation

| 压力等级<br>Pressure grade            |                         | 公称压力PN(MPa)<br>Nominal Pressure PN(MPa)                   |     |      |      |                                                            |      |      | 磅级(Class)<br>Pound(Class) |                                                            |      |      |
|-----------------------------------|-------------------------|-----------------------------------------------------------|-----|------|------|------------------------------------------------------------|------|------|---------------------------|------------------------------------------------------------|------|------|
|                                   |                         | 0.6                                                       | 1.0 | 1.6  | 2.5  | 4.0                                                        | 6.4  | 10.0 | 150                       | 300                                                        | 400  | 600  |
| 试验压力<br>(MPa)<br>Test<br>Pressure | 壳体试验<br>Shell test      | 0.9                                                       | 1.5 | 2.4  | 3.75 | 6.0                                                        | 9.6  | 15.0 | 3.03                      | 7.5                                                        | 10.2 | 15.0 |
|                                   | 密封试验<br>Sealing test    | 0.66                                                      | 1.1 | 1.76 | 2.75 | 4.4                                                        | 7.04 | 11.0 | 2.2                       | 5.5                                                        | 7.48 | 11.0 |
|                                   | 气密封<br>Air Sealing Test | 0.6(MPa)                                                  |     |      |      |                                                            |      |      |                           |                                                            |      |      |
| 适用介质<br>Applicable medium         |                         | 阀体材质 Body Material                                        |     |      |      |                                                            |      |      |                           |                                                            |      |      |
|                                   |                         | C                                                         |     |      |      | P                                                          |      |      |                           | R                                                          |      |      |
|                                   |                         | 水、蒸气、油品、液化气等<br>Water,vapor,oil and<br>liquefied gas etc. |     |      |      | 硝酸类腐蚀性介质等<br>Corrosive mediums such<br>as nitric acid etc. |      |      |                           | 醋酸类腐蚀性介质等<br>Corrosive mediums such<br>as acetic acid etc. |      |      |

技术规范 Technical Parameter

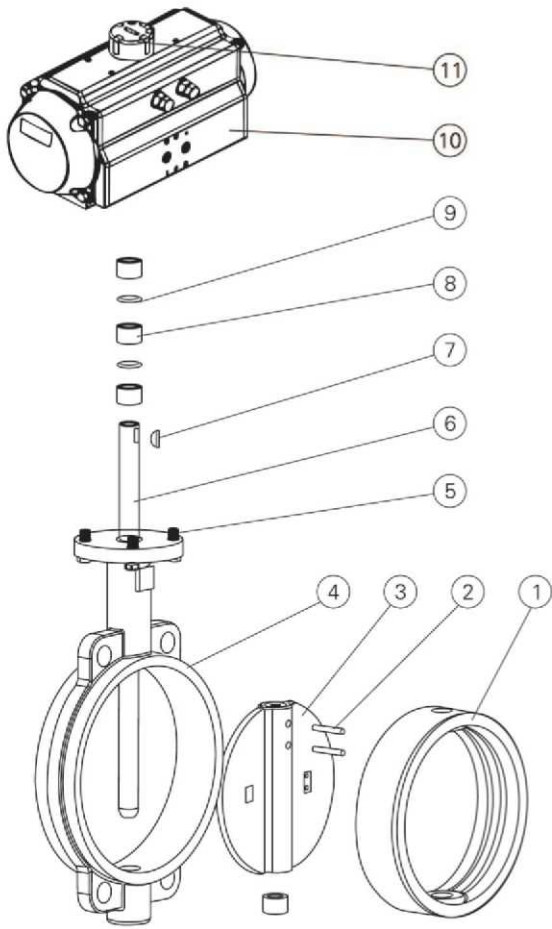
|                                      |                                 |          |
|--------------------------------------|---------------------------------|----------|
| 设计依据<br>Design Basis                 |                                 | GB       |
| 设计标准<br>Design Standard              |                                 | GB/12238 |
| 结构长度<br>Face to<br>Face<br>Dimension | 对夹<br>连接<br>Wafer<br>Connecting | GB/12221 |
| 连接法兰尺寸<br>Connecting Flange Size     |                                 | GB/12221 |
| 试验和检验<br>Test & Inspection           |                                 | JB/T9092 |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Component              | 材质 Material                                        |                                              |                                            |
|-----------|--------------------------------|----------------------------------------------------|----------------------------------------------|--------------------------------------------|
|           |                                | Z                                                  | C                                            | P                                          |
| 1         | 阀座<br>Seat                     | 橡胶，聚四氟乙烯<br>Rubber, PTFE                           |                                              |                                            |
| 2         | 圆锥销<br>Taper Pin               | 45钢<br>45 Steel                                    | 45钢<br>45 Steel                              | 不锈钢<br>Stainless Steel                     |
| 3         | 蝶板<br>Butterfly Plate          | 球墨铸铁镀铬<br>Ductile Iron-iron<br>Hard Chrome Plating | 碳钢或不锈钢<br>Simple Steel or<br>Stainless Steel | 不锈钢<br>Stainless Steel                     |
| 4         | 阀体<br>Body                     | 灰铸铁<br>Grey Cast Iron                              | 碳钢<br>Carbon Steel                           | 不锈钢<br>Stainless Steel                     |
| 5         | 螺栓<br>Screw                    | 35钢<br>35 Steel                                    | 碳钢<br>Carbon Steel                           | 不锈钢<br>Stainless Steel                     |
| 6         | 阀杆<br>Stem                     | 45钢<br>45 Steel                                    | 不锈钢<br>Stainless Steel                       | 不锈钢<br>Stainless Steel                     |
| 7         | 键<br>Key                       | 45钢<br>45 Steel                                    | 45钢<br>45 Steel                              | 不锈钢<br>Stainless Steel                     |
| 8         | 衬套<br>Bushing                  | 铜基粉末冶金<br>Copper Base Powder<br>Metallurgy         | 铜基粉末冶金<br>Copper Base Powder<br>Metallurgy   | 铜基粉末冶金<br>Copper Base Powder<br>Metallurgy |
| 9         | O型圈<br>O Ring                  | 橡胶 Rubber，氟橡胶 Viton                                |                                              |                                            |
| 10        | 气动装置<br>Pneumatic<br>Device    | AT Series AW Series                                |                                              |                                            |
| 11        | 位置指示器<br>Location<br>Indicator | 塑料 Plastic                                         |                                              |                                            |

※注：系列蝶阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The Materials for main parts and ball seats of the butterfly valve series can be designed and optioned as per the actual working conditions and users'special requirements.



HK59-D 气动对夹式铸铁软密封蝶阀

Pneumatic Wafer Cast Iron Butterfly Valve

气动对夹式铸铁软密封蝶阀

Pneumatic Wafer Cast Iron Butterfly Valve

型号：HK59-D  
口径：DN40~1200mm  
压力：1.0MPa、1.6MPa、150Lb、10K  
结构：对夹式连接  
尺寸标准：国标、美标、日标、德标  
阀体材质：铸铁、铸钢  
阀板材质：铸铁、不锈钢  
阀座材料：橡胶(X)、聚四氟乙烯(F)  
作用方式：双作用、单作用(弹簧复位)  
附件选择：电磁阀、定位器、限位开关、气源处理三联件、手动机构

Pneumatic Wafer Cast Iron Butterfly Valve  
Model: HK59-D  
Nominal Diameter: DN40~1200  
Pressure: 1.0MPa, 1.6MPa, 150Lb, 10K  
Connection: Wafer  
Design Standard: GB, ANSI, JIS, DIN  
Body Material: Cast Iron、Carbon Steel(WCB)  
Disc Material: Cast Iron、Stainless Steel  
Seat Material: Rubber, PTFE  
Mode of Action: Double-Acting/Single-Acting(Spring Return)  
Optional Accessories: Solenoid Valve, Positioner, Limit Switch, F.R.L., Gear box

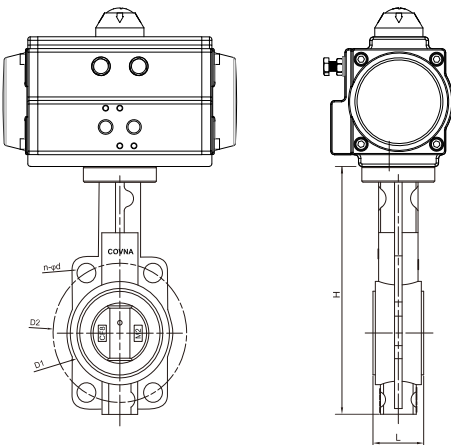
主要外形及连接尺寸 HK59-D PN10, PN16(1.0MPa,1.6MPa)  
Main Outline and Connecting Size- PN10, PN16(1.0MPa,1.6MPa)

| MEDLE | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200 | DN250 | DN300 | DN350 | DN400 | DN500 | DN600 |
|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Inch  | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"    | 10"   | 12"   | 14"   | 16"   | 20"   | 24"   |
| D     | 50    | 65     | 80    | 100   | 125   | 150   | 200   | 250   | 300   | 350   | 400   | 500   | 600   |
| D1    | 96    | 104    | 127   | 153   | 180   | 206   | 270   | 320   | 368   | 428   | 482   | 605   |       |
| D2    | 125   | 145    | 160   | 180   | 210   | 240   | 295   | 355   | 410   | 470   | 525   | 650   | 725   |
| L     | 45    | 47     | 48    | 58    | 59    | 59    | 64    | 70    | 78    | 80    | 108   | 120   | 152   |
| H     | 212   | 225    | 256   | 280   | 315   | 345   | 405   | 480   | 554   |       |       |       |       |
| n-φd  | 4-φ18 | 4-φ18  | 4-φ18 | 4-φ18 | 4-φ18 | 4-φ23 | 4-φ23 | 4-φ23 | 4-φ26 | 4-φ26 | 4-φ26 | 4-φ30 | 4-φ36 |

\*注：  
系列蝶阀结构长度及连接法兰尺寸可根据JB/T79标准或要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note:  
JB/T79 standard accepted.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

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HK59-D-S 气动对夹式不锈钢软密封蝶阀

Pneumatic Wafer Stainless Steel Butterfly Valve

气动对夹式不锈钢软密封蝶阀

Pneumatic Wafer Stainless Steel Butterfly Valve

型号：HK59-D-S  
口径：DN40~1200mm  
压力：1.0MPa、1.6MPa、150Lb、10K  
结构：对夹式连接  
尺寸标准：国标、美标、日标、德标  
阀体材质：不锈钢  
阀座材料：橡胶(X)、聚四氟乙烯(F)  
作用方式：双作用、单作用(弹簧复位)  
附件选择：电磁阀、定位器、限位开关、气源处理三联件、手动机构

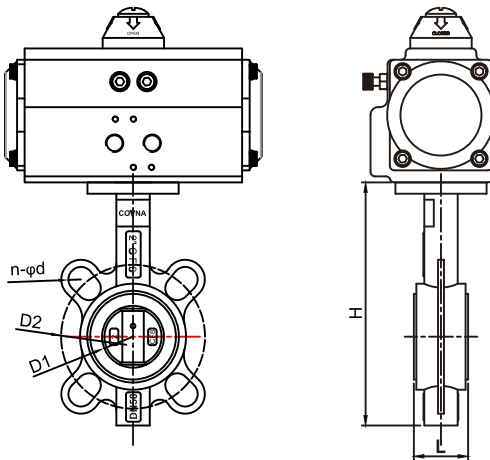
Pneumatic Wafer Stainless Steel Butterfly Valve  
Model: HK59-D-S  
Nominal Diameter: DN40~1200  
Pressure: 1.0MPa, 1.6MPa, 150Lb, 10K  
Connection: Wafer  
Design Standard: GB, ANSI, JIS, DIN  
Body Material: Stainless Steel(CF8, CF8M)  
Disc Material: Stainless Steel  
Seat Material: Rubber, PTFE  
Mode of Action: Double-Acting/Single-Acting(Spring Return)  
Optional Accessories: Solenoid Valve, Positioner, Limit Switch, F.R.L., Gear box

主要外形及连接尺寸 HK59-D-S PN10,PN16(1.0MPa,1.6MPa)  
Main Outline and Connecting Size- PN10,PN16(1.0MPa,1.6MPa)

| MEDLE | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200 | DN250 | DN300 | DN350 | DN400 | DN500 |
|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Inch  | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"    | 10"   | 12"   | 14"   | 16"   | 20"   |
| D     | 52.7  | 64.4   | 78.8  | 104.2 | 123.3 | 157   | 202.5 | 250.5 | 301.6 | 333.3 | 389.6 | 491.6 |
| D1    | 89    | 104    | 127   | 153   | 180   | 206   | 270   | 320   | 368   | 428   | 482   | 605   |
| D2    | 125   | 145    | 160   | 180   | 210   | 240   | 295   | 355   | 410   | 470   | 525   | 585   |
| L     | 41    | 43     | 45    | 50    | 54    | 54    | 60    | 66    | 75.5  | 86.5  | 86.5  | 131.8 |
| H     | 207   | 219    | 232   | 262   | 265   | 296   | 353   | 390   | 460   | 508   | 597   | 677   |
| n-φd  | 4-φ18 | 4-φ18  | 4-φ18 | 4-φ18 | 4-φ18 | 4-φ23 | 4-φ23 | 4-φ23 | 4-φ26 | 4-φ26 | 4-φ26 | 4-φ30 |

\*注：  
系列蝶阀结构长度及连接法兰尺寸可根据JB/T79标准或要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note:  
JB/T79 standard accepted.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.



HK59-D-M 气动凸耳式蝶阀

Pneumatic Lugged Butterfly Valve

气动凸耳式蝶阀

Pneumatic Lugged Butterfly Valve

型号：HK59-D-M  
口径：DN40~1200mm  
压力：1.0MPa、1.6MPa、150Lb、10K  
结构：凸耳式连接  
尺寸标准：国标、美标、日标、德标  
阀体材质：铸铁、碳钢(WCB)、不锈钢(CF8、CF8M)  
阀板材质：铸铁、不锈钢  
阀座材料：橡胶(X)、聚四氟乙烯(F)  
作用方式：双作用、单作用(弹簧复位)  
附件选择：电磁阀、定位器、限位开关、气源处理三联件、手动机构

Pneumatic Lugged Butterfly Valve  
Model: HK59-D-M  
Nominal Diameter: DN40~1200  
Pressure: 1.0MPa, 1.6MPa, 150Lb, 10K  
Connection: Lugged Type  
Design Standard: GB, ANSI, JIS, DIN  
Body Material: Cast Iron, Carbon Steel(WCB), Stainless Steel(CF8, CF8M)  
Disc Material: Cast Iron, Stainless Steel  
Seat Material: Rubber, PTFE  
Mode of Action: Double-Acting/Single-Acting(Spring Return)  
Optional Accessories: Solenoid Valve, Positioner, Limit Switch, F.R.L., Gear box

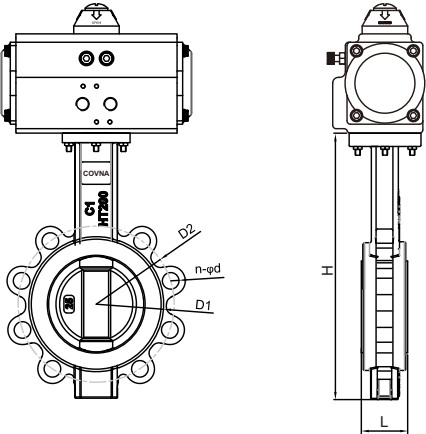
主要外形及连接尺寸 HK59-D-M PN10, PN16(1.0MPa,1.6MPa)  
Main Outline and Connecting Size- PN10, PN16(1.0MPa,1.6MPa)

| MEDLE | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  | DN250  | DN300  | DN350 | DN400 | DN500 |
|-------|-------|--------|-------|-------|-------|-------|--------|--------|--------|-------|-------|-------|
| Inch  | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     | 10"    | 12"    | 14"   | 16"   | 20"   |
| D     | 52.7  | 64.4   | 78.8  | 104.2 | 123.3 | 157   | 202.5  | 250.5  | 301.6  | 333.3 | 389.6 | 491.6 |
| D1    | 89    | 104    | 127   | 153   | 180   | 206   | 270    | 320    | 368    | 428   | 482   | 605   |
| D2    | 125   | 145    | 160   | 180   | 210   | 240   | 295    | 355    | 410    | 470   | 525   | 585   |
| L     | 41.4  | 44     | 45    | 52    | 54    | 54    | 55     | 60     | 65     | 76    | 86    | 130   |
| H     | 217   | 234    | 252   | 289   | 318   | 341   | 428    | 490    | 567    |       |       |       |
| n-φd  | 4-M16 | 4-M16  | 8-M16 | 8-M16 | 8-M16 | 8-M20 | 12-M20 | 12-M24 | 12-M24 |       |       |       |

\*注：  
系列蝶阀结构长度及连接法兰尺寸可根据JB/T79标准或要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note:  
JB/T79 standard accepted.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

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HK59-D-F 气动法兰式蝶阀

Pneumatic Flange Butterfly Valve

气动法兰式蝶阀

Pneumatic Flange Butterfly Valve

型号：HK59-D-F  
口径：DN40~1200mm  
压力：1.0MPa、1.6MPa、150Lb、10K  
结构：法兰式连接  
尺寸标准：国标、美标、日标、德标  
阀体材质：铸铁、碳钢(WCB)、不锈钢(CF8、CF8M)  
阀板材质：铸铁、不锈钢  
阀座材料：橡胶(X)、聚四氟乙烯(F)  
作用方式：双作用、单作用(弹簧复位)  
附件选择：电磁阀、定位器、限位开关、气源处理三联件、手动机构

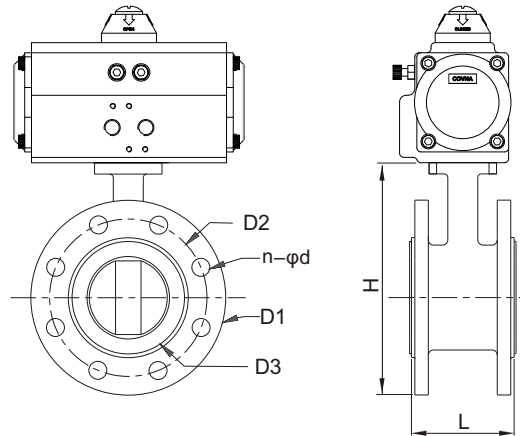
Pneumatic Flange Butterfly Valve  
Model: HK59-D-F  
Nominal Diameter: DN40~1200  
Pressure: 1.0MPa, 1.6MPa, 150Lb, 10K  
Connection: Flanged Type  
Design Standard: GB, ANSI, JIS, DIN  
Body Material: Cast Iron, Carbon Steel(WCB), Stainless Steel(CF8, CF8M)  
Disc Material: Cast Iron, Stainless Steel  
Seat Material: Rubber, PTFE  
Mode of Action: Double-Acting/Single-Acting(Spring Return)  
Optional Accessories: Solenoid Valve, Positioner, Limit Switch, F.R.L., Gear box

主要外形及连接尺寸 HK59-D-F PN10, PN16(1.0MPa,1.6MPa)  
Main Outline and Connecting Size- PN10, PN16(1.0MPa,1.6MPa)

| MEDLE | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200 | DN250  | DN300  | DN350  | DN400  | DN500  |
|-------|-------|--------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| Inch  | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"    | 10"    | 12"    | 14"    | 16"    | 20"    |
| D     | 52.7  | 64.4   | 83    | 104.2 | 123.3 | 157   | 202.5 | 250.5  | 301.6  | 333.3  | 389.6  | 491.6  |
| D1    | 165   | 185    | 200   | 220   | 250   | 285   | 340   | 395    | 445    | 505    | 565    | 670    |
| D2    | 125   | 145    | 160   | 180   | 210   | 240   | 295   | 355    | 410    | 470    | 525    | 620    |
| D3    | 99    | 118    | 132   | 156   | 184   | 211   | 266   | 319    | 370    | 429    | 480    | 582    |
| L     | 108   | 112    | 114   | 127   | 140   | 140   | 150   | 165    | 185    | 195    | 216    | 229    |
| H     | 192   | 207    | 224   | 255   | 290   | 325   | 386   | 460    | 510    | 565    | 632    | 759    |
| n-φd  | 4-φ18 | 4-φ18  | 8-φ18 | 8-φ18 | 8-φ18 | 8-φ22 | 8-φ22 | 12-φ22 | 12-φ22 | 16-φ22 | 16-φ26 | 20-φ26 |

\*注：系列蝶阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note: The structural length and connecting flange size of ball valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.



HK59-D-C 气动衬氟蝶阀

Pneumatic Fluorine Butterfly Valve

气动衬氟蝶阀

Pneumatic Fluorine lined butterfly valve

型号：HK59-D-C(对夹式), HK59D-CF(法兰式)  
口径：DN40~1200mm  
压力：1.0Mpa、1.6Mpa、150Lb、10K  
结构：对夹式连接、法兰式连接  
尺寸标准：国标、美标、日标、德标  
阀体材质：铸铁、碳钢(WCB)、不锈钢(CF8、CF8M)  
阀板材质：铸铁+聚四氟乙烯(F)  
阀座材料：聚四氟乙烯(F)  
作用方式：双作用、单作用(弹簧复位)  
附件选择：电磁阀、定位器、限位开关、气源处理三联件、手动机构

Pneumatic Fluorine lined butterfly valve

Model: HK59-D-C(wafer type), HK59D-CF(flanged type)

Nominal Diameter: DN40~1200

Pressure: 1.0Mpa, 1.6Mpa, 150Lb, 10K

Connection: Wafer, Flanged Type

Design Standard: GB, ANSI, JIS, DIN

Body Material: Cast Iron, Carbon Steel(WCB), Stainless Steel(CF8, CF8M)

Seat Material: Cast Iron+PTFE

Seat Material: PTFE

Mode of Action: Double-Acting/Single-Acting(Spring Return)

Optional Accessories: Solenoid Valve, Positioner, Limit Switch, F.R.L., Gear box

主要外形及连接尺寸 HK59-D-C PN10(1.0MPa)

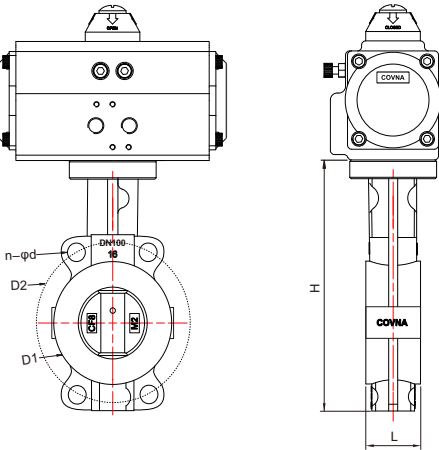
Main Outline and Connecting Size of Wafer Type- PN10(1.0MPa)

| MEDLE | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200 | DN250 | DN300 | DN350 | DN400 | DN500 |
|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Inch  | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"    | 10"   | 12"   | 14"   | 16"   | 20"   |
| D     | 50    | 65     | 80    | 100   | 125   | 150   | 200   | 250   | 300   | 350   | 400   | 500   |
| D1    | 96    | 104    | 127   | 153   | 180   | 206   | 270   | 320   | 368   | 428   | 482   | 605   |
| D2    | 125   | 145    | 160   | 180   | 210   | 240   | 295   | 355   | 410   | 470   | 525   | 585   |
| L     | 43    | 46     | 46    | 52    | 56    | 56    | 60    | 68    | 78    | 78    | 102   | 127   |
| H     | 212   | 230    | 233   | 270   | 298   | 337   | 407   | 480   | 555   | 610   | 715   | 870   |
| n-φd  | 4-φ18 | 4-φ18  | 4-φ18 | 4-φ18 | 4-φ18 | 4-φ23 | 4-φ23 | 4-φ23 | 4-φ23 | 4-φ23 | 4-φ25 | 4-φ25 |

\*注：系列蝶阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note: The structural length and connecting flange size of butterfly valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

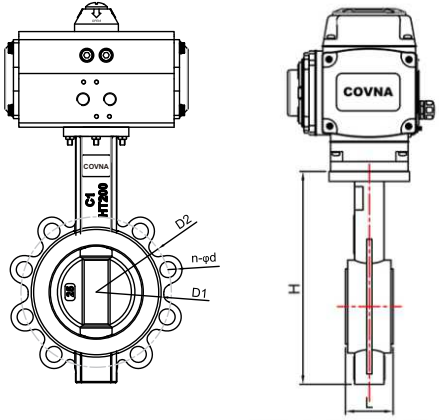
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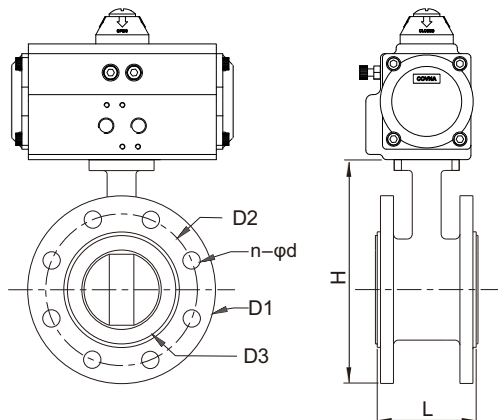
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HK59-D-C 气动衬氟蝶阀

