

集生产、研发、销售、服务 于一体阀门制造企业

Set production, research and development,
sales and service in one valve manufacturing enterprise

产品选型手册
Product selection manual

04

BALL VALVE SERIES 球阀系列



结构特点 Structure characteristics

浮动软密封不锈钢球阀用于PN16~PN63的各种管路上,用于截断或接通管路中的介质,选用不同的材质,可分别适用于水、蒸汽、油品、液化气、天然气、煤气、醋酸、氧化性介质、尿素等多种介质。

- a. 在各种阀门中,球阀的流动阻力最小,全径球阀打开时,球体通道、阀体通道和连接管径相等并成一直径,介质几乎可以毫无损失的流过。
- b. 球阀旋转90°即可全开全关,启闭迅速。与相同规格的闸阀、截止阀比较,球阀体积小、重量轻、便于管道安装。

Soft floating seal stainless steel ball valve used for PN16 ~ PN63 various piping, used to truncate or on line in the medium, choose no material, can be respectively suitable for water, steam, oil, liquefied petroleum gas, natural gas, coal gas, acetic acid, oxidizing medium, urea, and other media.

A, in all kinds of valve, ball valve flow resistance of the smallest, full bore ball valve is opened, the sphere channels, the body and connected to equal diameter and diameter, flow medium can be almost no losses.

B, ball valve can be rotated 90° seated fully open, opening and closing fast. Compared with the same specifications of the gate valve, globe valve, ball valve, small volume, light weight, easy to pipeline installation.

标准与规范 Standards and norms

| 设计标准 Design standard | 结构长度 Face to Face | 法兰连接尺寸 Flange End | 试验与检验 Test & Check | 压力-温度 Pressure-Temp. |
|-------------------------|----------------------|----------------------|-----------------------|-------------------------|
| GB/T 12237 API6D | GB/T 12221 | JB/T 79 HG20592 | JB/T 9092 GB/T 13927 | GB/T 12224 ASME B16.34 |

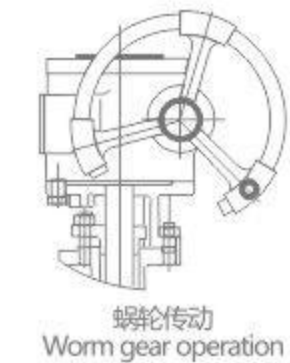
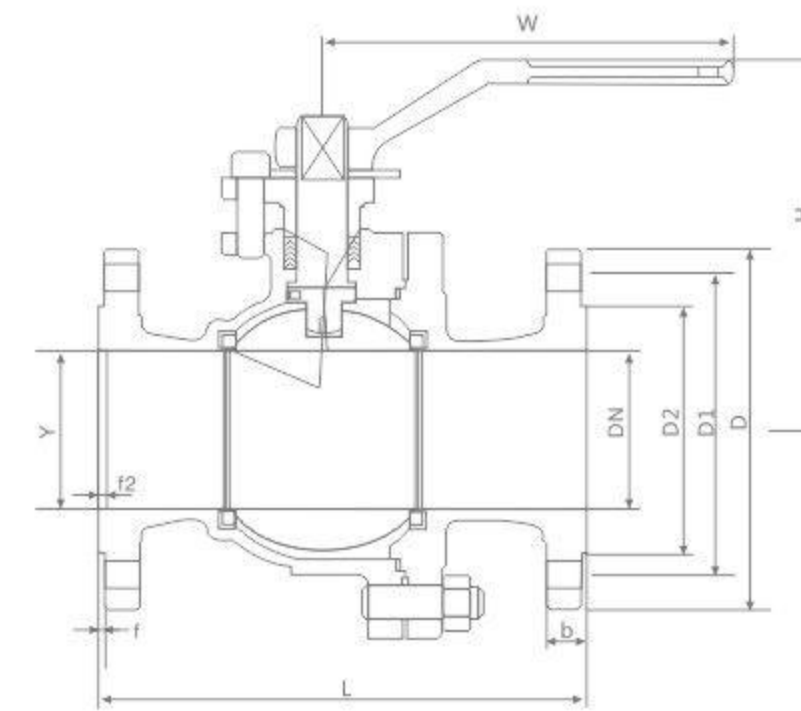
性能参数 performance parameters

| 序号 NO. | 项目名称 Project name | 项目名称 Project name | | | |
|-----------|---|--|------|------|------|
| | | PN16 | PN25 | PN40 | PN64 |
| 1 | 公称压力 (MPa) | 1.6 | 2.5 | 4.0 | 6.4 |
| 2 | 壳体强度试验压力 (MPa) Shell strength test pressure | 常温下公称压力的1.5倍 1.5 Times the nominal pressure at room temperature | | | |
| 3 | 高压密封试验压力 (MPa) High pressure seal test pressure | 常温下公称压力的1.1倍 1.1 Times the nominal pressure at room temperature | | | |
| 4 | 常温下工作压力 (MPa) Operating pressure at room temperature | ≤1.6 | ≤2.5 | ≤4.0 | ≤6.4 |

主要零件材料 Materials for Main Parts

| 名称 Name | 材料 Material | | | | | | | | |
|----------------------|---------------------|-------|------|-------|-------------|------------|------|------|------|
| 阀体/阀盖 Body/Bonnet | CF8 | CF3 | CF8M | CF3M | WCB | LCB | WC6 | WC9 | C5 |
| 球体 Ball | CF8 | CF3 | CF8M | CF3M | WCB Hcr | CF8 | CF8 | CF8 | CF8 |
| 阀杆 Stem | F304 | F304L | F316 | F316L | 2CR13 | F304 | F304 | F304 | F304 |
| 阀座 Seat | PTFE/PPL/304 | | | | | | | | |
| 填料/垫片 Packing/Gasket | PTFF | | | | 石墨 Graphite | | | | |
| 螺栓 Bolt | 不锈钢 Stainless Steel | | | | | 35CrMoA | | | |
| 螺母 Nut | 不锈钢 Stainless Steel | | | | | 45、35CrMoA | | | |
| 手柄 Handle | 铸钢 Cast Steel | | | | | | | | |

Q41/641/941F-16C/P/R/RL



主要外形和连接尺寸 Main external and connection dimension

单位Unit:mm

| 公称通径 DN | 主要外形和连接尺寸 Main external and connecting dimensions | | | | | | | | WT (kg) | |
|------------|---|-----|----------|-----------|-----------|------------|------------|-----|------------|-----|
| | L | D | D1 | D2 | b | f | Z-φd | H | | W |
| | Q41F-16C | | Q41F-16P | Q641F-16C | Q641F-16P | Q9B41F-16C | Q9B41F-16P | | | |
| 15 | 130 | 95 | 65 | 45 | 14 | 2 | 4-φ14 | 78 | 140 | 3 |
| 20 | 140 | 105 | 75 | 55 | 14 | 2 | 4-φ14 | 84 | 160 | 4 |
| 25 | 150 | 115 | 85 | 65 | 14 | 2 | 4-φ14 | 95 | 180 | 5 |
| 32 | 165 | 135 | 100 | 78 | 17 | 2 | 4-φ18 | 150 | 250 | 9 |
| 40 | 180 | 145 | 110 | 85 | 17 | 2 | 4-φ18 | 150 | 300 | 11 |
| 50 | 200 | 160 | 125 | 100 | 18 | 2 | 4-φ18 | 170 | 350 | 15 |
| 65 | 220 | 180 | 145 | 120 | 19 | 2 | 4-φ18 | 195 | 350 | 19 |
| 80 | 250 | 195 | 160 | 135 | 20 | 2 | 8-φ18 | 215 | 400 | 27 |
| 100 | 280 | 215 | 180 | 155 | 21 | 2 | 8-φ18 | 250 | 500 | 38 |
| 125 | 320 | 245 | 210 | 185 | 22 | 3 | 8-φ18 | 265 | 600 | 58 |
| 150 | 360 | 280 | 240 | 210 | 24 | 3 | 8-φ23 | 270 | 800 | 81 |
| 200 | 400 | 335 | 295 | 265 | 26 | 3 | 12-φ23 | 330 | 800 | 95 |
| 250 | 533 | 405 | 355 | 320 | 28 | 3 | 12-φ25 | 450 | 1300 | 140 |

Q41/341/641/941P-25~64/

JB/T 79.2-1994 JB/T 79.1-1994

主要外形和连接尺寸 Main external and connection dimension

单位Unit:mm

| 公称口径 DN | 主要外形和连接尺寸Main external and connecting dimensions | | | | | | | | | | WT (kg) |
|---|--|-----|-----|-----|----|-----|-----|--------|-----|------|------------|
| | L | D | D1 | D2 | b | Y | f2 | Z-Φd | H | W | |
| Q41F-25 Q41F-25P Q641F-25 Q641F-25P Q9B41F-25 Q9B41F-25P | | | | | | | | | | | |
| 15 | 130 | 95 | 65 | 45 | 16 | - | - | 4-Φ14 | 103 | 100 | 3 |
| 20 | 140 | 105 | 75 | 55 | 16 | - | - | 4-Φ14 | 112 | 160 | 4 |
| 25 | 150 | 115 | 85 | 65 | 16 | - | - | 4-Φ14 | 123 | 160 | 6 |
| 32 | 165 | 135 | 100 | 78 | 18 | - | - | 4-Φ18 | 150 | 250 | 10 |
| 40 | 180 | 145 | 110 | 85 | 18 | - | - | 4-Φ18 | 156 | 250 | 14 |
| 50 | 200 | 160 | 125 | 100 | 20 | - | - | 4-Φ18 | 172 | 350 | 20 |
| 65 | 220 | 180 | 145 | 120 | 22 | - | - | 8-Φ18 | 197 | 350 | 25 |
| 80 | 250 | 195 | 160 | 135 | 22 | - | - | 8-Φ18 | 222 | 450 | 30 |
| 100 | 280 | 230 | 190 | 160 | 24 | - | - | 8-Φ23 | 253 | 450 | 40 |
| 125 | 320 | 270 | 220 | 188 | 28 | - | - | 8-Φ25 | 275 | 600 | 65 |
| 150 | 360 | 300 | 250 | 218 | 30 | - | - | 8-Φ25 | 286 | 800 | 85 |
| 200 | 400 | 360 | 310 | 278 | 34 | - | - | 12-Φ25 | 340 | 1200 | 100 |
| 250 | 533 | 425 | 370 | 332 | 36 | - | - | 12-Φ30 | 470 | 1400 | 165 |
| Q41F-40 Q41F-40P Q341F-40 Q341F-40P Q641F-40 Q641F-40P Q9B41F-40 Q9B41F-40P | | | | | | | | | | | |
| 15 | 130 | 95 | 65 | 45 | 16 | 40 | 4 | 4-Φ14 | 103 | 100 | 3 |
| 20 | 140 | 105 | 75 | 55 | 16 | 51 | 4 | 4-Φ14 | 112 | 160 | 4 |
| 25 | 150 | 115 | 85 | 65 | 16 | 58 | 4 | 4-Φ14 | 123 | 160 | 6 |
| 32 | 180 | 135 | 100 | 78 | 18 | 66 | 4 | 4-Φ18 | 150 | 250 | 10 |
| 40 | 200 | 145 | 110 | 85 | 18 | 76 | 4 | 4-Φ18 | 156 | 250 | 14 |
| 50 | 220 | 160 | 125 | 100 | 20 | 88 | 4 | 4-Φ18 | 172 | 350 | 20 |
| 65 | 250 | 180 | 145 | 120 | 22 | 110 | 4 | 8-Φ18 | 197 | 350 | 25 |
| 80 | 280 | 195 | 160 | 135 | 22 | 121 | 4 | 8-Φ18 | 222 | 450 | 30 |
| 100 | 320 | 230 | 190 | 160 | 24 | 150 | 4.5 | 8-Φ23 | 253 | 450 | 40 |
| 125 | 400 | 270 | 220 | 188 | 28 | 176 | 4.5 | 8-Φ25 | 275 | 600 | 65 |
| 150 | 400 | 300 | 250 | 218 | 30 | 204 | 4.5 | 8-Φ25 | 286 | 800 | 85 |
| 200 | 550 | 375 | 320 | 282 | 38 | 260 | 4.5 | 12-Φ30 | 340 | 1200 | 100 |
| 250 | 568 | 445 | 385 | 345 | 42 | 313 | 4.5 | 12-Φ34 | 470 | 1400 | 165 |
| Q41F-63 Q41F-63P Q341F-63 Q341F-63P Q641F-63 Q641F-63P Q9B41F-63 Q9B41F-63P | | | | | | | | | | | |
| 15 | 140 | 105 | 75 | 55 | 18 | 40 | 4 | 4-Φ14 | 105 | 130 | 3.1 |
| 20 | 155 | 125 | 90 | 68 | 20 | 51 | 4 | 4-Φ18 | 125 | 130 | 4.9 |
| 25 | 180 | 135 | 100 | 78 | 22 | 58 | 4 | 4-Φ18 | 135 | 160 | 7.2 |
| 32 | 200 | 150 | 110 | 82 | 24 | 66 | 4 | 4-Φ23 | 150 | 160 | 8.7 |
| 40 | 220 | 165 | 125 | 95 | 24 | 76 | 4 | 4-Φ23 | 165 | 230 | 12.1 |
| 50 | 250 | 175 | 135 | 105 | 26 | 88 | 4 | 4-Φ23 | 175 | 230 | 16.7 |
| 65 | 280 | 200 | 160 | 130 | 28 | 110 | 4 | 8-Φ23 | 200 | 400 | 28.2 |
| 80 | 320 | 210 | 170 | 140 | 30 | 121 | 4 | 8-Φ23 | 210 | 400 | 36 |
| 100 | 350 | 250 | 200 | 168 | 32 | 150 | 4.5 | 8-Φ25 | 250 | 700 | 66 |
| 125 | 455 | 295 | 240 | 202 | 36 | 176 | 4.5 | 8-Φ30 | 295 | 1100 | 98 |
| 150 | 495 | 340 | 280 | 240 | 38 | 204 | 4.5 | 8-Φ34 | 340 | 1500 | 142 |

设计 Design

球阀为提供最大的操作寿命和可靠性而设计和生产的，所有的球阀都符合美国石油学会标准API608和API6D的求和英标BS 5351与美国机械工程师协会标准ASME B16.34一致。阀门由完整的阀体、阀盖和内件组成。

ball valve are designed and manufactured to provide maximum service life and dependability. All ball valves are full ported and meet the design requirements of API Standard API 600&API 6D, British Standard BS 5351 and generally conform to American Society of Mechanical Engineers Standard ASME B 16.34. Valves are available in a complete range of body/bonnet materials and trims.

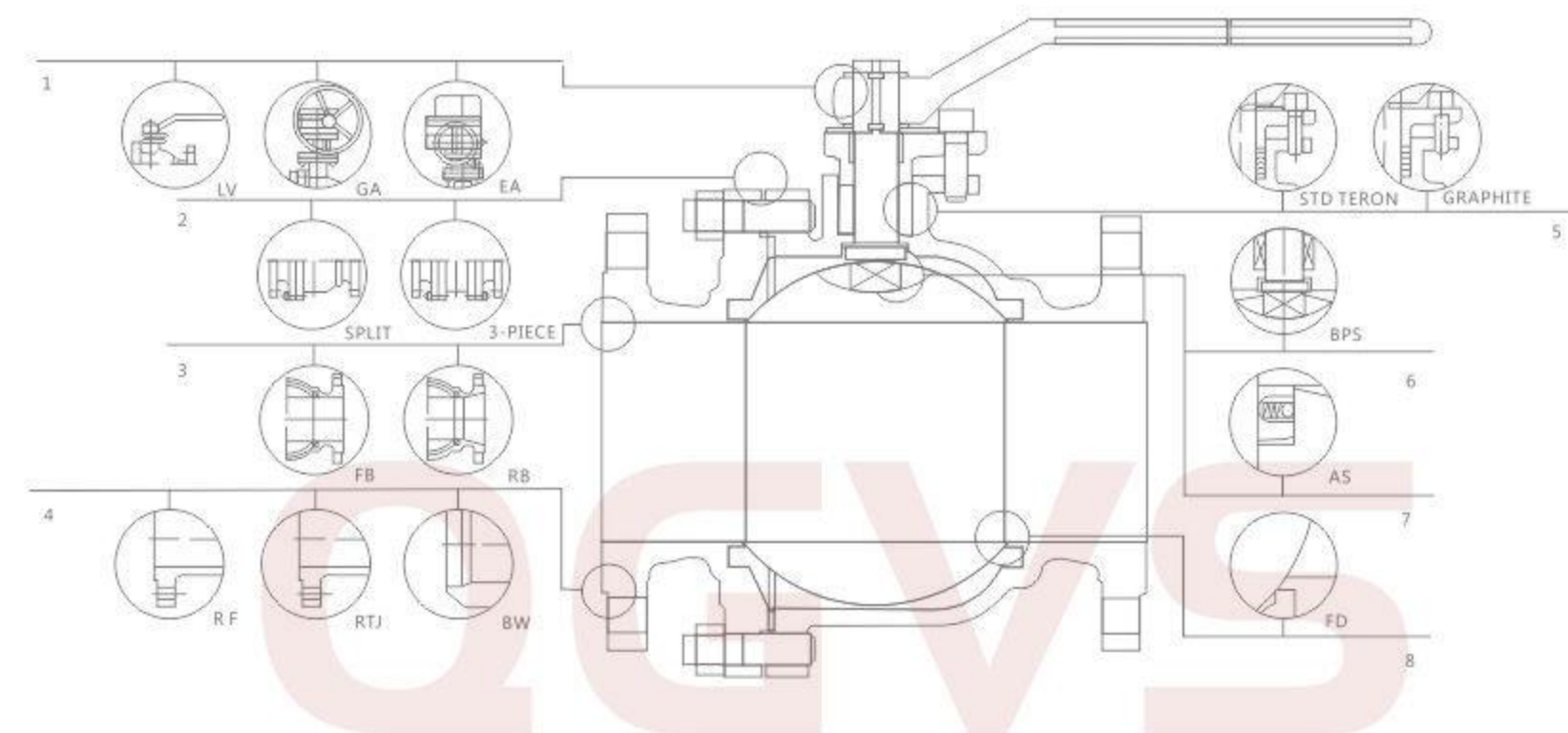
阀门的商标可以按照客户的要求修改 Available Modifications For Trademark Cast Steel Valves

- | | | | |
|------------|--------------------------------|--------------|--|
| * 内件变化 | * Trim changes | * 压力调节 | * Pressure Equalizing |
| * 连接方式改变 | * End connection Modifications | * 静电弹簧/防火标准 | * AS or FD |
| * 填料和垫片的改变 | * Packing and Gasket Changes | * 客户的特殊铸造要求 | * Customer specified Coatings |
| * 固定式操作 | * Operator Mounting | * 焊接端的内孔改变 | * Weld End Bore Changes |
| * 加长手柄 | * Handwheel Extensions | * 氧/氯气的清洁及包装 | * Oxygen & Chlorine Cleaning & Packaging |

材料范围 Rang of Materials

阀体/阀盖的材料包括碳含量的九个等级，低合金和不锈钢，在特殊的适用中，他们可用合金和不锈钢的其他等级。有许多内件供不同的环境下使用，填料和垫片的选择也为各种环境所具备。

Standard body/bonnet materials include nine grades of carbon, low alloy and stainless steels. For special applications they can be supplied in other grades of alloy and stainless steel. There's a full range of trim materials to match any service. Optional packing and gasket materials are available for a full range of service conditions.



1、操作 Operating

用手柄更容易操作，同样也可以用蜗轮、电动、气动、液动，他们用于更艰难的环境下
Extended lever for easy operation. Also available with gearing, motor actuator, pneumatic or hydraulic actuators for more difficult services.

3、通径 BORE

全通径和缩径全通径适用于大的流量介质，也可请扫管路
Full and reduced full diameters are suitable for large flow media, also please sweep the pipe

5、填料 Packing

标准填料一般采用特氟龙材质，保证填料在高循环的压缩和严峻的操作环境下，石墨填料适合高温条件下使用
STD Packing Multiple V-TEFLON packing, combined with live loading, maintains packing compression under high-cycle and severe service applications. Graphite packing use situation for high-temperature.

7、静电弹簧 AS

这种连接总是在球体和阀杆/阀体之间运动卸载最终在操作时静止
This connection always moves between the ball and stem/body and the unloading eventually stops during operation

2、阀体-阀盖

BODY & BONNET
不采3片式12"以下的阀体、阀盖，用这种结构更方便于外部零件的修理和替换
Split or 3-piece split body & bonnet for 12" & small Disassembles easily for repair or replacement of internal components.

