

无滞留球阀

Non-retention ball valve



应用

- ◆该球阀根据3A ASME BPE标准设计，主要应用于生物制药、食品饮料、酿酒、化工等工业领域。

Applications

- ◆The ball valve according to 3A and ASME BPE standard design, mainly used in pharmaceutical, food and beverage, wine, chemical and other industries..

技术特点

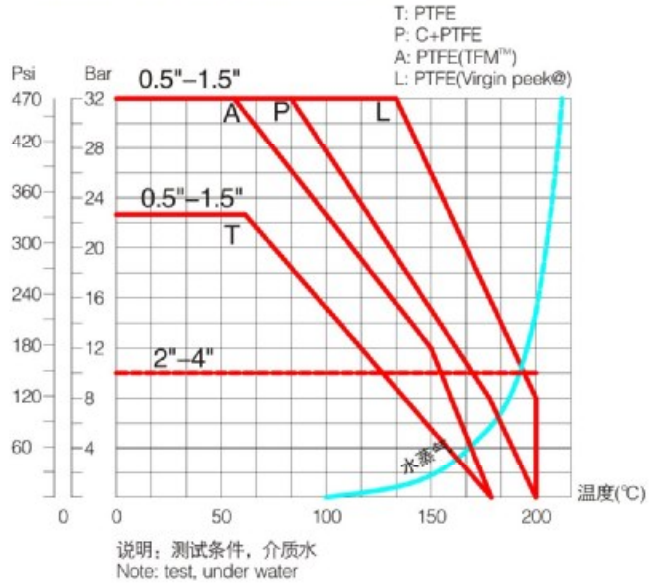
- ◆全包式球座设计，无滞留高洁净，满足CIP SIP杀菌和清洗要求，耐高温180℃ 压力30bar 动补偿密封设计，具有扭矩小，寿命长等特点。
- ◆可配置各种执行结构，如电动、卧式气动、不锈钢立式气动、钥匙手动手柄，还可以加装控制单元、定位器、位置传感器等可兼容自动控制系统。

Technical characteristics

- ◆All-inclusive tee design, no stranded high clean, meet the requirement of CIP and SIP sterilization and cleaning, and heat resistance of 180 °C, the highest pressure 30 bar, automatic compensating sealing design, the advantages of small torque, long service life, etc.
- ◆Available with a variety of structures, such as electric pneumatic, stainless steel, horizontal vertical pneumatic, key manually handle, can also be equipped with the control unit, locator, position sensor and other compatible automatic control system.



球阀压力-温度曲线图
Pressure And Temperature Curve



直通无滞留球阀扭矩表, 单位 (N.M)

| SIZE | 1"-3/4" | DN25/1" | DN32-1 1/4" | DN40/1.5" | DN50/2" | 2.5"-DN65 | 3" | DN80 | 4"-DN100 |
|------|---------|---------|-------------|-----------|---------|-----------|----|------|----------|
| 扭矩 | 6 | 10 | 12 | 14 | 20 | 40 | 75 | 90 | 110 |

注意: 选择执行器建议增加20%安全余量

表面处理

- ◆所有的表面CNC 0.8μm 达到RA0.4μm 电抛光 可达到0.25μm

Surface finish

- ◆CNC machining all surfaces to 0.8μm, polishing can be achieved RA0.4μm, electro-polishing can reach 0.25μm

Conversion Table of Surface Finishes

| Surface Designation | | Mechanically Polished | | | |
|---------------------|----------|-----------------------|-------|--------|-------|
| ASME BPE | GRIT | Ra Average | | Ra Max | |
| | | μ-in | μ-m | μ-in | μ-m |
| SFV 1 | GRIT 320 | 15 | 0.375 | 20 | 0.50 |
| SFV 2 | GRIT 240 | 20 | 0.50 | 25 | 0.625 |
| SFV 3 | GRIT 180 | 25 | 0.625 | 30 | 0.75 |

| Surface Designation | | Mechanically and Electropolished | | | |
|---------------------|----------|----------------------------------|-------|--------|-------|
| ASME BPE | GRIT | Ra Average | | Ra Max | |
| | | μ-in | μ-m | μ-in | μ-m |
| SFV 4 | GRIT 320 | 10 | 0.25 | 15 | 0.375 |
| SFV 5 | GRIT 240 | 15 | 0.375 | 20 | 0.50 |
| SFV 6 | GRIT 180 | 20 | 0.50 | 25 | 0.625 |