Pneumatic Fluorine Butterfly Valve



对夹式 Lug Type



法兰式 Flange Type

对夹式主要外形及连接尺寸 HK59D-10bar(1.0MPa)

Lug Type Main Outline and Connecting Size-10bar(1.0MPa)

| MEDLE | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200  | DN250  | DN300  | DN350 | DN400 | DN500 |
|-------|-------|--------|-------|-------|-------|-------|--------|--------|--------|-------|-------|-------|
| Inch  | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"     | 10"    | 12"    | 14"   | 16"   | 20"   |
| D     | 52.7  | 64.4   | 78.8  | 104.2 | 123.3 | 157   | 202.5  | 250.5  | 301.6  | 333.3 | 389.6 | 491.6 |
| D1    | 89    | 104    | 127   | 153   | 180   | 206   | 270    | 320    | 368    | 428   | 482   | 605   |
| D2    | 125   | 145    | 160   | 180   | 210   | 240   | 295    | 355    | 410    | 470   | 525   | 585   |
| L     | 41.4  | 44     | 45    | 52    | 54    | 54    | 55     | 60     | 65     | 76    | 86    | 130   |
| H     | 217   | 234    | 252   | 289   | 318   | 341   | 428    | 490    | 567    |       |       |       |
| n-φd  | 4-M16 | 4-M16  | 8-M16 | 8-M16 | 8-M16 | 8-M20 | 12-M20 | 12-M24 | 12-M24 |       |       |       |

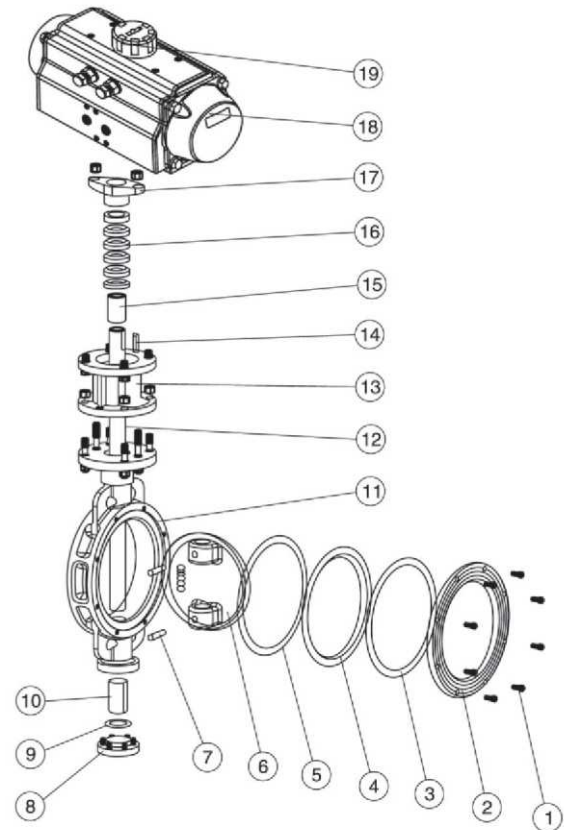
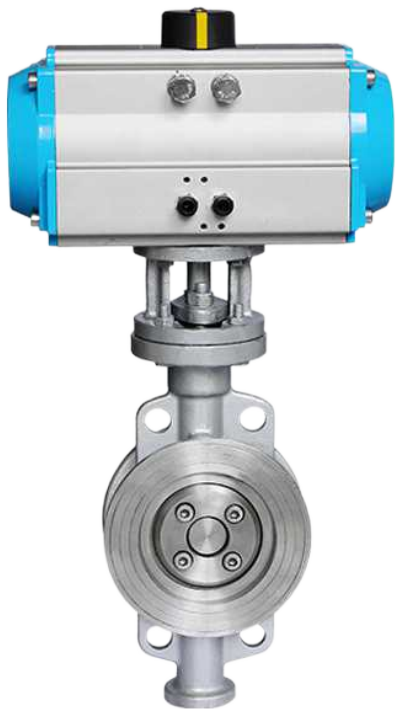
法兰连接 主要外形及连接尺寸 HK59D-CF PN10(1.0MPa)

Flange Type Main Outline and Connecting Size- PN10(1.0MPa)

| MEDLE | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200 | DN250  | DN300  | DN350  | DN400  | DN500  |
|-------|-------|--------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| Inch  | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"    | 10"    | 12"    | 14"    | 16"    | 20"    |
| D     | 50    | 65     | 80    | 100   | 125   | 150   | 200   | 250    | 300    | 350    | 400    | 500    |
| D1    | 96    | 104    | 127   | 153   | 180   | 206   | 270   | 320    | 368    | 428    | 482    | 605    |
| D2    | 125   | 145    | 160   | 180   | 210   | 240   | 295   | 355    | 410    | 470    | 525    | 585    |
| L     | 108   | 112    | 114   | 127   | 140   | 140   | 152   | 165    | 178    | 190    | 216    | 229    |
| H     | 212   | 230    | 233   | 270   | 298   | 337   | 407   | 480    | 555    | 610    | 715    | 870    |
| n-φd  | 4-φ18 | 4-φ18  | 8-φ18 | 8-φ18 | 8-φ18 | 8-φ23 | 8-φ23 | 12-φ23 | 12-φ23 | 16-φ23 | 16-φ25 | 20-φ25 |

\*注：系列蝶阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note: The structural length and connecting flange size of butterfly valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.



技术规范 Technical Parameter

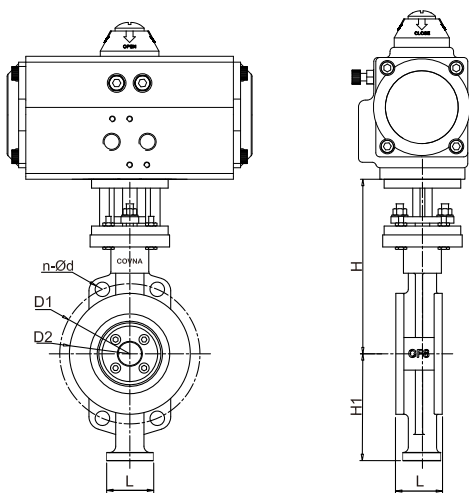
|                                   |                             |                |                                          |
|-----------------------------------|-----------------------------|----------------|------------------------------------------|
| 设计依据<br>Design Basis              |                             | GB             | ANSI                                     |
| 设计标准<br>Design Standard           |                             | GB/12238       | API609                                   |
| 结构长度<br>Face to Face<br>Dimension | 对夹连接<br>Water<br>Connecting | GB/12221       | ANSI B16.10                              |
| 连接法兰尺寸<br>Connecting Flange Size  |                             | GB/9113 JB/T79 | ANSI B16.5(2~24")<br>ANSI B16.47(26~32") |
| 试验和检验<br>Test & Inspection        |                             | JB/T9092       | API 598                                  |

※注：系列蝶阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of butterfly valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Name                 | 材质 Material                                    |     |     |
|-----------|------------------------------|------------------------------------------------|-----|-----|
|           |                              | C                                              | P   | R   |
| 1         | 内六角螺钉<br>Inner Hexagon Screw | 3.6                                            | 3.6 | 3.6 |
| 2         | 阀盖<br>Bonnet                 | WCB                                            | 3.6 | 304 |
| 3         | 垫片<br>Gasket                 | 3.6                                            | 3.6 | 3.6 |
| 4         | 阀座<br>Seat                   | 不锈钢+柔性石墨 PTFE<br>Stainless Steel+Graphite PTFE |     |     |
| 5         | 垫片<br>Gasket                 | 3.6                                            | 3.6 | 3.6 |
| 6         | 蝶板<br>Butterfly Plate        | WCB                                            | 304 | 304 |
| 7         | 圆柱销<br>Straight Pin          | 45                                             | 3.6 | 3.6 |
| 8         | 下盖<br>Bottom Cover           | WCB                                            | 304 | 304 |
| 9         | 垫片<br>Gasket                 | 不锈钢+柔性石墨 PTFE<br>Stainless Steel+Graphite PTFE |     |     |
| 10        | 衬套<br>Bushing                | PTFE复合轴承 Composite bearings                    |     |     |
| 11        | 阀体<br>Body                   | WCB                                            | 304 | 304 |
| 12        | 阀杆<br>Stem                   | 3.6                                            | 3.6 | 304 |
| 13        | 支架<br>Yoke                   | WCB                                            | WCB | WCB |
| 14        | 键<br>Key                     | 45                                             | 45  | 45  |
| 15        | 衬套<br>Bushing                | PTFE复合轴承 Composite Bearings                    |     |     |
| 16        | 填料<br>Packing                | 柔性石墨 PTFE<br>Graphite PTFE                     |     |     |
| 17        | 压盖<br>Gland                  | WCB                                            | 304 | 304 |
| 18        | 气动执行器<br>Pneumatic Actuator  | AT Series AW Series                            |     |     |
| 19        | 位置指示器<br>Location Indicator  | 塑料 Plastic                                     |     |     |

※注：系列蝶阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The Materials for main parts and ball seats of the butterfly valve series can be designed and optioned as per the actual working conditions and users'special requirements.



主要外形及连接尺寸 GB-PN16(1.6MPa)  
Main Outline and Connecting Size of GB-PN16(1.6MPa)

| MEDLE | DN80  | DN100 | DN125 | DN150 | DN200  | DN250  | DN300  | DN350  | DN400  | DN450  | DN500  |
|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| Inch  | 3"    | 4"    | 5"    | 6"    | 8"     | 10"    | 12"    | 14"    | 16"    | 18"    | 20"    |
| D     | 83    | 104.2 | 123.3 | 157   | 202.5  | 250.5  | 301.6  | 333.3  | 389.6  | 449.5  | 491.6  |
| D1    | 160   | 180   | 210   | 240   | 295    | 355    | 410    | 410    | 525    | 585    | 620    |
| D2    | 132   | 156   | 184   | 211   | 266    | 319    | 370    | 429    | 480    | 548    | 582    |
| L     | 49    | 56    | 64    | 70    | 71     | 76     | 83     | 83     | 102    | 114    | 127    |
| H     | 260   | 298   | 315   | 325   | 380    | 435    | 475    | 475    | 580    | 620    | 660    |
| H1    | 114   | 128   | 148   | 170   | 188    | 235    | 265    | 265    | 335    | 380    | 410    |
| n-φd  | 4-φ18 | 8-φ18 | 8-φ18 | 8-φ22 | 12-φ23 | 12-φ26 | 12-φ26 | 12-φ26 | 16-φ30 | 20-φ30 | 20-φ33 |

主要外形及连接尺寸 ANSI-Class 150  
Main Outline and Connecting Size of ANSI-Class 150

| MEDLE | DN80  | DN100 | DN125 | DN150 | DN200  | DN250  | DN300  | DN350  | DN400  | DN450  | DN500  |
|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| Inch  | 3"    | 4"    | 5"    | 6"    | 8"     | 10"    | 12"    | 14"    | 16"    | 18"    | 20"    |
| D     | 83    | 104.2 | 123.3 | 157   | 202.5  | 250.5  | 301.6  | 333.3  | 389.6  | 449.5  | 491.6  |
| D1    | 152.4 | 190.5 | 215.9 | 241.3 | 298.5  | 362    | 431.8  | 476.3  | 539.8  | 577.9  | 635    |
| D2    | 132   | 156   | 184   | 211   | 266    | 319    | 370    | 429    | 480    | 548    | 582    |
| L     | 49    | 56    | 64    | 70    | 71     | 76     | 83     | 83     | 102    | 114    | 127    |
| H     | 260   | 298   | 315   | 325   | 380    | 435    | 475    | 475    | 580    | 620    | 660    |
| H1    | 114   | 128   | 148   | 170   | 188    | 235    | 265    | 265    | 335    | 380    | 410    |
| n-φd  | 4-φ18 | 8-φ18 | 8-φ18 | 8-φ22 | 12-φ23 | 12-φ26 | 12-φ26 | 12-φ26 | 16-φ30 | 20-φ30 | 20-φ33 |

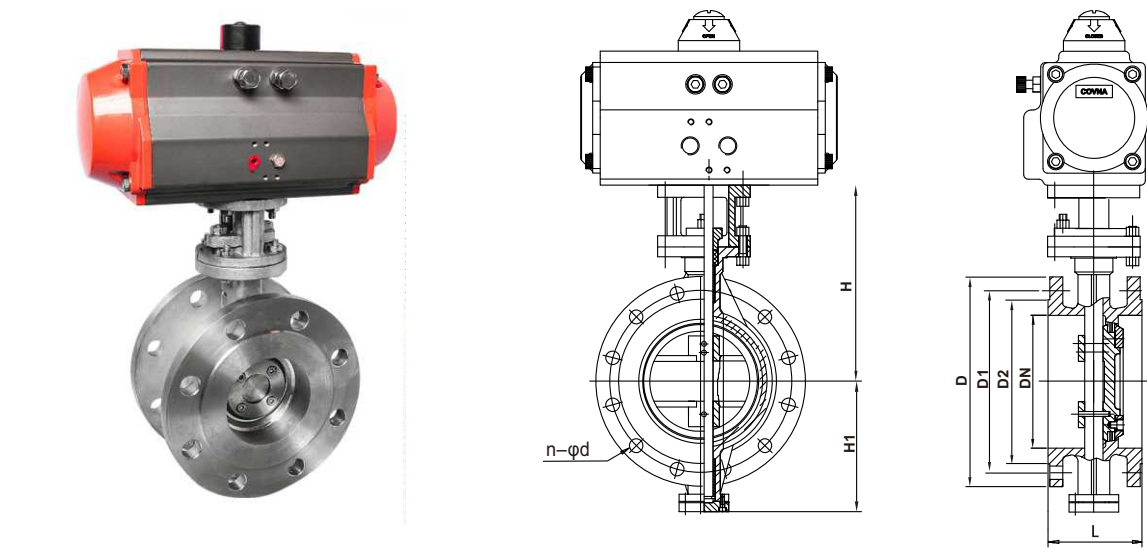
\*注：  
系列蝶阀结构长度及连接法兰尺寸可根据JB/T79标准或要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note:  
JB/T79 standard accepted.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

HK59-D-GF 气动法兰硬密封蝶阀

Pneumatic Flanged Hard Seal Butterfly Valve

科威納 COVNA®



主要外形及连接尺寸 HK59-D-GF  
Main Outline and Connecting Size

| DN  | Inch   | L   | 1.6 MPa |     |     |         | 2.5 MPa |     |     |        | 150LB |       |     |        | 300LB |       |     |        | High |     |
|-----|--------|-----|---------|-----|-----|---------|---------|-----|-----|--------|-------|-------|-----|--------|-------|-------|-----|--------|------|-----|
|     |        |     | D       | D1  | D2  | Z-φd    | D       | D1  | D2  | Z-φd   | D     | D1    | D2  | Z-φd   | D     | D1    | D2  | Z-φd   | H    | H1  |
| 50  | 2"     | 108 | 165     | 125 | 102 | 4-φ18   | 165     | 125 | 102 | 4-φ18  | 150   | 120.7 | 92  | 4-φ19  | 165   | 127   | 92  | 8-φ19  | 130  | 96  |
| 65  | 2-1/2" | 112 | 185     | 145 | 122 | 4/8-φ18 | 185     | 145 | 122 | 8-φ18  | 180   | 137.7 | 105 | 4-φ19  | 190   | 149.2 | 105 | 8-φ22  | 145  | 97  |
| 80  | 3"     | 114 | 200     | 160 | 138 | 8-φ18   | 200     | 160 | 138 | 8-φ18  | 190   | 152.4 | 127 | 4-φ19  | 210   | 168.3 | 127 | 8-φ22  | 167  | 108 |
| 100 | 4"     | 127 | 220     | 180 | 158 | 8-φ18   | 235     | 190 | 162 | 8-φ22  | 230   | 190.5 | 157 | 8-φ19  | 255   | 200   | 157 | 8-φ22  | 195  | 128 |
| 125 | 5"     | 140 | 250     | 210 | 188 | 8-φ18   | 270     | 220 | 188 | 8-φ26  | 255   | 215.9 | 186 | 8-φ22  | 280   | 235   | 186 | 8-φ22  | 240  | 145 |
| 150 | 6"     | 140 | 285     | 240 | 212 | 8-φ22   | 300     | 250 | 218 | 8-φ26  | 280   | 241.3 | 216 | 8-φ22  | 320   | 269.9 | 216 | 12-φ22 | 260  | 168 |
| 200 | 8"     | 152 | 340     | 295 | 268 | 12-φ22  | 360     | 310 | 278 | 12-φ26 | 345   | 298.5 | 270 | 8-φ22  | 380   | 330.2 | 270 | 12-φ26 | 290  | 190 |
| 250 | 10"    | 165 | 405     | 355 | 320 | 12-φ26  | 425     | 370 | 335 | 12-φ30 | 405   | 362   | 324 | 12-φ26 | 445   | 387.4 | 324 | 16-φ29 | 310  | 235 |
| 300 | 12"    | 178 | 460     | 410 | 378 | 16-φ26  | 485     | 430 | 305 | 16-φ30 | 485   | 431.8 | 381 | 12-φ26 | 520   | 450.8 | 381 | 16-φ32 | 380  | 266 |
| 350 | 14"    | 190 | 520     | 470 | 438 | 16-φ26  | 555     | 490 | 450 | 16-φ33 | 535   | 476.3 | 413 | 12-φ29 | 585   | 514.4 | 413 | 20-φ32 | 435  | 300 |
| 400 | 16"    | 216 | 580     | 525 | 490 | 16-φ30  | 620     | 550 | 505 | 16-φ36 | 595   | 539.8 | 470 | 16-φ29 | 650   | 571.5 | 470 | 20-φ35 | 460  | 330 |
| 450 | 18"    | 222 | 640     | 585 | 550 | 20-φ30  | 670     | 600 | 555 | 20-φ36 | 635   | 577.9 | 533 | 16-φ32 | 710   | 628.6 | 533 | 24-φ35 | 485  | 355 |
| 500 | 20"    | 229 | 715     | 650 | 610 | 20-φ33  | 730     | 660 | 615 | 20-φ36 | 700   | 635   | 584 | 20-φ32 | 775   | 685.8 | 584 | 24-φ35 | 520  | 385 |
| 600 | 24"    | 267 | 840     | 770 | 725 | 20-φ36  | 845     | 770 | 720 | 20-φ39 | 815   | 749.3 | 692 | 20-φ35 | 915   | 812.8 | 692 | 24-φ42 | 610  | 455 |
| 700 | 28"    | 292 | 910     | 840 | 795 | 24-φ36  | 960     | 875 | 820 | 24-φ42 | 925   | 863.6 | 800 | 28-φ35 | 1035  | 939.8 | 800 | 28-φ45 | 675  | 505 |

\*注：  
系列蝶阀结构长度及连接法兰尺寸可根据JB/T79标准或要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note:  
JB/T79 standard accepted.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.

科威納 COVNA®

HK59-D-P 气动PVC蝶阀

PVC Pneumatic Butterfly Valve

技术规范 Technical Parameter

|                        |                         |
|------------------------|-------------------------|
| 规格 Specifications      | DN50-DN200(2"-8")       |
| 工作压力 Working pressure  | DN50- DN150 10kg/cm²    |
|                        | DN 200 6kg/cm²          |
| 材质 Texture of material | PVC CPVC PPH            |
|                        | PVC UPVC CPVC PPH PVDF  |
| 标准 Standard            | 国际GB 德标DIN 美标ANSI 日标JIS |
|                        | 台湾 地区CNS                |

主要零件材质表 Main Parts Materials

| 序号 No. | 零件名称 Name                | 材质 Material                                     |
|--------|--------------------------|-------------------------------------------------|
| 1      | 主阀体 Body                 | PVC UPVC CPVC PPH PVDF                          |
| 2      | 阀板 Ball                  | PVC UPVC CPVC PPH PVDF                          |
| 3      | 阀座 Seat                  | EPDM FPM                                        |
| 4      | O型环 O-Ring               | EPDM FPM                                        |
| 5      | 阀杆 Stem                  | 不锈钢304、316、316L<br>Stainless Steel 304、316、316L |
| 6      | 连接套 Connecting Set       | 不锈钢304、316<br>Stainless Steel 304、316           |
| 7      | Screw 螺栓                 | 不锈钢304、316<br>Stainless Steel 304、316           |
| 8      | 气动执行器 Pneumatic Actuator | AT Series                                       |
| 9      | 位置指示器 Location Indicator | 塑料 Plastic                                      |

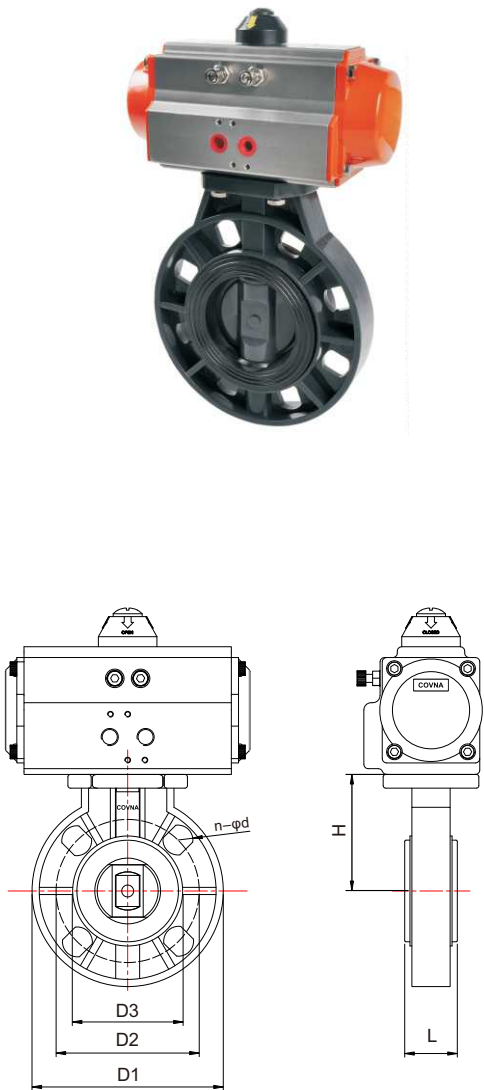
※注：系列蝶阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of butterfly valve series can be designed for options as per real working conditions and users'special requirements.

主要外形及连接尺寸 HK59-D-P PN10(1.0MPa)  
Main Outline and Connecting Size PN10(1.0MPa)

| MEDLE | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200 | DN250  | DN300  |
|-------|-------|--------|-------|-------|-------|-------|-------|--------|--------|
| Inch  | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"    | 10"    | 12"    |
| D     | 52.7  | 64.4   | 83    | 104.2 | 123.3 | 157   | 202.5 | 250.5  | 300    |
| D1    | 160   | 180    | 195   | 226   | 255   | 280   | 340   | 410    | 470    |
| D2    | 120   | 140    | 155   | 178   | 200   | 230   | 285   | 345    | 400    |
| D3    | 84    | 100    | 120   | 141   | 167   | 190   | 245   | 292    |        |
| L     | 44    | 43     | 47    | 52    | 63    | 68    | 80    | 90     | 105    |
| H     | 99    | 108    | 131   | 156   | 168   | 182   | 230   | 261    | 305    |
| n-φd  | 4-φ18 | 4-φ18  | 8-φ18 | 8-φ18 | 8-φ18 | 8-φ22 | 8-φ22 | 12-φ22 | 12-φ22 |

\*注：系列蝶阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
根据不同的扭矩、介质，适配的执行器型号及尺寸可能有所不同。  
以上执行器配置数据均采集自软密封(F, N, P)阀门，硬密封阀门的配置及数据请咨询本公司。

Note: The structural length and connecting flange size of butterfly valve series can be made to order.  
The actuator model vary with different output torque and medium.  
Above data are all on basis of soft-sealed valves(F, N, P), contact COVNA for hard-sealed valves data.



HK59-D-W 气动卫生级蝶阀

Penumatic Sanitary Butterfly Valve

科威納 COVNA®

科威納 COVNA®

HK59-LD-W立式气动卫生级蝶阀

Vertical Pneumatic Sanitary Butterfly Valve

技术规范 Technical Parameter

|                            |               |
|----------------------------|---------------|
| 设计依据<br>Design Basis       | GB            |
| 设计标准<br>Design standard    | GB/12238-1989 |
| 试验和检验<br>Test & inspection | JB/T9092      |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                               |
|-----------|-----------------------------|-----------------------------------------------------------|
| 1         | 位置指示器<br>Location Indicator | 塑料 Plastic                                                |
| 2         | 气动执行器<br>Pneumatic Actuator | AT Series                                                 |
| 3         | 连接套<br>Connecting Set       | 不锈钢304<br>Stainless Steel 304                             |
| 4         | 阀杆<br>Stem                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304、316、316L  |
| 5         | 螺栓<br>Screw                 | 不锈钢304、316L<br>Stainless Steel 304、316L                   |
| 6         | 螺母<br>Nut                   | 不锈钢304、316L<br>Stainless Steel 304、316L                   |
| 7         | 填料<br>Packing               | PTFE                                                      |
| 8         | 连接支架<br>Connecting Yoke     | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 9         | 蝶板<br>Disc                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 10        | 阀座<br>Seat                  | 三元乙丙橡胶、硅胶、定制高温<br>EPDM、SIL、High temperature glue          |
| 11        | 左阀体<br>Left Body            | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |
| 12        | 右阀体<br>Right Body           | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |

※注：系列蝶阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of butterfly valve series can be designed for options as per real working conditions and users'special requirements.