4、连接方式

End Connections
可采用法兰连接、环连接、对接焊管件
Flange connection, ring connection and butt welding fitting can be used

6、阀杆防脱 BPS

防止阀杆脱落，一个压力安全的阀杆设计应该是有防脱结构，在正常压力下不易飞出
To prevent stem shedding, a pressure-safe stem design should be designed with a trip-proof design that does not fly out under normal pressure

8、防火标志 FD

根据API607或BS6755来设计，确保他们在发生火灾时的操作适用性，其次金属密封面当主要的密封面被火破坏时就像是一层隔离墙，符合API607的阀门带石墨填料和垫片
Fire Durable. Designed according to API607 or BS6755 to ensure their operability in case of fire, the metal sealing surface ACTS as a barrier when the main sealing surface is damaged by fire, and API607 compliant valves with graphite packing and gaskets

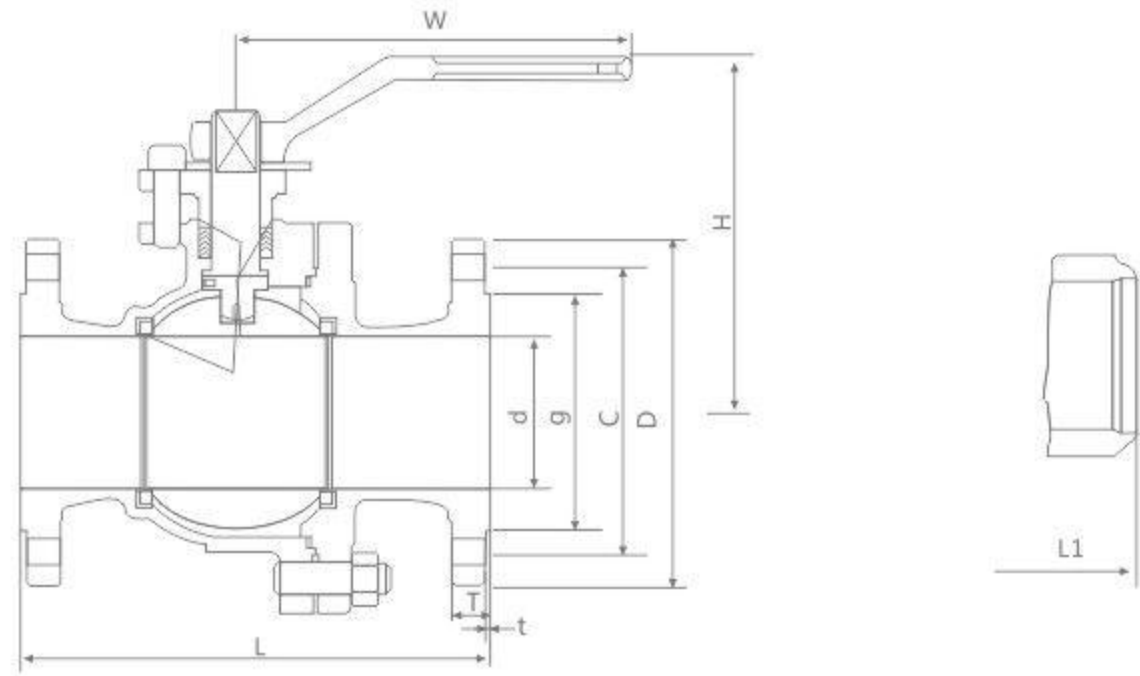
API FLANGED FLOATING BALL VALVE

美标法兰浮动球阀

API FLANGED FLOATING BALL VALVE

美标法兰浮动球阀

Q41F-150Lb



应用标准

球阀符合API 608/API 6D标准
球阀符合ISO 10434/ISO 14313标准
防火标志采用API 607 标准
防静电采用API 608标准
符合ASME B 16.34标准
结构长度符合ASME B 16.10标准
法兰尺寸符合ASME B 16.5标准
对接焊符合ASME B 16.25标准
试验与检验符合API 598/API 6D标准

Applicable standards

BALL VALVES, API 608/API 6D
BALL VALVES, ISO 10434/ISO 14313
FIRE DURABLE, API 607
ANTI STATIC, API 608
VALVES, ASME B 16.34
FACE TO FACE, ASME B 16.10
END FLANGES, ASME B 16.5
BUTTWELDING ENDS, ASME B 16.25
INSPECTION AND TEST, API 598/API 6D

设计描述

全通径设计
螺栓连接
浮动结构
防脱阀杆
防火设计
静电装置
切断装置
ISO5211 固定盘
法兰/焊接端
蜗轮操作

Design description:

FULL PORT DESIGN
BB, BOLTED BONNET, SPLIT BODY
FLOATING BALL TYPE
BLOW-OUT PROOF STEM
FIRE DURABLE CONSTRUCTION
ANTI STATIC DEVICE
STOPPER DEVICE
ISO5211 MOUNTING PAD
FLANGED OR BUTT WELDING ENDS
AVAILABLE WITH BG OPERATOR

各部件材质 Materials of parts

| 序号 NO | 零件名称 Part Name | ASTM材质 ASTM Material | | |
|----------|-------------------------|-------------------------|----------------|----------|
| | | 碳钢Carbon Steel | CF8M | CF8 |
| 1 | 阀体Body | A216-WCB | A351-CF8M | CF8 |
| 2 | 阀盖Bonnet | A216-WCB | A351-CF8M | CF8 |
| 3 | 球Ball | A182-F3041) | A182-F316 | F304 |
| 4 | 阀杆Stem | A276-304 | A276-316 | F304 |
| 5 | 阀座Seat seat | | R.PTFE | |
| 6 | 垫片Gasket | 石墨+3042) Graphite+3042) | PTFE | PTFE |
| 7 | 阀盖螺栓 Valve cover bolt | A193-B7 | A193-B8M | A193-B8M |
| 8 | 阀盖螺母 Valve cover nut | A194-2H | A194-8M | A194-8M |
| 9 | 填料Packing | | PTFE | PTFE |
| 10 | 填料压板Packing press plate | A216-WCB | CF8 | CF8 |
| 11 | 填料螺栓Packing bolt | A193-B7 | A193-B8M | A193-B8M |
| 12 | 定位片 Positioning sheet | 碳钢Carbon Steel | F304 | F304 |
| 13 | 手柄Handle | | 碳钢Carbon Steel | |

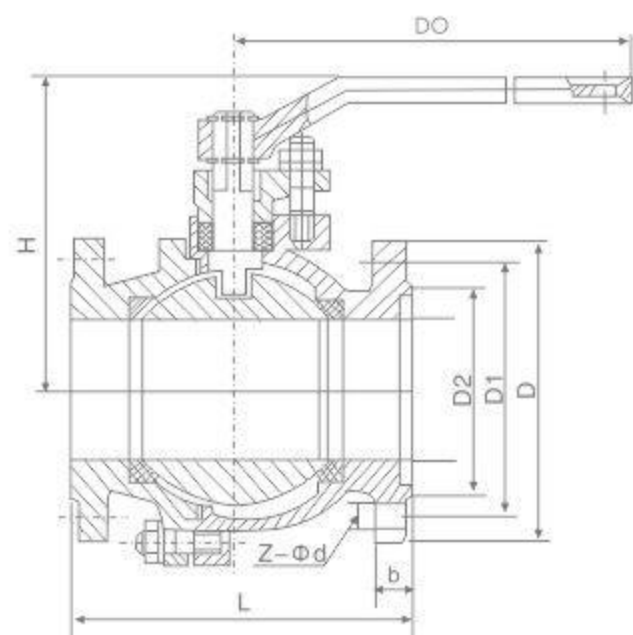
注释: 1、A105+ENP 可选择的 Note:1)A105+ENP optional 2、缠绕石墨垫片 2).Spiral wound construction.

主要连接尺寸 Main connection dimensions

| 公称压力 Nominal pressure | Size DN | Dimensions(mm) | | | | | | | | | |
|--------------------------|------------|----------------|-----|-----|-------|-----|------|-----|------|-------|-------|
| | | d | L | D | C | g | T | t | H | W | n-Φ |
| class 150Lb | 1/2" | 15 | 108 | 89 | 60.5 | 35 | 12.7 | 1.6 | 87.5 | 142 | 4-15 |
| | 3/4" | 20 | 117 | 98 | 70.0 | 43 | 12.7 | 1.6 | 87.5 | 142 | 4-15 |
| | 1" | 25 | 127 | 108 | 79.5 | 51 | 13 | 1.6 | 91.5 | 142 | 4-15 |
| | 1 1/4" | 32 | 140 | 117 | 89 | 64 | 14.5 | 1.6 | 107 | 190 | 4-15 |
| | 1 1/2" | 40 | 165 | 127 | 98.5 | 73 | 15 | 1.6 | 128 | 200 | 4-15 |
| | 2" | 50 | 178 | 152 | 120.5 | 92 | 16 | 1.6 | 136 | 200 | 4-19 |
| | 2 1/2" | 65 | 190 | 178 | 139.5 | 105 | 18 | 1.6 | 158 | 300 | 4-19 |
| | 3" | 80 | 203 | 190 | 152.5 | 127 | 19 | 1.6 | 196 | 350 | 4-19 |
| | 4" | 100 | 229 | 229 | 190.5 | 157 | 24 | 1.6 | 212 | 700 | 4-19 |
| | 5" | 125 | 256 | 254 | 215.9 | 186 | 24 | 1.6 | 252 | 1100 | 8-22 |
| | 6" | 150 | 394 | 279 | 241.5 | 261 | 26 | 1.6 | 272 | 1100 | 8-22 |
| | 8" | 200 | 457 | 343 | 298.5 | 270 | 29 | 1.6 | 342 | 1500 | 8-22 |
| | 10" | 250 | 533 | 406 | 362 | 324 | 30 | 1.6 | 345 | 1500 | 12-25 |
| | 12" | 305 | 610 | 483 | 432 | 381 | 32 | 1.6 | 385 | | 12-25 |
| 14" | 337 | 686 | 535 | 476 | 413 | 35 | 1.6 | 430 | | 12-29 | |
| 16" | 387 | 762 | 597 | 540 | 470 | 37 | 1.6 | 470 | | 16-29 | |
| 18" | 489 | 914 | 698 | 635 | 582 | 43 | 1.6 | 590 | | 16-32 | |

主要连接尺寸 Main connection dimensions

| 公称压力 Nominal pressure | Size DN | Dimensions(mm) | | | | | | | | | |
|--------------------------|------------|----------------|-----|-------|-------|-------|------|-----|------|-------|------|
| | | d | L | D | C | g | T | t | H | W | n-Φ |
| class 300Lb | 1/2" | 15 | 140 | 95 | 66.5 | 35 | 15 | 1.6 | 87.5 | 142 | 4-15 |
| | 3/4" | 20 | 152 | 117 | 82.5 | 43 | 16 | 1.6 | 87.5 | 142 | 4-15 |
| | 1" | 25 | 165 | 124 | 89.0 | 51 | 18 | 1.6 | 91.5 | 142 | 4-19 |
| | 1 1/4" | 32 | 178 | 133 | 98.5 | 64 | 19 | 1.6 | 107 | 190 | 4-19 |
| | 1 1/2" | 40 | 190 | 156 | 114.5 | 73 | 21 | 1.6 | 128 | 200 | 4-22 |
| | 2" | 50 | 216 | 165 | 127 | 92 | 23 | 1.6 | 136 | 200 | 8-19 |
| | 2 1/2" | 65 | 241 | 190 | 149 | 105 | 26 | 1.6 | 158 | 300 | 8-22 |
| | 3" | 80 | 283 | 210 | 168.5 | 127 | 29 | 1.6 | 202 | 350 | 8-22 |
| | 4" | 100 | 305 | 254 | 200 | 157 | 32 | 1.6 | 218 | 700 | 8-22 |
| | 5" | 125 | 381 | 279 | 235 | 186 | 35 | 1.6 | 252 | 1100 | 8-22 |
| 6" | 150 | 403 | 318 | 270 | 216 | 37 | 1.6 | 272 | 1100 | 12-22 | |
| 8" | 200 | 502 | 381 | 330 | 270 | 41 | 1.6 | 342 | 1500 | 12-25 | |
| 10" | 250 | 568 | 444 | 387.5 | 324 | 48 | 1.6 | 345 | 1500 | 16-29 | |
| class 600Lb | 1/2" | 15 | 165 | 95 | 66.5 | 35 | 15 | 6.4 | 59 | 160 | 4-16 |
| | 3/4" | 20 | 190 | 117 | 82.5 | 43 | 16 | 6.4 | 63 | 160 | 4-19 |
| | 1" | 25 | 216 | 124 | 89.0 | 51 | 18 | 6.4 | 75 | 230 | 4-19 |
| | 1 1/4" | 32 | 229 | 133 | 98.5 | 64 | 21 | 6.4 | 85 | 300 | 4-19 |
| | 1 1/2" | 40 | 241 | 156 | 114.5 | 73 | 22.3 | 6.4 | 95 | 400 | 4-22 |
| | 2" | 50 | 292 | 165 | 127 | 92 | 25.4 | 6.4 | 107 | 700 | 8-19 |
| | 4" | 100 | 432 | 273 | 216 | 157.2 | 38 | 6.4 | 178 | 1100 | 8-25 |
| | 5" | 125 | 491 | 330 | 267 | 186 | 44.5 | 6.4 | 225 | 1100 | 8-29 |
| 6" | 152 | 559 | 356 | 282 | 216 | 47.2 | 6.4 | 250 | 1500 | 12-29 | |
| 8" | 203 | 660 | 419 | 349 | 282 | 55.7 | 6.4 | 294 | 1500 | 12-32 | |



执行标准 Execution standard

| 设计标准 Design standard | 结构长度 Face to Face | 法兰连接尺寸 Flange End | 压力-温度 Pressure-Temp. | 试验与检验 Test & Check |
|-------------------------|----------------------|----------------------|-------------------------|-----------------------|
| BS 5351 | JIS B2002 | JIS B2212 B2214 | JIS B2201 | JIS B2003 |

规格主要尺寸 Main size

| DN | | 10K | | | | | | | |
|-----|--------|-------|-----|-----|-----|----|--------|-----|------|
| mm | in | L | D | D1 | D2 | B | Z-φd | H | D0 |
| 15 | 1/2" | 108 | 95 | 70 | 52 | 12 | 4-φ15 | 59 | 130 |
| 20 | 3/4" | 117 | 100 | 75 | 58 | 14 | 4-φ15 | 63 | 130 |
| 25 | 1" | 127 | 125 | 90 | 70 | 14 | 4-φ19 | 75 | 160 |
| 32 | 1 1/4" | 140 | 135 | 100 | 80 | 16 | 4-φ19 | 75 | 160 |
| 40 | 1 1/2" | 165 | 140 | 105 | 85 | 16 | 4-φ19 | 95 | 230 |
| 50 | 2" | 178 | 155 | 120 | 100 | 16 | 4-φ19 | 107 | 230 |
| 65 | 2 1/2" | 190 | 175 | 140 | 120 | 18 | 4-φ19 | 142 | 400 |
| 80 | 3" | 203 | 185 | 150 | 130 | 18 | 8-φ19 | 152 | 400 |
| 100 | 4" | 229 | 210 | 175 | 155 | 18 | 8-φ19 | 178 | 700 |
| 125 | 5" | 356 | 250 | 210 | 185 | 20 | 8-φ23 | 252 | 1100 |
| 150 | 6" | 394 | 280 | 240 | 215 | 22 | 8-φ23 | 272 | 1100 |
| 200 | 8" | 457 | 330 | 290 | 265 | 22 | 12-φ23 | 342 | 1500 |
| | | 20K | | | | | | | |
| 15 | 1/2" | 140 | 95 | 70 | 52 | 14 | 4-φ15 | 59 | 130 |
| 20 | 3/4" | 152 | 100 | 75 | 58 | 16 | 4-φ15 | 63 | 130 |
| 25 | 1" | 165 | 125 | 90 | 70 | 16 | 4-φ19 | 75 | 160 |
| 32 | 1 1/4" | 178 | 135 | 100 | 80 | 18 | 4-φ19 | 75 | 160 |
| 40 | 1 1/2" | 190.5 | 140 | 105 | 85 | 18 | 4-φ19 | 95 | 230 |
| 50 | 2" | 216 | 155 | 120 | 100 | 18 | 8-φ19 | 107 | 230 |
| 65 | 2 1/2" | 241 | 175 | 140 | 120 | 20 | 8-φ19 | 142 | 400 |
| 80 | 3" | 283 | 200 | 160 | 135 | 22 | 8-φ22 | 152 | 400 |
| 100 | 4" | 305 | 225 | 185 | 160 | 24 | 8-φ22 | 178 | 700 |
| 125 | 5" | 381 | 270 | 225 | 195 | 26 | 8-φ22 | 252 | 1100 |
| 150 | 6" | 403 | 305 | 260 | 230 | 28 | 12-φ22 | 272 | 1100 |
| 200 | 8" | 502 | 350 | 305 | 275 | 30 | 12-φ25 | 342 | 1500 |

结构特点及用途
Structural characteristics and uses

1、操作省力：球体由上下轴承支撑，减少摩擦，消除了由于进口压力推动球体与密封座形成的巨大密封负荷而造成过大的扭矩。

1、 Operation: ball bearings supported by the up and down, to reduce friction, eliminate the pressure as imports to promote the formation of the sphere and the great seal sealed seat load caused by excessive torque.

2、密封性能可靠（见图1）：PTFE弹性材料密封圈嵌于不锈钢阀座内，金属阀座尾端没有弹簧，保证密封圈足够的预紧力，阀门在使用过程中密封面摩擦损时，在弹簧作用下阀门继续保证良好密封性能。

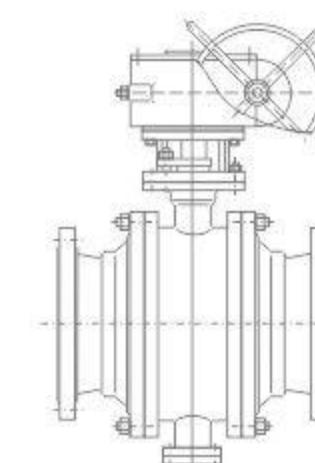
2、 Sealing performance and reliable (see Figure 1): PTFE elastic material embedded in stainless steel valve seat ring, the metal spring seat no end, to ensure adequate preload ring, valve sealing surface in the course of friction loss When the valve under the action of the spring to ensure good sealing performance.

3、防火结构（见图2）：为防止由于骤热或火灾的出现，使聚四氟乙烯密封圈烧毁，发生较大泄漏，而助长火势，在球体与阀座间设置防火密封环，在密封圈烧毁时，在弹簧力作用下，将阀座密封环迅速推向球体上，形成金属与金属密封，起到一定程度的密封效果。耐火试验符合API 6FA和API 607标准要求。

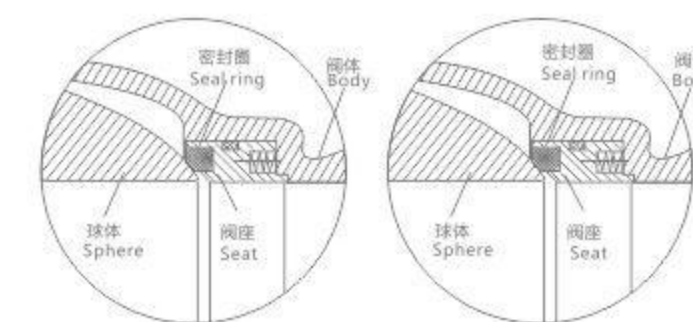
3、 Fire structure (see Figure 2): In order to prevent the sudden appearance of heat or fire to burn PTFE seals, large leak occurred, and contribute to the fire, the fire ball and set the seal ring between the valve seat, in the ring when burned, under the action of the spring force will quickly push the ball valve seat seal ring, the formation of metal to metal seal, play a certain degree of sealing effect. The fireproof experiment conforms to API 6FA and the API 607 standard requests.

4、自动泄压功能（见图3）：当阀门中腔停滞的介质压力异常升高超过弹簧的预紧力时，阀座后退脱离球体，达到自动泄压的效果，卸压后阀座自动复位。

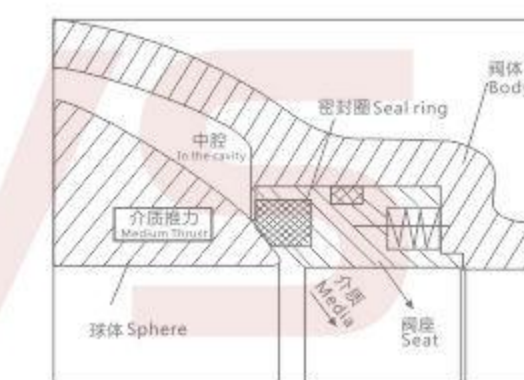
4、 Automatic pressure relief function (see Figure 3): When the valve is in a stagnant medium pressure in the cavity increased over the spring preload, the seat back from the ball, to the effect of automatic pressure relief, pressure relief valve seat after automatically reset.



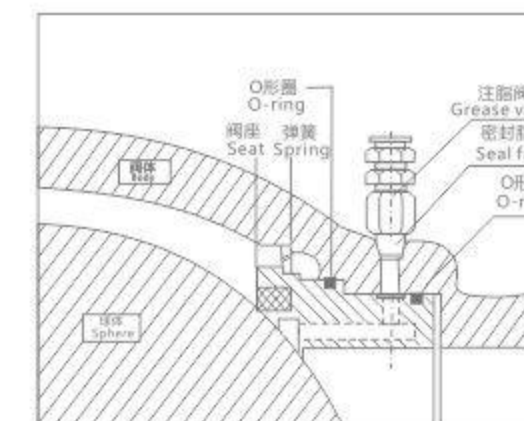
图一 Figure 1



图二 Figure 2



图三 Figure 3



图四 Figure 4

5、排泄管路：阀体上下均设置排泄孔，可检查阀座是否发生泄漏，在工作中，阀门处于全开或全关时，卸掉中腔压力，可直接更换填料；可以排放中腔滞留物，减少介质对阀门的污染。

辅助密封设置系统（客户需要在订购时说明）

5、Discharge tube: the upper and lower body were set to vent, to check whether the leak valve seat, at work, the valve is fully open or fully closed, the removal of the pressure in the cavity can directly replace the packing; to emissions cavity left in reducing pollution of medium on the valve.