无滞留球阀 Non-retention ball valve



气动三片无滞留球阀
Pneumatic three-piece non-retention ball valve

规格: 1/2"-4", DN10-DN100
可选配位置反馈

Size: 1/2"-4", DN10-DN100
Optional position feedback



气动球阀-MINI C-TOP
Pneumatic ball Valve +MINI C-TOP

SIZE: 1/2"-1", DN10-DN25



气动无滞留球阀+定位器
Pneumatic non-retention ball valves+valve positioner

规格: 1/2"-4", DN10-DN100
输入: 0/4-20mA, 0-5/10V
输出: 0/4-20mA, 0-5/10V(位置反馈)
总线: DEVICE NET BUS 通讯
单作用/双作用

Size: 1/2"-4", DN10-DN100
Input: 0/4-20mA, 0-5/10V
Output: 0/4-20mA, 0-5/10V
(Position feedback)
Bus: DEVICE NET BUS
Single/double action



气动球阀+控制单元
Pneumatic ball Valve+C-TOP

电源: DC 24V ± 10%
PLC连接自动化控制
单作用/双作用
基本版: 接线端子连接
总线: AS-I 总线 通讯(选项)

Power: DC 24V ± 10%
PLC Connection automatically control
Single/double action
Basic version: terminal block
Bus version: AS-I DEVICE NET
BUS(options)

电动无滞留球阀
Electric non-retention ball valve

| | |
|-------------|---------------------|
| 开关型 | Switching type |
| 智能型(4-20mA) | Intelligent(4-20mA) |
| 位置反馈型 | Position feedback |
| 电源 DC.24V | Power DC.24V |



卧式气动无滞留球阀+定位器
Pneumatic non-retention ball valves+valve positioner

规格: 1/2"-4", DN10-DN100
 输入: 0/4-20mA, 0-5/10V
 输出: 0/4-20mA, 0-5/10V(位置反馈)
 总线: DEVICE NET BUS 通讯
 单作用/双作用

Size: 1/2"-4", DN10-DN100
 Input: 0/4-20mA, 0-5/10V
 Output: 0/4-20mA, 0-5/10V
 (Position feedback)
 Bus: DEVICE NET BUS
 Single/double action



规格: DN10-DN100
 材质: 304/316L
 工作温度: -10°C-150°C
 气源压力: 4-7bar
 连接方式: 卡箍、焊接、法兰、螺纹

SIZE: DN10-DN100
 Material: 304/316L
 Working temperature: -10 °C to 150 °C
 Air pressure: 4 to 7 bar
 Connection mode: clamp, welding,
 flange, screw thread