主要外形及连接尺寸（卡箍连接）

Main Outline and Connecting of clamp connection type

| Size | 3/4" | 1"   | 1-1/4" | 1-1/2" | 1-3/4" | 2"   | 2-1/4" | 2-1/2" | 3"   | 3-1/2" | 4"   | 4"   | 4-1/2" | 5"      | 6"      |
|------|------|------|--------|--------|--------|------|--------|--------|------|--------|------|------|--------|---------|---------|
|      | Ø19  | Ø25  | Ø32    | Ø38    | Ø45    | Ø51  | Ø57    | Ø63    | Ø76  | Ø89    | Ø102 | Ø108 | Ø114   | Ø133    | Ø159    |
| d    | 16.1 | 22.4 | 28.8   | 35.1   | 42     | 47.8 | 53     | 59.5   | 72.2 | 85     | 97.6 | 104  | 110    | 128     | 153.5   |
| D    | 50.5 | 50.5 | 50.5   | 50.5   | 64     | 64   | 77.5   | 77.5   | 91   | 106    | 119  | 119  | 130    | 145     | 183     |
| L    | 66   | 66   | 66     | 66     | 70     | 72   | 76     | 76     | 76   | 84     | 90   | 90   | 106    | 128/100 | 132/100 |

技术规范 Technical Parameter

|                            |               |
|----------------------------|---------------|
| 设计依据<br>Design Basis       | GB            |
| 设计标准<br>Design standard    | GB/12238-1989 |
| 试验和检验<br>Test & inspection | JB/T9092      |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

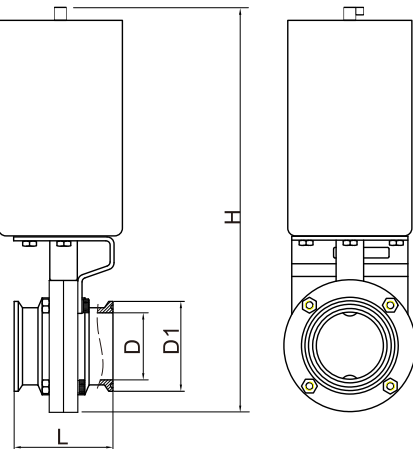
| 序号<br>No. | 零件名称<br>Name                | 材质 Material                                               |
|-----------|-----------------------------|-----------------------------------------------------------|
| 1         | 位置指示器<br>Location Indicator | 塑料 Plastic                                                |
| 2         | 气动执行器<br>Pneumatic Actuator | AT Series                                                 |
| 3         | 连接套<br>Connecting Set       | 不锈钢304<br>Stainless Steel 304                             |
| 4         | 阀杆<br>Stem                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304、316、316L  |
| 5         | 螺栓<br>Screw                 | 不锈钢304、316L<br>Stainless Steel 304、316L                   |
| 6         | 螺母<br>Nut                   | 不锈钢304、316L<br>Stainless Steel 304、316L                   |
| 7         | 填料<br>Packing               | PTFE                                                      |
| 8         | 连接支架<br>Connecting Yoke     | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 9         | 蝶板<br>Disc                  | 不锈钢304、304L、316、316L<br>Stainless Steel 304、304L、316、316L |
| 10        | 阀座<br>Seat                  | 三元乙丙橡胶、硅胶、定制高温<br>EPDM、SIL、High temperature glue          |
| 11        | 左阀体<br>Left Body            | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |
| 12        | 右阀体<br>Right Body           | 不锈钢CF8、CF8M、CF3、CF3M<br>Stainless Steel CF8、CF8M、CF3、CF3M |

※注：系列蝶阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of butterfly valve series can be designed for options as per real working conditions and users'special requirements.

主要外形及连接尺寸（卡箍连接）

Main Outline and Connecting of clamp connection type

| Size | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 1-3/4" | 2"   | 2-1/4" | 2-1/2" | 3"    | 3-1/2" | 4"   | 4"   | 4-1/2" | 5"      | 6"      |
|------|-------|-------|--------|--------|--------|------|--------|--------|-------|--------|------|------|--------|---------|---------|
|      | Ø19   | Ø25   | Ø32    | Ø38    | Ø45    | Ø51  | Ø57    | Ø63    | Ø76   | Ø89    | Ø102 | Ø108 | Ø114   | Ø133    | Ø159    |
| D    | 16.1  | 22.4  | 28.8   | 35.1   | 42     | 47.8 | 53     | 59.5   | 72.2  | 85     | 97.6 | 104  | 110    | 128     | 153.5   |
| D1   | 50.5  | 50.5  | 50.5   | 50.5   | 64     | 64   | 77.5   | 77.5   | 91    | 106    | 119  | 119  | 130    | 145     | 183     |
| L    | 68    | 66    | 66     | 66     | 70     | 72   | 76     | 76     | 76    | 84     | 90   | 90   | 106    | 128/100 | 132/100 |
| H    | 227.5 | 227.5 | 227.5  | 231    | 237    | 242  | 248    | 283.5  | 295.5 | 389    | 415  |      |        |         |         |



HK59-D-D 气动刀闸阀

Penumatic Knife Gate Valve

科威納 COVNA®

气动刀闸阀具有结构简单紧凑、设计合理、轻型节材,密封可靠、操作轻便灵气动刀闸阀借助压缩空气驱动的阀门。  
气动刀型闸阀是用气动执行器控制阀门,从而实现阀门的开和关。灵活、体积小、通道流畅、流阻小、重量轻、易安装、易拆卸等优点,可在工作压力1.0MPa-2.5MPa,使用温度-29-650℃情况下正常工作。刀型闸阀其闸板具有剪切功能,可刮除密封面上的粘着物,自动清除杂物,不锈钢闸板可防止腐蚀引起的密封泄漏。

The pneumatic knife gate valve has the advantages of simple and compact structure, reasonable design, light-weight material, reliable sealing and easy operation. The pneumatic knife gate valve is driven by compressed air.Pneumatic knife gate valve uses pneumatic actuator to control the valve, so as to realize the opening and closing of the valve. It has the advantages of flexibility, small size, smooth passage, small flow resistance, light weight, easy installation and disassembly, etc. It can work normally under the working pressure of 1.0MPa-2.5MPa and the operating temperature of -29~650℃. The gate of the knife gate valve has a shearing function, which can scrape off the adhesive on the sealing surface and automatically remove the sundries. The stainless steel gate can prevent the seal leakage caused by corrosion.

| NO. | 零件名称 Part Name             | 零件材料 Part Material                                                            |
|-----|----------------------------|-------------------------------------------------------------------------------|
| 1   | 公称通径 Nominal Size          | DN50~DN1000                                                                   |
| 2   | 适用介质 Applicable Medium     | 泥浆、物料、粘稠、颗粒类流体 Mud, material, viscous, granular fluid                         |
| 3   | 连接类型 Connection Type       | 法兰型, 梅花型, 对夹型 Flanged Type, Plum blossom type, Wafer type                     |
| 4   | 压力等级 Pressure Rating       | 0-6 1-6 4-0 6-4 (ANSI150 300 600Lb) (JIS10 20 30 40K)                         |
| 5   | 工作温度 Operating temperature | -30℃ ~300℃                                                                    |
| 6   | 阀体材质 Body Material         | WCB、铸铁、不锈钢(CF8、CF8M) Cast Iron, Carbon Steel(WCB), Stainless Steel(CF8, CF8M) |
| 7   | 阀板材质 Disc Material         | WCB、铸铁、不锈钢(CF8、CF8M) WCB 、Cast Iron, Stainless Steel(CF8, CF8M)               |
| 8   | 阀杆材质 Stem Material         | 不锈钢 Stainless Steel (CF8, CF8M)                                               |
| 9   | 阀体材质 Body Material         | WCB、铸铁、不锈钢(CF8、CF8M) Cast Iron, Carbon Steel(WCB), Stainless Steel(CF8, CF8M) |
| 10  | 阀板材质 Disc Material         | WCB、铸铁、不锈钢(CF8、CF8M) WCB 、Cast Iron, Stainless Steel(CF8, CF8M)               |
| 11  | 阀杆材质 Stem Material         | 不锈钢 Stainless Steel (CF8, CF8M)                                               |



法兰型  
Flange type



梅花型  
Lug type

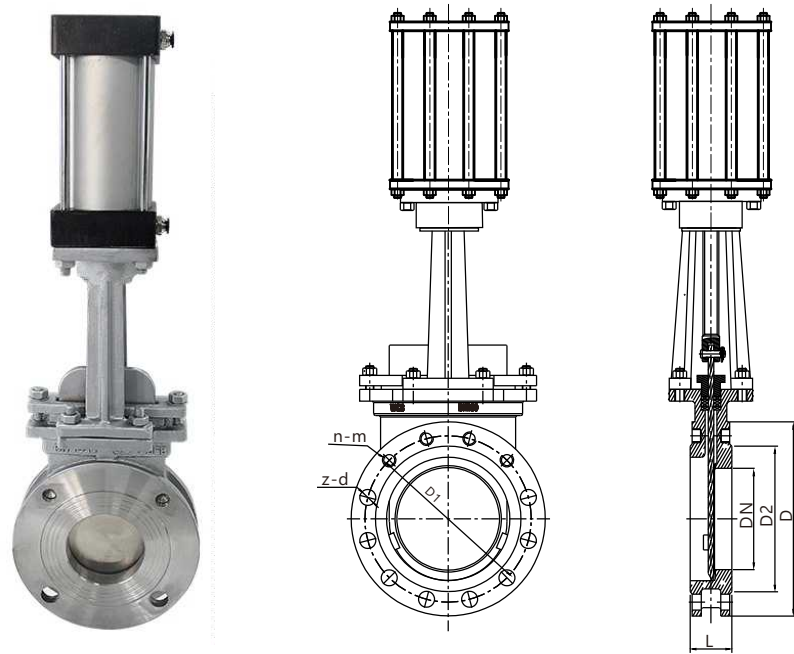


对夹型  
Wafer type

科威納 COVNA®

HK59-D-D 气动刀闸阀

Penumatic Knife Gate Valve



主要外形及连接尺寸(1.0MPa) Main Outline and Connecting (1.0MPa)

| Size | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"   | 8"    | 10"   | 12"   | 14"   | 16"   | 18"   | 20"   |
|------|-------|--------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| DN   | 50    | 65     | 80    | 100   | 125   | 150  | 200   | 250   | 300   | 350   | 400   | 450   | 500   |
| D    | 160   | 180    | 195   | 215   | 245   | 280  | 335   | 390   | 440   | 500   | 565   | 615   | 670   |
| D1   | 125   | 145    | 160   | 180   | 210   | 240  | 295   | 350   | 400   | 460   | 515   | 565   | 620   |
| D2   | 100   | 120    | 135   | 155   | 185   | 210  | 265   | 320   | 368   | 428   | 482   | 532   | 585   |
| b    | 18    | 18     | 18    | 18    | 18    | 23   | 23    | 23    | 23    | 23    | 27    | 27    | 27    |
| L    | 50    | 50     | 50    | 50    | 50    | 60   | 60    | 70    | 80    | 90    | 100   | 110   | 114   |
| z-d  | 2-18  | 2-18   | 2-18  | 6-18  | 6-22  | 6-22 | 6-22  | 8-26  | 8-26  | 8-30  | 10-30 | 10-30 | 10-30 |
| n-m  | 2-M16 | 2-M16  | 2-M16 | 2-M16 | 2-M20 | 2-20 | 2-M20 | 4-M24 | 4-M24 | 4-M27 | 6-M27 | 6-M27 | 6-M27 |

主要外形及连接尺寸(ANSI 150LB) Main Outline and Connecting (ANSI 150LB)

| Size | 2"     | 2-1/2" | 3"     | 4"       | 5"     | 6"     | 8"     | 10"    | 12"    | 14"    | 16"    |
|------|--------|--------|--------|----------|--------|--------|--------|--------|--------|--------|--------|
| DN   | 50     | 65     | 80     | 100      | 125    | 150    | 200    | 250    | 300    | 350    | 400    |
| D    | 150    | 180    | 190    | 230      | 255    | 280    | 345    | 405    | 485    | 535    | 595    |
| D1   | 120. 7 | 139. 7 | 152. 4 | 190. 5   | 215. 9 | 241. 3 | 298. 5 | 362    | 431. 8 | 476. 3 | 539. 8 |
| D2   | 92. 1  | 104. 8 | 127    | 157. . 2 | 185. 7 | 215. 9 | 269. 9 | 323. 8 | 381    | 412. 8 | 469. 9 |
| L    | 50     | 50     | 50     | 50       | 50     | 60     | 60     | 70     | 76     | 76     | 89     |
| z-d  | 2-18   | 2-18   | 2-18   | 6-18     | 6-22   | 6-22   | 6-22   | 8-26   | 8-26   | 8-30   | 10-30  |
| n-m  | 2-M16  | 2-M16  | 2-M16  | 2-M16    | 2-M20  | 2-20   | 2-M20  | 4-M24  | 4-M24  | 4-M27  | 6-M27  |

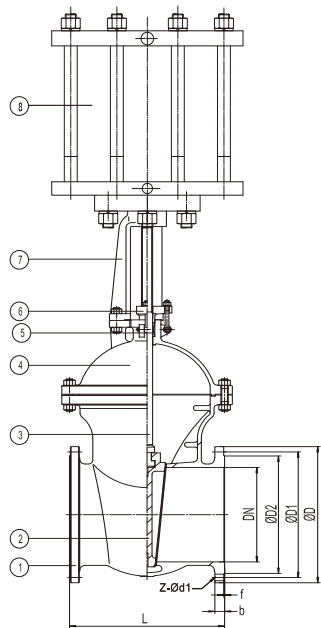
HK59-Z 气动闸阀

Pneumatic Gate Valve

科威纳 COVNA®

HK59-S 气动截止阀

Pneumatic Globe Valve



技术规范 Technical Parameter

|                                   |                                  |                |
|-----------------------------------|----------------------------------|----------------|
| 设计依据<br>Design Basis              |                                  | GB             |
| 设计标准<br>Design Standard           |                                  | GB/12237       |
| 结构长度<br>Face to Face<br>Dimension | 法兰<br>连接<br>Flange<br>Connecting | HKQB           |
| 连接法兰尺寸<br>Connecting Flange Size  |                                  | GB/9113 JB/T79 |
| 试验和检验<br>Test & Inspection        |                                  | JB/T9092       |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Name          | 材质 Material                                   |
|-----------|-----------------------|-----------------------------------------------|
| 1         | 主阀体<br>Body           | 不锈钢304、316、WCB<br>Stainless Steel 304、316、WCB |
| 2         | 闸板<br>Lashboard       | 不锈钢304、316、WCB<br>Stainless Steel 304、316、WCB |
| 3         | 阀杆<br>Stem            | 不锈钢304、316<br>Stainless Steel 304、316         |
| 4         | 阀盖<br>Bonnet          | 不锈钢304、316、WCB<br>Stainless Steel 304、316、WCB |
| 5         | 填料<br>Packing         | PTFE                                          |
| 6         | 填料压盖<br>packing gland | 不锈钢304、316、WCB<br>Stainless Steel 304、316、WCB |
| 7         | 连接套<br>Connecting Set | 不锈钢304、316<br>Stainless Steel 304、316         |
| 8         | 执行器<br>Actuator       | 直行程气动执行器<br>Direct stroke pneumatic actuator  |

※注：系列阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of valve series can be designed for options as per real working conditions and users'special requirements.

主要外形及连接法兰尺寸 Main Outline and Connecting Size 1.6MPa

| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    |
| D2    | 45    | 58    | 68    | 78     | 88     | 102   | 122    | 138   | 158   | 188   | 212   |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145    | 160   | 180   | 210   | 240   |
| D     | 95    | 105   | 115   | 140    | 150    | 165   | 185    | 200   | 220   | 250   | 285   |
| L     | 108   | 117   | 127   | 140    | 240    | 250   | 270    | 280   | 300   | 325   | 350   |
| b     | 16    | 18    | 18    | 18     | 18     | 18    | 18     | 20    | 20    | 22    | 22    |
| f     | 2     | 2     | 2     | 2      | 2      | 2     | 2      | 2     | 2     | 2     | 2     |
| n-M   | 4-Ø14 | 4-Ø14 | 4-Ø14 | 4-Ø18  | 4-Ø18  | 4-Ø18 | 4-Ø18  | 8-Ø18 | 8-Ø18 | 8-Ø18 | 8-Ø22 |

科威纳 COVNA®

技术规范 Technical Parameter

|                                   |                                  |                |
|-----------------------------------|----------------------------------|----------------|
| 设计依据<br>Design Basis              |                                  | GB             |
| 设计标准<br>Design Standard           |                                  | GB/12237       |
| 结构长度<br>Face to Face<br>Dimension | 法兰<br>连接<br>Flange<br>Connecting | HKQB           |
| 连接法兰尺寸<br>Connecting Flange Size  |                                  | GB/9113 JB/T79 |
| 试验和检验<br>Test & Inspection        |                                  | JB/T9092       |

※注：系列球阀结构长度及连接法兰尺寸可根据用户要求设计制造。  
Note: The structural length and connecting flange size of ball valve series can be designed and manufactured as per users'requirments.

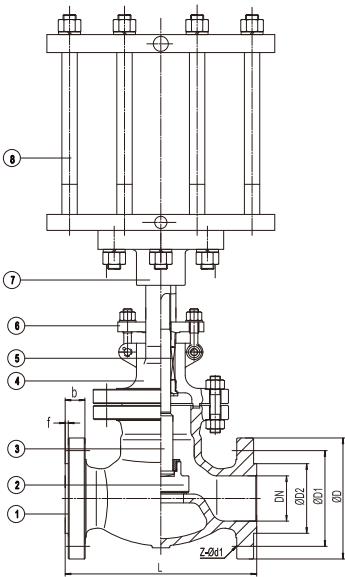
主要零件材质表 Main Parts Materials

| 序号<br>No. | 零件名称<br>Name          | 材质 Material                                   |
|-----------|-----------------------|-----------------------------------------------|
| 1         | 主阀体<br>Body           | 不锈钢304、316、WCB<br>Stainless Steel 304、316、WCB |
| 2         | 阀芯<br>Disc            | 不锈钢304、316、WCB<br>Stainless Steel 304、316、WCB |
| 3         | 阀杆<br>Stem            | 不锈钢304、316<br>Stainless Steel 304、316         |
| 4         | 阀盖<br>Bonnet          | 不锈钢304、316、WCB<br>Stainless Steel 304、316、WCB |
| 5         | 填料<br>Packing         | PTFE                                          |
| 6         | 填料压盖<br>packing gland | 不锈钢304、316、WCB<br>Stainless Steel 304、316、WCB |
| 7         | 连接套<br>Connecting Set | 不锈钢304、316<br>Stainless Steel 304、316         |
| 8         | 执行器<br>Actuator       | 直行程气动执行器<br>Direct stroke pneumatic actuator  |

※注：系列阀主要零部件及密封圈的材质可根据实际工况条件或用户特殊要求设计选用。  
Note: The main spare parts and sealing-ring materials of valve series can be designed for options as per real working conditions and users'special requirements.

主要外形及连接法兰尺寸 Main Outline and Connecting Size 1.6MPa

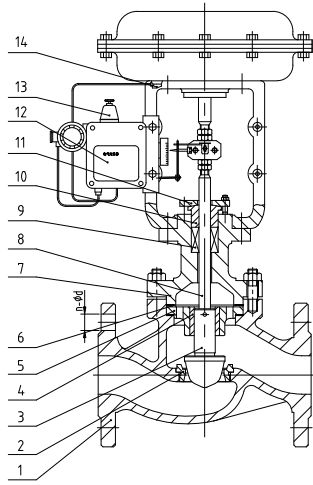
| MEDLE | DN15  | DN20  | DN25  | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 |
|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|-------|-------|
| G     | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    |
| D2    | 45    | 58    | 68    | 78     | 88     | 102   | 122    | 138   | 158   | 188   | 212   |
| D1    | 65    | 75    | 85    | 100    | 110    | 125   | 145    | 160   | 180   | 210   | 240   |
| D     | 95    | 105   | 115   | 140    | 150    | 165   | 185    | 200   | 220   | 250   | 285   |
| L     | 130   | 150   | 160   | 180    | 200    | 230   | 290    | 310   | 350   | 400   | 480   |
| b     | 16    | 16    | 16    | 18     | 18     | 18    | 18     | 20    | 22    | 24    | 24    |
| f     | 2     | 2     | 2     | 2      | 3      | 3     | 3      | 3     | 3     | 3     | 3     |
| n-M   | 4-Ø14 | 4-Ø14 | 4-Ø14 | 4-Ø18  | 4-Ø18  | 4-Ø18 | 4-Ø18  | 8-Ø18 | 8-Ø18 | 8-Ø18 | 8-Ø22 |



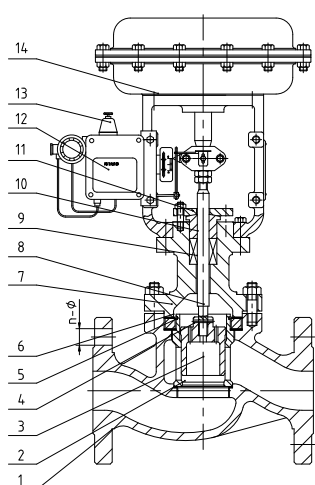
产品用途及结构特点 Product use and structural characteristics

气动调节阀由执行机构和调节机构组成，执行机构是调节阀的推力部件，它按控制信号压力的大小产生相应的推力，推动调节机构动作。阀体是气动调节阀的调节部件，它直接与调节介质接触，调节该流体的流量、压力、温度等各种工艺参数。气动调节阀具有控制简单，反应快速，且本质安全，不需另外再采取防爆措施的特点。气动式调节阀是石油、化工、电力、冶金等工业企业广泛使用的工业过程控制仪表之一。

The pneumatic control valve is composed of an actuator and an adjustment mechanism. The actuator is the thrust component of the control valve. It generates a corresponding thrust according to the pressure of the control signal to push the adjustment mechanism into action. The valve body is the regulating component of the pneumatic control valve. It directly contacts the medium to regulate the flow, pressure, temperature and other process parameters of the fluid. The pneumatic control valve has the characteristics of simple control, fast response, and intrinsically safe, without additional explosion-proof measures. Pneumatic control valve is one of the industrial process control instruments widely used in petroleum, chemical, electric power, metallurgy and other industrial enterprises.