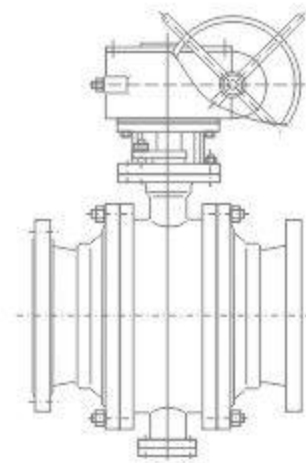
Auxiliary sealing set the system (customer needs when ordering please specify)

6、见图4：本阀门设计有辅助的阀座紧急密封系统，一旦密封受损或出现紧急情况而不能密封时，通过辅助密封系统向密封面注射相应的密封剂即可修复密封面，达到紧急密封。当输送的介质不洁或含有少量颗粒时，为保护密封面，确保达到可靠的密封，还可给这一装置注射相应的清洗剂或润滑剂对密封面进行清洗。

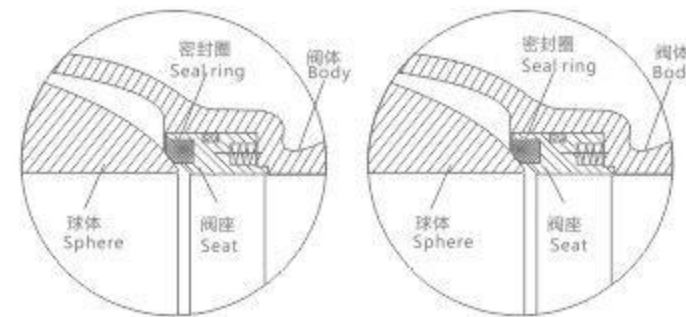
6、Figure 4: The auxiliary valve seat designed for emergency sealing system, once the seal damage or emergency situations cannot be sealed, through the auxiliary sealing system corresponding to the sealing surface sealant injection sealing surface can be repaired, to an emergency seal. When the transport medium or containing a small amount of contaminated particles, in order to protect the sealing surface and ensure that a reliable seal, the device can also be injected to the appropriate cleaning agents or lubricants on the sealing surface cleaning.

7、广泛适用于食品、医药、石油、化工、天然气、钢铁、环保、造纸等输送管路介质的切断或流通。还可给这一装置注射相应的清洗剂或润滑剂对密封面进行清洗。

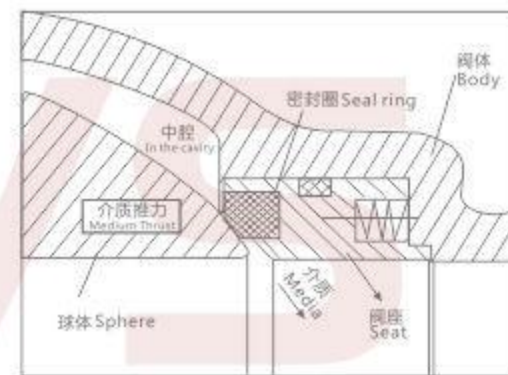
7、Widely used in food, medicine, petroleum, chemical, natural gas, steel, environmental protection, paper and other media to cut off pipeline transportation or circulation. The device can also be injected to the appropriate cleaning agents or lubricants on the sealing surface cleaning.



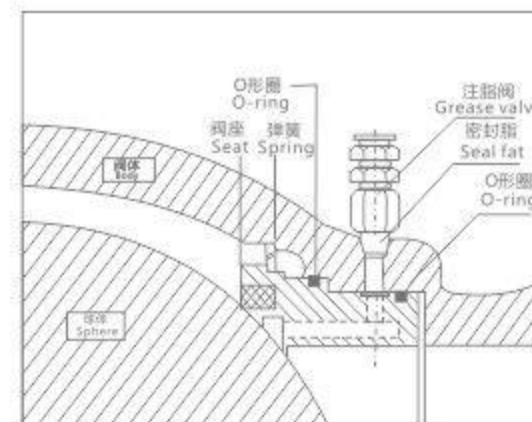
图一 Figure 1



图二 Figure 2



图三 Figure 3



图四 Figure 4

执行标准 Implementation of standards

- 1、设计和制造 Design and manufacture : GB/T 12237-1989; API 608
- 2、检验和试验 Inspection and test : GB/T 13927-1992; API 598
- 3、法兰连接 Flange connection : JB/T 79.1 ~ 2-1994; ASME/ANSI B 16.5
- 4、结构长度 Structure length : GB/T 12221-1989; ASME/ANSI B 16.10

性能规范 Performance Specifications

试验压力 Test pressure 单位 Unit : MPa

| 公称压力 PN | 常温最大工作压力 Max temperature Working pressure | 壳体试验压力 Case Test pressure | 气密封试验压力 Gas Seals test pressure | 高压密封试验压力 High-pressure sealing Test pressure |
|-----------|--|------------------------------|------------------------------------|---|
| 1.6 | 1.6 | 2.4 | 0.6 | 1.76 |
| 2.5 | 2.5 | 3.8 | 0.6 | 2.75 |
| 4.0 | 4.0 | 6.0 | 0.6 | 4.4 |
| 6.4 | 6.4 | 9.6 | 0.6 | 7.1 |
| Class 150 | 2.0 | 3.0 | 0.6 | 2.2 |
| Class 300 | 5.0 | 7.5 | 0.6 | 5.5 |

使用范围 Terms of Use

| 壳体材料 Shell material | 阀座材料 Seat material | 适用温度 Applicable temperature | 适用介质 Applicable media |
|---|----------------------------------|--------------------------------|-------------------------------------|
| 碳钢C型 Carbon Steel C | 聚四氟乙烯PTFE | ≤150°C | 水、蒸汽、油品等 Water, steam, oil, etc. |
| | 对位聚苯 Counterpoint polystyrene | ≤250°C | |
| 铬镍钛钢P型 Chrome P-type nickel-titanium steel | 聚四氟乙烯PTFE | ≤150°C | 硝酸类 Nitric acid |
| | 对位聚苯 Counterpoint polystyrene | ≤200°C | |
| 铬镍钼钛钢R型 Chrome-nickel steel R-Mo Ti | 聚四氟乙烯PTFE | ≤150°C | 醋酸类 Acetic acid |
| | 对位聚苯 Counterpoint polystyrene | ≤200°C | |

主要零件材料 Main components material

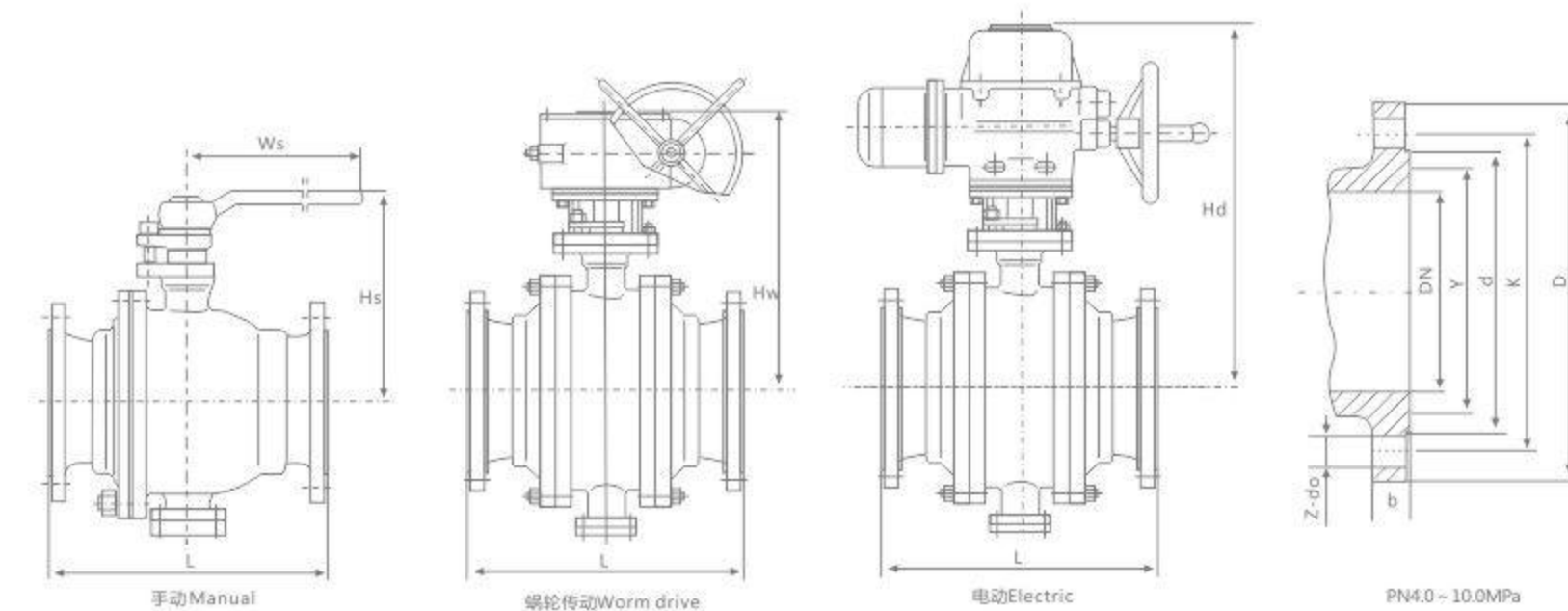
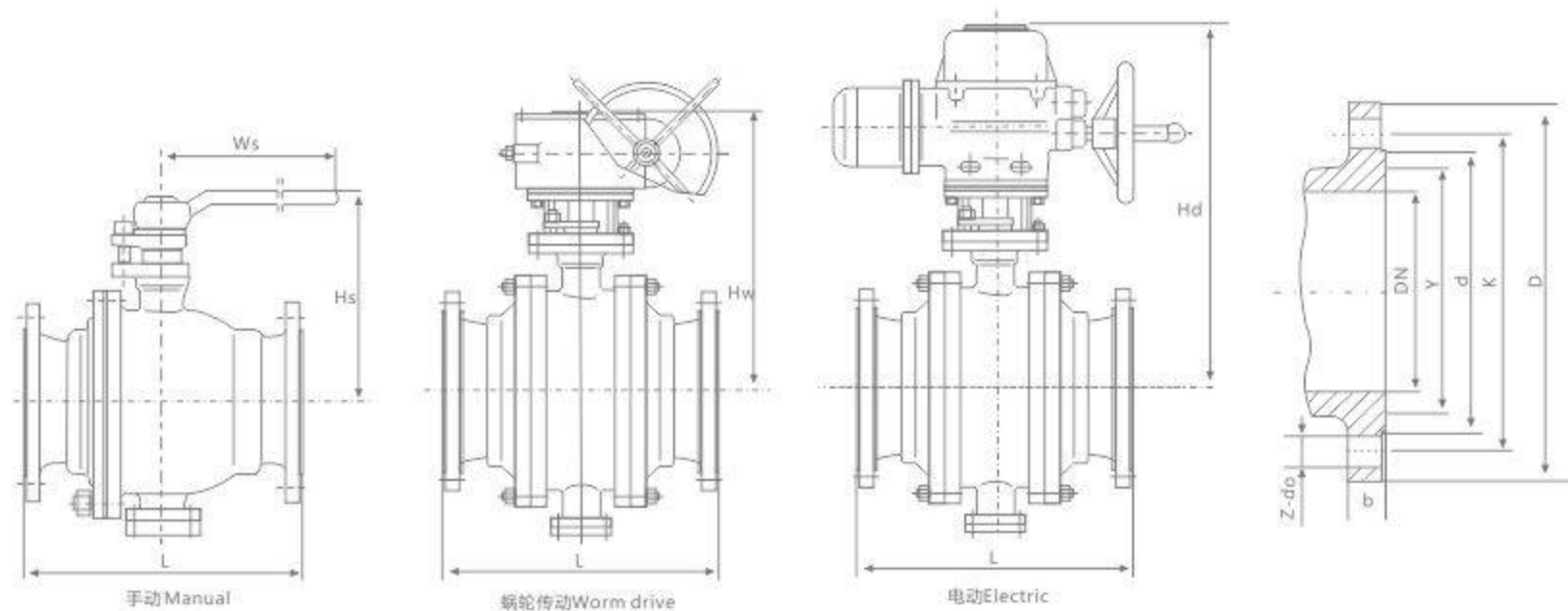
| 零件名称 | GB | WCB | ZG0Cr18Ni9 | ZG0Cr17Ni12Mo2 |
|-----------------------|------|------------|---------------|-------------------|
| 阀体、阀盖 Body, bonnet | ASTM | WCB | CF8 | CF8M |
| | GB | 2Cr13 | 0Cr18Ni9 | 0Cr17Ni12Mo2 |
| 球体 Ball body | ASTM | 420 | 304 | 316 |
| | GB | 2Cr13 | 0Cr18Ni9 | 1Cr18Ni12Mo2Ti |
| 阀杆 Stem | ASTM | 420 | 304 | 316 |
| | GB | 2Cr13/PTFE | 0Cr18Ni9/PTFE | 0Cr17Ni12Mo2/PTFE |
| 阀座 Seat | ASTM | 420/PTFE | 304/PTFE | 316/PTFE |
| | GB | PTFE | PTFE | PTFE |
| 填料 Packing | ASTM | PTFE | PTFE | PTFE |
| | GB | 35 | 0Cr18Ni9 | 0Cr18Ni9 |
| 螺栓 Bolt | ASTM | A193 B7 | A320-B8 | A320-B8 |
| | GB | 45 | 0Cr18Ni9 | 0Cr18Ni9 |
| 螺母 Nut | ASTM | A194 2H | A190-8 | A194-8 |

FIXED METAL SEAL BALL VALVE

Q47F/Y/H型固定金属密封球阀

FIXED METAL SEAL BALL VALVE

Q47F/Y/H型固定金属密封球阀



主要连接尺寸 Main connection dimensions

JB/T79.1

| 公称压力 PN | 公称直径 DN | 尺寸Size (mm) | | | | | | | | | | |
|------------|------------|-------------|------|------|------|----|-------|-------|------|------|------|------|
| | | L | D | K | d | Y | b | Z-do | Ws | Hs | Hw | Hd |
| 1.6MPa | 150 | 394 | 280 | 240 | 210 | - | 22 | 8-23 | 1000 | 305 | 470 | 540 |
| | 200 | 457 | 335 | 295 | 265 | - | 24 | 12-23 | - | - | 520 | 580 |
| | 250 | 533 | 405 | 355 | 320 | - | 26 | 12-25 | - | - | 610 | 640 |
| | 300 | 610 | 460 | 410 | 375 | - | 28 | 12-25 | - | - | 650 | 690 |
| | 350 | 686 | 520 | 470 | 435 | - | 32 | 16-25 | - | - | 740 | 785 |
| | 400 | 762 | 580 | 525 | 485 | - | 36 | 16-30 | - | - | 795 | 830 |
| | 450 | 864 | 640 | 585 | 545 | - | 38 | 20-30 | - | - | 860 | 910 |
| | 500 | 914 | 705 | 650 | 608 | - | 42 | 20-34 | - | - | 945 | 990 |
| | 600 | 1067 | 840 | 770 | 718 | - | 46 | 20-41 | - | - | 1040 | 1090 |
| | 700 | 1245 | 910 | 840 | 788 | - | 48 | 24-41 | - | - | 1150 | 1210 |
| | 800 | 1372 | 1020 | 950 | 898 | - | 50 | 24-41 | - | - | 1280 | 1340 |
| | 900 | 1524 | 1120 | 1050 | 998 | - | 52 | 28-41 | - | - | 1430 | 1510 |
| | 1000 | 1753 | 1255 | 1170 | 1110 | - | 54 | 28-48 | - | - | 1580 | 1640 |
| | 1200 | 2032 | 1485 | 1390 | 1325 | - | 56 | 32-54 | - | - | 1810 | 1910 |
| 1400 | 2300 | 1685 | 1590 | 1525 | - | 60 | 36-54 | - | - | 2010 | 2115 | |
| 2.5MPa | 150 | 403 | 300 | 250 | 218 | - | 30 | 8-25 | 1000 | 305 | 470 | 555 |
| | 200 | 502 | 360 | 310 | 278 | - | 34 | 12-25 | - | - | 540 | 595 |
| | 250 | 568 | 425 | 370 | 332 | - | 36 | 12-30 | - | - | 630 | 655 |
| | 300 | 648 | 485 | 430 | 390 | - | 40 | 16-30 | - | - | 650 | 705 |
| | 350 | 762 | 550 | 490 | 448 | - | 44 | 16-34 | - | - | 740 | 795 |
| | 400 | 838 | 610 | 550 | 505 | - | 48 | 16-34 | - | - | 795 | 830 |
| | 450 | 914 | 660 | 600 | 555 | - | 50 | 20-34 | - | - | 860 | 910 |
| | 500 | 991 | 730 | 660 | 610 | - | 52 | 20-41 | - | - | 945 | 990 |
| | 600 | 1143 | 840 | 770 | 718 | - | 56 | 20-41 | - | - | 1040 | 1090 |
| | 700 | 1346 | 955 | 875 | 815 | - | 60 | 24-48 | - | - | 1150 | 1210 |
| | 800 | 1524 | 1070 | 990 | 930 | - | 64 | 24-48 | - | - | 1305 | 1340 |
| | 900 | 1727 | 1180 | 1090 | 1025 | - | 66 | 28-54 | - | - | 1505 | 1600 |
| | 1000 | 1880 | 1305 | 1210 | 1140 | - | 68 | 28-58 | - | - | 1615 | 1705 |
| | 1200 | 2184 | 1525 | 1420 | 1350 | - | 72 | 32-58 | - | - | 1925 | 2035 |
| 1400 | 2300 | 1750 | 1640 | 1560 | - | 78 | 36-65 | - | - | 2110 | 2185 | |

主要连接尺寸 Main connection dimensions

JB/T 79.2-1994

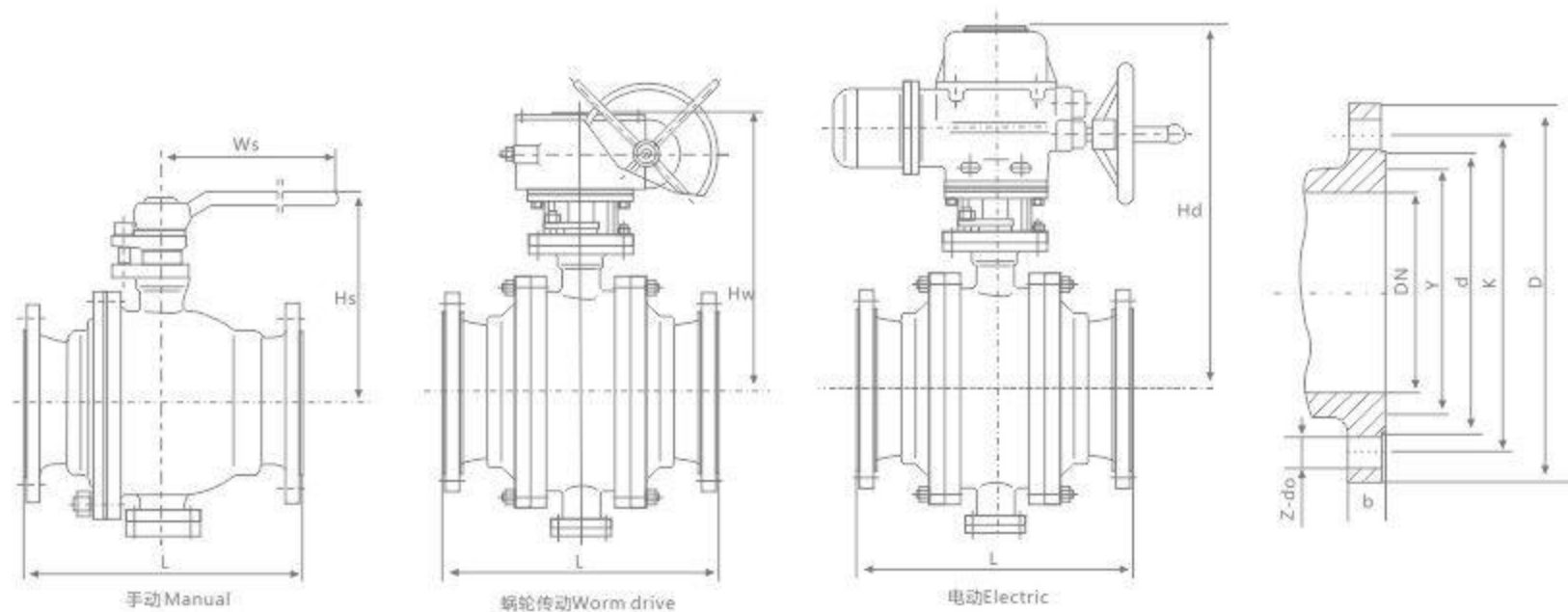
| 公称压力 PN(MPa) | 公称直径 DN(mm) | 尺寸Size (mm) | | | | | | | | | | |
|-----------------|----------------|-------------|------|------|------|-----|-------|-------|------|------|------|------|
| | | L | D | K | d | Y | b | Z-do | Ws | Hs | Hw | Hd |
| 4.0MPa | 150 | 403 | 300 | 250 | 218 | 204 | 30 | 8-25 | 1200 | 360 | 485 | 590 |
| | 200 | 502 | 375 | 320 | 282 | 260 | 38 | 12-30 | - | - | 580 | 640 |
| | 250 | 568 | 445 | 385 | 345 | 313 | 42 | 12-34 | - | - | 665 | 680 |
| | 300 | 648 | 510 | 450 | 408 | 364 | 46 | 16-34 | - | - | 760 | 810 |
| | 350 | 762 | 570 | 510 | 465 | 422 | 52 | 16-34 | - | - | 820 | 890 |
| | 400 | 838 | 655 | 585 | 535 | 474 | 58 | 16-41 | - | - | 860 | 940 |
| | 450 | 914 | 680 | 610 | 560 | 524 | 60 | 20-41 | - | - | 930 | 1010 |
| | 500 | 991 | 755 | 670 | 612 | 576 | 62 | 20-48 | - | - | 980 | 1130 |
| | 600 | 1143 | 890 | 795 | 730 | 678 | 62 | 20-54 | - | - | 1040 | 1090 |
| | 700 | 1346 | 995 | 900 | 835 | 768 | 68 | 24-54 | - | - | 1150 | 1210 |
| | 800 | 1524 | 1135 | 1030 | 960 | 876 | 76 | 24-58 | - | - | 1305 | 1340 |
| | 900 | 1727 | 1270 | 1168 | 1022 | - | 105 | 32-54 | - | - | 1505 | 1600 |
| | 1000 | 1880 | 1238 | 1156 | 1086 | - | 114 | 32-44 | - | - | 1615 | 1705 |
| | 1200 | 2184 | 1467 | 1372 | 1302 | - | 133 | 32-51 | - | - | 1925 | 2035 |
| 1400 | - | 1708 | 1600 | 1518 | - | 154 | 28-60 | - | - | 2110 | 2185 | |
| 6.4MPa | 150 | 495 | 340 | 280 | 240 | 204 | 38 | 8-34 | 1200 | 360 | 485 | 590 |
| | 200 | 597 | 405 | 345 | 300 | 260 | 44 | 12-34 | - | - | 580 | 650 |
| | 250 | 673 | 470 | 400 | 352 | 313 | 48 | 12-41 | - | - | 665 | 720 |
| | 300 | 762 | 530 | 460 | 412 | 364 | 54 | 16-41 | - | - | 760 | 840 |
| | 350 | 826 | 595 | 525 | 475 | 422 | 60 | 16-41 | - | - | 820 | 930 |
| | 400 | 902 | 670 | 585 | 525 | 474 | 66 | 16-48 | - | - | 870 | 990 |
| | 500 | 1054 | 800 | 705 | 640 | 576 | 70 | 20-54 | - | - | 995 | 1150 |
| | 600 | 1232 | 930 | 820 | 750 | 678 | 76 | 20-58 | - | - | 1100 | 1180 |
| | 700 | 1397 | 1035 | 940 | 800 | - | 95 | 28-51 | - | - | 1180 | 1230 |
| | 800 | 1651 | 1149 | 1054 | 914 | - | 108 | 28-54 | - | - | 1345 | 1385 |
| | 900 | 1880 | 1270 | 1168 | 1022 | - | 114 | 32-54 | - | - | 1550 | 1655 |
| | 1000 | 1981 | 1270 | 1175 | 1092 | - | 133 | 32-51 | - | - | 1675 | 1745 |
| | 1200 | 2311 | 1511 | 1403 | 1308 | - | 152 | 28-60 | - | - | 1945 | 2075 |