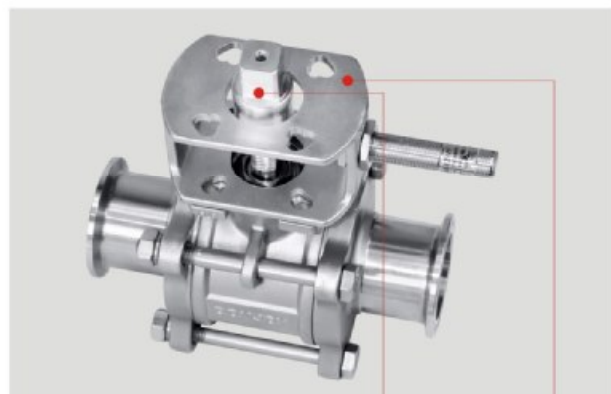


气动三片式无滞留球阀
Pneumatic three-piece non-retention ball valve

整体CNC加工, 外观具有无死角。
 SIZE: 1/2", DN10-DN50
 材质: 304/316L



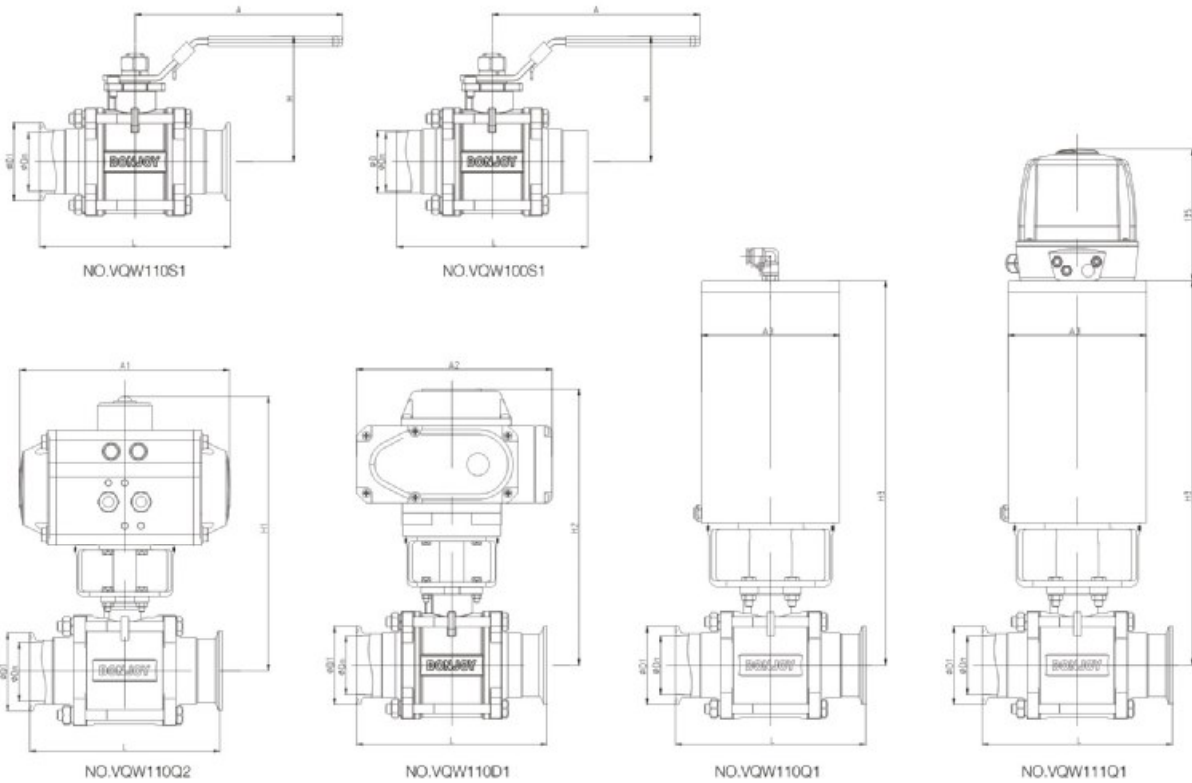
| SIZE | A | ISO5211 |
|-------------|----|---------|
| 0.5"-1 1/4" | 6 | F04 |
| 1.5"-2" | 10 | F05 |
| 2.5"-3" | 12 | F07 |
| 4" | 12 | F10 |



| SIZE | A*A | ISO5211 |
|-----------|-------|---------|
| 1/2"-3/4" | 11*11 | F04-05 |
| 1"-1.5" | 14*14 | F04-05 |
| 2" | 17*17 | F05-07 |
| 2.5"-3" | 22*22 | F05-07 |
| 4" | 27*27 | F07-10 |

注意: 可任意配置各种执行机构球阀

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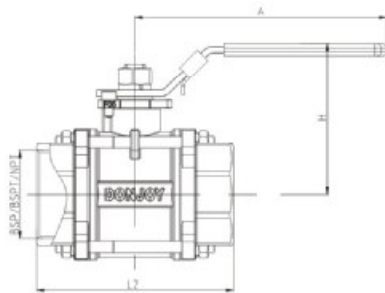


INCH

| SIZE | ISO5211 | ϕD_n | ϕD | ϕD_1 | L | H | A | H1 | A1 | H2 | A2 | H3 | A3 | AA对边 |
|-------|---------|------------|----------|------------|-----|-----|-----|-------|-----|-----|-----|-----|-----|------|
| 0.5" | F04 | 9.7 | 12.7 | 25.4 | 89 | 75 | 163 | 175.5 | 158 | 220 | 165 | 226 | 86 | 6 |
| 0.75" | F04 | 16.1 | 19.1 | 25.4 | 89 | 75 | 163 | 175.5 | 158 | 220 | 165 | 226 | 86 | |
| 1" | F04 | 22.4 | 25.4 | 50.5 | 114 | 78 | 163 | 179 | 158 | 223 | 165 | 230 | 86 | |
| 1.25" | F04 | 28.8 | 31.8 | 50.5 | 117 | 83 | 163 | 198 | 190 | 228 | 165 | 235 | 86 | |
| 1.5" | F05 | 35.1 | 38.1 | 50.5 | 142 | 94 | 164 | 206 | 190 | 236 | 165 | 243 | 86 | 10 |
| 2" | F05 | 47.8 | 50.8 | 64 | 156 | 99 | 164 | 237 | 207 | 255 | 165 | 315 | 113 | |
| 2.5" | F07 | 59.5 | 63.5 | 77.5 | 197 | 116 | 236 | 257 | 207 | 272 | 212 | 332 | 113 | 12 |
| 3" | F07 | 72.2 | 76.2 | 91 | 221 | 127 | 236 | 274 | 213 | 314 | 212 | 380 | 133 | |
| 3.5" | F07 | 85 | 89 | 106 | 229 | 133 | 236 | 291 | 259 | 354 | 259 | 386 | 133 | |
| 4" | F10 | 97.6 | 101.6 | 119 | 241 | 150 | 236 | 308 | 259 | 371 | 259 | 423 | 166 | |