ZJHP型单座调节阀  
Single seat control valve



ZJHM型套筒调节阀  
Sleeve control valve

| NO. | 零件名称 Part Name    | 零件材料 Part Material         |
|-----|-------------------|----------------------------|
| 1   | 阀体 Body           | WCB/ SS304/SS316           |
| 2   | 阀座 Seat           | SS304/SS316                |
| 3   | 阀芯 Spool          | SS304/SS316                |
| 4   | 衬套 Spool          | 20Cr13                     |
| 5   | 衬套座 Guide Sleeve  | 45                         |
| 6   | 垫圈 Gasket         | 金属缠绕垫 Metal winding gasket |
| 7   | 阀盖 Cap            | WCB/ SS304/SS316           |
| 8   | 阀杆 Stem           | SS304/SS316                |
| 9   | 填料 Packing        | PTFE                       |
| 10  | 填料压盖 Packing Cap  | 20Cr13                     |
| 11  | 压板 Gland          | WCB/ SS304/SS316           |
| 12  | 阀门定位器 Positioner  |                            |
| 13  | 减压过滤器 Air Set     |                            |
| 14  | 气动薄膜执行机构 Actuator |                            |

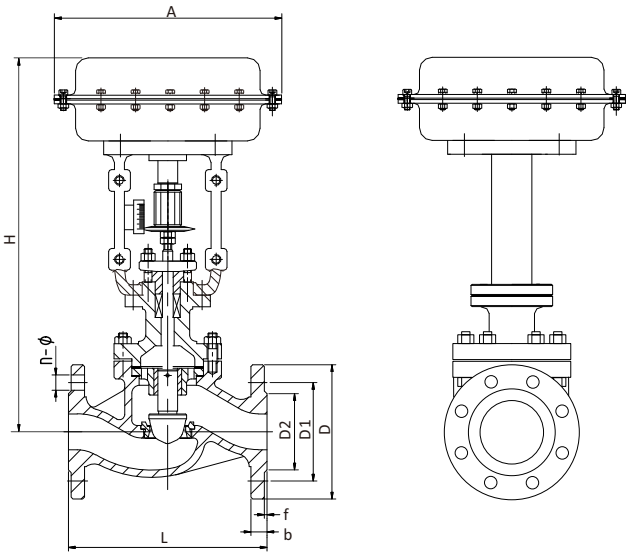
规格及技术对数表 Specification and technical logarithm table

| 公称通径(mm)<br>Nominal diameter                     |                          | G <sup>3</sup> /4"                                    |   | 20   |   |     |     | 25  |     |     |    | 40  |      |      |      | 50   |    |      |    | 65  |    |    |     | 80 |     |     |     | 100 |     |     |     | 150 |      |      |  | 200 |  |  |  | 250 | 300 |
|--------------------------------------------------|--------------------------|-------------------------------------------------------|---|------|---|-----|-----|-----|-----|-----|----|-----|------|------|------|------|----|------|----|-----|----|----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|--|-----|--|--|--|-----|-----|
| 阀座直径(mm)<br>Valve seat diameter                  |                          | 3                                                     | 4 | 5    | 6 | 7   | 8   | 10  | 12  | 15  | 20 | 20  | 25   | 25   | 32   | 40   | 32 | 40   | 50 | 40  | 50 | 65 | 50  | 65 | 80  | 65  | 80  | 100 | 100 | 125 | 150 | 125 | 150  | 200  |  |     |  |  |  |     |     |
| 额定流量<br>系数KV                                     | 直 线<br>straight line     | 0.08                                                  |   | 0.12 |   | 1.8 | 2.8 | 4.4 | 6.9 | 6.9 | 11 | 11  | 17.6 | 27.5 | 17.6 | 27.5 | 44 | 27.5 | 44 | 69  | 44 | 69 | 110 | 69 | 110 | 176 | 176 | 275 | 440 | 275 | 440 | 690 | 1000 | 1600 |  |     |  |  |  |     |     |
|                                                  | 等百分比<br>Equal percentage | 0.20                                                  |   | 0.32 |   |     |     |     |     |     |    |     |      |      |      |      |    |      |    |     |    |    |     |    |     |     |     |     |     |     |     |     |      |      |  |     |  |  |  |     |     |
| Limited Data<br>Coefficient KV                   |                          | 0.50                                                  |   | 0.80 |   | 1.6 | 2.5 | 4   | 6.3 | 6.3 | 10 | 10  | 16   | 25   | 16   | 25   | 40 | 25   | 40 | 63  | 40 | 63 | 100 | 63 | 100 | 160 | 160 | 250 | 400 | 250 | 400 | 630 | 900  | 1440 |  |     |  |  |  |     |     |
| 额定行程(mm)<br>Rated stroke                         |                          | 10                                                    |   | 16   |   |     |     | 25  |     |     |    | 40  |      |      |      | 60   |    |      |    | 100 |    |    |     |    |     |     |     |     |     |     |     |     |      |      |  |     |  |  |  |     |     |
| 薄膜有效面积 cm <sup>2</sup><br>Effective area of film |                          | 220                                                   |   | 350  |   |     |     | 560 |     |     |    | 900 |      |      |      | 1400 |    |      |    |     |    |    |     |    |     |     |     |     |     |     |     |     |      |      |  |     |  |  |  |     |     |
| 固有流量特性<br>Inherent flow characteristics          |                          | 直线、等百分比<br>Linear, Equal percentage                   |   |      |   |     |     |     |     |     |    |     |      |      |      |      |    |      |    |     |    |    |     |    |     |     |     |     |     |     |     |     |      |      |  |     |  |  |  |     |     |
| 固有可调比<br>Inherently adjustable ratio             |                          | 50: 1                                                 |   |      |   |     |     |     |     |     |    |     |      |      |      |      |    |      |    |     |    |    |     |    |     |     |     |     |     |     |     |     |      |      |  |     |  |  |  |     |     |
| 公称压力MPa<br>Nominal pressure                      |                          | 0.6 1.6 4.0 6.4 (ANSI150 300 600Lb) (JIS10 20 30 40K) |   |      |   |     |     |     |     |     |    |     |      |      |      |      |    |      |    |     |    |    |     |    |     |     |     |     |     |     |     |     |      |      |  |     |  |  |  |     |     |
| 工作温度℃<br>Working temperature                     |                          | -20~+200 -40~+250 -40~+450 -60~+450                   |   |      |   |     |     |     |     |     |    |     |      |      |      |      |    |      |    |     |    |    |     |    |     |     |     |     |     |     |     |     |      |      |  |     |  |  |  |     |     |
| 环境温度℃<br>Ambient temperature                     |                          | -40~+85                                               |   |      |   |     |     |     |     |     |    |     |      |      |      |      |    |      |    |     |    |    |     |    |     |     |     |     |     |     |     |     |      |      |  |     |  |  |  |     |     |
| 气源压力MPa<br>Air pressure                          |                          | 0.14(0.25 0.4)                                        |   |      |   |     |     |     |     |     |    |     |      |      |      |      |    |      |    |     |    |    |     |    |     |     |     |     |     |     |     |     |      |      |  |     |  |  |  |     |     |
| 弹簧范围Kpa<br>Spring range                          |                          | 20~100(40~200 80~40 20~60 60~100)                     |   |      |   |     |     |     |     |     |    |     |      |      |      |      |    |      |    |     |    |    |     |    |     |     |     |     |     |     |     |     |      |      |  |     |  |  |  |     |     |
| 接管尺寸<br>Take over size                           |                          | 内螺纹M10×1<br>Female Threaded M10X1                     |   |      |   |     |     |     |     |     |    |     |      |      |      |      |    |      |    |     |    |    |     |    |     |     |     |     |     |     |     |     |      |      |  |     |  |  |  |     |     |

注：低温型和波纹管密封型保温夹套型特殊要求的调节阀，订货时必须说明。  
Note: Low-temperature type and bellows-sealed type insulation jacket type special requirements for regulating valves must be stated when ordering

技术性能指标表 Technical performance index table

| 技 术 性 能<br>Technical performance        | 不带定位器<br>Without Positioner                                                                                                                            | 带定位器<br>With Positioner |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 基 本 误 差<br>Basic error                  | ±5%                                                                                                                                                    | ±1%                     |
| 回 差<br>Back difference                  | 3%                                                                                                                                                     | 1%                      |
| 死 区<br>dead zone                        | 3%                                                                                                                                                     | 0.4%                    |
| 泄 漏 量<br>Leakage                        | 单座10 <sup>-4</sup> 阀额定容量(套筒10 <sup>-3</sup> 阀额定容量)<br>Rated capacity 10 <sup>-4</sup> of single seat valve (capacity 10 <sup>-3</sup> of sleeve valve) |                         |
| 额定流量系数<br>Rated flow coefficient        | ±10%                                                                                                                                                   |                         |
| 固有流量特性<br>Inherent flow characteristics | 斜率±30%<br>Slope±30%                                                                                                                                    |                         |

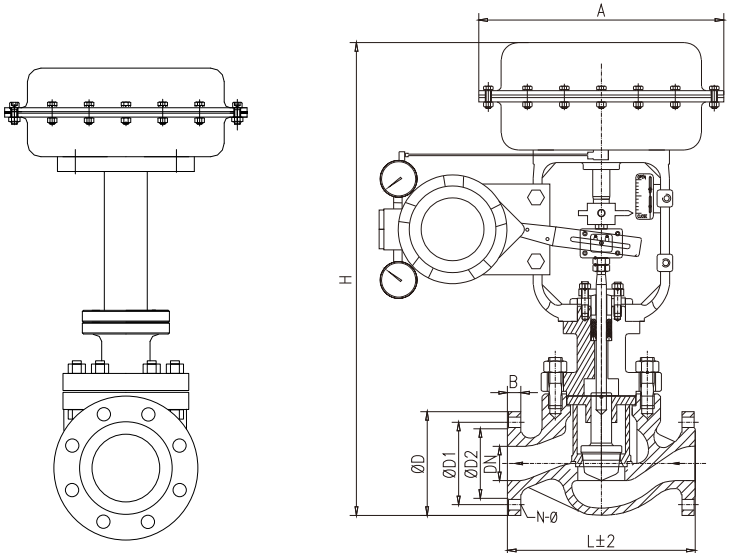


主要外形及连接法兰尺寸 Main Outline and Connecting Size 1.6MPa

| MEDLE | DN15 | DN20 | DN25 | DN32   | DN40   | DN50 | DN65   | DN80 | DN100 | DN125 | DN150 | DN200 |
|-------|------|------|------|--------|--------|------|--------|------|-------|-------|-------|-------|
| G     | 1/2" | 3/4" | 1"   | 1-1/4" | 1-1/2" | 2"   | 2-1/2" | 3"   | 4"    | 5"    | 6"    | 8"    |
| D2    | 45   | 58   | 68   | 78     | 88     | 102  | 122    | 138  | 158   | 188   | 212   | 268   |
| D1    | 65   | 75   | 85   | 100    | 110    | 125  | 145    | 160  | 180   | 210   | 240   | 285   |
| D     | 95   | 105  | 115  | 140    | 150    | 165  | 185    | 200  | 220   | 250   | 285   | 340   |
| b-f   | 14-2 | 18-2 | 18-2 | 18-2   | 18-2   | 18-2 | 18-2   | 20-2 | 20-2  | 22-2  | 22-2  | 24-2  |
| n-φd  | 4-14 | 4-14 | 4-14 | 4-18   | 4-18   | 4-18 | 8-18   | 8-18 | 8-18  | 8-18  | 8-22  | 12-22 |
| L     | 180  | 184  | 184  | 200    | 222    | 254  | 276    | 298  | 352   | 410   | 451   | 600   |
| H     | 394  | 394  | 396  | 402    | 437    | 451  | 607    | 613  | 631   | 736   | 778   | 810   |
| A     | 285  | 285  | 285  | 285    | 285    | 285  | 360    | 360  | 360   | 360   | 470   | 470   |

主要外形及连接法兰尺寸 Main Outline and Connecting Size ANSI 150LB

| MEDLE | DN25  | DN32   | DN40   | DN50   | DN65   | DN80   | DN100  |
|-------|-------|--------|--------|--------|--------|--------|--------|
| G     | 1"    | 1-1/4" | 1-1/2" | 2"     | 2-1/2" | 3"     | 4"     |
| D2    | 50.8  | 63.5   | 73     | 92.1   | 104.8  | 127    | 157.2  |
| D1    | 79.4  | 88.9   | 98.4   | 120.7  | 139.7  | 152.4  | 190.5  |
| D     | 110   | 115    | 125    | 150    | 180    | 190    | 230    |
| b-f   | 9.6-2 | 11.2-2 | 12.7-2 | 14.3-2 | 15.9-2 | 17.5-2 | 22.3-2 |
| n-φd  | 4-16  | 4-16   | 4-16   | 4-19   | 4-16   | 4-19   | 8-19   |
| L     | 185   | 222    | 222    | 255    | 275    | 298    | 352    |
| H     | 394   | 402    | 402    | 437    | 607    | 613    | 631    |
| A     | 285   | 285    | 285    | 285    | 360    | 360    | 360    |



主要外形及连接法兰尺寸 Main Outline and Connecting Size 1.6MPa

| MEDLE | DN15 | DN20 | DN25 | DN32   | DN40   | DN50 | DN65   | DN80 | DN100 | DN125 | DN150 | DN200 | DN250 | DN300 |
|-------|------|------|------|--------|--------|------|--------|------|-------|-------|-------|-------|-------|-------|
| G     | 1/2" | 3/4" | 1"   | 1-1/4" | 1-1/2" | 2"   | 2-1/2" | 3"   | 4"    | 5"    | 6"    | 8"    | 10"   | 12"   |
| D2    | 45   | 55   | 66   | 76     | 88     | 102  | 122    | 138  | 158   | 188   | 212   | 268   | 320   | 378   |
| D1    | 65   | 75   | 85   | 100    | 110    | 125  | 145    | 160  | 180   | 210   | 240   | 295   | 355   | 410   |
| D     | 95   | 105  | 115  | 140    | 150    | 165  | 185    | 200  | 220   | 250   | 285   | 340   | 405   | 460   |
| b-f   | 16-2 | 16-2 | 18-2 | 18-2   | 18-2   | 20-3 | 20-3   | 20-3 | 22-3  | 22-3  | 22-3  | 24-3  | 26-3  | 28-3  |
| n-φd  | 4-14 | 4-14 | 4-14 | 4-18   | 4-18   | 4-18 | 4/8-18 | 8-18 | 8-18  | 8-18  | 8-22  | 8-22  | 12-26 | 12-26 |
| L     | 180  | 180  | 188  | 200    | 220    | 252  | 275    | 300  | 350   | 410   | 452   | 610   | 650   | 730   |
| H     | 560  | 570  | 580  | 620    | 640    | 660  | 740    | 750  | 770   | 880   | 1060  | 1150  | 1260  | 1320  |
| A     | 285  | 285  | 285  | 285    | 285    | 285  | 350    | 350  | 350   | 470   | 470   | 470   | 580   | 580   |

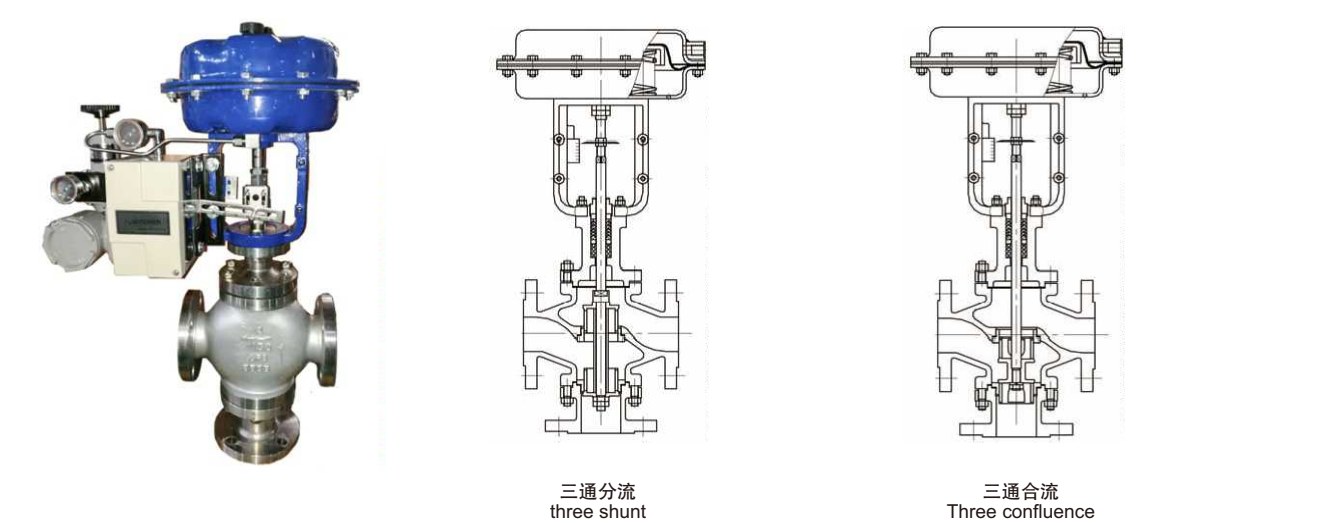
主要外形及连接法兰尺寸 Main Outline and Connecting Size ANSI 150LB

| MEDLE | DN15 | DN20 | DN25 | DN32   | DN40   | DN50  | DN65   | DN80  | DN100 | DN125 | DN150 | DN200 | DN250 | DN300 |
|-------|------|------|------|--------|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| G     | 1/2" | 3/4" | 1"   | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    | 5"    | 6"    | 8"    | 10"   | 12"   |
| D2    | 34.9 | 42.9 | 50.8 | 63.5   | 73     | 92.1  | 104.8  | 127   | 157.2 | 185.7 | 215.9 | 269.9 | 323.8 | 381   |
| D1    | 60.3 | 69.9 | 79.4 | 88.9   | 98.4   | 120.7 | 139.7  | 152.4 | 190.5 | 215.9 | 241.3 | 298.5 | 362   | 413.8 |
| D     | 90   | 100  | 110  | 115    | 125    | 150   | 180    | 190   | 230   | 255   | 280   | 345   | 405   | 485   |
| b     | 11.5 | 13   | 14.5 | 16     | 17.5   | 19.5  | 22.5   | 24    | 24    | 24    | 25.5  | 29    | 30.5  | 32    |
| f     | 2    | 2    | 2    | 2      | 2      | 2     | 2      | 2     | 2     | 2     | 2     | 2     | 2     | 2     |
| n-φd  | 4-16 | 4-16 | 4-16 | 4-16   | 4-16   | 4-19  | 4-19   | 4-19  | 8-19  | 8-22  | 8-22  | 8-22  | 12-25 | 12-25 |
| L     | 180  | 180  | 188  | 200    | 220    | 252   | 275    | 300   | 350   | 410   | 452   | 610   | 650   | 730   |

产品用途及结构特点 Product use and structural characteristics

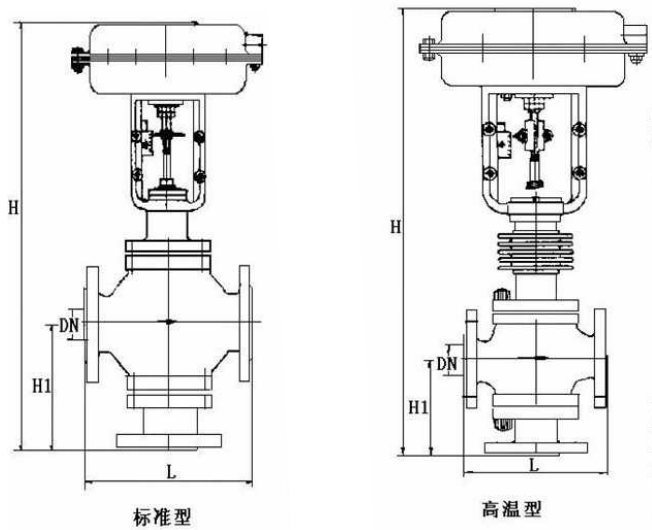
气动三通调节阀有合流和分流两种作用方式，阀芯结构采用圆筒薄壁窗口，并采用阀芯侧面导向。三通阀在某些场合可以替代两个二通阀和一个三通接管而得到广泛应用，常用于热交换器的两相调节，也可用于简单的配比调节。

The pneumatic three-way control valve has two modes of action: confluence and divergence. The spool structure adopts a cylindrical thin-walled window and is guided by the side of the spool. The three-way valve can be widely used in some occasions instead of two 2 way valves and a 3 way connection. It is often used for two-phase adjustment of heat exchangers, and can also be used for simple ratio adjustment.



规格及技术对数表 Specification and technical logarithm table

| 公称通径<br>(mm)<br>Nominal<br>Diameter | 合流<br>Confluence                               | 25                                                                                                                                                   | 32               | 40  | 50   | 65   | 80 | 100 | 125 | 150 | 200 | 250 | 300  |
|-------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----|------|------|----|-----|-----|-----|-----|-----|------|
|                                     | 分流<br>Divergence                               |                                                                                                                                                      |                  |     |      |      | 80 | 100 | 125 | 150 | 200 | 250 | 300  |
|                                     | 额定流量<br>系数KV<br>Limited Data<br>Coefficient KV | 合流<br>Confluence                                                                                                                                     | 分流<br>Divergence |     |      |      | 85 | 135 | 210 | 340 | 535 | 800 | 1260 |
| 额定行程 (mm)<br>Rated stroke           |                                                | 16                                                                                                                                                   | 25               | 40  | 60   | 100  |    |     |     |     |     |     |      |
| 有效面积<br>Effective area              |                                                | 400                                                                                                                                                  | 400              | 630 | 1000 | 1600 |    |     |     |     |     |     |      |
| 公称压力MPa<br>Nominal pressure         |                                                | 0.6 1.6 4.0 6.4 (ANSI150 300 600Lb) (JIS10 20 30 40K)                                                                                                |                  |     |      |      |    |     |     |     |     |     |      |
| 流量特性<br>Flow characteristics        |                                                | 直线 straight line                                                                                                                                     |                  |     |      |      |    |     |     |     |     |     |      |
| 介质温度<br>Medium temperature          |                                                | -20~200℃ -40~250℃ -40~315℃                                                                                                                           |                  |     |      |      |    |     |     |     |     |     |      |
| 法兰尺寸<br>Flange size                 |                                                | 铸铁法兰尺寸按JB77-59, 铸钢法兰尺寸按JB79-59<br>Cast iron flange size according to JB77-59, Cast steel flange size according to JB79-59                            |                  |     |      |      |    |     |     |     |     |     |      |
| 法兰形式<br>Flange form                 |                                                | 法兰密封面形式按JB77-59, 其中铸铁法兰按光滑式, 铸钢法兰按凹式<br>Flange sealing face form press JB77-59, Base cast iron flanges are smooth and cast steel flanges are concave |                  |     |      |      |    |     |     |     |     |     |      |
| 阀体材质<br>Body material               |                                                | SS304, SS316, SS316L, WBC                                                                                                                            |                  |     |      |      |    |     |     |     |     |     |      |
| 阀芯材质<br>Spool material              |                                                | 1CR18NI9TI                                                                                                                                           |                  |     |      |      |    |     |     |     |     |     |      |
| 上阀盖型式<br>Upper bonnet type          |                                                | 普通式 (常温型), 热片式 (高温型)<br>Normal type (normal temperature type), hot piece type (high temperature type)                                                |                  |     |      |      |    |     |     |     |     |     |      |
| 弹簧范围<br>Spring range                |                                                | 20-100; 40-200; 80-240                                                                                                                               |                  |     |      |      |    |     |     |     |     |     |      |
| 可调式<br>Adjustable                   |                                                | 30 :1                                                                                                                                                |                  |     |      |      |    |     |     |     |     |     |      |



主要外形及连接尺寸 Main Outline and Connecting Size

| 公称<br>通径<br>size | 合 流 Confluence |     |        |      |      |              |            |        |      |      | 分 流 Diversion |      |      |              |            |        |      |      |
|------------------|----------------|-----|--------|------|------|--------------|------------|--------|------|------|---------------|------|------|--------------|------------|--------|------|------|
|                  | 行程<br>Journey  | D   | L      |      |      | H            |            | H1     |      |      | L             |      |      | H            |            | H1     |      |      |
|                  |                |     | PN MPa |      |      | 常温<br>Normal | 高温<br>High | PN MPa |      |      | PN MPa        |      |      | 常温<br>Normal | 高温<br>High | PN MPa |      |      |
|                  |                |     | 1. 6   | 4. 0 | 6. 4 |              |            | 1. 6   | 4. 0 | 6. 4 | 1. 6          | 4. 0 | 6. 4 |              |            | 1. 6   | 4. 0 | 6. 4 |
| 25               | 16             | 325 | 185    | 190  | 200  | 615          | 763        | 140    | 150  | 150  | 185           | 190  | 200  | 615          | 763        | 140    | 150  | 150  |
| 32               | 16             | 325 | 200    | 200  | 210  | 622          | 773        | 150    | 160  | 170  | 200           | 200  | 210  | 622          | 773        | 150    | 160  | 170  |
| 40               | 25             | 325 | 220    | 220  | 235  | 625          | 776        | 160    | 170  | 180  | 220           | 220  | 235  | 625          | 776        | 160    | 170  | 180  |
| 50               | 25             | 325 | 250    | 255  | 265  | 640          | 791        | 180    | 190  | 200  | 250           | 255  | 265  | 640          | 791        | 180    | 190  | 200  |
| 65               | 40             | 410 | 275    | 285  | 295  | 861          | 1024       | 200    | 210  | 220  | 275           | 285  | 295  | 61           | 1024       | 200    | 210  | 220  |
| 80               | 40             | 410 | 300    | 310  | 320  | 879          | 1042       | 210    | 230  | 240  | 300           | 310  | 320  | 85           | 1050       | 210    | 230  | 240  |
| 100              | 40             | 410 | 350    | 360  | 370  | 873          | 1036       | 220    | 250  | 260  | 350           | 350  | 370  | 900          | 1060       | 220    | 250  | 260  |
| 125              | 60             | 495 | 410    | 430  | 440  | 1029         | 1244       | 260    | 300  | 300  | 410           | 425  | 440  | 1050         | 1265       | 260    | 300  | 300  |
| 150              | 60             | 495 | 450    | 465  | 475  | 1046         | 1261       | 280    | 320  | 320  | 450           | 460  | 475  | 1060         | 1275       | 280    | 320  | 320  |
| 200              | 60             | 495 | 550    | 560  | 570  | 1075         | 1290       | 320    | 380  | 380  | 550           | 560  | 570  | 1105         | 1320       | 320    | 380  | 380  |
| 250              | 100            | 600 | 635    | 660  | 670  | 1451         | 1320       |        | 474  | 474  | 635           | 660  | 670  | 1525         | 2800       |        | 474  | 474  |
| 300              | 100            | 600 | 720    | 740  | 770  | 1512         | 1560       |        | 584  | 584  | 720           | 740  | 770  | 1545         | 2820       |        | 584  | 584  |