FIXED METAL SEAL BALL VALVE

Q47F/Y/H型固定金属密封球阀

FORGED STEEL BALL VALVE

锻钢球阀



主要连接尺寸 Main connection dimensions

| 公称压力 PN(MPa) | 公称直径 DN(mm) | 尺寸Size (mm) | | | | | | | | | | |
|-----------------|----------------|-------------|-------|-------|-----|------|-------|---------|------|------|------|------|
| | | L | D | K | d | Y | b | Z-do | Ws | Hs | Hw | Hd |
| Class 150 | 2" | 178 | 152 | 120.7 | 92 | - | 14.3 | 4-19 | 260 | 155 | - | - |
| | 2 1/2" | 190 | 178 | 139.7 | 105 | - | 15.9 | 4-19 | 350 | 185 | - | - |
| | 3" | 203 | 190 | 152.4 | 127 | - | 17.5 | 4-19 | 500 | 205 | - | - |
| | 4" | 229 | 229 | 190.5 | 157 | - | 22.3 | 8-19 | 650 | 255 | 390 | 500 |
| | 5" | 356 | 254 | 215.9 | 186 | - | 22.3 | 8-22.5 | 800 | 285 | 410 | 520 |
| | 6" | 394 | 279 | 241.3 | 216 | - | 23.9 | 8-22.5 | 1000 | 305 | 470 | 540 |
| | 8" | 457 | 343 | 298.5 | 270 | - | 27.0 | 8-22.5 | - | - | 520 | 580 |
| | 10" | 533 | 406 | 362 | 324 | - | 28.6 | 12-25.5 | - | - | 610 | 640 |
| | 12" | 610 | 483 | 431.8 | 381 | - | 30.2 | 12-25.5 | - | - | 650 | 690 |
| | 14" | 686 | 533 | 476.3 | 413 | - | 33.4 | 12-28.5 | - | - | 740 | 785 |
| | 16" | 762 | 597 | 539.8 | 470 | - | 35.0 | 16-28.5 | - | - | 795 | 830 |
| | 18" | 864 | 635 | 577.9 | 533 | - | 38.1 | 16-32 | - | - | 860 | 910 |
| 20" | 914 | 699 | 635.0 | 584 | - | 41.3 | 20-32 | - | - | 945 | 990 | |
| 24" | 1067 | 813 | 749.3 | 692 | - | 46.1 | 20-35 | - | - | 1040 | 1090 | |
| 28" | 1245 | 927 | 864 | 800 | - | 71 | 28-35 | - | - | 1150 | 1210 | |
| 32" | 1372 | 1060 | 978 | 914 | - | 81 | 28-41 | - | - | 1280 | 1340 | |
| Class 300 | 2" | 216 | 165 | 127 | 92 | - | 20.7 | 8-19 | 260 | 155 | - | - |
| | 2 1/2" | 241 | 190 | 149.2 | 105 | - | 23.9 | 8-22.5 | 350 | 185 | - | - |
| | 3" | 282 | 210 | 168.3 | 127 | - | 27.0 | 8-22.5 | 500 | 205 | - | - |
| | 4" | 305 | 254 | 200 | 157 | - | 30.2 | 8-22.5 | 800 | 270 | 410 | 530 |
| | 5" | 381 | 279 | 235 | 186 | - | 33.4 | 8-22.5 | 1000 | 305 | 470 | 560 |
| | 6" | 403 | 318 | 269.9 | 216 | - | 35.0 | 12-22.5 | 1200 | 340 | 485 | 590 |
| | 8" | 502 | 381 | 330.2 | 270 | - | 39.7 | 12-25.5 | - | - | 5809 | 640 |
| | 10" | 568 | 445 | 387.4 | 324 | - | 46.1 | 16-28.5 | - | - | 665 | 680 |
| | 12" | 648 | 521 | 450.8 | 381 | - | 49.3 | 16-32 | - | - | 760 | 810 |
| | 14" | 762 | 584 | 514.4 | 413 | - | 52.4 | 20-32 | - | - | 820 | 890 |
| | 16" | 838 | 648 | 571.5 | 470 | - | 55.6 | 20-35 | - | - | 860 | 940 |
| | 18" | 914 | 711 | 628.5 | 533 | - | 58.8 | 24-35 | - | - | 930 | 1010 |
| 20" | 991 | 775 | 685.8 | 584 | - | 62.0 | 24-35 | - | - | 980 | 1130 | |
| Class 600 | 2" | 292 | 165 | 127 | 108 | - | 25.4 | 8-19 | 350 | 175 | - | - |
| | 2 1/2" | 330 | 190 | 149.2 | 127 | - | 28.6 | 8-22.5 | 500 | 200 | - | - |
| | 3" | 356 | 210 | 168.3 | 146 | - | 31.8 | 8-22.5 | 650 | 235 | - | - |
| | 4" | 432 | 273 | 215.9 | 175 | - | 38.1 | 8-25.5 | 1000 | 275 | 395 | 550 |
| | 5" | 508 | 330 | 266.7 | 210 | - | 44.5 | 8-28.5 | 1200 | 325 | 430 | 580 |
| | 6" | 559 | 356 | 292.1 | 241 | - | 47.7 | 12-28.5 | - | - | 495 | 620 |
| | 8" | 660 | 419 | 349.2 | 302 | - | 55.6 | 12-32 | - | - | 595 | 680 |
| | 10" | 787 | 508 | 431.8 | 356 | - | 63.5 | 16-35 | - | - | 680 | 740 |
| 12" | 838 | 559 | 489.0 | 413 | - | 66.7 | 20-35 | - | - | 790 | 850 | |

结构特点及用途

- 1、抗硫化应力裂化：阀门接触介质的材料都是按美国腐蚀工程师协会 NACE0 1-75 的标准进行选择，且按标准进行表面镀镍，能满足硫化环境工况的要求。
- 2、用聚合物或金属作密封材料，在高温、高压工况具有优良的密封性能。
- 3、设置填料箱，防止阀门内腔压力异常升高而使阀杆飞出，增置倒密封结构，能确保填料可靠密封。
- 4、广泛适用于化工、炼油、油气、天然气、钢铁等介质管路。

Unique feature and use

- 1、Anti-curing stress cracking: The valve contact medium's material is corrodes Engineer according to the US the association NACE0 1-75 standards to carry on the choice, and carries on the superficial nickel plating according to the standard, can satisfy the curing environment operating mode the request.
- 2、Make the packing with the polymer or the metal, in the high temperature, the high-pressured operating mode has the fine sealing property.
- 3、The establishment stuffing box, prevents the valve cavity pressure anomaly to elevate causes the valve lever to depart, increasess ets seals the structure but actually, can guarantee that the padding seals reliably.
- 4、Widely is suitable for medium pipelines and so on chemical industry, refinery, oil gas, natural gas, steel and iron.

性能规范 Performance Specifications

试验压力 Test pressure

单位 Unit : MPa

| 公称压力 PN | 常温最大工作压力 Max temperature Working pressure | 壳体试验压力 Case Test pressure | 气密封试验压力 Gas Seals test pressure | 高压密封试验压力 High-pressure sealing test pressure |
|------------|---|---------------------------------|---------------------------------------|---|
| 1.6 | 1.6 | 2.4 | 0.6 | 1.76 |
| 2.5 | 2.5 | 3.8 | 0.6 | 2.75 |
| 4.0 | 4.0 | 6.0 | 0.6 | 4.4 |
| 6.4 | 6.4 | 9.6 | 0.6 | 7.1 |
| 10.0 | 10.0 | 15.0 | 0.6 | 11.0 |
| 16.0 | 16.0 | 24.0 | 0.6 | 17.6 |
| 20.0 | 20.0 | 30.0 | 0.6 | 22.0 |
| 25.0 | 25.0 | 37.5 | 0.6 | 27.5 |
| Class 150 | 2.0 | 3.0 | 0.6 | 2.2 |
| Class 300 | 5.0 | 7.5 | 0.6 | 5.5 |
| Class 600 | 10.0 | 15.0 | 0.6 | 11.0 |
| Class 900 | 15.0 | 22.5 | 0.6 | 16.5 |
| Class 1500 | 25.0 | 37.5 | 0.6 | 27.5 |

使用范围 Terms of use

| 壳体材料 Shell material | 阀座材料 Seat Material | 适用温度 Applicable medium | 适用介质 Applicable temperature |
|---|------------------------|------------------------------|--|
| 碳钢 C 型 Carbon Steel C | PTFE PTFE | ≤150°C | 水、蒸汽、油品等 Water, steam, oil, etc. |
| | 不锈钢 Stainless steel | ≤425°C | |
| 铬镍钛钢 P 型 Chrome P-type nickel-titanium steel | PTFE PTFE | ≤150°C | 硝酸类 Nitric acid |
| | 不锈钢 Stainless steel | ≤200°C | |
| 铬镍钼钛钢 R 型 Chrome-nickel steel R-Mo Ti | PTFE PTFE | ≤150°C | 醋酸类 Acetic acid |
| | 不锈钢 Stainless steel | ≤200°C | |
| 铬钼钒钢 I 型 Cr-Mo steel I-V | 硬质合金 Hard alloy | ≤550°C | 蒸汽、冶炼、能源等 Steam, metallurgical, energy, etc. |

主要零件材料 Main components material

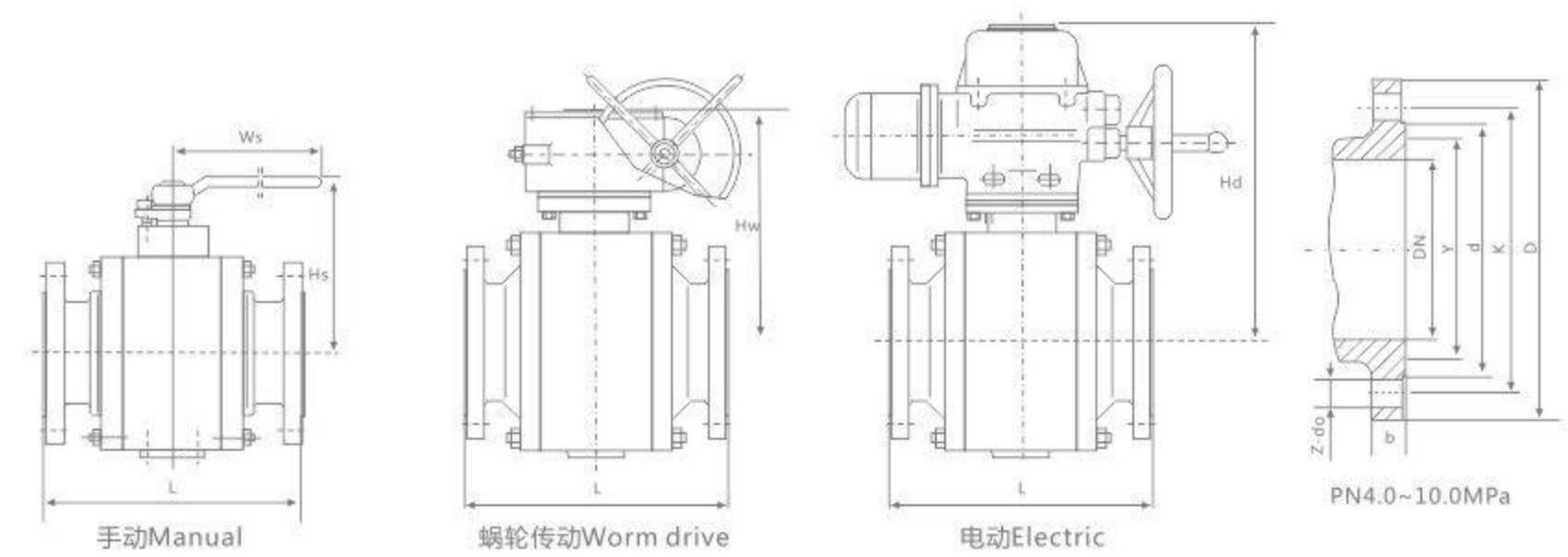
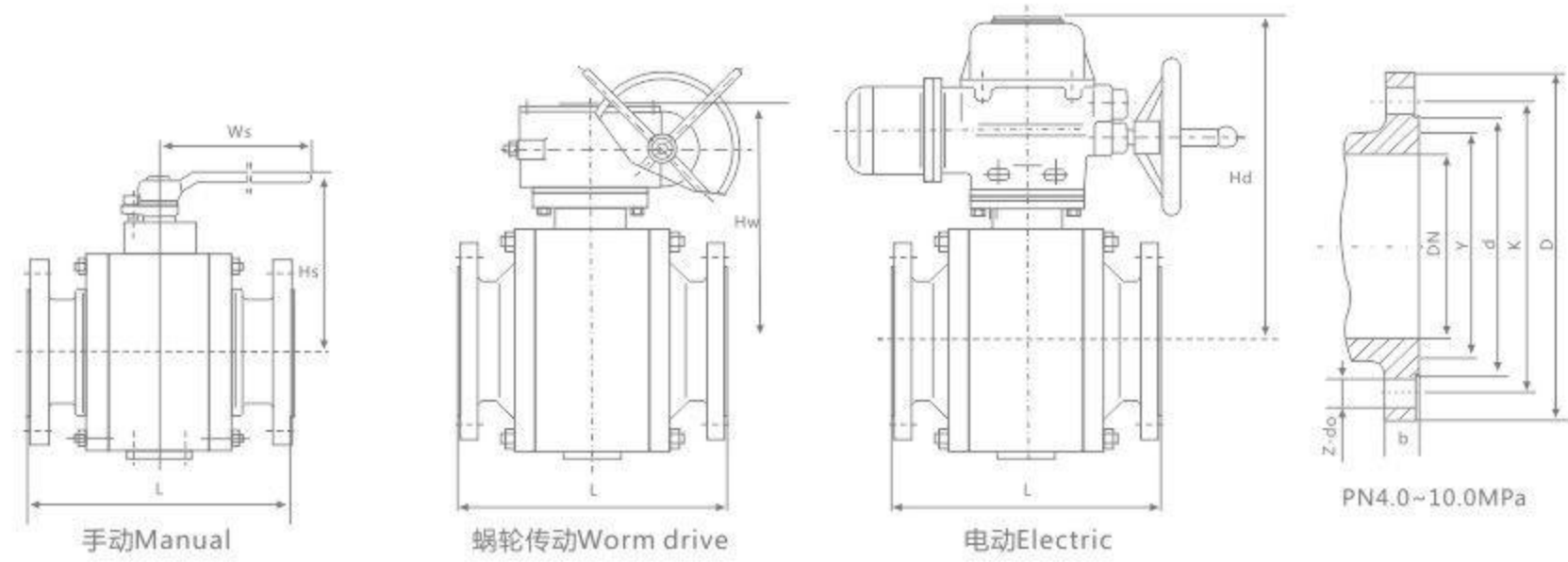
| 零件名称 Component Name | 标准 Standard | 材料 Material | 材料 Material | 材料 Material | 材料 Material |
|--|----------------|---|--|--|---|
| 阀体、阀盖、填料箱 Body, bonnet Packing Box | GB | 25 | 1Cr18Ni9Ti | 0Cr18Ni12Mo2Ti | 15Cr1Mo1V |
| | ASTM | 1025 | 304 | 316 | F22a |
| 球体 Ball | GB | 2Cr13/表面特殊处理 Special surface treatment | 1Cr18Ni9Ti/表面特殊处理 Special surface treatment | 0Cr18Ni12Mo2Ti/表面特殊处理 Special surface treatment | 25Cr2Mo1V/表面特殊处理 Special surface treatment |
| | ASTM | 420 | 304+HF | 316+HF | F22a+HF |
| 阀杆、固定轴 Stern, fixed axis | GB | 2Cr13 | 0Cr18Ni9 | 0Cr17Ni12Mo2 | 25Cr2Mo1V |
| | ASTM | 420 | 304 | 316 | F22a |
| 阀座 Seat | GB | PTFE | 2Cr13 | PTFE | 0Cr17Ni12Mo2 |
| | ASTM | PTFE | 420 | PTFE | 304 |
| 填料 Packing | GB | PTFE 柔性石墨 Flexible Graphite | PTFE 柔性石墨 Flexible Graphite | PTFE 柔性石墨 Flexible Graphite | PTFE 柔性石墨 Flexible Graphite |
| | ASTM | PTFE 柔性石墨 Flexible Graphite | PTFE 柔性石墨 Flexible Graphite | PTFE 柔性石墨 Flexible Graphite | PTFE 柔性石墨 Flexible Graphite |
| 螺栓 Bolt | GB | 35 | 0Cr18Ni9 | 0Cr18Ni9 | 15Cr1Mo1V |
| | ASTM | A193 B7 | A320-B8 | A320-B8 | A193 B16 |
| 螺母 Nut | GB | 45 | 1Cr13 | 1Cr13 | 20CrMo |
| | ASTM | A194 2H | A194-8 | A194-8 | A194-4 |

FORGED STEEL BALL VALVE

锻钢球阀

FORGED STEEL BALL VALVE

锻钢球阀



主要连接尺寸 Main connection dimensions

JB/T 79.1-1994

| 公称压力 PN | 公称口径 DN | 尺寸Size (mm) | | | | | | | | | | |
|------------|------------|-------------|-----|-----|-----|----|-------|--------|------|-----|-----|-----|
| | | L | D | K | d | Y | b | Z-do | Ws | Hs | Hw | Hd |
| 1.6MPa | 40 | 165 | 145 | 110 | 85 | - | 16 | 4-18 | 230 | 135 | - | - |
| | 50 | 203 | 160 | 125 | 100 | - | 16 | 4-18 | 260 | 150 | - | - |
| | 65 | 222 | 180 | 145 | 120 | - | 18 | 4-18 | 350 | 180 | - | - |
| | 80 | 241 | 195 | 160 | 135 | - | 20 | 8-18 | 500 | 195 | - | - |
| | 100 | 305 | 215 | 180 | 155 | - | 20 | 8-18 | 650 | 245 | 310 | 420 |
| | 125 | 356 | 245 | 210 | 185 | - | 22 | 8-18 | 800 | 270 | 330 | 440 |
| | 150 | 394 | 280 | 240 | 210 | - | 24 | 8-23 | 1000 | 295 | 390 | 470 |
| | 200 | 457 | 335 | 295 | 265 | - | 26 | 12-23 | - | - | 440 | 510 |
| | 250 | 533 | 405 | 355 | 320 | - | 30 | 12-25 | - | - | 490 | 560 |
| | 300 | 610 | 460 | 410 | 375 | - | 30 | 12-25 | - | - | 530 | 600 |
| | 350 | 686 | 520 | 470 | 435 | - | 34 | 16-25 | - | - | 620 | 670 |
| | 400 | 762 | 580 | 525 | 485 | - | 36 | 16-30 | - | - | 675 | 720 |
| | 450 | 864 | 640 | 585 | 545 | - | 40 | 20-30 | - | - | 740 | 790 |
| | 500 | 914 | 705 | 650 | 608 | - | 44 | 20-34 | - | - | 825 | 870 |
| 600 | 1067 | 840 | 770 | 718 | - | 48 | 20-41 | - | - | 920 | 960 | |
| 2.5MPa | 40 | 190 | 145 | 110 | 85 | - | 18 | 4-18 | 230 | 135 | - | - |
| | 50 | 216 | 160 | 125 | 100 | - | 20 | 4-18 | 260 | 150 | - | - |
| | 65 | 241 | 180 | 145 | 120 | - | 22 | 8-18 | 350 | 180 | - | - |
| | 80 | 283 | 195 | 160 | 135 | - | 22 | 8-18 | 500 | 195 | - | - |
| | 100 | 305 | 230 | 190 | 160 | - | 24 | 8-23 | 650 | 245 | 310 | 420 |
| | 125 | 381 | 270 | 220 | 188 | - | 28 | 8-25 | 800 | 270 | 330 | 440 |
| | 150 | 403 | 300 | 250 | 218 | - | 30 | 8-25 | 1000 | 295 | 390 | 470 |
| | 200 | 502 | 360 | 310 | 278 | - | 34 | 12-25 | - | - | 440 | 510 |
| | 250 | 568 | 425 | 370 | 332 | - | 36 | 12-30 | - | - | 490 | 560 |
| | 300 | 648 | 485 | 430 | 390 | - | 40 | 16-30 | - | - | 530 | 600 |
| | 350 | 762 | 550 | 490 | 448 | - | 44 | 16-034 | - | - | 620 | 670 |
| | 400 | 838 | 610 | 550 | 505 | - | 48 | 16-34 | - | - | 675 | 720 |
| | 450 | 914 | 660 | 600 | 555 | - | 50 | 20-34 | - | - | 740 | 790 |
| | 500 | 991 | 730 | 660 | 610 | - | 52 | 20-41 | - | - | 825 | 870 |
| 600 | 1143 | 840 | 770 | 718 | - | 56 | 20-41 | - | - | 920 | 960 | |