DIN

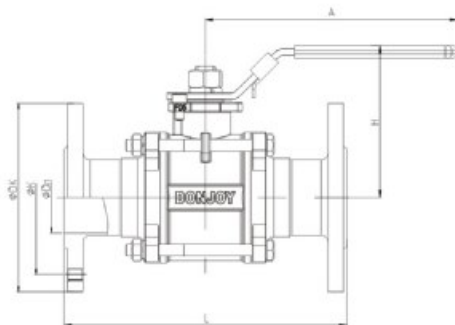
| SIZE | ISO5211 | ϕD_n | ϕD | ϕD_1 | L | H | A | H1 | A1 | H2 | A2 | H3 | A3 | AA对边 |
|-------|---------|------------|----------|------------|-----|-----|-----|-------|-----|-----|-----|-----|-----|------|
| DN10 | F04 | 9 | 12 | 34 | 89 | 75 | 163 | 175.5 | 158 | 220 | 165 | 226 | 86 | 6 |
| DN15 | F04 | 15 | 18 | 34 | 89 | 75 | 163 | 175.5 | 158 | 220 | 165 | 226 | 86 | |
| DN20 | F04 | 19 | 22 | 34 | 89 | 75 | 163 | 175.5 | 158 | 220 | 165 | 226 | 86 | |
| DN25 | F04 | 25 | 28 | 50.5 | 114 | 78 | 163 | 179 | 158 | 223 | 165 | 230 | 86 | |
| DN32 | F04 | 31 | 34 | 50.5 | 117 | 83 | 163 | 198 | 190 | 228 | 165 | 235 | 86 | 10 |
| DN40 | F05 | 37 | 40 | 50.5 | 142 | 91 | 164 | 206 | 190 | 236 | 165 | 243 | 86 | |
| DN50 | F05 | 49 | 52 | 64 | 156 | 99 | 164 | 237 | 207 | 255 | 165 | 315 | 113 | 12 |
| DN65 | F07 | 66 | 70 | 91 | 207 | 122 | 236 | 269 | 213 | 309 | 212 | 338 | 113 | |
| DN80 | F07 | 81 | 85 | 106 | 229 | 133 | 236 | 291 | 259 | 354 | 259 | 386 | 133 | |
| DN100 | F10 | 100 | 104 | 119 | 241 | 150 | 236 | 308 | 259 | 371 | 259 | 423 | 166 | |



NO. VQW120S1

内螺纹球阀 Thread ball valve

| SIZE | ISO5211 | L2 | H | A | G | BSPT | NPT |
|-------|---------|-----|-----|-----|-------|-------|-------|
| 0.5" | F04 | 79 | 75 | 163 | 1/2" | 1/2" | 1/2" |
| 0.75" | F04 | 83 | 75 | 163 | 3/4" | 3/4" | 3/4" |
| 1" | F04 | 90 | 78 | 163 | 1" | 1" | 1" |
| 1.25" | F04 | 107 | 83 | 163 | 1.25" | 1.25" | 1.25" |
| 1.5" | F05 | 114 | 91 | 164 | 1.5" | 1.5" | 1.5" |
| 2" | F05 | 133 | 99 | 164 | 2" | 2" | 2" |
| 2.5" | F07 | 157 | 116 | 236 | 2.5" | 2.5" | 2.5" |
| 3" | F07 | 179 | 127 | 236 | 3" | 3" | 3" |