技术性能指标表 Technical performance index table

| 技 术 性 能      Technical performance  |              |                 | 不 带 定 位 器      Without Positioner | 带 定 位 器      With Positioner               |
|-------------------------------------|--------------|-----------------|-----------------------------------|--------------------------------------------|
| 基 本 误 差      Basic error            |              |                 | ± 6                               | ± 1. 5                                     |
| 回            差      Back difference |              |                 | 5                                 | 1. 5                                       |
| 死            区      Dead zone       |              |                 | 4                                 | 0. 6                                       |
| 始终点偏差%<br>Always point deviation    | 气 开    OPEN  | 始 点    Starting | ± 2. 5                            | ± 1. 5                                     |
|                                     |              | 终 点    End      | ± 6. 0                            |                                            |
|                                     | 气 关    CLOSE | 始 点    Starting | ± 6. 0                            |                                            |
|                                     |              | 终 点    End      | ± 2. 5                            |                                            |
| 额定行程偏差%      Rated stroke deviation |              |                 | ± 2. 5                            |                                            |
| 允许泄漏量L/h      Allowable leakage     |              |                 | 10 <sup>-3</sup> x 阀的额定容量         | 10 <sup>-3</sup> x Rated capacity of valve |

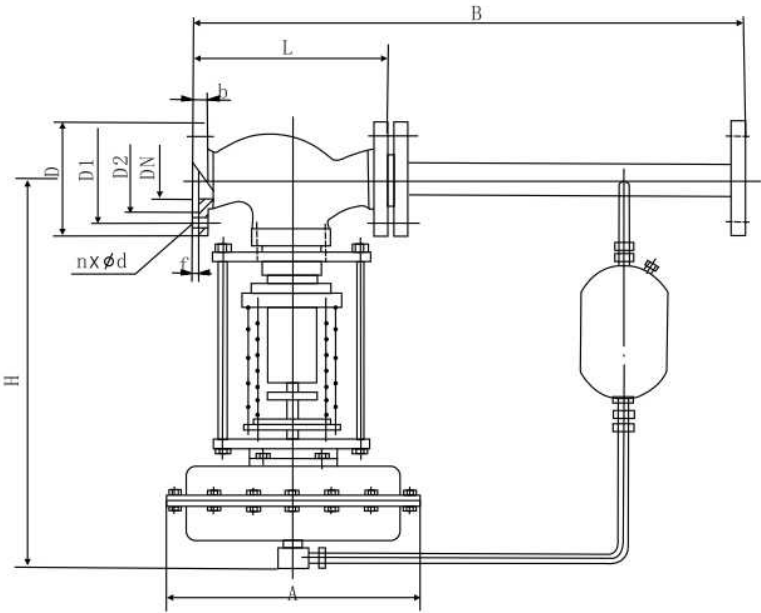
产品用途及结构特点 Product use and structural characteristics

自力式压力调节阀无需外加能源,利用被控介质自身作为 动力源引入执行机构控制阀芯位置来改变流通面积,从而达到改变流量的目的,使阀前(或阀后)压力稳定。具有 动作灵敏,密封性好,压力波动小等优点,广泛应用各种工业设备中用于气体、液体、及蒸汽介质减压稳压泄压稳压的自动控制。自力式压力调节阀分为阀后式和阀前式两种。

The self-operated pressure regulating valve does not require external energy, and uses the controlled medium itself as the power source to introduce the actuator to control the spool position to change the flow area, so as to achieve the purpose of changing the flow rate and stabilize the pressure before (or after the valve). It has the advantages of sensitive action, good sealing, small pressure fluctuation, etc. It is widely used in various industrial equipment for the automatic control of gas, liquid, and steam medium pressure relief and pressure relief. Self-operated pressure regulating valves are divided into two types: rear valve and front valve.

规格及技术对数表 Specification and technical logarithm table

| 公称通径<br>Nominal diameter                 |                  | 20                                                                                                                                                                | 25   | 32   | 40   | 50   | 65   | 80  | 100  | 125  | 150  | 200 | 250  | 300  |
|------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|------|------|-----|------|------|------|-----|------|------|
| 额定流量系数<br>Rated flow coefficient         |                  | 7                                                                                                                                                                 | 11   | 20   | 30   | 48   | 75   | 120 | 190  | 300  | 480  | 760 | 1100 | 1750 |
| 额定行程<br>Rated stroke                     |                  | 8                                                                                                                                                                 |      | 10   |      | 14   | 20   |     | 25   | 40   |      | 50  | 60   | 70   |
| 连接形式<br>Connection Type                  |                  | 法兰型 焊接型<br>Flange Type Welded Type                                                                                                                                |      |      |      |      |      |     |      |      |      |     |      |      |
| 阀体及阀盖材质<br>Material of body and bonnet   |                  | 铸钢, 不锈钢304, 不锈钢316<br>WCB, CF8, CF8M                                                                                                                              |      |      |      |      |      |     |      |      |      |     |      |      |
| 填料<br>Filler                             |                  | 聚四氟乙稀+石墨<br>PTFE+Graphite                                                                                                                                         |      |      |      |      |      |     |      |      |      |     |      |      |
| 上阀盖形式<br>Upper bonnet form               |                  | 标准型: -5°C~80°C    高温型: -20°C~350°C<br>Standard type: -5°C~80°C, High temperature type: -20°C~350°C                                                                |      |      |      |      |      |     |      |      |      |     |      |      |
| 公称压力<br>Nominal pressure                 |                  | PN1.6, 2.5, 4.0, 6.4, 10.0, 15.0, 25.0, 32.0<br>ANSI: CLASS150, 300, 600, 900, 1500                                                                               |      |      |      |      |      |     |      |      |      |     |      |      |
| 压力调节范围(MPa)<br>Pressure adjustment range |                  | 15~50, 40~80, 60~140, 120~220, 160~220, 200~260, 240~300, 280~350, 330~400, 380~450<br>480~560, 540~620, 600~700, 680~800, 780~900, 880~1000, 950~1500, 1000~2500 |      |      |      |      |      |     |      |      |      |     |      |      |
| 流量特性<br>Flow characteristics             |                  | 快开<br>Open quickly                                                                                                                                                |      |      |      |      |      |     |      |      |      |     |      |      |
| 调节精度<br>Adjustment accuracy              |                  | ±5%                                                                                                                                                               |      |      |      |      |      |     |      |      |      |     |      |      |
| 使用温度<br>Operating temperature            |                  | ≤350°C                                                                                                                                                            |      |      |      |      |      |     |      |      |      |     |      |      |
| 允许<br>泄漏量<br>Allowable<br>leakage        | 硬密封<br>Hard seal | 单座: ≤10-4阀额定容量 (IV) 级, 双座/套筒: ≤5X10-4额定容量 (II) 级<br>Single seat: ≤10-4 valve rated capacity (IV) level, double seat/sleeve: ≤5X10-4 rated capacity (II) level     |      |      |      |      |      |     |      |      |      |     |      |      |
|                                          | 软密封<br>Soft seal | 0.15                                                                                                                                                              | 0.30 | 0.45 | 0.60 | 0.90 | 1.70 | 4.0 | 6.75 | 11.0 | 16.0 |     |      |      |
| 减压比<br>Decom-<br>pression<br>ratio       | 最大<br>Maximum    | 10                                                                                                                                                                |      |      |      |      |      |     |      |      |      |     |      |      |
|                                          | 最小<br>Smallest   | 1.25                                                                                                                                                              |      |      |      |      |      |     |      |      |      |     |      |      |



主要外形及连接尺寸 Main Outline and Connecting Size

| 公称通径<br>Nominal diameter                                  |           | DN | 20        | 25  | 32  | 40  | 50  | 65  | 80  | 100  | 125  | 150 | 200  | 250  | 300  |
|-----------------------------------------------------------|-----------|----|-----------|-----|-----|-----|-----|-----|-----|------|------|-----|------|------|------|
| 接管尺寸<br>Take over size                                    |           | B  | 383       |     | 512 |     | 603 | 862 |     | 1023 | 1380 |     | 1800 | 2000 | 2200 |
| 法兰端间距<br>Flange end spacing                               |           | L  | 150       | 160 | 180 | 200 | 230 | 290 | 310 | 350  | 400  | 480 | 600  | 730  | 850  |
| 压力调节范围<br>(Kpa)<br><br>Pressure adjustment range<br>(Kpa) | 15-140    | H  | 475       |     | 520 |     | 540 | 710 |     | 780  | 840  | 880 | 915  | 940  | 1000 |
|                                                           |           | A  | 280       |     | 308 |     |     |     |     |      |      |     |      |      |      |
|                                                           | 200-500   | H  | 455       |     | 500 |     | 520 | 690 |     | 760  | 800  | 870 | 880  | 900  | 950  |
|                                                           |           | A  | 230       |     |     |     |     |     |     |      |      |     |      |      |      |
|                                                           | 120-300   | H  | 450       |     | 490 |     | 510 | 680 |     | 750  | 790  | 860 | 870  | 890  | 940  |
|                                                           |           | A  | 176       |     |     |     |     | 194 |     |      | 280  |     |      |      |      |
|                                                           | 480-1000  | H  | 445       |     | 480 |     |     | 670 |     | 740  | 780  | 850 | 860  | 880  | 930  |
|                                                           |           | A  | 176       |     |     |     |     | 194 |     |      | 280  |     |      |      |      |
|                                                           | 600-1500  | H  | 445       |     | 570 |     | 600 | 820 |     | 890  | 950  |     | 1000 | 1100 | 1200 |
|                                                           |           | A  | 85        |     | 96  |     |     |     |     |      |      |     |      |      |      |
|                                                           | 1000-2500 | H  | 445       |     | 570 |     | 600 | 820 |     | 980  | 950  |     | 1000 | 1100 | 1200 |
|                                                           |           | A  | 85        |     | 96  |     |     |     |     |      |      |     |      |      |      |
| 重量 weight ( Kg )                                          |           |    | 26        |     | 37  |     | 42  | 72  | 90  | 114  | 130  | 144 | 180  | 200  | 250  |
| 导压管接口螺纹<br>tubing thread interface                        |           |    | M16 x 1.5 |     |     |     |     |     |     |      |      |     |      |      |      |

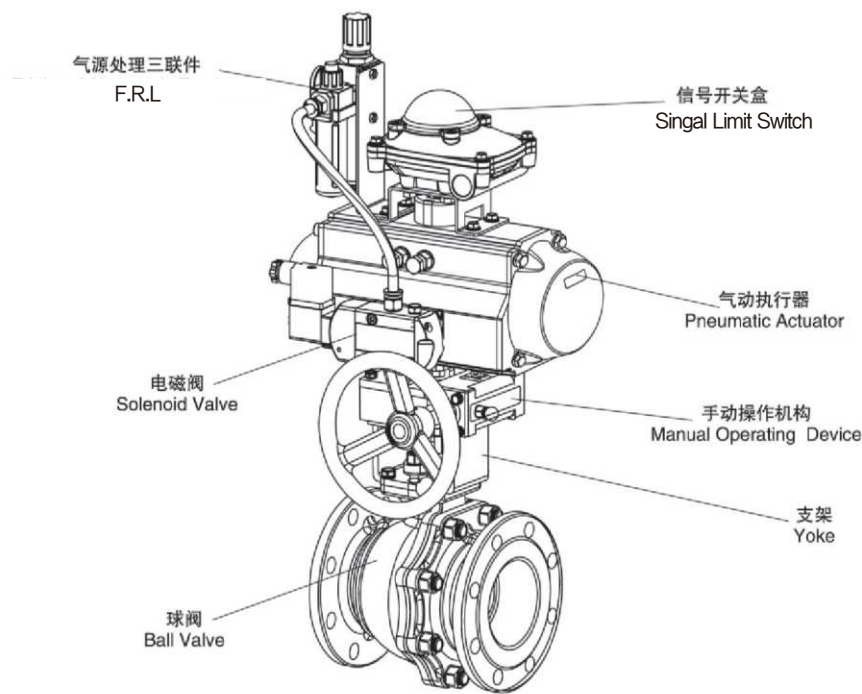
阀座密封材料温度额定值Temperature Rating of Pneumatic componants Selection Sealing Material

| 代 号<br>Code | 材料<br>Material                                      | 适用温度(°C)<br>Applicable Temperature |
|-------------|-----------------------------------------------------|------------------------------------|
| H           | 合金钢304,3016<br>Alloy Steel 304,3016                 | -30~425                            |
| F           | 增强聚四氟乙烯<br>Reiforced Polyterafluoroethylene(PTFE)   | -40~180                            |
| X           | 丁腈橡胶<br>Buna-N Rubber                               | -12~82                             |
|             | 乙丙橡胶<br>Ethylene-Propylene Rubber                   | -35~110                            |
|             | 食品级乙丙胶<br>Food Ethylene-Propylene Rubber            | -35~110                            |
|             | 氟橡胶<br>Floorous Rubber                              | -12~135                            |
| J           | 全衬里丁腈橡胶<br>Full-Lining Buna-N Rubber                | -12~82                             |
| F4          | 全衬里聚四氟乙烯<br>Full-lining Polyteafluoroethylene(PTFE) | -40~160                            |

附件的选项 Optional Accessories

根据不同控制和要求可选择下列附件：  
**切断型附件：**单电控电磁阀、双电控制电磁阀、限位开关回讯器。  
**调节型附件：**电气定位器、气动定位器、电气转换器。  
**气源处理附件：**空气过滤减压阀、气源处理三联件。  
**手动机构：**XLHJ系列

According to the different control and the request can choose the following accessories:  
**Cut-off Accessories:** Single coil solenoid valve, Double electrically-controlled Solenoid valve, Limit Switch  
**Adjusting Accessories:** Electropneumatic positioner, Pneumatic positioner, Electric-pneumatic Converter.  
**Air-supply Treatment Accessories:** Air-filtering reducing valve, F.R.L.  
**Manual Device:** XLHJ Series



气动三联件

气动三联件是气动阀门中最为常见的附件，其作用可简单概括为：过滤器+减压阀+油雾器。  
其中减压阀是必配的附件，无论何种功能的气动阀门都必须配置，其作用就是给气动阀门一个标准的动力气源的压力，标准值是0.4-0.7MPa。  
a. 单件（减压阀），减压阀是通过调节，将进口压力减至某一需要的出口压 力，并依靠介质本身的能量，使出口压力自动保 持稳定的阀门。  
b. 二联件（过滤器、减压阀）作用：完成对压缩仪表空气的过 滤和减压功能  
c. 三联件（过滤器、减压阀、油雾器）作用：完成对压缩仪表空气的过滤和减压功能，并对空气进行润滑。



气源单件



气源二联件



气源三联件

气动电磁阀

气动电磁阀，亦可叫方向控制阀，对于仅仅需要开与关作用的两位阀，电磁阀是必要的配置，电磁阀通过励磁/消磁来达到对气动阀门开/关的控制。  
电磁阀常用于开关阀，通过电压信号 控制气源气路的通断，以控制阀门的开关。定义：用电磁铁操纵阀芯移动的阀，一般是通过控制气动执行器的运动过程 实现对阀门的打开与关闭。



普通电磁阀



防爆电磁阀



汇流板电磁阀

限位开关

阀门限位开关，又称行程开关，也可叫回信器。它是自控系统中检测阀门状态的一种现场仪表，用以将阀门的开启或关闭位置以开关量（触点）的信号输出，被程控器接受或计算机寻访采样，确认后执行下一程序。该产品也可作为自系统中重要阀门联锁保护及远程报警指示之用。如果要掌握两位阀的阀位状态，阀门限位开关是有效的配置，是用以指示和反馈机械设备的运动极限位置的电气开关。



普通限位开关



防爆限位开关



防爆限位开关（带信号反馈）

阀门定位器

阀门定位器，它是气动调节阀的必要配置，通过阀门定位器可以控制阀门在任意开度的位置，它将阀杆位移信号作为输入的反馈测量信号，以控制器输出信号作为设定信号，进行比较，当两者有偏差时，改变其到执行机构的输出信号，使执行机构动作，建立了阀杆位移倍与控制器输出信号之间 的一一对应关系。



普通定位器



防爆定位器



气动涡轮装置

气动涡轮装置

手动机构需与气动执行器装配联合使用，用于90°开启的蝶阀、球阀等实现手动或气动驱动。

Air Components

The pneumatic triplet is the most common accessory in pneumatic valves. Its function can be simply summarized as: filter, pressure reducing valve, lubricator. The pressure reducing valve is a must-have accessory, no matter what kind of pneumatic valve must be configured, its role is to give the pneumatic valve a standard power source pressure, the standard value is 0.4-0.7MPa.

- a. Single piece (pressure reducing valve). The pressure reducing valve is a valve that adjusts to reduce the inlet pressure to a certain required outlet pressure and relies on the energy of the medium itself to keep the outlet pressure stable.
- b. The function of the two joint parts (filter, pressure reducing valve): complete the function of filtering and decompressing the compressed instrument air
- c. The function of three parts (filter, pressure reducing valve, lubricator): complete the function of filtering and decompressing the compressed instrument air, and lubricate the air.



Single piece (pressure reducing valve)



The function of the two joint parts (filter, pressure reducing valve)



The function of three parts (filter, pressure reducing valve, lubricator)

Pneumatic solenoid valve

Pneumatic solenoid valve, also known as directional control valve, is a necessary configuration for a two-position valve that only needs to open and close. The solenoid valve controls the opening/closing of the pneumatic valve through excitation/demagnetization. Solenoid valves are often used to open and close valves, and control the opening and closing of the gas source and gas circuit through voltage signals to control the opening and closing of the valves. Definition: The valve that moves the spool with an electromagnet is generally controlled by a pneumatic actuator. The movement process realizes the opening and closing of the valve.



Pneumatic solenoid valve



Explosion-proof Pneumatic solenoid valve

Limit switch

The valve limit switch, also known as the travel switch. It is a field instrument that detects the status of the valve in the automatic control system. It is used to output the open or closed position of the valve as a switch (contact) signal. It is accepted by the programmer or sampled by the computer. After confirmation, the next program is executed. The product can also be used as an important valve interlock protection and remote alarm indication in the system. If you want to grasp the valve position status of the two-position valve, the valve limit switch is an effective configuration, which is an electrical switch used to indicate and feedback the movement limit position of mechanical equipment.



Ordinary limit switch



Explosion-proof limit switch



Explosion-proof limit switch (Signal feedback)

Valve positioner

The valve positioner is a necessary configuration of the pneumatic control valve. The valve positioner can be used to control the position of the valve at any opening degree. It uses the valve stem displacement signal as the input feedback measurement signal and the controller output signal as the setting signal. For comparison, when there is a deviation between the two, the output signal to the actuator is changed to make the actuator operate, and a one-to-one correspondence between the displacement of the valve stem and the output signal of the controller is established.



Ordinary positioner



Explosion-proof positioner



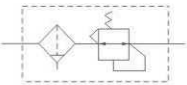
Gear Box

Gear Box

The manual mechanism needs to be used in conjunction with the pneumatic actuator assembly. It is used to realize manual or pneumatic drive for butterfly valves and ball valves opened at 90°.

AW系列调压过滤器  
Filter+regulator AW series

符号 Symbol:



如何订购 How to order

| AW                         | 2000              | - | 02                | D                           |
|----------------------------|-------------------|---|-------------------|-----------------------------|
| 系列号<br>Filter<br>regulator | 壳体尺寸<br>Body size |   | 螺纹接口<br>Port size | 排水方式 Drain type             |
|                            | 1000              |   | M5:M5             | 空白 Nil:手动排水 Manual drain    |
|                            | 2000              |   | 02:1/4"           | A:差压排水 Semi automatic drain |
|                            | 3000              |   | 03:3/8"           | D:自动排水 Automatic drain      |
|                            | 4000              |   | 04:1/2"           |                             |
|                            | 5000              |   | 06:3/4"           |                             |
|                            |                   |   | 10:1"             |                             |

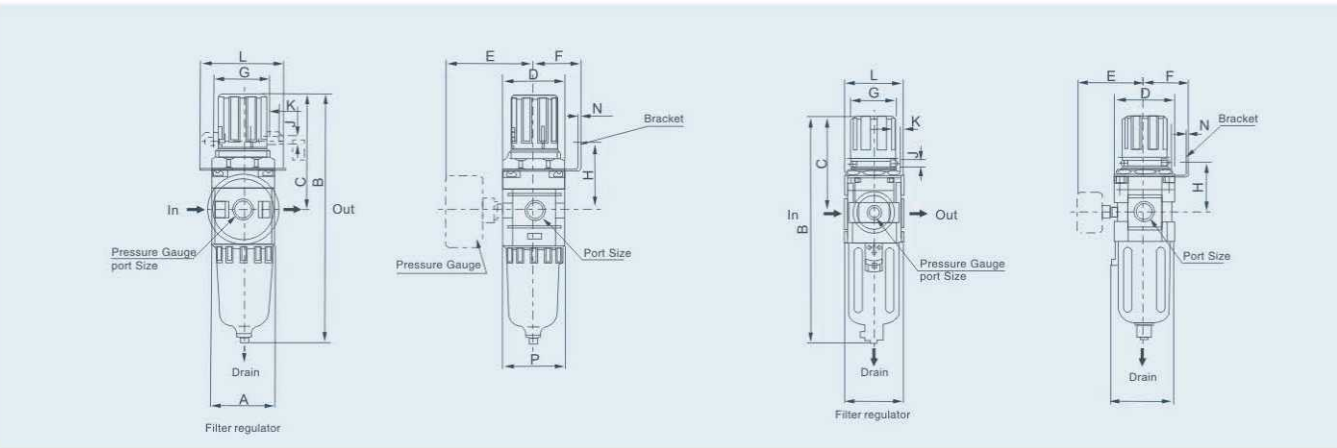


AW2000-02 AW3000-03D AW3000-03A AW5000-10

技术参数 Specification

| 型号 Model                            | AW1000-M5<br>AW1000-M5A<br>AW1000-M5D    | AW2000-02<br>AW2000-02A<br>AW2000-02D                                             | AW3000-02<br>AW3000-02A<br>AW3000-02D | AW3000-03<br>AW3000-03A<br>AW3000-03D | AW4000-03<br>AW4000-03A<br>AW4000-03D | AW4000-04<br>AW4000-04A<br>AW4000-04D | AW4000-06<br>AW4000-06A<br>AW4000-06D | AW5000-06<br>AW5000-06A<br>AW5000-06D | AW5000-10<br>AW5000-10A<br>AW5000-10D |
|-------------------------------------|------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| 接管口径 Port size RC(PT)               | M5×0.8                                   | 1/4"                                                                              | 1/4"                                  | 3/8"                                  | 3/8"                                  | 1/2"                                  | 3/4"                                  | 3/4"                                  | 1/4"                                  |
| 压力表口径<br>Pressure gauge port size   | 1/16"                                    | 1/8"                                                                              | 1/8"                                  | 1/8"                                  | 1/8"                                  | 1/4"                                  | 1/4"                                  | 1/4"                                  | 1/4"                                  |
| 额定流量 (L/Min)<br>Flow rate(L/Min)    | 100                                      | 550                                                                               | 2000                                  | 2000                                  | 4000                                  | 4000                                  | 4500                                  | 5500                                  | 5500                                  |
| 工作介质 Fluid                          | 空气 Air                                   |                                                                                   |                                       |                                       |                                       |                                       |                                       |                                       |                                       |
| 保证耐压力 Proof pressure                | 1.5MPa(15.3kgf/cm²)                      |                                                                                   |                                       |                                       |                                       |                                       |                                       |                                       |                                       |
| 最高使用压力<br>Max.operating pressure    | 1.0MPa(10.2kgf/cm²)                      |                                                                                   |                                       |                                       |                                       |                                       |                                       |                                       |                                       |
| 环境温度<br>Ambient & fluid temperature | 5~60℃                                    |                                                                                   |                                       |                                       |                                       |                                       |                                       |                                       |                                       |
| 过滤孔径<br>Nominal filtration rate     | 5 μ M                                    |                                                                                   |                                       |                                       |                                       |                                       |                                       |                                       |                                       |
| 调压范围<br>Adjustable pressure range   | 0.05~0.7MPa                              | 0.05~0.85MPa                                                                      |                                       |                                       |                                       |                                       |                                       |                                       |                                       |
| 托架 Bracket                          | B120                                     | B220                                                                              | B320                                  | B320                                  | B420                                  | B420                                  | B420                                  | B420                                  | B420                                  |
| 压力表 Pressure gauge                  | Y30-10M5                                 | Y40-6-1/8 Y40-10-1/8                                                              |                                       |                                       | Y50-6-1/4                             | Y50-10-1/4                            |                                       |                                       |                                       |
| 重量 Weight(kg)                       | 0.09                                     | 0.36                                                                              | 0.56                                  | 0.56                                  | 1.15                                  | 1.15                                  | 1.21                                  | 2                                     | 2                                     |
| 主要配件材质<br>Main parts material       | 本体材质 Body<br>杯材质 Bowl<br>杯防冲罩 Bowl guard | 铝合金 Aluminum alloy<br>PC<br>AW1000-AW2000:没有 without AW3000-AW5000:有 with(铁 Iron) |                                       |                                       |                                       |                                       |                                       |                                       |                                       |