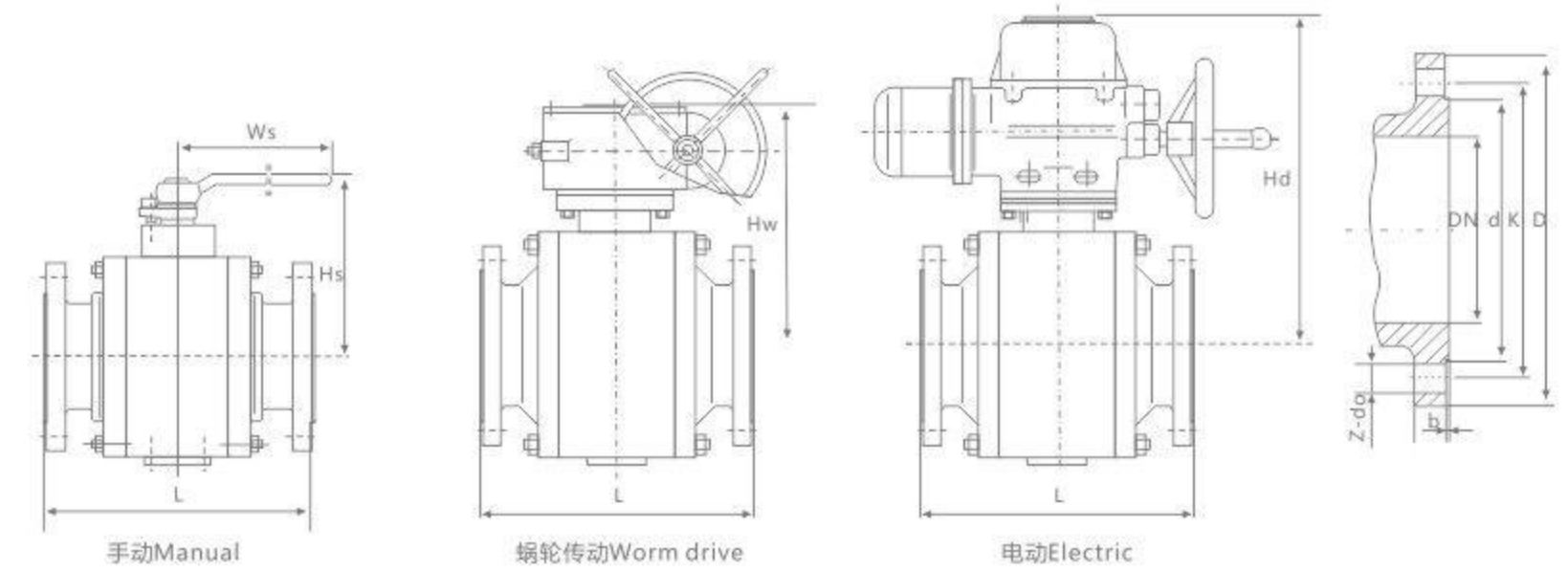
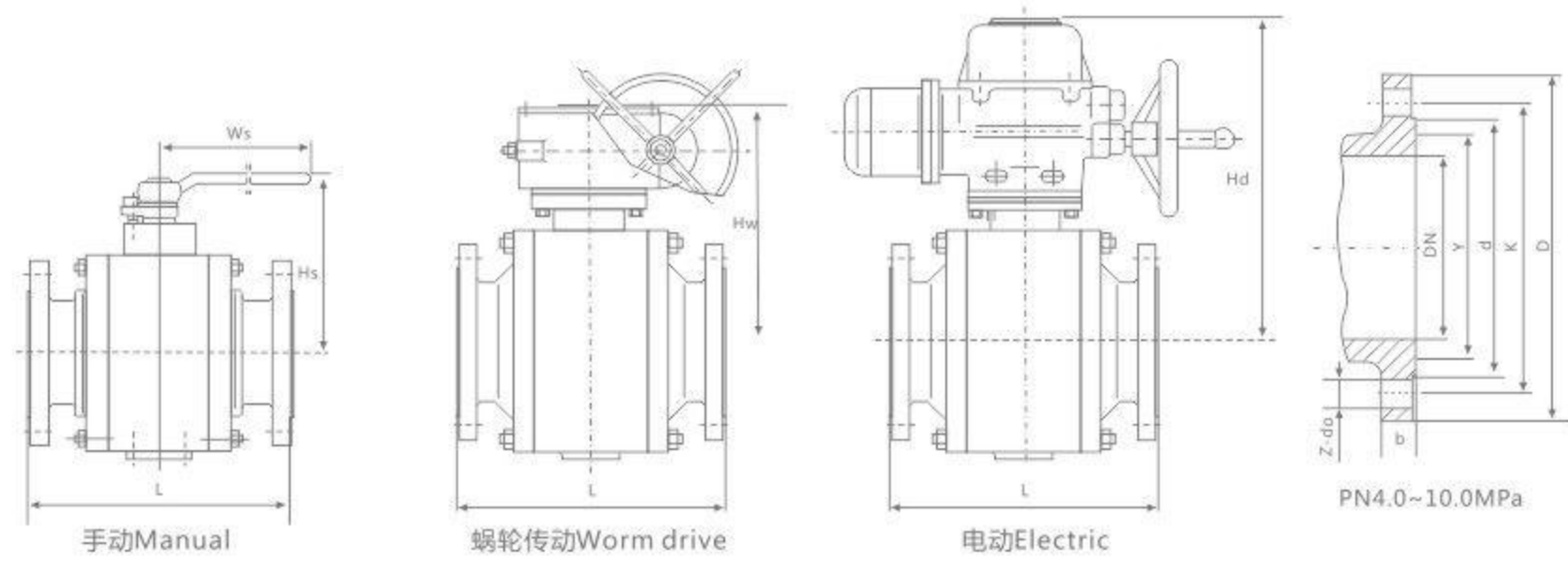
主要连接尺寸 Main connection dimensions

JB/T 79.2-1994

| 公称压力 PN | 公称口径 DN | 尺寸Size (mm) | | | | | | | | | | |
|------------|------------|-------------|-----|-----|-----|-----|----|-------|------|-----|-----|-----|
| | | L | D | K | d | Y | b | Z-do | Ws | Hs | Hw | Hd |
| 4.0MPa | 40 | 190 | 145 | 110 | 85 | 76 | 18 | 4-18 | 230 | 135 | - | - |
| | 50 | 216 | 160 | 125 | 100 | 88 | 20 | 4-18 | 260 | 150 | - | - |
| | 65 | 241 | 180 | 145 | 120 | 110 | 22 | 8-18 | 350 | 180 | - | - |
| | 80 | 283 | 195 | 160 | 135 | 121 | 22 | 8-18 | 500 | 195 | - | - |
| | 100 | 305 | 230 | 190 | 160 | 150 | 24 | 8-23 | 800 | 250 | 320 | 430 |
| | 125 | 381 | 270 | 220 | 188 | 176 | 28 | 8-25 | 1000 | 280 | 340 | 450 |
| | 150 | 403 | 300 | 250 | 218 | 204 | 30 | 8-25 | 1200 | 300 | 405 | 480 |
| | 200 | 502 | 375 | 320 | 282 | 260 | 38 | 12-30 | - | - | 450 | 530 |
| | 250 | 568 | 445 | 385 | 345 | 313 | 42 | 12-34 | - | - | 505 | 590 |
| | 300 | 648 | 510 | 450 | 408 | 364 | 46 | 16-34 | - | - | 545 | 620 |
| | 350 | 762 | 570 | 510 | 465 | 422 | 52 | 16-34 | - | - | 640 | 690 |
| | 400 | 838 | 655 | 585 | 535 | 474 | 58 | 16-41 | - | - | 690 | 740 |
| | 450 | 914 | 680 | 610 | 560 | 524 | 60 | 20-41 | - | - | 760 | 810 |
| | 500 | 991 | 755 | 670 | 612 | 576 | 62 | 20-48 | - | - | 850 | 900 |
| 6.3MPa | 40 | 241 | 165 | 125 | 95 | 76 | 24 | 4-23 | 260 | 140 | - | - |
| | 50 | 292 | 175 | 135 | 105 | 88 | 26 | 4-23 | 260 | 160 | - | - |
| | 65 | 330 | 200 | 160 | 130 | 110 | 28 | 8-23 | 350 | 180 | - | - |
| | 80 | 356 | 210 | 170 | 140 | 121 | 30 | 8-23 | 500 | 220 | - | - |
| | 100 | 406 | 250 | 200 | 168 | 150 | 32 | 8-25 | 800 | 250 | 320 | 430 |
| | 125 | 400 | 295 | 240 | 202 | 176 | 36 | 8-30 | 1000 | 295 | 340 | 450 |
| | 150 | 495 | 340 | 280 | 240 | 204 | 38 | 8-34 | 1200 | 340 | 405 | 480 |
| | 200 | 597 | 405 | 345 | 300 | 260 | 44 | 12-34 | - | - | 450 | 530 |
| | 250 | 673 | 470 | 400 | 352 | 313 | 48 | 12-41 | - | - | 505 | 590 |
| | 300 | 762 | 530 | 460 | 412 | 364 | 54 | 16-41 | - | - | 545 | 620 |
| | 350 | 826 | 595 | 525 | 475 | 422 | 60 | 16-41 | - | - | 640 | 690 |
| | 400 | 902 | 670 | 585 | 525 | 474 | 66 | 16-48 | - | - | 690 | 740 |
| | 500 | 1054 | 800 | 705 | 640 | 576 | 70 | 20-54 | - | - | 760 | 810 |

**FORGED
STEEL BALL VALVE**
锻钢球阀

**API FORGED
STEEL BALL VALVE**
美标锻钢球阀



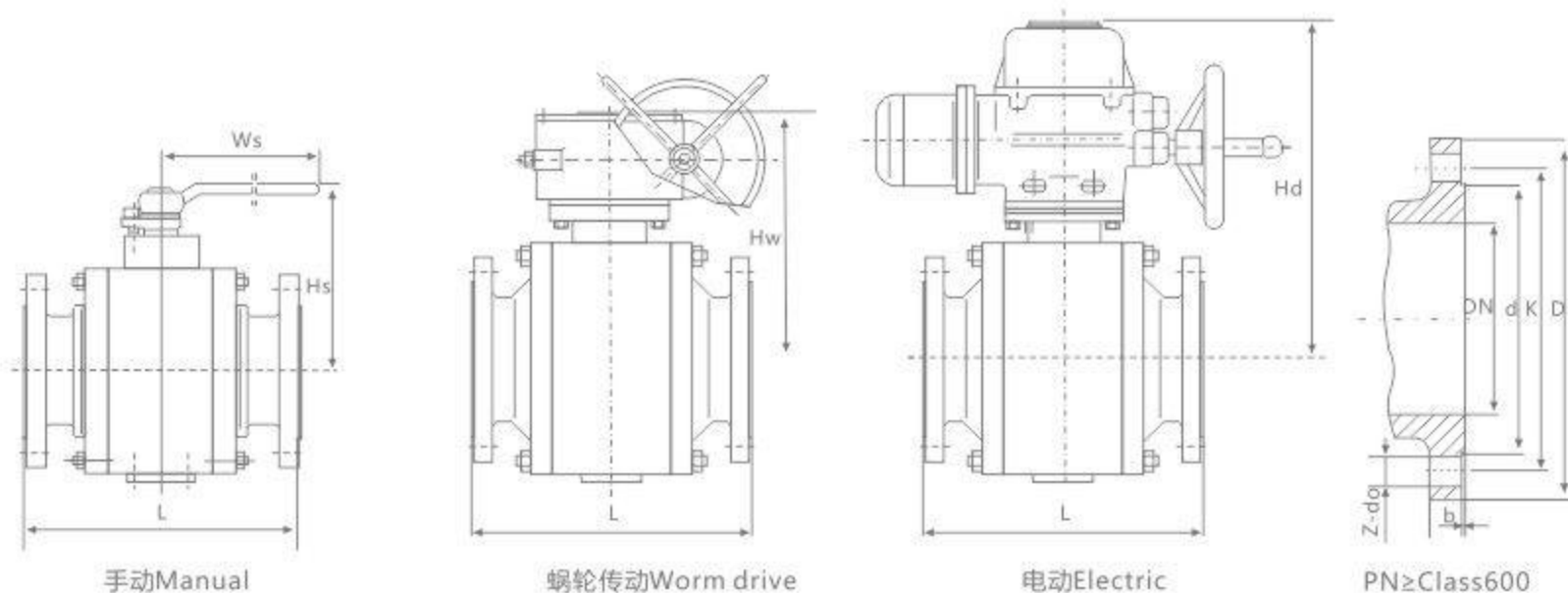
主要连接尺寸 Main connection dimensions

JB/T 79.2-1994

| 公称压力 PN | 公称口径 DN | 尺寸Size (mm) | | | | | | | | | | |
|------------|------------|-------------|-----|-------|-----|--------|-------|--------|------|-----|-----|-----|
| | | L | D | K | d | Y | b | Z-do | Ws | Hs | Hw | Hd |
| 10.0MPa | 40 | 241 | 165 | 125 | 95 | 76 | 26 | 4-23 | 260 | 160 | - | - |
| | 50 | 292 | 195 | 145 | 112 | 88 | 28 | 4-25 | 350 | 180 | - | - |
| | 65 | 330 | 220 | 170 | 138 | 110 | 32 | 8-25 | 500 | 200 | - | - |
| | 80 | 356 | 230 | 180 | 148 | 121 | 34 | 8-25 | 800 | 240 | 310 | 410 |
| | 100 | 432 | 265 | 210 | 172 | 150 | 38 | 8-30 | 1000 | 270 | 340 | 450 |
| | 125 | 508 | 310 | 250 | 210 | 176 | 42 | 8-34 | 1200 | 320 | 360 | 505 |
| | 150 | 559 | 350 | 290 | 250 | 204 | 46 | 12-34 | - | - | 425 | 555 |
| | 200 | 660 | 430 | 360 | 312 | 260 | 54 | 12-41 | - | - | 470 | 625 |
| | 250 | 787 | 500 | 430 | 382 | 313 | 60 | 12-41 | - | - | 525 | 645 |
| | 300 | 838 | 585 | 500 | 442 | 364 | 70 | 16-48 | - | - | 565 | 715 |
| 350 | 889 | 665 | 560 | 498 | 422 | 76 | 16-54 | - | - | 670 | 770 | |
| 400 | 991 | 715 | 620 | 558 | 474 | 80 | 16-54 | - | - | 720 | 840 | |
| 16.0MPa | 40 | 305 | 175 | 125 | 92 | 76 | 32 | 4-27 | 350 | 160 | - | - |
| | 50 | 368 | 215 | 165 | 132 | 88 | 36 | 8-25 | 500 | 180 | - | - |
| | 65 | 419 | 245 | 190 | 152 | 110 | 44 | 8-30 | 800 | 200 | - | - |
| | 80 | 381 | 260 | 205 | 168 | 121 | 46 | 8-30 | 1000 | 240 | 310 | 410 |
| | 100 | 457 | 300 | 240 | 200 | 150 | 48 | 8-34 | 1200 | 270 | 340 | 450 |
| | 125 | 559 | 355 | 285 | 238 | 176 | 60 | 8-41 | - | - | 360 | 505 |
| | 150 | 610 | 390 | 318 | 270 | 204 | 66 | 12-41 | - | - | 425 | 560 |
| | 200 | 737 | 480 | 400 | 345 | 260 | 78 | 12-48 | - | - | 530 | 630 |
| | 250 | 838 | 580 | 485 | 425 | 313 | 88 | 12-54 | - | - | 570 | 720 |
| | 300 | 965 | 665 | 570 | 510 | 364 | 100 | 16-54 | - | - | 680 | 780 |
| 20.0MPa | 40 | 305 | 170 | 124 | 90 | 56 | 34 | 4-27 | 500 | 180 | - | - |
| | 50 | 368 | 210 | 160 | 128 | 70 | 40 | 8-25 | 650 | 200 | - | - |
| | 65 | 419 | 260 | 203 | 165 | 97 | 48 | 8-30 | 800 | 220 | - | - |
| | 80 | 470 | 290 | 230 | 190 | 116 | 54 | 8-34 | 1000 | 260 | 320 | 420 |
| | 100 | 546 | 360 | 292 | 245 | 138 | 66 | 8-41 | 1200 | 290 | 360 | 470 |
| | 125 | 673 | 385 | 318 | 270 | 170 | 76 | 12-41 | - | - | 380 | 530 |
| | 150 | 705 | 440 | 360 | 305 | 190 | 82 | 12-48 | - | - | 440 | 580 |
| | 200 | 832 | 535 | 440 | 380 | 245 | 92 | 12-54 | - | - | 550 | 650 |
| 250 | 991 | 670 | 572 | 508 | 319 | 110 | 16-58 | - | - | 590 | 740 | |
| 25.0MPa | 40 | 305 | 180 | 124 | 92 | 68.28 | 32 | 4-29.5 | 500 | 180 | - | - |
| | 50 | 368 | 215 | 165 | 124 | 95.25 | 38.5 | 8-26 | 650 | 200 | - | - |
| | 65 | 419 | 245 | 190.5 | 137 | 107.95 | 41.5 | 8-29.5 | 800 | 220 | - | - |
| | 80 | 470 | 265 | 203 | 168 | 136.52 | 48 | 8-32.5 | 1000 | 260 | 320 | 420 |
| | 100 | 546 | 310 | 241.5 | 194 | 161.92 | 54 | 8-35.5 | 1200 | 290 | 360 | 470 |
| | 125 | 673 | 375 | 292 | 229 | 193.68 | 73.5 | 8-42 | - | - | 380 | 530 |
| | 150 | 705 | 395 | 317.5 | 248 | 211.12 | 83 | 12-39 | - | - | 440 | 580 |
| | 200 | 832 | 485 | 393.5 | 318 | 269.88 | 92 | 12-45 | - | - | 550 | 650 |

主要连接尺寸 Main connection dimensions

| 公称压力 PN | 公称口径 DN | 尺寸Size (mm) | | | | | | | | | | |
|------------|------------|-------------|-------|-------|-----|------|-------|---------|------|-----|-----|-----|
| | | L | D | K | d | Y | b | Z-do | Ws | Hs | Hw | Hd |
| Class 150 | 11/2" | 165 | 125 | 98.4 | 73 | - | 12.7 | 4-16 | 230 | 135 | - | - |
| | 2" | 178 | 150 | 120.7 | 92 | - | 14.3 | 4-19 | 260 | 150 | - | - |
| | 2 1/2" | 190 | 180 | 139.7 | 105 | - | 15.9 | 4-19 | 350 | 180 | - | - |
| | 3" | 203 | 190 | 152.4 | 127 | - | 17.5 | 4-19 | 500 | 195 | - | - |
| | 4" | 229 | 230 | 190.5 | 157 | - | 22.3 | 8-19 | 650 | 245 | 310 | 420 |
| | 5" | 356 | 255 | 215.9 | 186 | - | 22.3 | 8-22.5 | 800 | 270 | 330 | 440 |
| | 6" | 394 | 280 | 241.3 | 216 | - | 23.9 | 8-22.5 | 1000 | 295 | 390 | 470 |
| | 8" | 457 | 345 | 298.5 | 270 | - | 27.0 | 8-22.5 | - | - | 440 | 510 |
| | 10" | 533 | 405 | 362 | 324 | - | 28.6 | 12-25.5 | - | - | 490 | 560 |
| | 12" | 610 | 485 | 431.8 | 381 | - | 30.2 | 12-25.5 | - | - | 530 | 600 |
| | 14" | 686 | 535 | 476.3 | 413 | - | 33.4 | 12-28.5 | - | - | 620 | 670 |
| | 16" | 762 | 595 | 539.8 | 470 | - | 35.0 | 16-28.5 | - | - | 675 | 720 |
| | 18" | 864 | 635 | 577.9 | 533 | - | 38.1 | 16-32 | - | - | 740 | 790 |
| | 20" | 914 | 700 | 635 | 584 | - | 41.3 | 20-32 | - | - | 825 | 870 |
| 24" | 1067 | 815 | 749.3 | 692 | - | 46.3 | 20-35 | - | - | 920 | 960 | |
| Class 300 | 11/2" | 190 | 155 | 114.3 | 73 | - | 19.1 | 4-22.5 | 230 | 135 | - | - |
| | 2" | 216 | 165 | 127 | 92 | - | 20.7 | 8-19 | 260 | 150 | - | - |
| | 2 1/2" | 241 | 190 | 149.2 | 105 | - | 23.9 | 8-22.5 | 350 | 180 | - | - |
| | 3" | 282 | 210 | 168.3 | 127 | - | 27.0 | 8-22.5 | 500 | 195 | - | - |
| | 4" | 305 | 255 | 200 | 157 | - | 30.2 | 8-22.5 | 800 | 250 | 320 | 430 |
| | 5" | 356 | 280 | 235 | 186 | - | 33.4 | 8-22.5 | 1000 | 280 | 340 | 450 |
| | 6" | 403 | 320 | 269.9 | 216 | - | 35.0 | 12-22.5 | 1200 | 300 | 405 | 480 |
| | 8" | 502 | 380 | 330.2 | 270 | - | 39.7 | 12-25.5 | - | - | 450 | 530 |
| | 10" | 568 | 445 | 387.4 | 324 | - | 46.1 | 16-28.5 | - | - | 505 | 590 |
| | 12" | 648 | 520 | 450.8 | 381 | - | 49.3 | 16-32 | - | - | 545 | 620 |
| | 14" | 762 | 585 | 514.4 | 413 | - | 52.4 | 20-32 | - | - | 640 | 690 |
| | 16" | 838 | 650 | 571.5 | 470 | - | 55.6 | 20-35 | - | - | 690 | 740 |
| | 18" | 914 | 710 | 628.6 | 533 | - | 58.8 | 24-35 | - | - | 760 | 810 |
| | 20" | 991 | 775 | 685.8 | 584 | - | 62.0 | 24-35 | - | - | 850 | 900 |