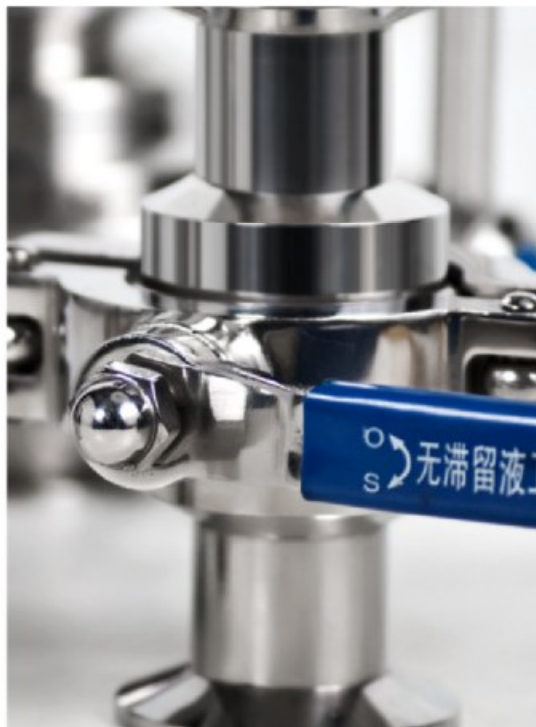
NO. VQW140S1

法兰球阀 Flanged Ball Valve

| SIZE | ISO5211 | φDn | φDk | φK | n-φd | L | H | A |
|-------|---------|-----|-----|-----|------|-----|-----|-----|
| DN15 | F04 | 15 | 95 | 65 | 4-14 | 130 | 75 | 163 |
| DN20 | F04 | 19 | 105 | 75 | 4-14 | 150 | 75 | 163 |
| DN25 | F04 | 25 | 115 | 85 | 4-14 | 160 | 78 | 163 |
| DN32 | F04 | 31 | 140 | 100 | 4-18 | 180 | 83 | 163 |
| DN40 | F05 | 37 | 150 | 110 | 4-18 | 200 | 91 | 164 |
| DN50 | F05 | 49 | 165 | 125 | 4-18 | 230 | 99 | 164 |
| DN65 | F07 | 66 | 185 | 145 | 4-18 | 250 | 122 | 236 |
| DN80 | F07 | 81 | 200 | 160 | 8-18 | 280 | 133 | 236 |
| DN100 | F10 | 100 | 220 | 180 | 8-18 | 320 | 150 | 236 |

卡箍无滞留球阀

Non-retention ball valve



卡箍无滞留球阀
Clamp Non-retention Ball Valve



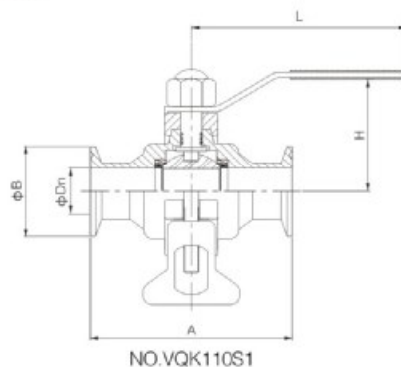
应用 Applications

无滞留球阀为全包式球座设计，解决了球阀液体滞留阀腔内的问题，该球阀适用于生物制药工程。

Overall valve body design prevents the medium from retaining in the valve after flowing through the body. This kind of ball valve is applied to pharmacy and biotechnology industries.

设计和特点 Design and Features

- ◆ 阀体组合卡箍连接
- ◆ 无需专业工具即拆卸阀门
- ◆ 操作扭矩小
- ◆ 垫圈根据FDA 177.2600
- ◆ 连接：卡箍、焊接、螺纹、DIN、SMS、ISO、IDF、BPE、RJT
- ◆ 无论是何种连接方式，阀体都可进行更换，而不会改变阀门的总长度
- ◆ Valve bodies Combined with clamp connection
- ◆ Easily disassemble without special tools
- ◆ Small Operating torque
- ◆ Gasket complies with FDA 177.2600
- ◆ Connection: clamp, weld, thread, DIN, SMS, ISO, IDF, BPE, RJT
- ◆ Valve body can be replaced in any connections. And Valve length will not change



| SIZE | A | L | H | B | Dn |
|------|-----|-----|-----|------|----|
| DN15 | 90 | 105 | 65 | 34.0 | 15 |
| DN20 | 100 | 105 | 65 | 34.0 | 19 |
| DN25 | 110 | 105 | 70 | 50.5 | 25 |
| DN32 | 120 | 130 | 80 | 50.5 | 31 |
| DN40 | 140 | 150 | 80 | 50.5 | 37 |
| DN50 | 164 | 160 | 85 | 64.0 | 49 |
| DN65 | 180 | 180 | 110 | 91.0 | 66 |

| SIZE | A | L | H | B | Dn |
|------|-----|-----|-----|------|------|
| Φ 19 | 90 | 105 | 65 | 25.4 | 16.0 |
| Φ 25 | 110 | 105 | 70 | 50.5 | 22.4 |
| Φ 32 | 120 | 105 | 80 | 50.5 | 28.8 |
| Φ 38 | 140 | 130 | 80 | 50.5 | 35.1 |
| Φ 51 | 164 | 150 | 85 | 64.0 | 47.8 |
| Φ 57 | 170 | 160 | 110 | 77.5 | 53.0 |
| Φ 63 | 180 | 180 | 110 | 77.5 | 59.5 |