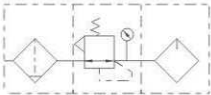
外形尺寸 Dimension



| Model     | Port size  | A  | B     | C    | D  | F  | G  | H  | J   | K     | L  | M   | ΦN   | P  |
|-----------|------------|----|-------|------|----|----|----|----|-----|-------|----|-----|------|----|
| AW1000    | M5×0.8     | 25 | 109.5 | 50.5 | 25 | 25 | 38 | 30 | 4.5 | 6.5   | 40 | 2.0 | 20.5 | 28 |
| AW2000    | 1/4"       | 43 | 164.5 | 78   | 40 | 30 | 34 | 45 | 5.5 | 10.54 | 55 | 2.3 | 33.5 | 40 |
| AW3000    | 1/4", 3/8" | 53 | 211   | 92.5 | 53 | 41 | 41 | 46 | 6.5 | 8.0   | 53 | 2.3 | 42.5 | 56 |
| AW4000    | 3/8", 1/2" | 70 | 262.5 | 112  | 70 | 50 | 50 | 54 | 8.5 | 10.5  | 70 | 2.3 | 52.5 | 73 |
| AW4000-06 | 3/4"       | 75 | 267   | 114  | 70 | 50 | 50 | 56 | 8.5 | 10.5  | 70 | 2.3 | 52.5 | 73 |

A/B系列空气过滤组合（二联件）  
F.R.L unit A/B series(two-union)

符号 Symbol:



AFC2000

BFC4000

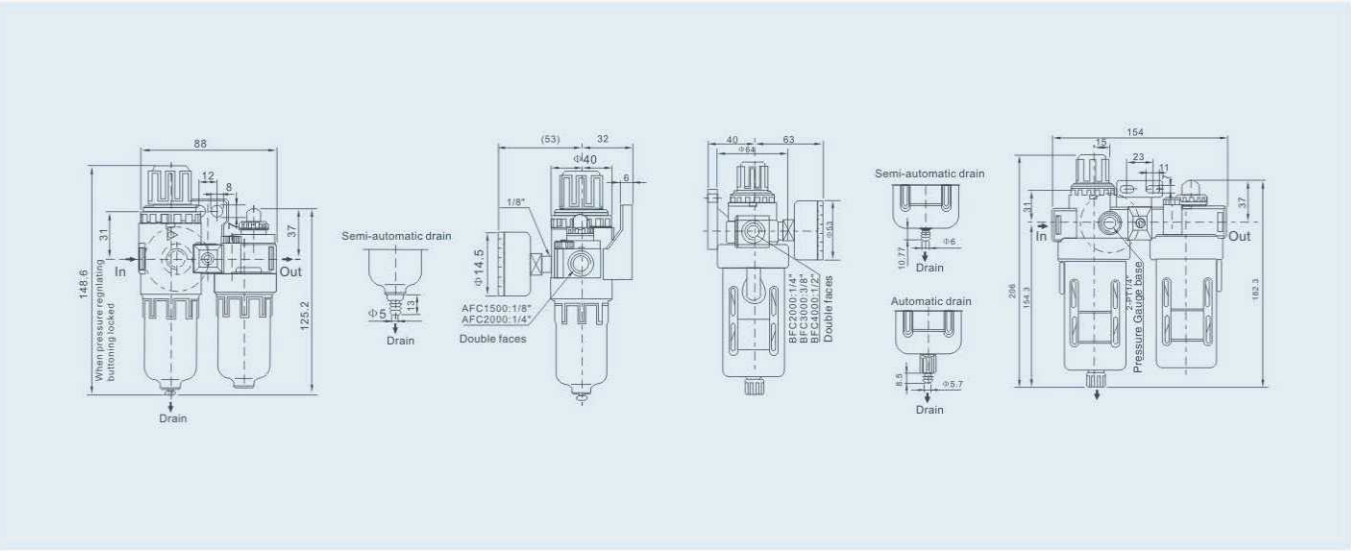
如何订购 How to order

| AFC                                              | 2000                                                                  | M                                                                                                     |
|--------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 系列号 F.R.L unit<br>AFC:AC series<br>BFC:BC series | 螺纹接口<br>Port size<br>1500:1/8"<br>2000:1/4"<br>3000:3/8"<br>4000:1/2" | 排水方式 Drain type<br>空白 Nil:差压排水 Semi-automatic drain<br>M: 手动排水 Manual drain<br>A:自动排水 Automatic drain |

技术参数 Specification

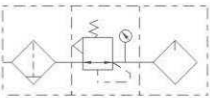
| 型号 Model                            |                             | AFC1500<br>AFC1500A<br>AFC1500M                              | AFC2000<br>AFC2000A<br>AFC2000M | BFC2000<br>BFC2000A<br>BFC2000M | BFC3000<br>BFC3000A<br>BFC3000M | BFC4000<br>BFC4000A<br>BFC4000M |
|-------------------------------------|-----------------------------|--------------------------------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| 组件<br>Component                     | 过滤器 减压阀<br>Filter-regulator | AFR1500                                                      | AFR2000                         | BFR2000                         | BFR3000                         | BFR4000                         |
|                                     | 油雾器 Lubricator              | AL1500                                                       | AL2000                          | BL2000                          | BL3000                          | BL4000                          |
| 接管口径 Port size RC(PT)               |                             | 1/8"                                                         | 1/4"                            | 1/4"                            | 3/8"                            | 1/2"                            |
| 工作介质 Fluid                          |                             | 空气 Air                                                       |                                 |                                 |                                 |                                 |
| 保证耐压力 Proof pressure                |                             | 0.5~8.5bar kgf/cm²                                           |                                 |                                 |                                 |                                 |
| 最高使用压力<br>Max.operating pressure    |                             | 9.5kgf/cm²                                                   |                                 |                                 |                                 |                                 |
| 环境温度<br>Ambient & fluid temperature |                             | 15.0kgf/cm²                                                  |                                 |                                 |                                 |                                 |
| 过滤孔径<br>Nominal filtration rate     |                             | 40 μ M                                                       |                                 |                                 |                                 |                                 |
| 滤水杯容量<br>Drain bowl capacity        |                             | 15CC                                                         |                                 |                                 | 60CC                            |                                 |
| 给油杯容量 Oil bowl capacity             |                             | 25CC                                                         |                                 |                                 | 90CC                            |                                 |
| 重量 Weight(kg)                       |                             | 0.7                                                          |                                 |                                 | 0.7                             |                                 |
| 主要配件材质<br>Main parts material       | 本体材质 Body                   | 铝合金 Aluminum alloy                                           |                                 |                                 |                                 |                                 |
|                                     | 杯材质 Bowl                    | PC                                                           |                                 |                                 |                                 |                                 |
|                                     | 杯防护罩 Bowl guard             | AC1500~AC2000:没有 without    BC2000~BC4000:有 with(塑料 Plastic) |                                 |                                 |                                 |                                 |

外形尺寸 Dimension



A/B系列空气过滤组合（三联件）  
F.R.L unit A/B series(three-union)

符号 Symbol:



AC2000

BC4000

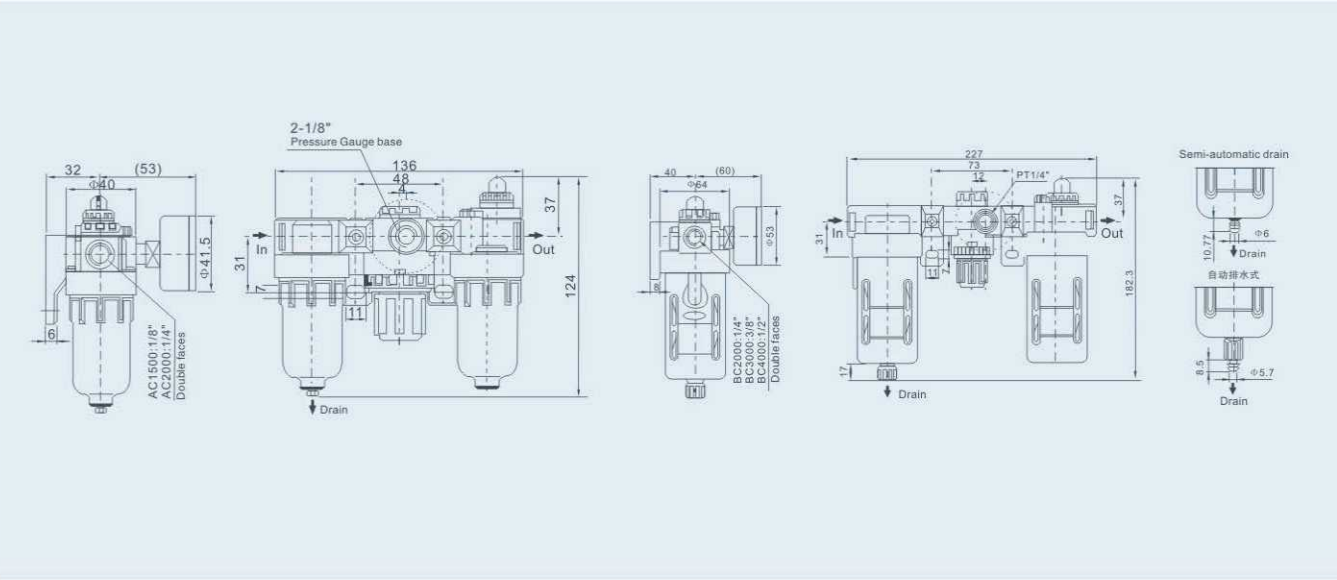
如何订购 How to order

| AFC                                            | 2000                                                                  | M                                                                                                     |
|------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 系列号 F.R.L unit<br>AC:AC series<br>BC:BC series | 螺纹接口<br>Port size<br>1500:1/8"<br>2000:1/4"<br>3000:3/8"<br>4000:1/2" | 排水方式 Drain type<br>空白 Nil:差压排水 Semi-automatic drain<br>M: 手动排水 Manual drain<br>A:自动排水 Automatic drain |

技术参数 Specification

| 型号 Model                            |                 | AC1500<br>AC1500A<br>AC1500M     | AC2000<br>AC2000A<br>AC2000M | BC2000<br>BC2000A<br>BC2000M     | BC3000<br>BC3000A<br>BC3000M | BC4000<br>BC4000A<br>BC4000M |
|-------------------------------------|-----------------|----------------------------------|------------------------------|----------------------------------|------------------------------|------------------------------|
| 组件<br>Component                     | 过滤器 Filter      | AF1500                           | AF2000                       | BF2000                           | BF3000                       | BF4000                       |
|                                     | 减压阀 Regulator   | AR1500                           | AR2000                       | BR2000                           | BR3000                       | BR4000                       |
|                                     | 油雾器 Lubricator  | AL1500                           | AL2000                       | BL2000                           | BL3000                       | BL4000                       |
| 接管口径 Port size RC(PT)               |                 | 1/8"                             | 1/4"                         | 1/4"                             | 3/8"                         | 1/2"                         |
| 工作介质 Fluid                          |                 | 空气 Air                           |                              |                                  |                              |                              |
| 保证耐压力 Proof pressure                |                 | 15.0kgf/cm²                      |                              |                                  |                              |                              |
| 最高使用压力<br>Max.operating pressure    |                 | 0.95MPa (9.5kgf/cm²)             |                              |                                  |                              |                              |
| 环境温度<br>Ambient & fluid temperature |                 | 5~60℃                            |                              |                                  |                              |                              |
| 过滤孔径<br>Nominal filtration rate     |                 | 40 μ M                           |                              |                                  |                              |                              |
| 建议润滑油<br>Recommended lubrication    |                 | 透平1号油 Turbine NO.1 oil(ISO Vg32) |                              |                                  |                              |                              |
| 滤水杯容量<br>Adjustable pressure range  |                 | 0.5~0.8kgf/cm²                   |                              |                                  |                              |                              |
| 排水碗容量<br>Drain bowl capacity        |                 | 15CC                             |                              | 60CC                             |                              |                              |
| 油碗容量 Oil bowl capacity              |                 | 25CC                             |                              | 90CC                             |                              |                              |
| 重量 Weight(kg)                       |                 | 0.7                              |                              | 0.7                              |                              |                              |
| 主要配件材质<br>Main parts material       | 本体材质 Body       | 铝合金 Aluminum alloy               |                              |                                  |                              |                              |
|                                     | 杯材质 Bowl        | PC                               |                              |                                  |                              |                              |
|                                     | 杯防护罩 Bowl guard | AC1500~AC2000:没有 without         |                              | BC2000~BC4000:有 with(塑料 Plastic) |                              |                              |

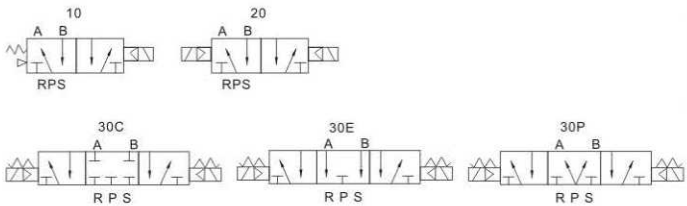
外形尺寸 Dimension





4M 系列电磁阀  
Solenoid Valve 4M series

符号 Symbol:



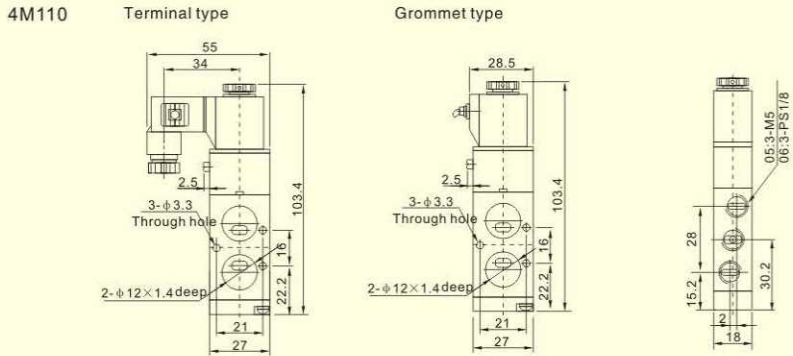
如何订购 How to order

| 4M                                       | 4                                                            | 10                                                                                                                                                                                                                                                                                                         | - | 15                                                       | AC110V                                                                            |
|------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|----------------------------------------------------------|-----------------------------------------------------------------------------------|
| 规格代号 Series code                         | 系列代号 Series                                                  | 线圈及位数 Position & coil                                                                                                                                                                                                                                                                                      |   | 接管口径 Port size                                           | 标准电压 Voltage                                                                      |
| 五口二 (三) 位电磁阀 V:Solenoid valve 2(3)/5 way | 1:100 series<br>2:200 series<br>3:300 series<br>4:400 series | 10:2/4 单头双位置 way single electrical control<br>20:2/5 双头双位置 way double electrical control<br>30C:3/5 双头三位置封闭型 way(midst closed type) double electrical control<br>30E:3/5 双头三位置排气型 way(midst exhaust type) double electrical control<br>30P:3/5 双头三位置压力型 way(midst pressure type) double electrical control |   | M5:M5 × 0.8"<br>06:1/8"<br>08:1/4"<br>10:3/7"<br>15:1/2" | DC12V<br>DC24V<br>AC24V50/60Hz<br>AC110V50/60Hz<br>AC220V50/60Hz<br>AC380V50/60Hz |

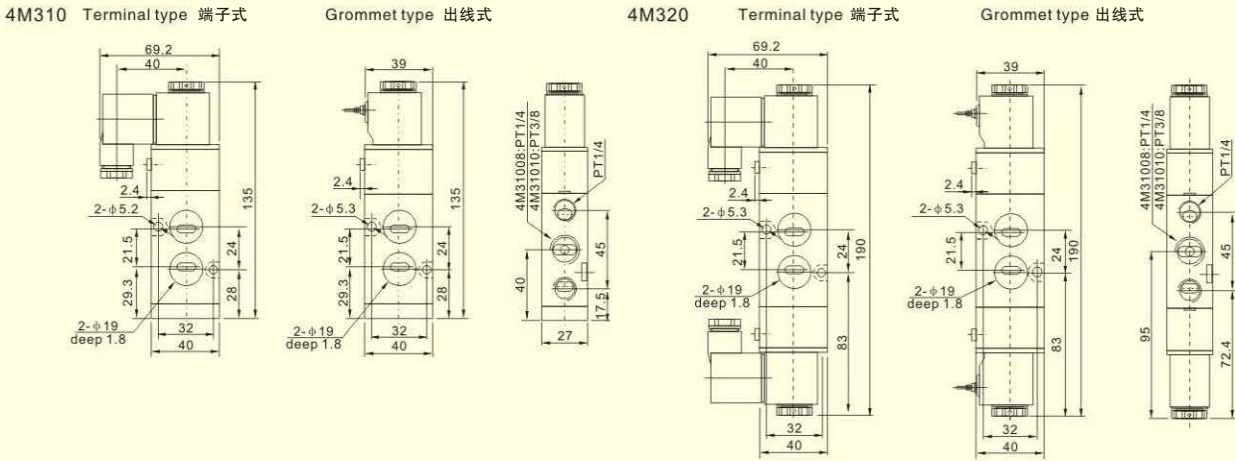
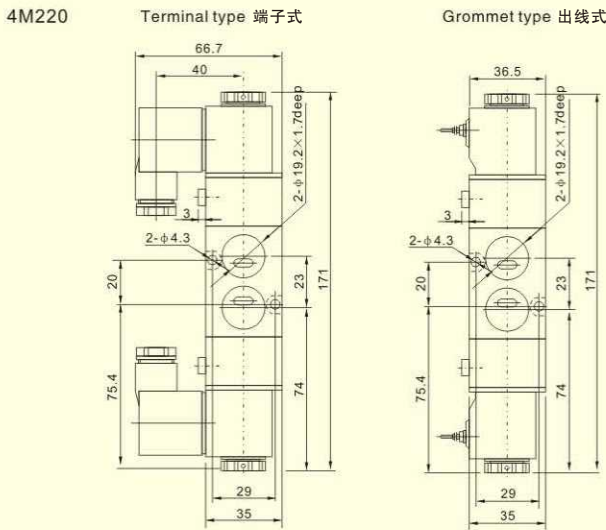
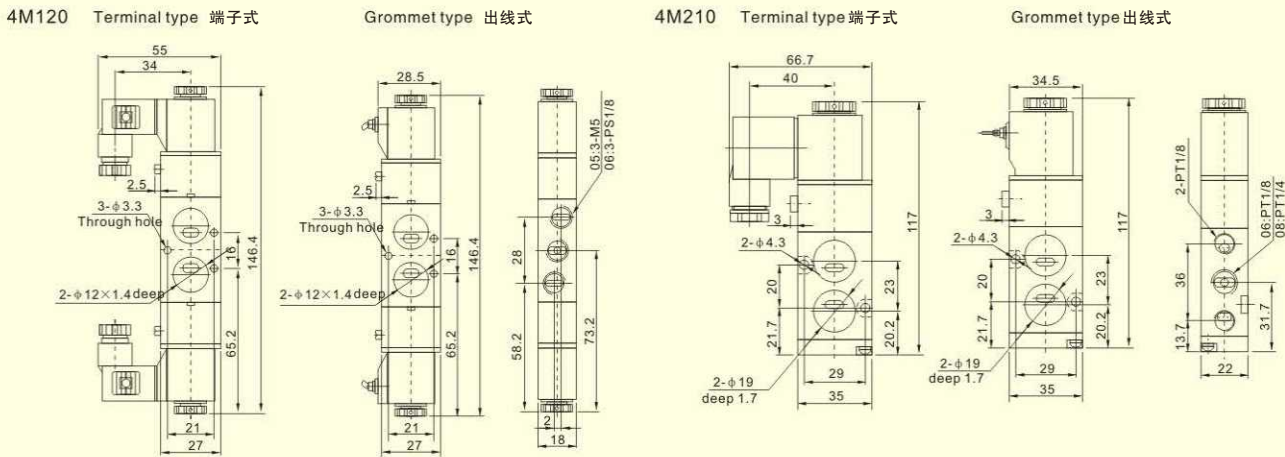
技术参数 Specification

| 型号 Model                            | 4M110-M5                                     | 4M120-M5 | 4M110-06       | 4M120-06 | 4M210-06         | 4M220-06 | 4M210-08           | 4M220-08 | 4M310-08      | 4M320-08 | 4M310-10           | 4M320-10 |
|-------------------------------------|----------------------------------------------|----------|----------------|----------|------------------|----------|--------------------|----------|---------------|----------|--------------------|----------|
| 工作介质 Fluid                          | 空气 Air(filtered through 40 μ filter element) |          |                |          |                  |          |                    |          |               |          |                    |          |
| 动作方式 Action                         | 内部先导式 Internally piloted acting type         |          |                |          |                  |          |                    |          |               |          |                    |          |
| 位置数 Valve type                      | 五口二位 2/5 way                                 |          |                |          |                  |          |                    |          |               |          |                    |          |
| 有效截面积(mm²)<br>Effective area(mm²)   | 5.5mm²(CV=0.31)                              |          | 12mm²(CV=0.67) |          | 14mm²(CV=0.78)   |          | 16mm²(CV=0.89)     |          | 25mm²(CV=1.4) |          | 30mm²(CV=1.68)     |          |
| 接管口径 Port size                      | IN=OUT=M5                                    |          | IN=OUT=PT1/8   |          | IN=OUT=PT1/8     |          | IN=PT1/4 OUT=PT1/8 |          | IN=OUT=PT1/4  |          | IN=PT3/8 OUT=PT1/4 |          |
| 润滑油 Lubrication                     | 不需要 Not required                             |          |                |          |                  |          |                    |          |               |          |                    |          |
| 使用压力<br>Operating pressure          | 0.5~0.8MPa(21~114QPsi)                       |          |                |          |                  |          |                    |          |               |          |                    |          |
| 最大耐压力<br>Proof pressure             | 1.2MPa(170Psi)                               |          |                |          |                  |          |                    |          |               |          |                    |          |
| 环境温度<br>Ambient & fluid temperature | -5~60°C(23~140° F)                           |          |                |          |                  |          |                    |          |               |          |                    |          |
| 电压范围 Voltage range                  | -15%~ + 10%                                  |          |                |          |                  |          |                    |          |               |          |                    |          |
| 耗电量 Power consumption               | AC:2.5VA DC:2.5W                             |          |                |          | AC:3.5VA DC:2.5W |          |                    |          |               |          |                    |          |
| 绝缘性 Insulation grade                | B级 B grade                                   |          |                |          |                  |          |                    |          |               |          |                    |          |
| 保护等级 Protection                     | IP65(DIN 40050)                              |          |                |          |                  |          |                    |          |               |          |                    |          |
| 接电形式 Connection                     | 直接出线式或端子式 Lead wire type or terminal type    |          |                |          |                  |          |                    |          |               |          |                    |          |
| 最高动作频率 Max.frequency                | 每秒5次 5 cycle/sec.                            |          |                |          |                  |          |                    |          |               |          |                    |          |
| 最短响应时间 Min.response time            | 0.05秒 sec.                                   |          |                |          |                  |          |                    |          |               |          |                    |          |
| 重量 Weight(kg)                       | 120g                                         | 175g     | 120g           | 175g     | 220g             | 320g     | 220g               | 320g     | 310g          | 400g     | 310g               | 400g     |
| 主要配件材质<br>Main parts material       | 铝合金 Aluminum alloy                           |          |                |          |                  |          |                    |          |               |          |                    |          |
|                                     | NBR                                          |          |                |          |                  |          |                    |          |               |          |                    |          |

外形尺寸 Dimension



外型尺寸 Dimension



结构 Structure



APL - 210

防护 Protection

坚固漂亮的外观，压铸铝保护  
Sturdy and beautiful appearance, die-cast aluminum, Protection  
防护等级 class IP67

外部涂层 Exterior coating

粉末涂层 Powder coating

体 Powder coating

压铸铝 Die-cast aluminum

快换凸轮 Quick change cam

设置方便、简单  
Easy to set up, simple  
开 ON-黄色 yellow, 关 OFF-红色 red

不同的开关 Different switches

机械式 mechanical  
接近式 Proximity (P & F)  
磁性式 Magnetic



可视阀位指示

Visual valve position indication  
聚酯涂层 Polyester coating  
开 ON-黄色 yellow, 关 OFF-红色 red