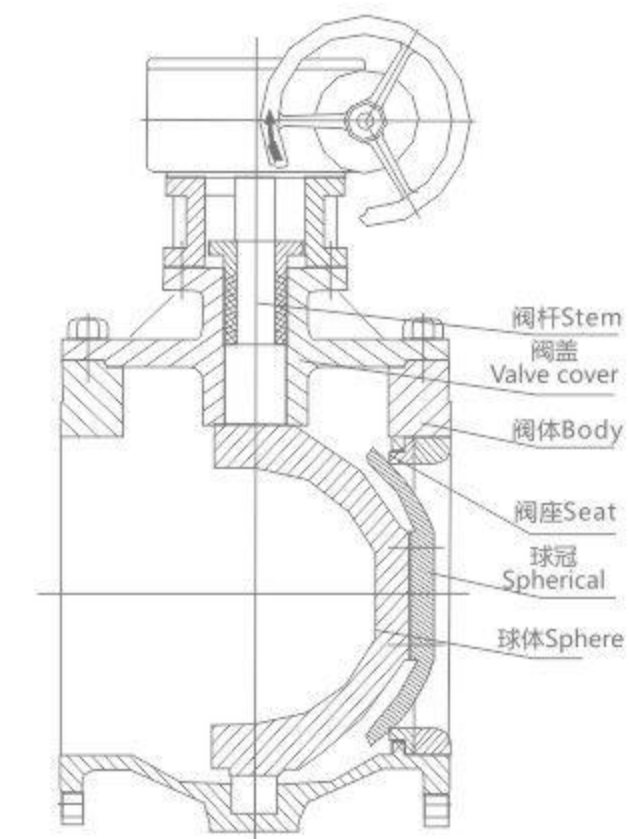
主要连接尺寸 Main connection dimensions

| 公称压力 PN | 公称直径 DN | 尺寸Size (mm) | | | | | | | | | | |
|------------|------------|-------------|-------|-------|---------|---------|---------|---------|------|-----|-----|------|
| | | L | D | K | d | Y | b | Z-do | Ws | Hs | Hw | Hd |
| Class 600 | 1 1/2" | 241 | 155 | 114.3 | 90 | 68.263 | 22.3 | 4-22.5 | 260 | 160 | - | - |
| | 2" | 292 | 165 | 127 | 108 | 82.550 | 25.4 | 8-19 | 350 | 180 | - | - |
| | 2 1/2" | 330 | 190 | 149.2 | 127 | 101.600 | 28.6 | 8-22.5 | 500 | 200 | - | - |
| | 3" | 356 | 210 | 168.3 | 146 | 123.825 | 31.8 | 8-22.5 | 800 | 240 | 310 | 410 |
| | 4" | 432 | 275 | 215.9 | 175 | 149.225 | 38.1 | 8-25.5 | 1000 | 270 | 340 | 450 |
| | 5" | 508 | 330 | 266.7 | 210 | 180.975 | 44.5 | 8-28.5 | 1200 | 320 | 360 | 505 |
| | 6" | 559 | 355 | 292.1 | 241 | 211.138 | 47.7 | 12-28.5 | - | - | 425 | 555 |
| | 8" | 660 | 420 | 349.2 | 302 | 269.876 | 55.6 | 12-32 | - | - | 470 | 625 |
| | 10" | 787 | 510 | 431.8 | 356 | 323.851 | 63.5 | 16-35 | - | - | 525 | 645 |
| | 12" | 838 | 560 | 489.0 | 413 | 381.001 | 66.7 | 20-35 | - | - | 565 | 715 |
| | 14" | 889 | 605 | 527.0 | 457 | 419.101 | 69.9 | 20-38 | - | - | 670 | 770 |
| 16" | 991 | 685 | 603.2 | 508 | 469.901 | 76.2 | 20-41 | - | - | 720 | 840 | |
| 18" | 1092 | 745 | 654.0 | 575 | 533.401 | 82.6 | 20-44.5 | - | - | 780 | 920 | |
| 20" | 1194 | 815 | 723.9 | 635 | 584.201 | 88.9 | 24-44.5 | - | - | 850 | 995 | |
| Class 900 | 1 1/2" | 305 | 180 | 123.8 | 73 | - | 31.8 | 4-28.5 | 350 | 160 | - | - |
| | 2" | 368 | 215 | 165.1 | 92 | - | 38.1 | 8-25.5 | 500 | 180 | - | - |
| | 2 1/2" | 419 | 245 | 190.5 | 105 | - | 41.3 | 8-28.5 | 800 | 200 | - | - |
| | 3" | 381 | 240 | 190.5 | 156 | 123.82 | 38.1 | 8-25.5 | 1000 | 240 | 310 | 410 |
| | 4" | 457 | 290 | 235.0 | 181 | 149.22 | 44.5 | 8-32 | 1200 | 270 | 340 | 450 |
| | 5" | 559 | 350 | 279.4 | 216 | 180.98 | 50.8 | 8-35 | - | - | 360 | 505 |
| | 6" | 610 | 380 | 317.5 | 241 | 211.12 | 55.6 | 12-32 | - | - | 425 | 560 |
| | 8" | 737 | 470 | 393.7 | 308 | 269.88 | 63.5 | 12-38 | - | - | 530 | 630 |
| Class 1500 | 10" | 838 | 545 | 469.9 | 362 | 323.85 | 69.9 | 16-38 | - | - | 570 | 720 |
| | 12" | 965 | 610 | 533.4 | 419 | 381.00 | 79.4 | 20-38 | - | - | 680 | 780 |
| | 14" | 1029 | 640 | 558.8 | 467 | 419.10 | 85.8 | 20-41 | - | - | 800 | 905 |
| | 16" | 1130 | 705 | 616.0 | 524 | 469.90 | 88.9 | 20-44.5 | - | - | 910 | 1010 |
| | 1 1/2" | 305 | 180 | 123.8 | 92 | 68.28 | 31.8 | 4-28.5 | 500 | 180 | - | - |
| | 2" | 368 | 215 | 165.1 | 124 | 95.25 | 38.1 | 8-25.5 | 650 | 200 | - | - |
| | 2 1/2" | 419 | 245 | 190.5 | 137 | 107.95 | 41.3 | 8-28.5 | 800 | 220 | - | - |
| | 3" | 470 | 265 | 203.2 | 168 | 136.52 | 47.7 | 8-32 | 1000 | 260 | 320 | 420 |
| 4" | 546 | 310 | 241.3 | 194 | 161.92 | 54.0 | 8-35 | 1200 | 290 | 360 | 470 | |
| 5" | 673 | 375 | 292.1 | 229 | 193.68 | 73.1 | 8-41 | - | - | 380 | 530 | |
| 6" | 705 | 395 | 317.5 | 248 | 211.12 | 82.6 | 12-38 | - | - | 440 | 580 | |
| 8" | 832 | 485 | 393.7 | 318 | 269.88 | 92.1 | 12-45 | - | - | 550 | 650 | |

结构特点及用途 Structural characteristics and uses

- 1、压力损失小：全开时水损为零，流道完全畅通，且介质不会沉积阀体腔内。
- 2、耐颗粒磨损：V形开口的球冠与金属阀座之间具有剪切作用，在关闭过程中，只在最后一刻球冠才靠向阀座，不形成摩擦，且阀座用耐磨的镍合金制成，不易被冲刷磨损，因而适用于含纤维、微小固体颗粒、浆等。
- 3、适合高流速介质：直通流道，坚固的偏心曲轴使之适合高流速且无振动。
- 4、寿命长：无易损部件，由于偏心作用，阀门启闭时密封面间无摩擦，则使用寿命长。
- 5、维修方便：阀门维修时不需从管路上拆下，只要打开阀盖即可进行维修。
- 6、广泛适用于水、污水、含微固体颗粒、水、蒸汽、煤气、天然气、油品等。

- 1、 Pressure loss: full-time water loss is zero, flow completely smooth, medium body will not be deposited in the cavity.
- 2、 Granule abrasion resistance: V-shaped opening of the spherical cap and the shear effect between the metal valve seat, in the closing process, only the crown at the last moment before their eyes the ball valve seat, not the formation of friction and resistant seat grinding of nickel alloys, cannot easily be washed and wear, which applies to contain fiber, small solid particles, pulp, etc.
- 3、 Suitable for high-velocity medium: direct flow, strong eccentric - crank to fit the high velocity and no vibration.
- 4、 Long life: no wearing parts, as eccentric, open and close the valve when the friction between the sealing surface, then the long service life.
- 5、 Easy maintenance: valve repair without removing the road from the tube, simply open the valve cover can be repaired.
- 6、 Widely used in water, sewage, solid particles containing micro-, water, steam, gas, natural gas, oil and so on.



执行标准 Implementation of standards

- 1、设计和制造 Design and manufacture : GB/T 12237-1989
- 2、检验和试验 Inspection and test : GB/T 13927-1992
- 3、法兰连接 Flange connection : GB/T 9113.1-2000
- 4、结构长度 Structure length : JD-2004

主要零件材料 Implementation of standards

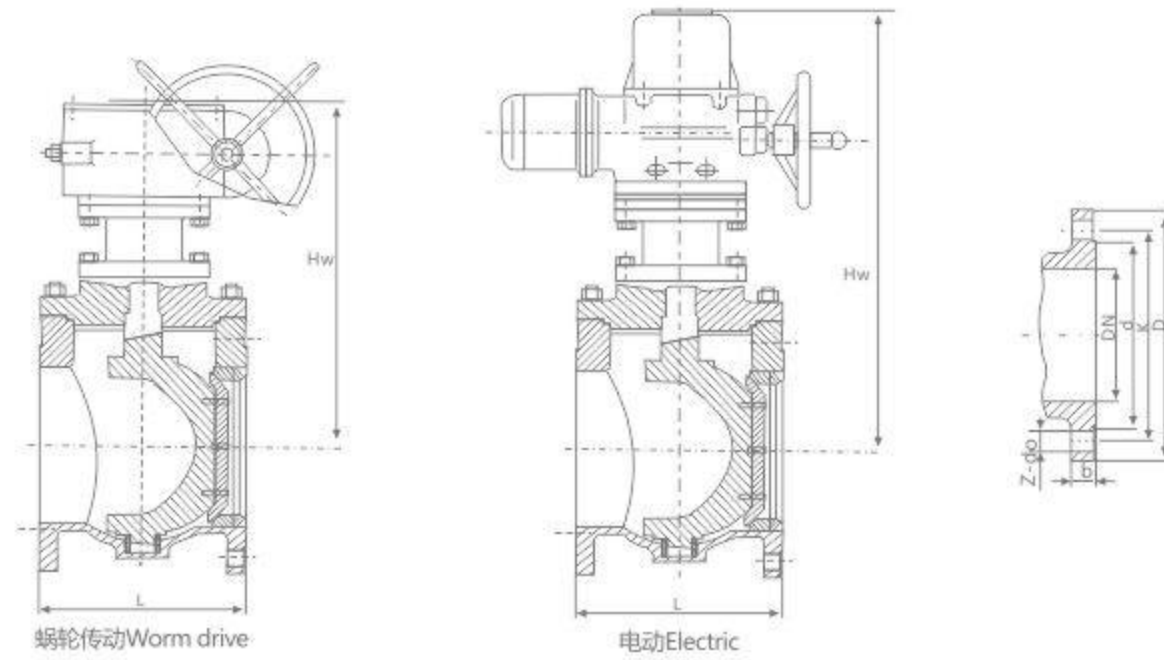
| 阀体Body | 灰铸铁Grey cast iron | 球墨铸铁Ductile Iron | 铸钢Cast steel |
|--------------|--|--------------------|--|
| 阀盖Bonnet | 灰铸铁Grey cast iron | 球墨铸铁Ductile Iron | 铸钢Cast steel |
| 阀杆Stem | 2Cr13 | 2Cr13 | 2Cr13 |
| 阀座Seat | 不锈钢Stainless steel | 不锈钢Stainless steel | 不锈钢Stainless steel |
| 球冠Spherical | 球墨铸铁覆盖橡胶、不锈钢 Ductile iron cover rubber, stainless steel | 不锈钢Stainless steel | 铸钢覆盖橡胶/不锈钢 Rubber covered steel / stainless steel |
| 半球Hemisphere | 灰铸铁Grey cast iron | 球墨铸铁Ductile Iron | 铸钢Cast steel |

INSTALL ECCENTRIC BALL VALVE

上装偏心半球阀

STAINLESS STEEL FLANGE TEE BALL VALVE

不锈钢法兰三通球阀

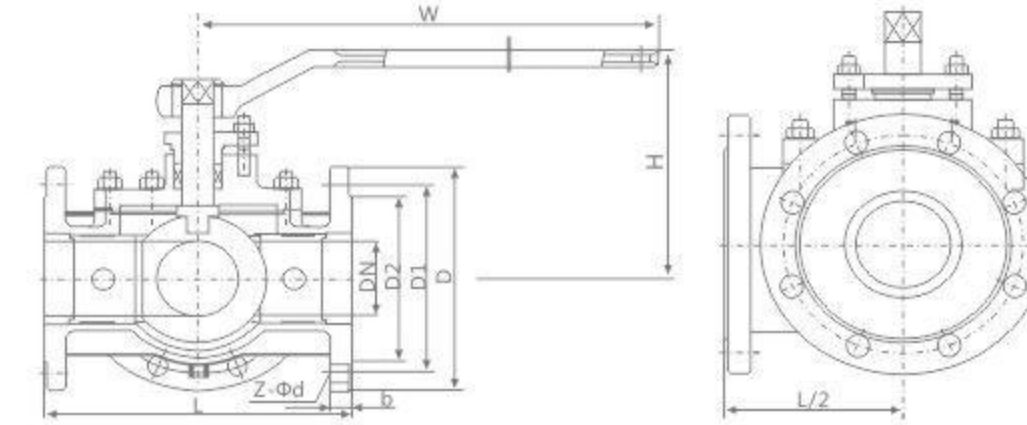


JB/T 79.2-1994
JB/T 82.1-1994

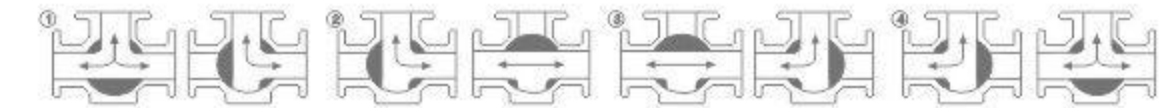
主要连接尺寸 Main connection dimensions

| 公称压力 PN | 公称通径 DN | 尺寸Size (mm) | | | | | | | |
|------------|------------|-------------|------|------|------|-------|-------|------|------|
| | | L | D | K | d | b | Z-do | Hw | Hd |
| 1.0MPa | 100 | 229 | 215 | 180 | 155 | 22 | 8-18 | 330 | 380 |
| | 125 | 254 | 245 | 210 | 185 | 24 | 8-18 | 345 | 405 |
| | 150 | 267 | 280 | 240 | 210 | 24 | 8-23 | 370 | 440 |
| | 200 | 292 | 335 | 295 | 265 | 24 | 8-23 | 405 | 470 |
| | 250 | 330 | 390 | 350 | 320 | 26 | 12-23 | 480 | 540 |
| | 300 | 356 | 440 | 400 | 368 | 28 | 12-23 | 520 | 580 |
| | 350 | 430 | 500 | 460 | 428 | 28 | 16-23 | 570 | 630 |
| | 400 | 530 | 565 | 515 | 482 | 30 | 16-25 | 630 | 710 |
| | 450 | 580 | 615 | 565 | 532 | 30 | 20-25 | 690 | 770 |
| | 500 | 660 | 670 | 620 | 585 | 32 | 20-25 | 740 | 820 |
| | 600 | 840 | 780 | 725 | 685 | 36 | 20-30 | 840 | 940 |
| | 700 | 900 | 895 | 840 | 794 | 34 | 24-30 | 960 | 1040 |
| | 800 | 1000 | 1015 | 950 | 901 | 36 | 24-33 | 1080 | 1180 |
| | 900 | 1100 | 1115 | 1050 | 1001 | 38 | 28-33 | 1190 | 1280 |
| 1000 | 1200 | 1230 | 1160 | 1112 | 38 | 28-36 | 1310 | 1420 | |
| 1200 | 1300 | 1455 | 1380 | 1328 | 44 | 32-39 | 1420 | 1530 | |
| 1400 | 1500 | 1675 | 1590 | 1530 | 48 | 36-42 | 1540 | 1650 | |
| 1.6MPa | 100 | 229 | 215 | 180 | 155 | 20 | 8-18 | 330 | 380 |
| | 125 | 254 | 245 | 210 | 185 | 22 | 8-18 | 345 | 405 |
| | 150 | 267 | 280 | 240 | 210 | 24 | 8-23 | 370 | 440 |
| | 200 | 292 | 335 | 295 | 265 | 26 | 12-23 | 405 | 470 |
| | 250 | 330 | 405 | 355 | 320 | 30 | 12-25 | 480 | 540 |
| | 300 | 356 | 460 | 410 | 375 | 30 | 12-25 | 520 | 580 |
| | 350 | 430 | 520 | 470 | 435 | 34 | 16-25 | 570 | 630 |
| | 400 | 530 | 580 | 525 | 485 | 36 | 16-30 | 630 | 710 |
| | 450 | 580 | 640 | 585 | 545 | 40 | 20-30 | 690 | 770 |
| | 500 | 660 | 705 | 650 | 608 | 44 | 20-34 | 740 | 820 |
| | 600 | 840 | 840 | 770 | 718 | 48 | 20-41 | 840 | 940 |
| | 700 | 900 | 910 | 840 | 788 | 50 | 24-41 | 960 | 1040 |
| | 800 | 1000 | 1020 | 950 | 898 | 52 | 24-41 | 1080 | 1180 |
| | 900 | 1100 | 1120 | 1050 | 998 | 54 | 28-41 | 1190 | 1280 |
| 1000 | 1200 | 1255 | 1170 | 1110 | 56 | 28-48 | 1310 | 1420 | |
| 1200 | 1300 | 1485 | 1390 | 1325 | 58 | 32-54 | 1420 | 1530 | |
| 1400 | 1500 | 1685 | 1590 | 1525 | 60 | 36-54 | 1540 | 1650 | |

Q44/644/944/45/645/945F-16C/P



"L"型 L-type



"T"型 T-type

主要外形和连接尺寸 Main external and connection dimension

JB/T79.1

| 公称通径 DN | 主要外形尺寸和连接尺寸(mm) Main external and connection dimensions | | | | | | | | WT(kg) |
|------------|---|-----|-----|-----|----|--------|-----|------|--------|
| | L | D | D1 | D2 | b | Z-φd | H | W | |
| | Q44F-16C Q44F-16P Q644F-16C Q644F-16P Q944F-16C Q944F-16P | | | | | | | | |
| | Q45F-16C Q45F-16P Q645F-16C Q645F-16P Q945F-16C Q945F-16P | | | | | | | | |
| 15 | 150 | 95 | 65 | 45 | 14 | 4-φ14 | 95 | 140 | 4 |
| 20 | 160 | 105 | 75 | 55 | 14 | 4-φ14 | 105 | 160 | 8 |
| 25 | 180 | 115 | 85 | 65 | 14 | 4-φ14 | 113 | 180 | 7 |
| 32 | 200 | 135 | 100 | 78 | 16 | 4-φ18 | 135 | 250 | 12 |
| 40 | 220 | 145 | 110 | 85 | 16 | 4-φ18 | 142 | 300 | 15 |
| 50 | 240 | 160 | 125 | 100 | 16 | 4-φ18 | 165 | 350 | 20 |
| 65 | 260 | 180 | 145 | 120 | 18 | 4-φ18 | 175 | 350 | 25 |
| 80 | 280 | 195 | 160 | 135 | 20 | 8-φ18 | 190 | 400 | 36 |
| 100 | 320 | 215 | 180 | 155 | 20 | 8-φ18 | 225 | 500 | 51 |
| 125 | 380 | 245 | 210 | 185 | 22 | 8-φ18 | 245 | 600 | 77 |
| 150 | 440 | 280 | 240 | 210 | 24 | 8-φ23 | 265 | 800 | 108 |
| 200 | 550 | 335 | 295 | 265 | 26 | 12-φ23 | 305 | 800 | 126 |
| 250 | 670 | 405 | 355 | 320 | 30 | 12-φ25 | 370 | 1300 | 185 |