接线孔 Wiring hole

最小2个 Minimum 2  
最多4个 maximum 4

不同开关 Different switches

不锈钢 stainless steel

上盖 Cover

压铸铝 Die-cast aluminum

防脱螺栓 Anti-offbolts

不锈钢 stainless steel

接线端子 Terminals

标准8个 Standard 8

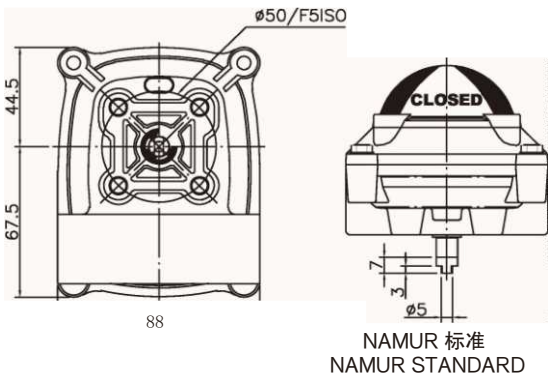
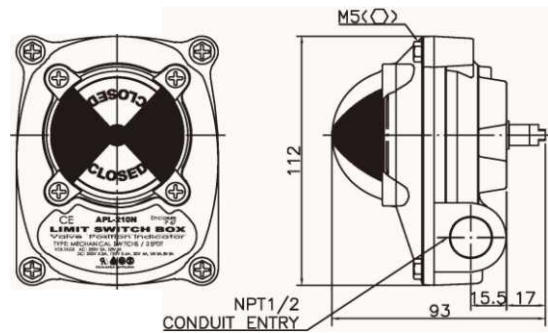
O-型圈 O-ring

材质 Material

|                    |                       |               |                   |
|--------------------|-----------------------|---------------|-------------------|
| Housing cover&body | Aluminium Die Casting | O-ring        | NBR               |
| Shaft              | Stainless steel       | Bushing       | Bronze            |
| Indicator cover    | Polycarbonate         | E-ring(shaft) | Stainless steel   |
| Cam                | Polycarbonate         | Earth lug     | Stainless steel   |
| Spring             | Stainless steel       | Indicator     | ABS/Polycarbonate |
| Housing cover bolt | Stainless steel       | Bracket       | Stainless steel   |

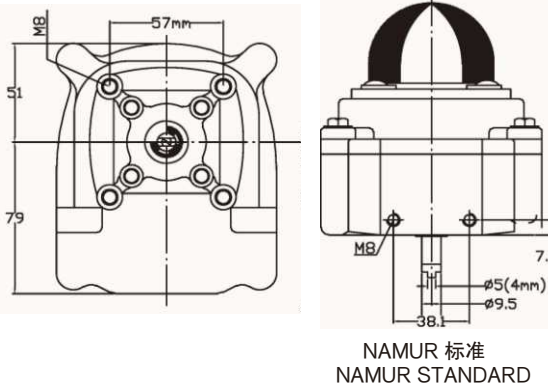
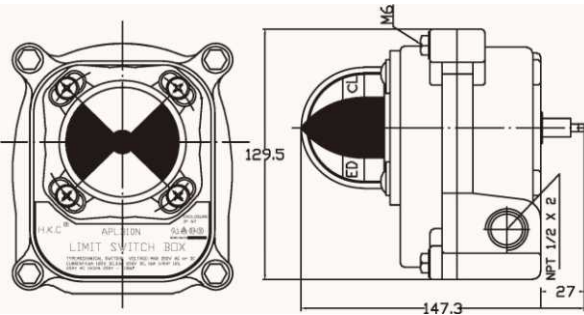
尺寸 DIMENSION

APL 2N 系列 APL 2N SERIES

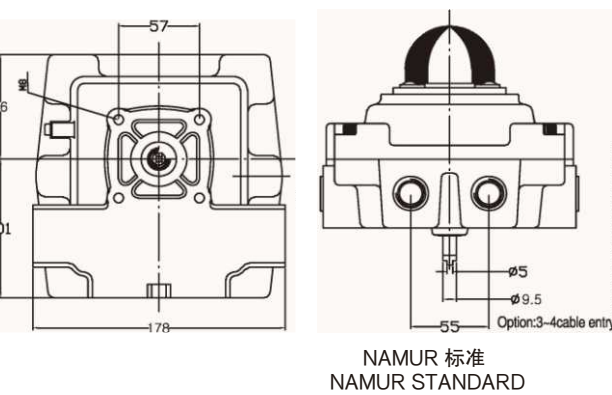
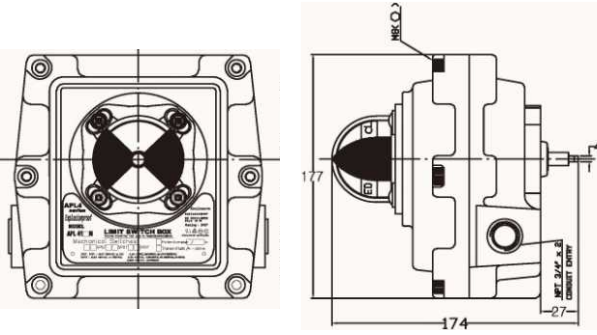


单位UNIT : mm

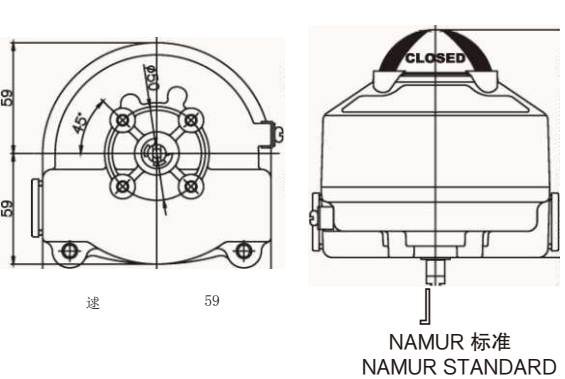
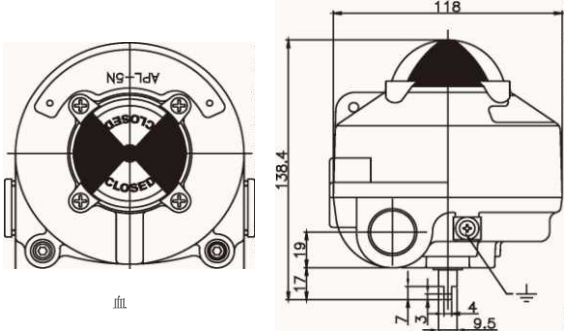
APL 3N 系列 APL 3N SERIES



APL 4N 系列 APL 4N SERIES



APL 4N 系列 APL 5N SERIES



YT-1000系列电/气定位器是通过接收调节装置输入的4~20mA信号，精准控制阀门行程。  
YT-1000 series Electro-Pneumatic Positioner accurately controls valve stroke in response to an input signal of 4~20mA from the controller.

- 兼容大部分调节装置，响应快速准确。
- 分程范围4~12mA 或12~20mA 可通过简单操作设置。
- 低耗气量，简单的正/反作用转换，简单的零位和量程调整。
- 提供内部和外部选项，例如位置变送器和限位开关。  
(内部选项用于非防爆，外部选项用于防爆。)
- 即使在现场也可安装支架，以最大限度地减少摆动和优化运行条件。
- 可自动/手动切换，无信号时手动将气源引至执行器，手动操作定位器或阀门。
- 具有IP66、Type 4X (FM) 防护等级。
- 环氧聚酯粉末涂料抗腐蚀。(YT-1050 除外)。
- 内部结构模块化，定位器维护方便。

- It is compatible with most of controllers. Response time is very fast and accurate.
- Split range 4~12mA or 12~20mA can be set by simple operating.
- Low air consumption, Simple Direct / Reverse Action change, Simple Zero & Span adjustment.
- Internal & External options, such as position transmitter (PTM) and/or limit switch (L/S) are available.  
(Internal options are for non-explosion proof and External options are for explosion proof.)
- Orifices can be installed even in the field to minimize the hunting occurrence and optimize operating conditions.
- A/M switch can be used to direct supply air to the actuator or to manually operate the positioner or valve without any signal.
- It has IP66, Type 4X (FM) ingress protection grade.
- Epoxy polyester powder coating resists the corrosion process. (except YT-1050).
- Maintenance of the positioner is easy because of modularized inner structure.

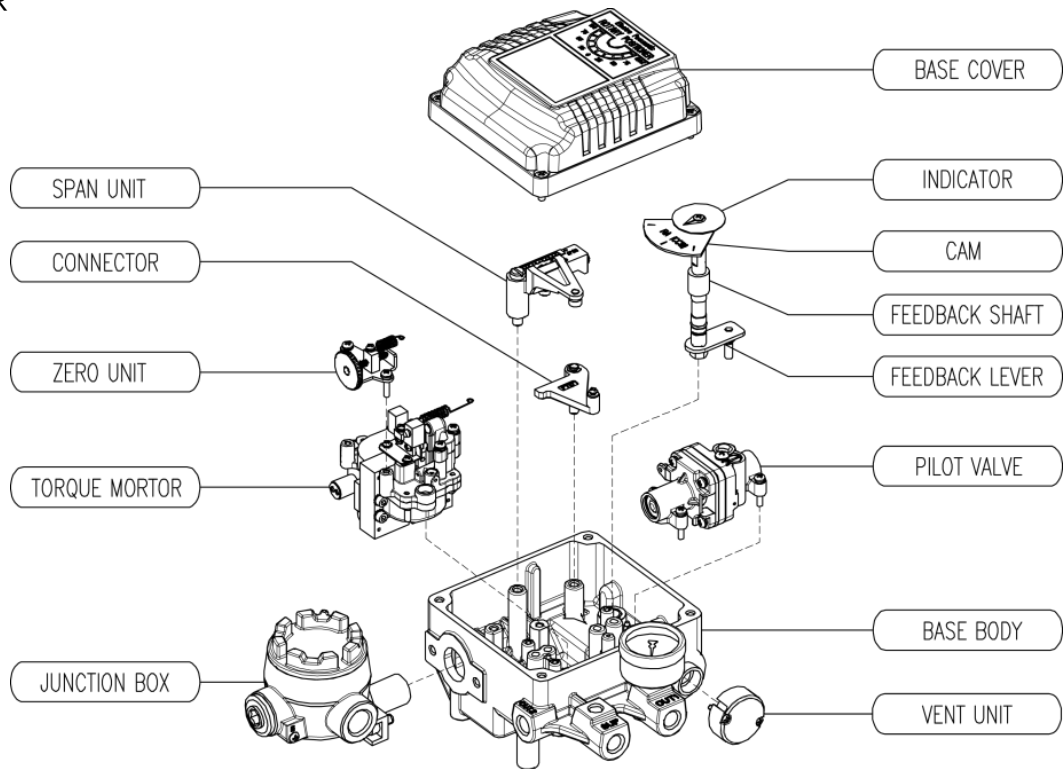


定位器参数 Positioner Specification

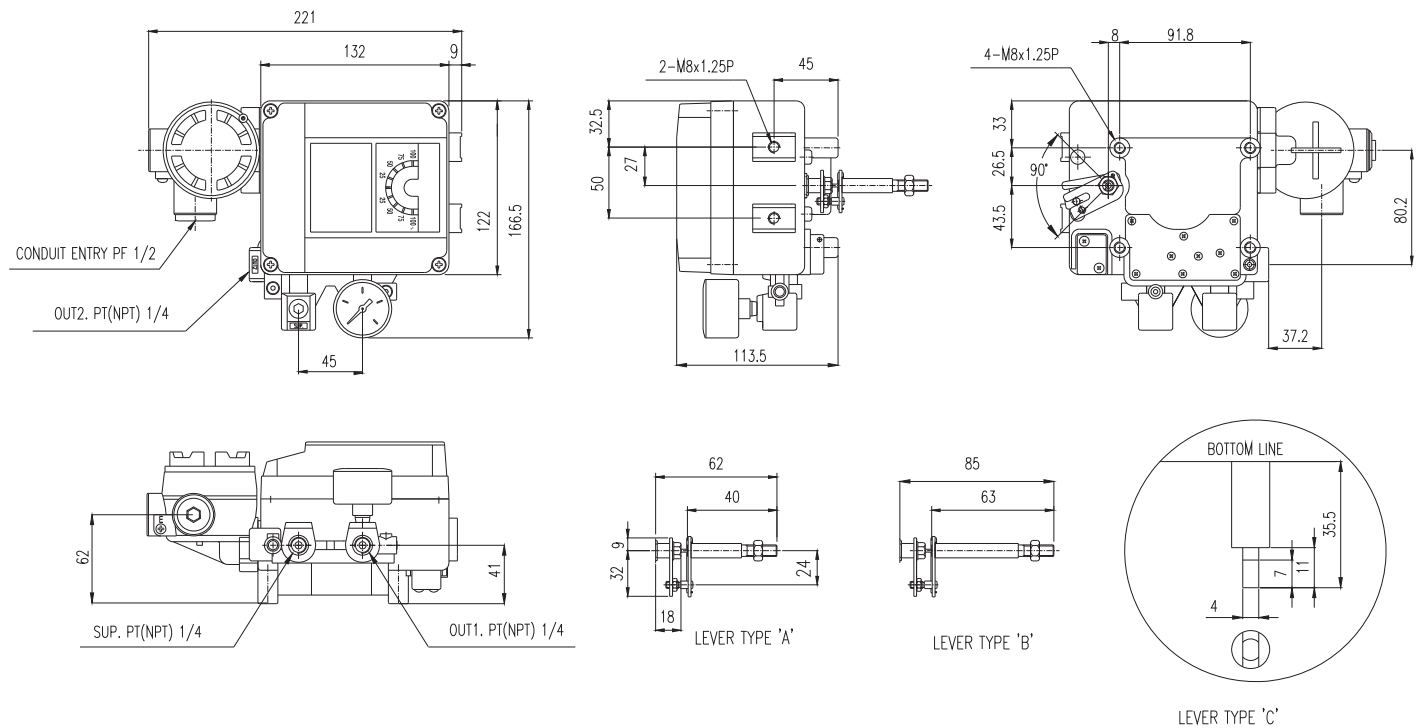
| 型号 Model                           |               | YT-1000                                                                                                                                                                                                                                                                              |                 |
|------------------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 材质 Housing Material                |               | 压铸铝 Aluminum                                                                                                                                                                                                                                                                         |                 |
| 动作方式 Motion Type                   |               | 直行程 Linear                                                                                                                                                                                                                                                                           | 角行程 Rotary      |
| 作用方式 Acting Type                   |               | 单作用/双作用 Single / Double                                                                                                                                                                                                                                                              |                 |
| 输入信号 Input Signal                  |               | 4~20mA DC                                                                                                                                                                                                                                                                            |                 |
| 气源压力 Supply Pressure               |               | 0.14 ~ 0.7 MPa (1.4 ~ 7 bar)                                                                                                                                                                                                                                                         |                 |
| 行程 Stroke                          |               | 10 ~ 150 mm                                                                                                                                                                                                                                                                          | 0 ~ 90°         |
| 阻抗 Impedance                       |               | Max.250 ± 15                                                                                                                                                                                                                                                                         |                 |
| 气源接口 Air Connection                |               | PT(G or NPT) 1/4                                                                                                                                                                                                                                                                     |                 |
| 压力表接口 Gauge Connection             |               | PT(or NPT) 1/8                                                                                                                                                                                                                                                                       |                 |
| 电气接口 Conduit Entry                 |               | PF(G or NPT) 1/2 or M20                                                                                                                                                                                                                                                              |                 |
| 防护等级 Ingress Protection            |               | Ip66, Type 4X                                                                                                                                                                                                                                                                        |                 |
| 防爆等级 Explosion Proof               |               | 1.非防爆 Non-explosion<br>2.Ex d bmb IIBT5 Gb(ATEX, IECEx, TS)<br>3.Ex d IIC T5 (KCs)<br>4. Ex ia IIB T6 Gb(KCs)<br>5.Ex d mb IIC T6 Gb(NEPSI)<br>6.Ex dmbIIB T5 (KCs, TIIS)<br>7.Ex d m IIB T5 (FM, CSA)<br>8. Ex d mb IIB T5 Gb X (TRCU)<br>Refer to "2.6 certifications" for details |                 |
| 环境温度<br>Operating Temperature      | 标准 Standard   | -20°C~60°C ( -4°F~140°F )                                                                                                                                                                                                                                                            |                 |
|                                    | 高温 High Temp. | -20°C~120°C ( -4°F~248°F )                                                                                                                                                                                                                                                           |                 |
|                                    | 低温 Low Temp.  | -40°C~70°C ( -40°F~158°F )                                                                                                                                                                                                                                                           |                 |
| 线性度 Linearity                      | 单作用 Single    | ± 1% F.S                                                                                                                                                                                                                                                                             |                 |
|                                    | 双作用 Double    | ± 2% F.S                                                                                                                                                                                                                                                                             |                 |
| 滞后度 Hysteresis                     |               | ± 1% F.S                                                                                                                                                                                                                                                                             |                 |
| 灵敏度 Sensitivity                    | 单作用 Single    | ± 0.2% F.S                                                                                                                                                                                                                                                                           |                 |
|                                    | 双作用 Double    | ± 0.5% F.S                                                                                                                                                                                                                                                                           |                 |
| 重复度 Repeatability                  |               | ± 0.5% F.S                                                                                                                                                                                                                                                                           |                 |
| 流量 Flow Capacity                   |               | 80 LPM (Sup.=0.14 MPa)                                                                                                                                                                                                                                                               |                 |
| 耗气量 Air Consumption                |               | 2.5 LPM (Sup.=0.14 Mpa @ idle)                                                                                                                                                                                                                                                       |                 |
| 反馈信号 (可选) Feedback Signal (Option) |               | 4~20mA (DC 9~28V)                                                                                                                                                                                                                                                                    |                 |
| 重量 Weight                          |               | 2.7 Kg (6.1 lb)                                                                                                                                                                                                                                                                      | 2.8 Kg (6.2 lb) |
| 喷漆 Painting                        |               | 环氧聚酯粉末涂料 Epoxy Polyester Powder Coating                                                                                                                                                                                                                                              |                 |

测试环境温度为20°C，绝对压力为760mmHg，湿度为65%  
Tested under ambient temperature of 20° C, absolute pressure of 760mmHg, and humidity of 65%.

YT-1000R



YT-1000 R (Namur type)



产品主要用途 Main uses of products

本手动机构与气动执行器装配联合使用，用于90°开启的蝶阀、球阀等实现手动或气动驱动。

The manual clutch is combined with the pneumatic actuator assembly to realize manual or pneumatic drive for butterfly valves, ball valves, etc. which are opened at 90° degrees.

特点 Characteristic

1. 体积小、重量轻、设计合理、样式新颖。
2. 产品系列化，输出扭矩与气动装置各种阀门匹配。
3. 涡轮连接内孔有相隔90°的两个键槽，以便用户根据需要选择装置同阀门的相对位置。
4. 提起限位拉环，旋转偏心装置90°限位销自动限位，实现气动，反之实现手动。
5. 产品出厂时，装有专用润滑脂，与阀装配后，整体密封防尘防水防护等级IP65，IP67，IP68可选。

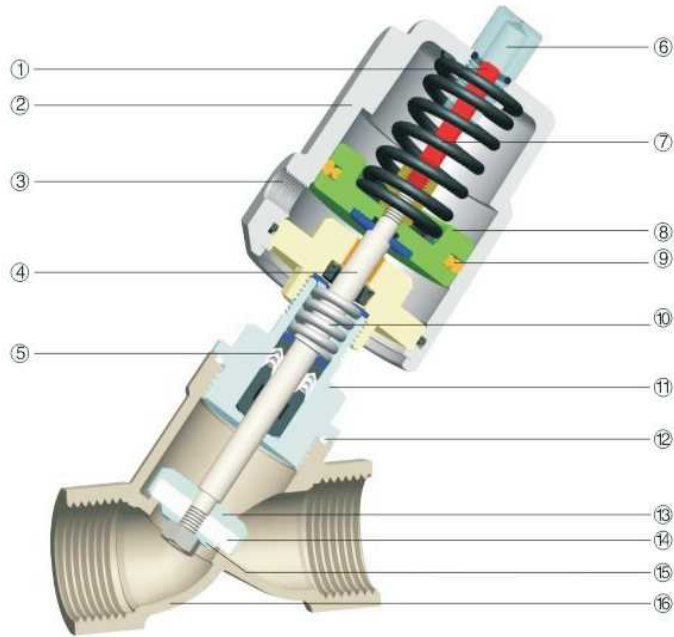
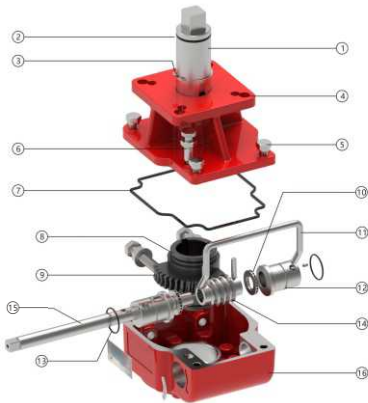
1. It is small in size, light in weight and reasonable in design
2. Products are serialized and output torque is matched with pneumatic devices
3. Turbine connection holes have two keyways 90 degrees apart so that users can choose the relative position of the device with the valve according to their needs
4. Lifting the limit pulling ring, rotating the eccentric device 90 degree limit pin automatic limit, to achieve pneumatic, otherwise to achieve manual
5. Product factory, equipped with special grease, and valve assembly, the overall seal, dust-proof, waterproof, protection grade IP65, IP67. IP68 optional

技术参数 Technical parameters

| 型号<br>Model | 执行器配置<br>Configuration of actuator |                                  | ISO05211标准法兰<br>Standard flange         |                  |                                          |                  | 手轮直径<br>Handwheel<br>diameter | 速比<br>Speed<br>ratio | 扭矩<br>N.m |
|-------------|------------------------------------|----------------------------------|-----------------------------------------|------------------|------------------------------------------|------------------|-------------------------------|----------------------|-----------|
|             |                                    |                                  | 阀门连接<br>Connecting dimensions of valves |                  | 执行器连接<br>Connecting dimensionsof actuate |                  |                               |                      |           |
|             | AT双作用(DA)<br>AT Double action(DA)  | AT单作用(SR)<br>AT Spring retum(SR) | 中心距<br>Center distance                  | 轴孔<br>Alixe hole | 中心距<br>Center distance                   | 轴孔<br>Alixe hole |                               |                      |           |
| M-0         | DA50-83                            | SR50-75                          | F05/F07                                 | 14*14            | F05/F07                                  | 14*14            | 140                           | 24:1                 | 160       |
| M-1         | DA83-92                            | SR75-83                          | F05/F07                                 | 14×14            | F05/F07                                  | 14×14            | 180                           | 38:1                 | 180       |
| M-2         | DA100-125                          | SR88-105                         | F07/F10                                 | 17×17            | F07/F10                                  | 17×17            | 200                           | 37:1                 | 320       |
| M-3         | DA125-145                          | SR115-125                        | F07/F10/F12                             | 22×22            | F10/F12                                  | 22×22            | 280                           | 35:1                 | 680       |
| M-4         | DA160-190                          | SR145-160                        | F10/F12 or F14                          | 27×27            | F10/F12 or F14                           | 27×27            | 320                           | 50:1                 | 1200      |
| M-5         | DA210-240                          | SR190-210                        | F14 or F16                              | 36×36            | F14 or F16                               | 36×36            | 400                           | 54:1                 | 2100      |
| M-6         | DA240-270                          | SR210-240                        | F16                                     | 46×46            | F16                                      | 46×46            | 500                           | 58:1                 | 3000      |
| M-7         | DA270-300                          | SR240-270                        | F16/φ200                                | 46×46            | F16/φ200                                 | 46×46            | 600                           | 66:1                 | 3800      |

主要零部件材料 Main components and materials

| 序号<br>NO. | 名称<br>Name             | 材料<br>Material Scienc            | 序号<br>NO. | 名称<br>Name              | 材料<br>Material Scienc                 |
|-----------|------------------------|----------------------------------|-----------|-------------------------|---------------------------------------|
| 1         | 传动主轴<br>Drive spindle  | 合金钢<br>Alloy steel               | 9         | 蜗轮<br>Worm gea          | 球墨铸铁<br>Spheroidal graphite cast iron |
| 2         | 密封圈<br>seal ring       | 丁腈橡胶<br>Nitrile rubber           | 10        | 平面轴承<br>Plane bearing   | 合金钢<br>Alloy steel                    |
| 3         | 卡簧<br>Reed spring      | 不锈钢(304)<br>Stainless steel(304) | 11        | 手柄<br>Handle            | 不锈钢(304)<br>Stainless steel(304)      |
| 4         | 上盖<br>Upper cover      | 铝合金<br>Aluminium alloy           | 12        | 偏心套<br>Eccentric sleeve | 合金钢<br>Alloy steel                    |
| 5         | 紧固件<br>Afastening      | 不锈钢(304)<br>Stainless steel(304) | 13        | 密封圈<br>Seal ring        | 丁腈橡胶<br>Nitrile rubber                |
| 6         | 定位销<br>Positioning pin | 合金钢<br>Alloy steel               | 14        | 蜗杆<br>Worm              | 合金钢<br>Alloy steel                    |
| 7         | 密封圈<br>Seal ring       | 丁腈橡胶<br>Nitrile rubber           | 15        | 传动杆<br>Transmission rod | 合金钢<br>Alloy steel                    |
| 8         | 密封圈<br>Seal ring       | 丁腈橡胶<br>Nitrile rubber           | 16        | 箱体<br>Box               | 铝合金<br>Aluminium alloy                |



- |            |                           |
|------------|---------------------------|
| ① 指示杆      | Indication Rod(nylon)     |
| ② 气缸       | Actuator(CF8)             |
| ③ 进气孔      | Pilot Port(1/8")          |
| ④ 阀杆       | Stem(AISI316/304)         |
| ⑤ 阀杆密封组件   | Stem Seal(PTFE)           |
| ⑥ 视窗       | Cap(PC)                   |
| ⑦ 弹簧       | Spring(Steel 65Mn)        |
| ⑧ 活塞       | Piston(Alu,alloy)         |
| ⑨ 活塞环      | Piston Seal (Viton)       |
| ⑩ 密封弹簧     | Seal Spring(AISI304)      |
| (11) 连接    | ConnectingPiece(CF8M/CF8) |
| (12) 阀体密封垫 | Body Seal (PTFE)          |
| (13) 阀芯    | Valve core(CF8M/CF8)      |
| (14) 阀芯密封垫 | Seat(PTFE)                |
| (15) 垫片    | Gasket(AISI316/304)       |
| (16) 阀体    | Body(CF8M/CF8)            |

Applications

- ◆ Beer & Drinks Filling Machinery
- ◆ Textile Printing & Dyeing
- ◆ Gas Industry
- ◆ Pharmacy & Medical Equipment
- ◆ Chemical Industry
- ◆ Disinfection
- ◆ Frothing Equipment
- ◆ Waters/Sewage Disposal

Advantages

- ◆ Large Flux,low Resistance,No Water-hammer
- ◆ Y-type Shape Enlarged The Flowing Section, which Could Raise The Flux By 30% And Make Flow More Smooth
- ◆ Super Long Life
- ◆ Which Help The Stem Adjust And Lubricate Itself Automatically.
- ◆ The Cylinder Material Is Stainless Steel. lubricating Automatically 360°Rolling Freely.