STAINLESS STEEL FLANGE TEE BALL VALVE

不锈钢法兰三通球阀

FULLY WELDED BALL VALVE

全焊接球阀

主要外形和连接尺寸 Main external and connection dimension

JB/T79.1

| 公称通径 DN | 主要外形尺寸和连接尺寸(mm) Main external and connection dimensions | | | | | | | | WT(kg) |
|------------|--|-----|-----|-----|----|--------|------|------|--------|
| | L | D | D1 | D2 | D6 | b | Z-Φd | H | |
| | Q44F-40 Q45F-40P Q644F-40 Q644F-40P Q944F-40 Q944F-40P Q45F-40 Q45F-40P Q644F-40 Q644F-40P Q944F-40 Q944F-40P | | | | | | | | |
| 15 | 150 | 95 | 65 | 45 | 16 | 4-Φ14 | 95 | 100 | 4 |
| 20 | 160 | 105 | 75 | 55 | 16 | 4-Φ14 | 105 | 160 | 5 |
| 25 | 180 | 115 | 85 | 65 | 16 | 4-Φ14 | 113 | 160 | 8 |
| 32 | 200 | 135 | 100 | 78 | 18 | 4-Φ18 | 135 | 250 | 13 |
| 40 | 220 | 145 | 110 | 85 | 18 | 4-Φ18 | 142 | 250 | 19 |
| 50 | 240 | 160 | 125 | 100 | 20 | 4-Φ18 | 154 | 350 | 27 |
| 65 | 260 | 180 | 145 | 120 | 22 | 8-Φ18 | 175 | 350 | 33 |
| 80 | 280 | 195 | 160 | 135 | 22 | 8-Φ18 | 190 | 450 | 40 |
| 100 | 320 | 230 | 190 | 160 | 24 | 8-Φ23 | 225 | 450 | 53 |
| 125 | 380 | 270 | 220 | 188 | 28 | 8-Φ25 | 245 | 600 | 86 |
| 150 | 440 | 300 | 250 | 218 | 30 | 8-Φ25 | 265 | 800 | 113 |
| 200 | 550 | 360 | 310 | 278 | 34 | 12-Φ25 | 305 | 1200 | 133 |
| 250 | 670 | 425 | 370 | 332 | 36 | 12-Φ30 | 370 | 1400 | 219 |

主要外形和连接尺寸 Main external and connection dimension

JB/T79.2

| 公称通径 DN | 主要外形尺寸和连接尺寸(mm) Main external and connection dimensions | | | | | | | | WT(kg) |
|------------|--|-----|-----|-----|-----|----|--------|------|--------|
| | L | D | D1 | D2 | D6 | b | Z-Φd | H | |
| | Q44F-40 Q45F-40P Q644F-40 Q644F-40P Q944F-40 Q944F-40P Q45F-40 Q45F-40P Q644F-40 Q644F-40P Q944F-40 Q944F-40P | | | | | | | | |
| 15 | 180 | 95 | 65 | 45 | 40 | 16 | 4-Φ14 | 100 | 4 |
| 20 | 190 | 105 | 75 | 55 | 51 | 16 | 4-Φ14 | 160 | 5 |
| 25 | 200 | 115 | 85 | 65 | 58 | 16 | 4-Φ14 | 160 | 8 |
| 32 | 210 | 135 | 100 | 78 | 66 | 18 | 4-Φ18 | 250 | 13 |
| 40 | 230 | 145 | 110 | 85 | 76 | 18 | 4-Φ18 | 250 | 19 |
| 50 | 250 | 160 | 125 | 100 | 88 | 20 | 4-Φ18 | 350 | 27 |
| 80 | 310 | 195 | 160 | 135 | 121 | 22 | 8-Φ18 | 450 | 40 |
| 100 | 350 | 230 | 190 | 160 | 150 | 24 | 8-Φ23 | 450 | 53 |
| 125 | 381 | 270 | 220 | 188 | 176 | 28 | 8-Φ25 | 600 | 86 |
| 150 | 403 | 300 | 250 | 218 | 204 | 30 | 8-Φ25 | 800 | 113 |
| 200 | 502 | 375 | 320 | 282 | 260 | 38 | 12-Φ30 | 1200 | 133 |
| 250 | 568 | 445 | 385 | 345 | 313 | 42 | 12-Φ34 | 1400 | 219 |

结构

阀门是由全焊的阀体和碳增强特氟隆密封垫组成，可以在频繁操作，有杂质及化学物质的情况下长寿命运行。研磨精细的不锈钢球体可以保证多年开闭自如，运行可靠。

采用浮球结构，斜面弹性垫圈保证密封圈紧压在球体之上，即使在压力不稳定的情况下，阀门可以保证严密。

阀杆的防泄漏结构适用两个“O”型圈，使阀杆转动自如且密封严密。

Structure

The valve is composed of a valve body welded and carbon reinforced Teflon gasket, in frequent operation, impurities and chemical substances under the condition of long service life. Grinding fine stainless steel ball can guarantee for many years to open and close, reliable operation.

Adopt floating ball structure, inclined plane elastic washer to ensure that the sealing ring is pressed on the ball, even in the case of unstable pressure, the valve can ensure tight.

The valve stem leakage structure using two "O"-shaped ring, so that the valve stem rotation and sealing.

特性

不需要维护，调整及润滑，易于安装，在低运行费用下长期可靠运行。阀杆可以加长、易于保温。

操作手柄可以拆下，换向安装。

阀体不含沉重且不可靠的铸件。

安装调节机构，非常简便。

Characteristic

Do not need to maintain, adjust and lubrication, easy to install, in the low operating cost of long-term reliable operation.

Valve stem can be lengthened, easy to heat insulation.

The operating handle can be removed and the reverse is installed.

The body does not contain heavy and unreliable castings.

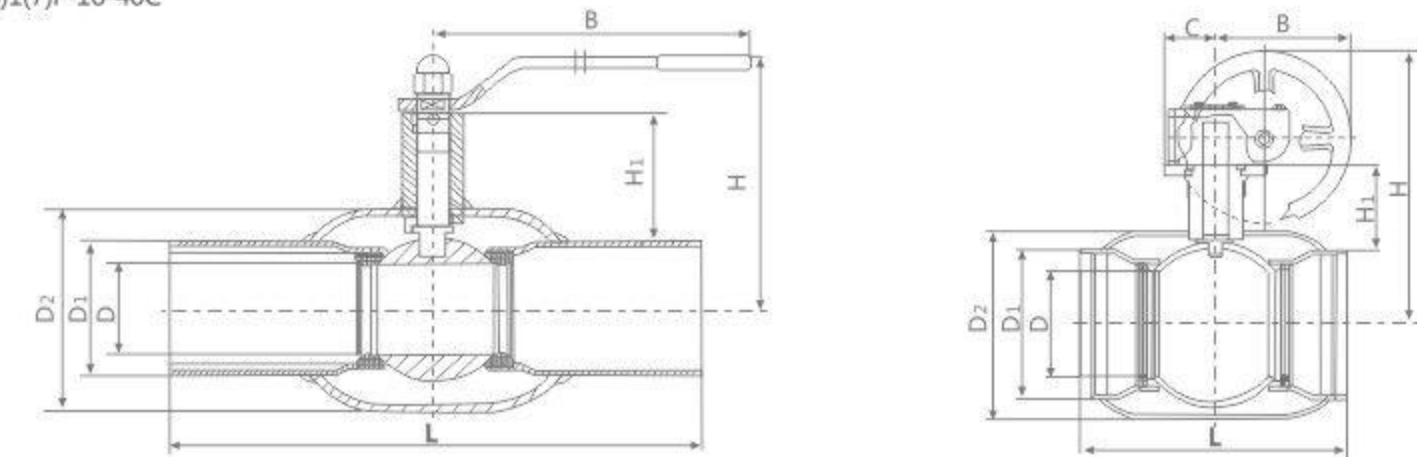
Install regulator, very simple.

主要零件材料 Main components material

| 序号 No. | 零件名称 Part name | 材料 Material Science | |
|--------|----------------------|-----------------------|---------|
| 1 | 阀体 Body | 碳钢 Carbon steel | ST37.8 |
| 2 | 阀杆室 Stem chamber | 碳钢 Carbon steel | Fe52DP |
| 3 | 球体 Ball | 不锈钢 Stainless steel | AISI304 |
| 4 | 阀杆 Stem | 不锈钢 Stainless steel | AISI303 |
| 5 | 密封圈 Seal ring | 特氟隆 Teflon | PTFE |
| 6 | 斜面垫圈 Bevel washer | 弹簧钢 Spring steel | |
| 7 | 支撑 Support | 不锈钢 Stainless steel | |
| 8 | 螺丝 Screw | 钢 Steel | |
| 9 | O形密封圈 O-sealing ring | 合成橡胶 Synthetic rubber | FPM |
| 10 | 垫圈 Gasket | 特氟隆 Teflon | PTFE |
| 11 | 止退垫圈 Floor clip | 铸钢 Cast steel | AISI304 |
| 12 | 手柄 Handle | 镀锌钢 Galvanized steel | |

结构图 Structure diagram

QW(3)4(6)1(7)F-16-40C



FULLY WELDED BALL VALVE

全焊接球阀

FULLY WELDED BALL VALVE

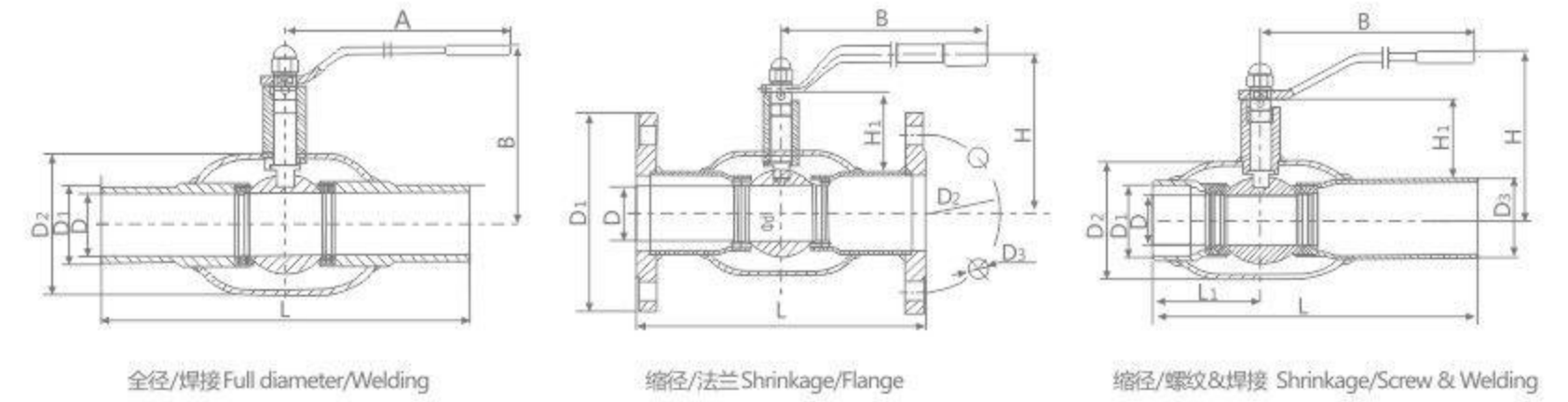
全焊接球阀

主要外形尺寸及连接尺寸 Main external and connection dimension

| DN | PN | L | D | D1 | D2 | H | B | C | H1 | |
|------|------|------|------|-------|-------|-------|------|-----|-----|----|
| 10 | 16 | 230 | 10 | 17.2 | 33.7 | 98 | 145 | | 22 | |
| 15 | | 230 | 10 | 21.3 | 33.7 | 98 | 145 | | 22 | |
| 20 | | 230 | 15 | 26.9 | 42.4 | 103 | 145 | | 23 | |
| 25 | | 230 | 20 | 33.7 | 48.3 | 118 | 145 | | 34 | |
| 32 | | 25 | 260 | 25 | 42.4 | 60.3 | 121 | 145 | | 33 |
| 40 | | 40 | 260 | 32 | 48.3 | 76.1 | 120 | 190 | | 43 |
| 50 | | | 300 | 40 | 60.3 | 88.9 | 127 | 190 | | 44 |
| 65 | | | 300 | 50 | 76.1 | 114.3 | 170 | 280 | | 71 |
| 80 | | 300 | 65 | 88.9 | 139.7 | 185 | 280 | | 77 | |
| 100 | 16 | 325 | 80 | 114.3 | 168.3 | 210 | 280 | | 102 | |
| 125 | | 325 | 100 | 139.7 | 177.8 | 253 | 400 | | 101 | |
| 150 | | 350 | 125 | 168.3 | 219.1 | 273 | 600 | | 107 | |
| 200 | | 400 | 150 | 219.1 | 273 | 315 | 900 | | 123 | |
| 250 | | 530 | 200 | 273 | 355.6 | 398 | 1200 | | 122 | |
| 300 | | 550 | 250 | 323.9 | 457 | 465 | 280 | 193 | 155 | |
| 350 | | 650 | 300 | 355.6 | 508 | 530 | 325 | 150 | 187 | |
| 400 | | 760 | 350 | 406.4 | 610 | 530 | 466 | 175 | 221 | |
| 500 | | 914 | 400 | 508 | 680 | 630 | 466 | 175 | 211 | |
| 600 | | 1067 | 500 | 610 | 830 | 762 | 466 | 175 | 259 | |
| 700 | | 1346 | 590 | 711 | 982 | 830 | 507 | | | |
| 800 | | 1524 | 690 | 813 | 1086 | 910 | 624 | | | |
| 900 | 1727 | 790 | 914 | 1245 | 1025 | 844 | | | | |
| 1000 | 1750 | 890 | 1016 | 1394 | 1165 | 881 | | | | |
| 1200 | 2050 | 1190 | 1219 | 1576 | 1289 | 1092 | | | | |

结构图 Structure diagram

QW(3)4(6)1(7)F-16-40C



全径/焊接 Full diameter /Welding

| DN | PN | L | D | D1 | D2 | A | H | B | H1 |
|------|------|------|-------|------|------|------|-----|-----|----|
| 10 | 16 | 210 | 15 | 21.7 | 42.7 | 129 | 103 | 64 | 22 |
| 15 | | 230 | 20 | 27.2 | 48 | 159 | 118 | 76 | 23 |
| 20 | | 260 | 25 | 34.0 | 60 | 159 | 121 | 85 | 34 |
| 25 | | 260 | 32 | 42.7 | 76 | 230 | 120 | 95 | 33 |
| 32 | | 300 | 40 | 48.6 | 89 | 230 | 127 | 100 | 43 |
| 40 | | 300 | 50 | 60.5 | 114 | 300 | 170 | 159 | 44 |
| 50 | | 300 | 65 | 76.3 | 140 | 300 | 185 | 170 | 71 |
| 65 | | 300 | 80 | 89.1 | 165 | 400 | 210 | 192 | 77 |
| 80 | 325 | 100 | 114.3 | 216 | 400 | 253 | 208 | 102 | |
| 100 | 350 | 125 | 139.8 | 219 | 450 | 273 | 241 | 101 | |
| 125 | 490 | 150 | 165.2 | 355 | 450 | 300 | 280 | 107 | |
| 150 | 580 | 200 | 216.3 | 356 | 252 | 325 | 500 | 123 | |
| 200 | 550 | 250 | 267.4 | 457 | 236 | 345 | 500 | 122 | |
| 250 | 630 | 300 | 318.5 | 508 | 331 | 465 | 600 | 155 | |
| 300 | 762 | 337 | 355.6 | 559 | 331 | 530 | 600 | 187 | |
| 400 | 840 | 387 | 406.4 | 660 | 360 | 550 | 700 | 221 | |
| 500 | 990 | 490 | 508.0 | 830 | 413 | 630 | 800 | 211 | |
| 600 | 1140 | 590 | 610 | 982 | 506 | 830 | | | |
| 700 | 1346 | 690 | 711 | 1086 | 605 | 910 | | | |
| 800 | 1524 | 790 | 813 | 1245 | 659 | 1025 | | | |
| 900 | 1727 | 890 | 914 | 1433 | 881 | 1165 | | | |
| 1000 | 1950 | 980 | 1016 | 1576 | 1092 | 1170 | | | |
| 1200 | 2250 | 1180 | 1219 | 1939 | 1092 | 1180 | | | |



1、防静电结构

当操作阀门，由于球体和阀座之间的摩擦，会产生静电并积聚在球体上，为防止产生静电火花，特在阀门上设置防静电装置，将积聚在球体上的电荷导出。

1、Antistatic structure

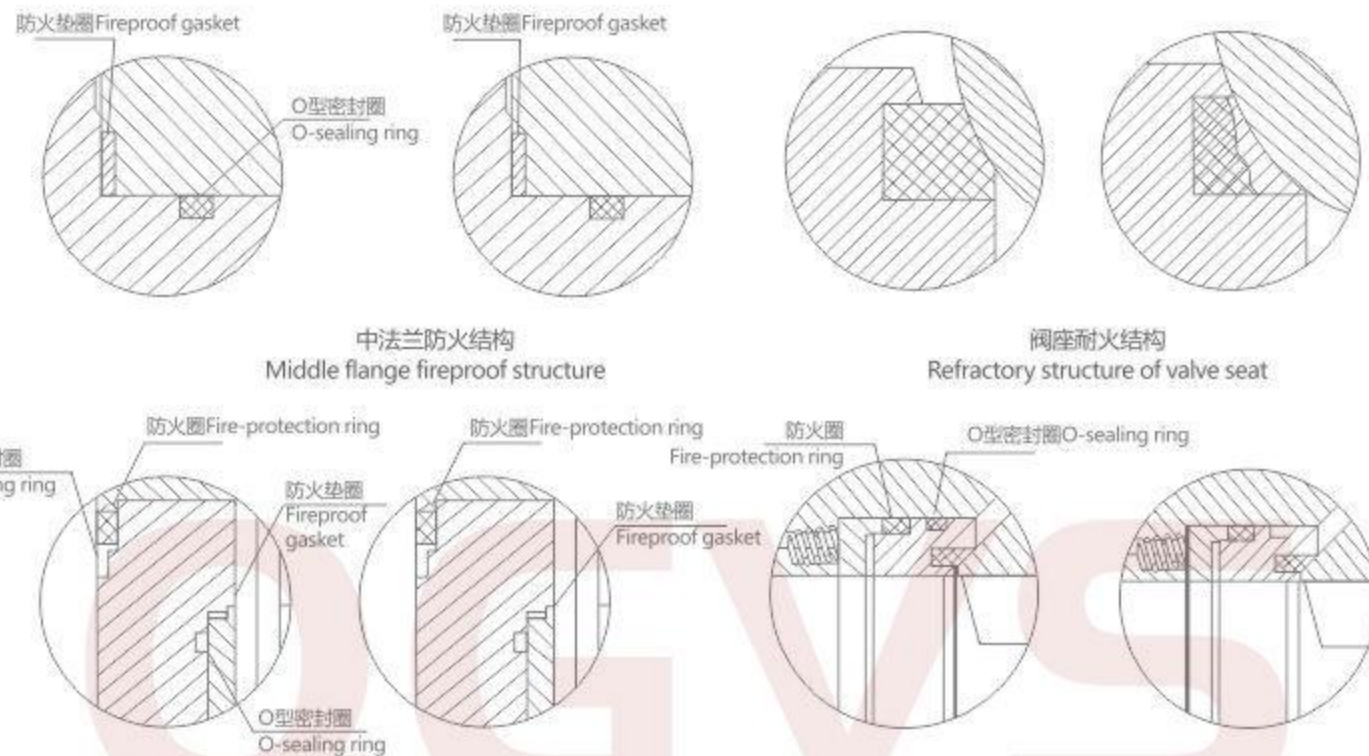
When operating the valve, due to the friction between ball and seat, will generate static electricity and accumulate on the sphere, to prevent electrostatic spark producing, set in the valve antistatic device, accumulate in the sphere of charge is derived.

2、防火结构

在意外发生火灾或异常升温使非金属阀座软化烧损时，特殊设计的阀座支撑金属密封面在弹簧载荷的作用下，与球体形成金属与金属接触，能够起到瞬时密封作用。

2、The structure of the fire

In accidental fire or burning of the abnormal heat up to soften the non-metallic seat, a specially designed valve seat sealing surface under the action of the spring load bearing metal, and sphere form metal to metal contact, can rise the instantaneous sealing function.



3、辅助密封结构

阀座及阀杆密封件出现损伤而引起泄漏时，可通过注脂阀注入密封脂，起到暂时密封作用。

3、Auxiliary seal structure

Valve seat and valve stem seal damage caused by the leakage, can pass on the valve sealing grease injection, temporary sealing effect.