技术参数 Technical Data

|      |                     |                                                                                                                                 |
|------|---------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 管道压力 | Fluid Pressure      | Max 1.6MPa(232PSI)                                                                                                              |
| 控制压力 | Control Pressure    | 0.3-0.8MPa(43.5-116PSI)                                                                                                         |
| 控制介质 | Control Fluid       | 中性气体或空气, Neutral Gas, Air                                                                                                       |
| 阀体材料 | Body Material       | CF8M/CF8                                                                                                                        |
| 密封材料 | Seals Material      | PTFE                                                                                                                            |
| 气缸材料 | Actuator Material   | CF8                                                                                                                             |
| 气缸尺寸 | Actuator Size       | 40mm, 50mm, 63mm, 90mm, 125mm                                                                                                   |
| 适用介质 | Applicable Fluid    | 水, 酒精, 油, 燃料, 蒸汽, 中性气体或液体, 有机溶剂, 酸碱溶液<br>Water, Alcohol, Oil, Fuel, Steam, Neutral gas or liquid, Organic Solvent, Acid and lye |
| 介质粘度 | Fluid Viscosity     | Max 600mm/s                                                                                                                     |
| 介质温度 | Fluid Temperature   | -10℃-+180℃,25℃-+220℃                                                                                                            |
| 环境温度 | Ambient Temperature | -10℃-+180℃                                                                                                                      |
| 控制形式 | Control Type        | 单作用常闭, 常开, 双作用常闭, 双作用自由态 Normally Closed, Normally Open, Double Acting                                                          |
| 连接形式 | Connection          | 螺纹式, 焊接式, 法兰式, 快装式 Threaded(BSP, BSPT, NPT), Welded, Flanged, Tri-Clamp                                                         |

Q5 Series Pneumatic Angle Seat Valve  
Q5 系列气动角座阀

特点 Advantages

外部先导角座阀，溢流口与滑块间有自动调节密封压盖，阀体角座结构可实现较大流量，特别是与普通截止阀相比时。

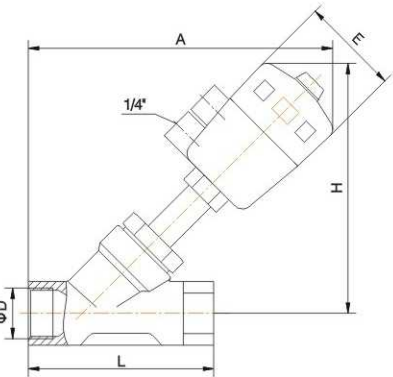
External advanced Angle, especially compare with the normal globe valves seat valve, there is adjustment sealing gland between over flow drain and slider, body structure can enforce more flow rate, especially compare with the normal globe valves.

技术参数 Technical data

- ◆压力范围 Pressure range: 0~16bar
- ◆介质温度 Medium temperature: -10℃~+180℃
- ◆环境温度 Environmental temperature: -10℃~+60℃
- ◆阀体材料 Body material: 不锈钢 Stainless steel
- ◆密封材料 Sealing material: 聚四氟乙烯PTFE
- ◆执行机构外壳 Actuator material: 聚酰胺PA
- ◆介质Medium: 中性气体、空气、水Neutral gas, air, water

选取 Option

- ◆控制功能 Control functions: 常开 Normally open
- ◆执行机构外壳适用于环境温度: +5℃~+130℃ Actuator material suitable for environmental temperature: +5℃~+130℃
- ◆无复位弹簧 双作用执行机构 No return spring double acting actuators
- ◆电子式位置反馈 Electronic position feedback
- ◆独立可调行程极限, 适于高低流量 Independent adjustable stroke limit, suitable for high low flow schedule
- ◆手动应急开关 Manual emergency switch
- ◆先导阀适用的Namur 适配器 Pilot valve suitable Namur adapter



Q5系列 Series

| 型号<br>Size | 规格<br>D | 执行器<br>mm | L   | A   | H   | E   |
|------------|---------|-----------|-----|-----|-----|-----|
| 15         | 1/2"    | φ 50      | 85  | 172 | 137 | 64  |
| 20         | 3/4"    | φ 50      | 95  | 180 | 144 | 64  |
| 25         | 1"      | φ 63      | 105 | 215 | 181 | 80  |
| 32         | 1 1/4"  | φ 63      | 120 | 220 | 185 | 80  |
| 40         | 1 1/2"  | φ 63      | 130 | 225 | 190 | 80  |
| 50         | 2"      | φ 80      | 150 | 270 | 215 | 100 |
| 65         | 2 1/2"  | φ 100     | 185 | 252 | 300 | 126 |
| 80         | 3"      | φ 100     | 210 | 368 | 340 | 126 |



Q5系列螺纹式  
Threaded Connection



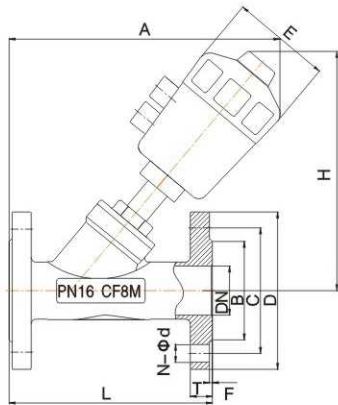
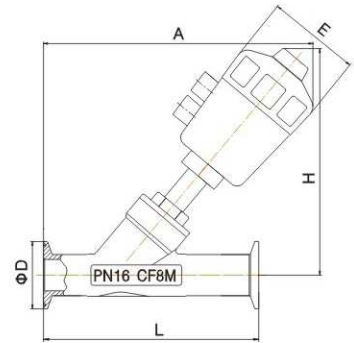
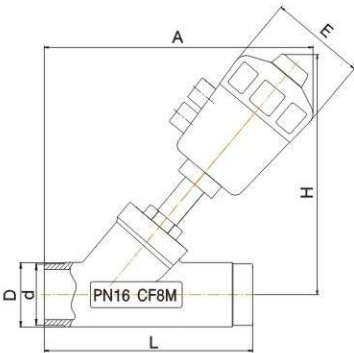
H5系列焊接式  
Welded Connection



K5系列快装式  
Tri-clamp Connection



F5系列法兰式  
Flanged Connection



H5系列 Series

| 规格<br>Size | 执行器<br>mm | L   | D    | d    | A   | H   | E   |
|------------|-----------|-----|------|------|-----|-----|-----|
| 15         | φ 50      | 120 | 20.0 | 19.0 | 165 | 145 | 64  |
| 20         | φ 50      | 125 | 25.5 | 24.0 | 167 | 150 | 64  |
| 25         | φ 63      | 145 | 31.0 | 30.0 | 210 | 183 | 80  |
| 32         | φ 63      | 156 | 38.0 | 37.0 | 215 | 185 | 80  |
| 40         | φ 63      | 185 | 47.0 | 45.5 | 232 | 195 | 80  |
| 50         | φ 80      | 200 | 58.0 | 56.5 | 262 | 230 | 100 |
| 65         | φ 100     | 228 | 77.5 | 75.0 | 319 | 290 | 126 |
| 80         | φ 100     | 245 | 92.0 | 90.0 | 360 | 315 | 126 |

K5系列 Series

| 规格<br>Size | 执行器<br>mm | L   | D    | A   | H   | E   |
|------------|-----------|-----|------|-----|-----|-----|
| 15         | φ 50      | 120 | 50.5 | 165 | 145 | 64  |
| 20         | φ 50      | 140 | 50.5 | 175 | 150 | 64  |
| 25         | φ 63      | 160 | 50.5 | 215 | 183 | 80  |
| 32         | φ 63      | 175 | 50.5 | 225 | 185 | 80  |
| 40         | φ 63      | 190 | 64.0 | 235 | 195 | 80  |
| 50         | φ 80      | 210 | 77.5 | 270 | 205 | 100 |
| 65         | φ 100     | 225 | 77.5 | 315 | 290 | 126 |
| 80         | φ 100     | 255 | 91.0 | 362 | 315 | 126 |

F5系列 Series

| 规格<br>Size | 执行器<br>mm | L   | T  | f | D   | C   | B   | N-φd   | A   | H   | E   |
|------------|-----------|-----|----|---|-----|-----|-----|--------|-----|-----|-----|
| 15         | φ 50      | 120 | 14 | 2 | 95  | 65  | 40  | 4-φ 14 | 165 | 145 | 64  |
| 20         | φ 50      | 130 | 14 | 2 | 105 | 75  | 50  | 4-φ 14 | 170 | 150 | 64  |
| 25         | φ 63      | 140 | 14 | 2 | 115 | 85  | 60  | 4-φ 14 | 210 | 183 | 80  |
| 32         | φ 63      | 150 | 16 | 2 | 135 | 100 | 70  | 4-φ 18 | 220 | 185 | 80  |
| 40         | φ 63      | 180 | 16 | 2 | 145 | 110 | 80  | 4-φ 18 | 230 | 195 | 80  |
| 50         | φ 80      | 195 | 16 | 2 | 160 | 125 | 92  | 4-φ 18 | 260 | 230 | 100 |
| 65         | φ 100     | 230 | 18 | 2 | 185 | 145 | 115 | 4-φ 18 | 320 | 290 | 126 |
| 80         | φ 100     | 250 | 18 | 2 | 195 | 160 | 130 | 8-φ 18 | 360 | 315 | 126 |

Q3 Series Pneumatic Angle Seat Valve  
Q3系列气动角座阀

特点 Advantages

- ◆流量大、流阻小、无水锤
- ◆Y型设计，增加30%流量
- ◆阀杆自动校正，自润滑，免维护
- ◆气缸采用不锈钢材质，在恶劣的环境中更加优秀，可360° 旋转。
- ◆Large flux, low resistance, No water-hammer
- ◆Y-type shape enlarged the flowing section, which could raise the flux by 30% and make flow more smooth.
- ◆Super long life, which help the stem adjust and lubricate itself automatically.
- ◆The cylinder material is stainless steel. lubricating automatically, 360° rolling freely.

技术参数 Technical data

- ◆压力范围 Pressure range: 0~16bar
- ◆介质温度 Medium temperature: -10℃~+180℃
- ◆环境温度 Environmental temperature: -10℃~+60℃
- ◆阀体材料 Body material: 不锈钢 Stainless steel
- ◆密封材料 Sealing material: 聚四氟乙烯PTFE
- ◆执行机构外壳 Actuator material: 不锈钢 SS304
- ◆介质Medium: 中性气体、空气、水Neutral gas, air, water

选取 Option

- ◆控制功能 Control functions: 常开 Normally open
- ◆执行机构外壳适用于环境温度: +5℃~+130℃ Actuator material suitable for environmental temperature: +5℃~+130℃
- ◆双作用执行机构 Double acting actuators
- ◆电子式位置反馈 Electronic position feedback
- ◆独立可调行程极限，适于高低流量 Independent adjustable stroke limit, suitable for high-low flow schedule
- ◆先导阀适用的Namur 适配器 Pilot valve suitable Namur adapter



Q3系列螺纹式  
Threaded Connection



H3系列焊接式  
Welded Connection



K3系列快装式  
Tri-clamp Connection



F3系列法兰式  
Flanged Connection

H3系列 Series

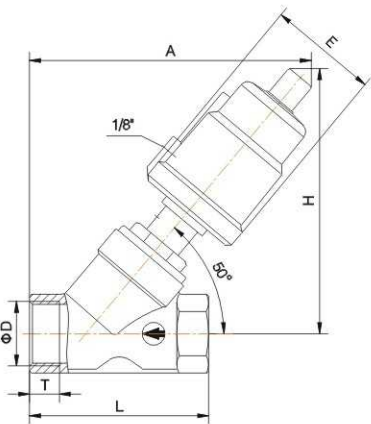
| 规格<br>Size | 执行器<br>mm | L   | D    | d    | A   | H   | E   |
|------------|-----------|-----|------|------|-----|-----|-----|
| 15         | φ 50      | 120 | 20.0 | 19.0 | 150 | 135 | 62  |
| 20         | φ 50      | 125 | 25.5 | 24.0 | 160 | 142 | 62  |
| 25         | φ 63      | 145 | 31.0 | 30.0 | 195 | 172 | 76  |
| 32         | φ 63      | 156 | 38.0 | 37.0 | 200 | 175 | 76  |
| 40         | φ 63      | 185 | 47.0 | 45.5 | 207 | 180 | 76  |
| 50         | φ 80      | 200 | 58.0 | 56.5 | 240 | 205 | 96  |
| 65         | φ 100     | 228 | 77.5 | 75.0 | 319 | 275 | 114 |
| 80         | φ 100     | 245 | 92.0 | 90.0 | 337 | 290 | 114 |

K3系列 Series

| 规格<br>Size | 执行器<br>mm | L   | D     | A   | H   | E   |
|------------|-----------|-----|-------|-----|-----|-----|
| 15         | φ 50      | 120 | 50.5  | 150 | 135 | 62  |
| 20         | φ 50      | 140 | 50.5  | 163 | 142 | 62  |
| 25         | φ 63      | 160 | 50.5  | 195 | 172 | 76  |
| 32         | φ 63      | 175 | 50.5  | 203 | 175 | 76  |
| 40         | φ 63      | 190 | 64.0  | 210 | 180 | 76  |
| 50         | φ 80      | 210 | 77.5  | 245 | 205 | 96  |
| 65         | φ 100     | 225 | 91.0  | 317 | 275 | 114 |
| 80         | φ 100     | 255 | 106.0 | 342 | 290 | 114 |

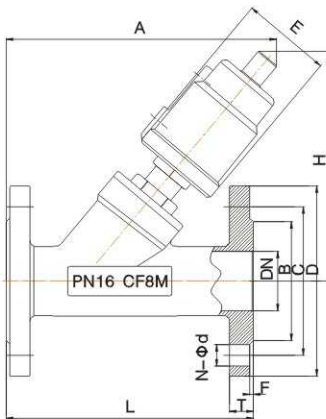
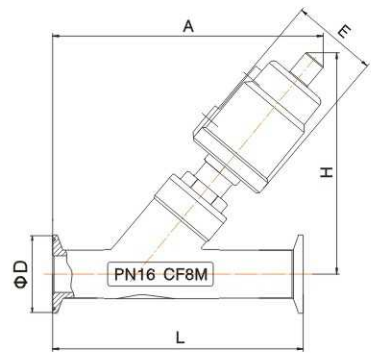
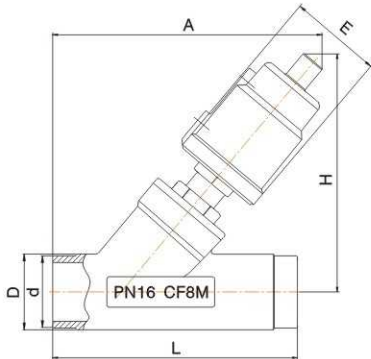
F3系列 Series

| 规格<br>Size | 执行器<br>mm | L   | T  | f | D   | C   | B   | N-φd   | A   | H   | E   |
|------------|-----------|-----|----|---|-----|-----|-----|--------|-----|-----|-----|
| 15         | φ 50      | 120 | 14 | 2 | 95  | 65  | 40  | 4-φ 14 | 160 | 145 | 62  |
| 20         | φ 50      | 130 | 14 | 2 | 105 | 75  | 50  | 4-φ 14 | 165 | 153 | 62  |
| 25         | φ 63      | 140 | 14 | 2 | 115 | 85  | 60  | 4-φ 14 | 220 | 178 | 76  |
| 32         | φ 63      | 150 | 16 | 2 | 135 | 100 | 70  | 4-φ 18 | 215 | 213 | 76  |
| 40         | φ 63      | 180 | 16 | 2 | 145 | 110 | 80  | 4-φ 18 | 205 | 180 | 76  |
| 50         | φ 80      | 195 | 16 | 2 | 160 | 125 | 92  | 4-φ 18 | 235 | 205 | 96  |
| 65         | φ 100     | 230 | 18 | 2 | 185 | 145 | 115 | 4-φ 18 | 320 | 275 | 114 |
| 80         | φ 100     | 250 | 18 | 2 | 195 | 165 | 130 | 8-φ 18 | 340 | 290 | 114 |



Q3系列 Series

| 型号<br>Size | 规格<br>D | 执行器<br>mm | L   | A   | H   | E   |
|------------|---------|-----------|-----|-----|-----|-----|
| 15         | 1/2"    | φ 50      | 68  | 133 | 126 | 62  |
| 20         | 3/4"    | φ 50      | 75  | 137 | 131 | 62  |
| 25         | 1"      | φ 63      | 90  | 170 | 165 | 76  |
| 32         | 1 1/4"  | φ 63      | 110 | 180 | 175 | 76  |
| 40         | 1 1/2"  | φ 63      | 115 | 190 | 178 | 76  |
| 50         | 2"      | φ 80      | 135 | 235 | 210 | 96  |
| 65         | 2 1/2"  | φ 100     | 185 | 307 | 283 | 114 |
| 80         | 3"      | φ 100     | 210 | 320 | 295 | 114 |



## G3 Series Pneumatic Filling Valve G3系列气动灌装阀

### G3-A



DN15灌装阀-A

#### 特点：

本阀门采用精致型设计，各部件均采用不锈钢制造，外观精美，部件轻巧，结构紧凑，阀芯部位采用活动式结构，可自行校正，密封性能优良。

#### 技术参数：

- ◆控制形式：双作用常闭型，双作用自由态
- ◆双作用常闭型：管道压力0-0.7MPa，控制压力：0.38-0.42MPa
- ◆双作用自由态：管道压力0-0.7MPa，控制压力：0.3-0.35MPa
- ◆控制介质：经过滤的压缩空气
- ◆阀体材质：CF8或CF8M
- ◆密封材料：PTFE
- ◆介质温度：-10℃- +120℃
- ◆连接形式：螺纹式

### G3-B



DN15立式灌装阀-B

#### Advantages:

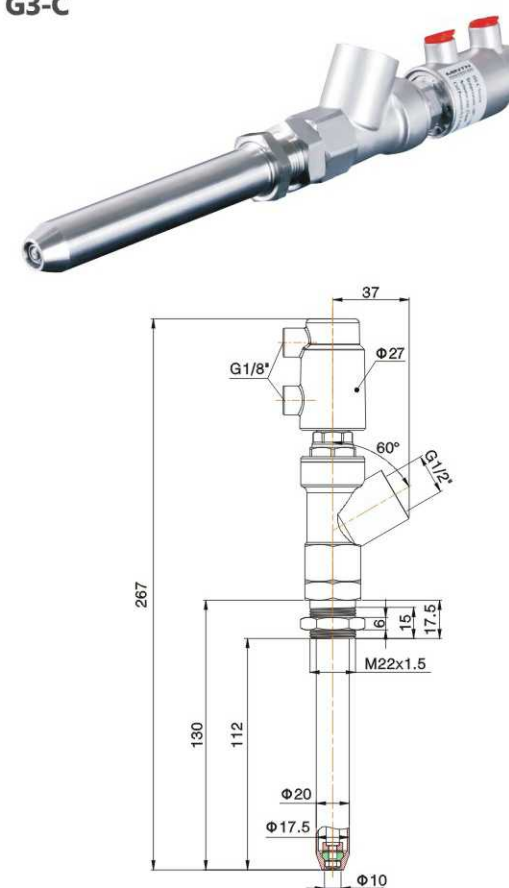
Compact design, could be assembled in a small space Movable seat, which have perfect sealing.

#### Technical data:

- ◆Double acting(with spring): Fluid pressure: 0-7bar, Control pressure: 3.8bar-4.2bar
- ◆Double acting(no spring): Fluid pressure: 0-7bar, Control pressure: 3-3.5bar
- ◆Body: CF8 or CF8M
- ◆Sealing Material: PTFE
- ◆Fluid Temperature: -10℃- +120℃
- ◆Connection: Thread(BSP, BSPT, NPT)

## G3 Series Pneumatic Filling Valve G3系列气动灌装阀 (定制各类非标灌嘴)

### G3-C



DN15加长型灌装阀-C

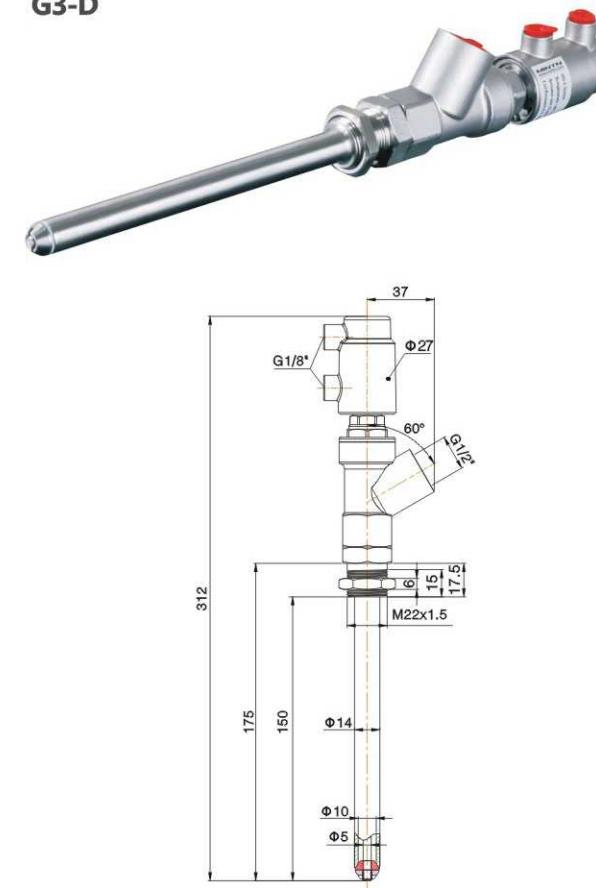
#### 特点：

广泛应用于灌装机械，尤其适用于粘稠、膏状及容易起泡沫的液体灌装；灌装速度快，精准稳定；精致小巧，便于排管布局；灌装头底部特殊的密封设计，可以实现灌装无滴漏；灌装头底部倒角结构，具有导向定位作用，可下潜灌装。

#### 技术参数：

- ◆双作用常闭型：管道压力0-0.7MPa，控制压力：0.38-0.42MPa
- ◆双作用自由态：管道压力0-0.7MPa，控制压力：0.3-0.35MPa
- ◆阀体材质：CF8或CF8M
- ◆密封材料：PTFE
- ◆介质温度：-10℃- +120℃

### G3-D



DN15加长型灌装阀-D

#### Advantages:

This valve is widely used on drinks filling machinery. The long filling gun is specially designed for high viscosity fluid. Fast filling, accurate and steady performance. Compact design, could be assembled in a small space. No dripping during working, because of special sealing design.

#### Technical data:

- ◆Double acting(with spring): Fluid pressure: 0-7bar, Control pressure: 3.8bar-4.2bar
- ◆Double acting(no spring): Fluid pressure: 0-7bar, Control pressure: 3-3.5bar
- ◆Body: CF8 or CF8M
- ◆Sealing Material: PTFE
- ◆Fluid temperature: -10℃- +120℃