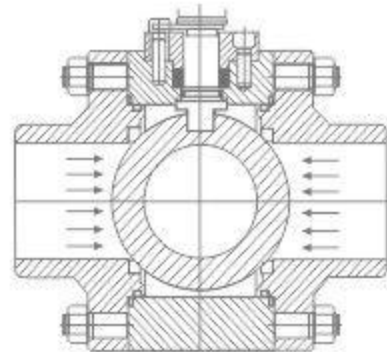


4、双阻塞与双排放 (DBB) 结构

固定球阀处于全关闭状态时，上下游的阀座使流体完全阻断，阀体中腔的积滞物可以通过排泄装置进行排泄，减少污物对阀门密封面的损伤，延长阀门使用寿命。

4、Double block and double emission (DBB) structure

Fixed ball valve is fully closed, the valve on the lower reaches of the valve seat so that the fluid is completely blocked, the valve body in the cavity of the product can be excreted through the drainage device to reduce the dirt on the valve sealing surface damage, extend the service life of the valve.



5、阀门开、关位置指示

在蜗轮箱上端面，设有开、关位置指示器，在手轮顺时针转动时，阀门处于关闭位置；当手轮逆时针转动时，阀门处于开启位置。

5、Valves open and close position indicator

End face on the worm gear box, equipped with open and closed position indicator, when the handwheel clockwise, the valve is in closed position; when the handwheel anti-clockwise rotation, the valve is in open position.

6、上游密封双向阀

固定球阀采用先进的弹簧预紧浮动阀座组件上游密封的设计原理，无论阀门在低压、高压、真空下都能良好地实现密封。每只阀门有两个阀座，两个方向都能密封，因而安装没有方向限制，无论阀门的哪端均可作为上游端是双向阀。

6、Upstream sealing two-way valve

Fixed ball valve with advanced spring pre-tight upstream of the valve seat assembly design principle, regardless of the valve in the low pressure, high pressure, vacuum can be a good way to achieve sealing. Each valve has two valve seats, two directions can be sealed, so the installation has no direction, regardless of which side of the valve can be used as a two-way valve.

7、全通径或缩径结构

可根据需要选用全通径或缩径结构。全通径球阀的通道内与管线内径一致。不但流体阻力最小，也便于管道清扫，而缩径球阀的流体阻力比相同口径的截止阀要低很多，介质阻力比相同口径的截止阀要低很多，重量比相同口径的球阀要轻30%左右，有效的降低了生产成本及价格，因而逐步得到了较广泛的使用。

7、Full size of reduced diameter structure

Can be selected according to the full size of reducing structure. Full bore ball valve in the channel is consistent with the inner diameter of pipeline. Not only the fluid resistance is minimal, but also easy to pipe cleaning, and reducing valve of the same diameter of fluid resistance than the same diameter of the valve to be much lower than the same diameter of the same diameter of the cut-off valve to lower a lot of weight ratio of the same diameter of the valve to light around 30%, effectively reduce the production of the price, and thus gradually get a wider use.

8、操作灵活

采用具有小摩擦系数和良好润滑性的阀杆轴承，大大地减少了阀门的操作扭矩，因此即使在没有提供密封润滑脂的情况下，也能够长期灵活自如地对阀门进行操作。

8、Flexible operation

With stem bearing small friction coefficient and good lubricity, greatly reduced the valve operating torque, so even in the case does not provide a tight seal grease, is also a long-term mobility to operate the valve.

9、多种操作方式

操作方式根据需要可选择手动、气动、电动、气液联动、液动等。

9、All kinds of operating modes

Operation mode according to the need to choose manual, pneumatic, electric, gas-liquid linkage, hydraulic, etc.

10、防止误操作结构

对安装在野外或防止非工作人员的错误操作，以及在有些振动较大的场合手柄受到撞击产生误动作。在阀门的全开或全关位置设有锁定孔，用以需要时加锁，起到安全保护作用。

10、To prevent wrong operation structure

To install in the wild or prevent non-working people mistake operation, as well as in some larger vibration occasions handle hit to produce false action. In the position of the valve fully open or close a locking hole, used to lock when necessary. Have insurance effect.

11、低温结构

低温球阀采用长颈结构设计，防止低温工况下阀杆填料密封的失效，同时阀座采用自动泄结构，防止阀腔中腔介质由于升温而出现的异常升压，确保阀门的使用安全。

11、Low temperature structure

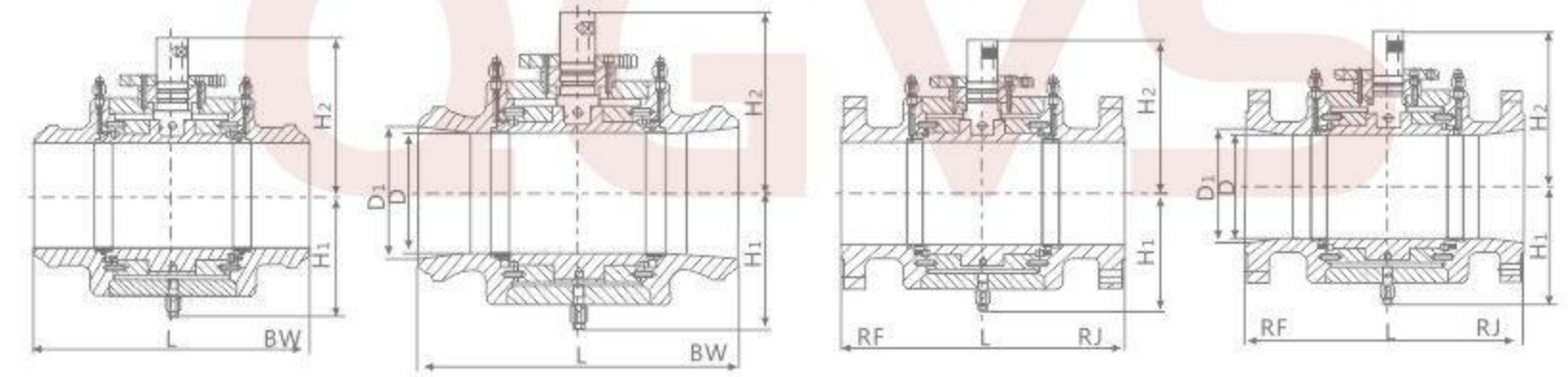
Low temperature valve with long neck structure design, prevent failure under low temperature valve with long neck structure design, prevent failure under low temperature conditions and the valve stem seal, valve seat with automatic relief structure design, prevent the abnormal pressure valve in the cavity medium due to heating, to ensure the safe use of the valve.

12、埋地式加长杆结构

根据用户的需求，球阀可设计成阀杆加长结构，适用于管线埋地铺设安装的场所。

12、Buried type extension rod structure

According to the needs of users, ball valve can be designed into stem extension structure, suitable for buried pipelines laid the place of installation.



Class 150 PN1.6MPa PN2.0MPa

| DN | NPS | L | | | D | D1 | H1 | H2 | 重量 Weight(Kg) | |
|---------|-------|-----|-----|-----|-----|-----|-----|-----|---------------|-----|
| | | RF | BW | RJ | | | | | RF | BW |
| 100 | 4 | 229 | 305 | 241 | 102 | / | 235 | 135 | 51 | 44 |
| 150×100 | 6×4 | 394 | 457 | 406 | 102 | 152 | 235 | 135 | 76 | 68 |
| 150 | 6 | 394 | 457 | 406 | 152 | 1 | 263 | 185 | 93 | 105 |
| 200×150 | 8×6 | 457 | 521 | 470 | 152 | 203 | 263 | 185 | 154 | 130 |
| 200 | 8 | 457 | 521 | 470 | 203 | / | 325 | 215 | 192 | 202 |
| 250×200 | 10×8 | 533 | 559 | 546 | 203 | 254 | 325 | 215 | 293 | 240 |
| 250 | 10 | 533 | 559 | 546 | 254 | / | 376 | 243 | 322 | 296 |
| 300×250 | 12×10 | 610 | 635 | 622 | 254 | 305 | 376 | 243 | 433 | 384 |
| 300 | 12 | 610 | 636 | 622 | 305 | / | 428 | 316 | 548 | 497 |
| 350×300 | 14×12 | 686 | 762 | 699 | 305 | 377 | 428 | 316 | 582 | 527 |

Class 150 PN1.6MPa PN2.0MPa

| DN | NPS | L | | | D | D1 | H1 | H2 | 重量 Weight(Kg) | |
|----------|-------|------|------|------|------|------|------|-----|---------------|------|
| | | RF | BW | RJ | | | | | RF | BW |
| 350 | 14 | 686 | 762 | 699 | 337 | / | 457 | 330 | 604 | 559 |
| 400×350 | 16×14 | 762 | 838 | 775 | 337 | 387 | 457 | 330 | 657 | 604 |
| 400 | 16 | 762 | 838 | 775 | 387 | / | 565 | 360 | 749 | 704 |
| 450×400 | 18×16 | 864 | 914 | 876 | 387 | 438 | 568 | 362 | 773 | 686 |
| 450 | 18 | 864 | 914 | 876 | 438 | / | 538 | 363 | 1056 | 997 |
| 500×450 | 20×18 | 914 | 991 | 927 | 438 | 489 | 538 | 362 | 1095 | 1042 |
| 500 | 20 | 914 | 991 | 927 | 489 | / | 559 | 458 | 1503 | 1254 |
| 550×500 | 22×20 | 991 | 1092 | 1062 | 489 | 540 | 559 | 458 | 1568 | 1385 |
| 550 | 22 | 991 | 1092 | 1062 | 540 | / | 578 | 525 | 1756 | 1590 |
| 600×550 | 24×22 | 1067 | 1143 | 1080 | 540 | 59 | 578 | 525 | 1954 | 1658 |
| 600 | 24 | 1067 | 1143 | 1080 | 591 | / | 683 | 565 | 2097 | 1935 |
| 650×600 | 26×24 | 1143 | 1245 | 1168 | 591 | 635 | 683 | 565 | 2442 | 2315 |
| 650 | 26 | 1143 | 1245 | 1168 | 635 | / | 695 | 585 | 2908 | 2545 |
| 700×650 | 28×26 | 1295 | 1397 | 1270 | 635 | 736 | 695 | 585 | 3196 | 2768 |
| 700 | 28 | 1245 | 1346 | 1270 | 686 | / | 743 | 646 | 3262 | 2945 |
| 750×700 | 30×28 | 1295 | 1397 | 1321 | 686 | 736 | 743 | 646 | 4038 | 3446 |
| 750 | 30 | 1295 | 1397 | 1321 | 736 | / | 782 | 675 | 4305 | 3994 |
| 800×750 | 32×30 | 1372 | 1524 | 1400 | 736 | 781 | 782 | 675 | 4358 | 3855 |
| 800 | 32 | 1372 | 1524 | 1400 | 781 | / | 928 | 210 | 4392 | 4025 |
| 850 | 34 | 1473 | 1626 | 1502 | 832 | / | 946 | 738 | 6127 | 5448 |
| 900×850 | 36×34 | 1524 | 1727 | 1552 | 832 | 876 | 946 | 738 | 6352 | 5676 |
| 900 | 36 | 1524 | 1727 | 1552 | 876 | / | 982 | 776 | 6875 | 6576 |
| 1000 | 40 | 1753 | 1956 | / | 978 | / | 1069 | 885 | 7014 | 6805 |
| 1050×900 | 42×40 | 1855 | 2083 | / | 876 | 1022 | 988 | 884 | 7235 | 7000 |
| 1050 | 42 | 1855 | 2083 | / | 1022 | / | 1097 | 926 | 7628 | 7239 |
| 1200 | 48 | 2134 | 2388 | / | 1168 | / | 1227 | 990 | 8257 | 7925 |

Class 300 PN2.5MPa PN2.0MPa

| DN | NPS | L | | | D | D1 | H1 | H2 | 重量 Weight(Kg) | |
|---------|-------|------|------|------|-----|-----|-----|-----|---------------|------|
| | | RF | BW | RJ | | | | | RF | BW |
| 100 | 4 | 305 | 305 | 321 | 102 | 1 | 235 | 135 | 58 | 46 |
| 150×100 | 6×4 | 403 | 403 | 419 | 102 | 152 | 235 | 135 | 85 | 72 |
| 150 | 6 | 403 | 403 | 419 | 152 | / | 263 | 185 | 125 | 112 |
| 200×150 | 8×6 | 502 | 521 | 518 | 152 | 203 | 263 | 185 | 169 | 138 |
| 200 | 8 | 502 | 521 | 518 | 203 | / | 325 | 215 | 210 | 215 |
| 250×200 | 10×8 | 568 | 559 | 584 | 203 | 254 | 325 | 215 | 286 | 243 |
| 250 | 10 | 568 | 559 | 584 | 254 | 1 | 376 | 243 | 346 | 297 |
| 300×250 | 12×10 | 648 | 635 | 664 | 254 | 305 | 376 | 243 | 478 | 385 |
| 300 | 12 | 648 | 635 | 664 | 305 | / | 428 | 316 | 586 | 490 |
| 350×300 | 14×12 | 762 | 762 | 778 | 305 | 337 | 428 | 316 | 585 | 527 |
| 350 | 14 | 762 | 762 | 778 | 337 | / | 457 | 330 | 629 | 553 |
| 400×350 | 16×14 | 638 | 838 | 854 | 337 | 387 | 457 | 330 | 747 | 615 |
| 400 | 16 | 838 | 838 | 854 | 387 | 1 | 565 | 360 | 785 | 713 |
| 450×400 | 18×16 | 914 | 914 | 930 | 387 | 438 | 568 | 362 | 920 | 783 |
| 450 | 18 | 914 | 914 | 930 | 438 | 1 | 538 | 362 | 1265 | 990 |
| 500×450 | 20×18 | 991 | 991 | 1010 | 438 | 489 | 538 | 362 | 1437 | 1058 |
| 500 | 20 | 991 | 991 | 1010 | 489 | 1 | 559 | 458 | 1546 | 1253 |
| 550×500 | 22×20 | 1092 | 1092 | 1114 | 489 | 540 | 559 | 458 | 1546 | 1387 |
| 550 | 22 | 1092 | 1092 | 1114 | 540 | / | 578 | 525 | 1830 | 1593 |
| 600×550 | 24×22 | 1143 | 1143 | 1165 | 540 | 591 | 578 | 575 | 2042 | 1660 |
| 600 | 24 | 1143 | 1143 | 1165 | 591 | / | 683 | 566 | 2443 | 1934 |
| 650×600 | 26×24 | 1245 | 1245 | 1220 | 591 | 635 | 683 | 565 | 2618 | 2319 |
| 650 | 26 | 1245 | 1245 | 1270 | 635 | / | 695 | 585 | 3015 | 2544 |
| 700×650 | 28×26 | 1397 | 1397 | 1372 | 635 | 236 | 685 | 585 | 3291 | 2768 |
| 700 | 28 | 1346 | 1346 | 1372 | 686 | 1 | 743 | 646 | 3514 | 2958 |
| 750×700 | 30×28 | 1397 | 1397 | 1422 | 686 | 736 | 743 | 646 | 4138 | 3457 |
| 750 | 30 | 1397 | 1397 | 1422 | 736 | / | 782 | 675 | 4538 | 3998 |
| 800×750 | 32×30 | 1524 | 1524 | 1553 | 781 | / | 928 | 710 | 4907 | 4325 |
| 800 | 32 | 1524 | 1524 | 1553 | 781 | / | 928 | 710 | 4907 | 4325 |
| 850 | 34 | 1626 | 1626 | 1654 | 832 | 1 | 946 | 738 | 6658 | 5446 |
| 900×850 | 36×34 | 1727 | 1727 | 1756 | 832 | 876 | 946 | 738 | 6965 | 5893 |

QW(3、6、9)61F-150~1500Lb C、P、R、I、V
ANSI Class 150/Class300

| CLASS | DN | d | L | H | W |
|----------------|-------|-------|--------|-------|-------|
| 150Lb 300Lb | 2 | 2 | 8.5 | 7.08 | 78.78 |
| | 3 | 3 | 11.125 | 7.87 | 15.75 |
| | 4 | 4 | 12 | 8.86 | 19.69 |
| | 6 | 6 | 18 | 11.22 | |
| | 8 | 8 | 20.5 | 12.40 | |
| | 10 | 10 | 22 | 12.99 | |
| | 12 | 12 | 25 | 16.93 | |
| | 14 | 13.25 | 30 | 18.30 | |
| | 16 | 15.25 | 33 | 19.49 | |
| | 18 | 17.25 | 36 | 23.03 | |
| | 20 | 19.25 | 39 | 24.01 | |
| 24 | 23.25 | 45 | 25 | | |

PN20/50

| CLASS | DN | d | L | H | W |
|------------------|-----|-------|-----|-----|-----|
| 2.0MPa 5.0MPa | 50 | 50 | 216 | 180 | 350 |
| | 80 | 76.2 | 283 | 200 | 400 |
| | 100 | 101.6 | 305 | 225 | 500 |
| | 150 | 152 | 457 | 285 | |
| | 200 | 203 | 521 | 315 | |
| | 250 | 254 | 559 | 330 | |
| | 300 | 305 | 635 | 430 | |
| | 350 | 337 | 762 | 465 | |
| | 400 | 387 | 838 | 495 | |
| | 450 | 438 | 914 | 585 | |
| 500 | 489 | 991 | 610 | | |
| 600 | 591 | 1143 | 635 | | |

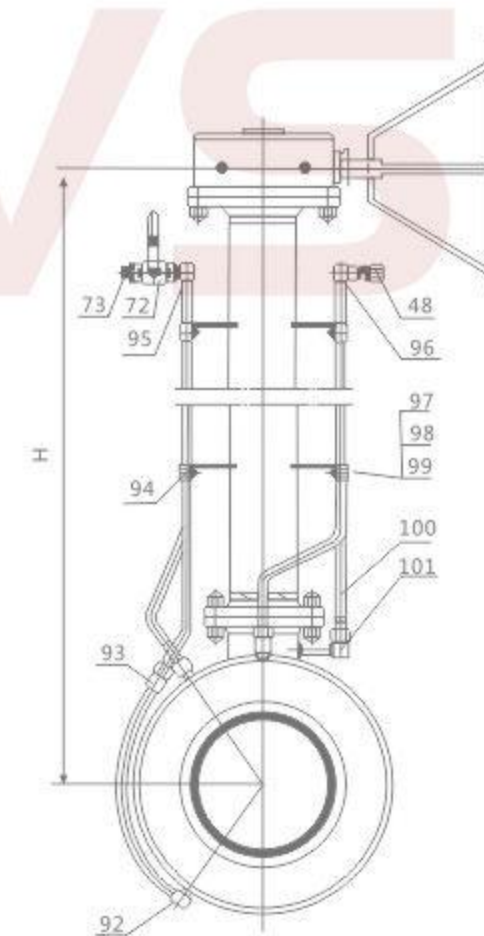
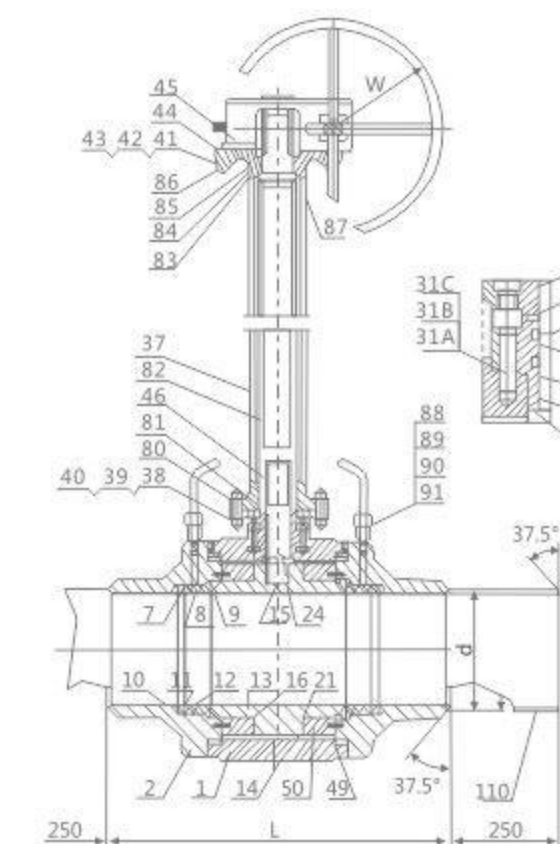
Class600

| CLASS | DN | d | L | H | W |
|-------|-------|-------|------|-------|-------|
| 600Lb | 2 | 2 | 11.5 | 7.08 | 23.62 |
| | 3 | 3 | 14 | 7.87 | 39.37 |
| | 4 | 4 | 17 | 8.86 | 59.05 |
| | 6 | 6 | 22 | 11.22 | |
| | 8 | 8 | 26 | 12.40 | |
| | 10 | 10 | 31 | 12.99 | |
| | 12 | 12 | 33 | 16.93 | |
| | 14 | 13.25 | 35 | 18.30 | |
| | 16 | 15.25 | 39 | 19.49 | |
| | 18 | 17.25 | 43 | 23.03 | |
| | 20 | 19.25 | 47 | 24.01 | |
| 24 | 23.25 | 55 | 25 | | |

PN100

| CLASS | DN | d | L | H | W |
|---------|-----|--------|--------|-----|------|
| 10.0MPa | 50 | 50 | 216 | 180 | 600 |
| | 80 | 76.2 | 355.6 | 200 | 1000 |
| | 100 | 101.6 | 431.8 | 225 | 1500 |
| | 150 | 152 | 558 | 285 | |
| | 200 | 203 | 660.4 | 315 | |
| | 250 | 254 | 787.4 | 330 | |
| | 300 | 305 | 838.2 | 430 | |
| | 350 | 337 | 889 | 465 | |
| | 400 | 387 | 990.6 | 495 | |
| | 450 | 438 | 1092.2 | 585 | |
| 500 | 489 | 1193.8 | 610 | | |
| 600 | 591 | 1397 | 635 | | |

结构图Structure diagram



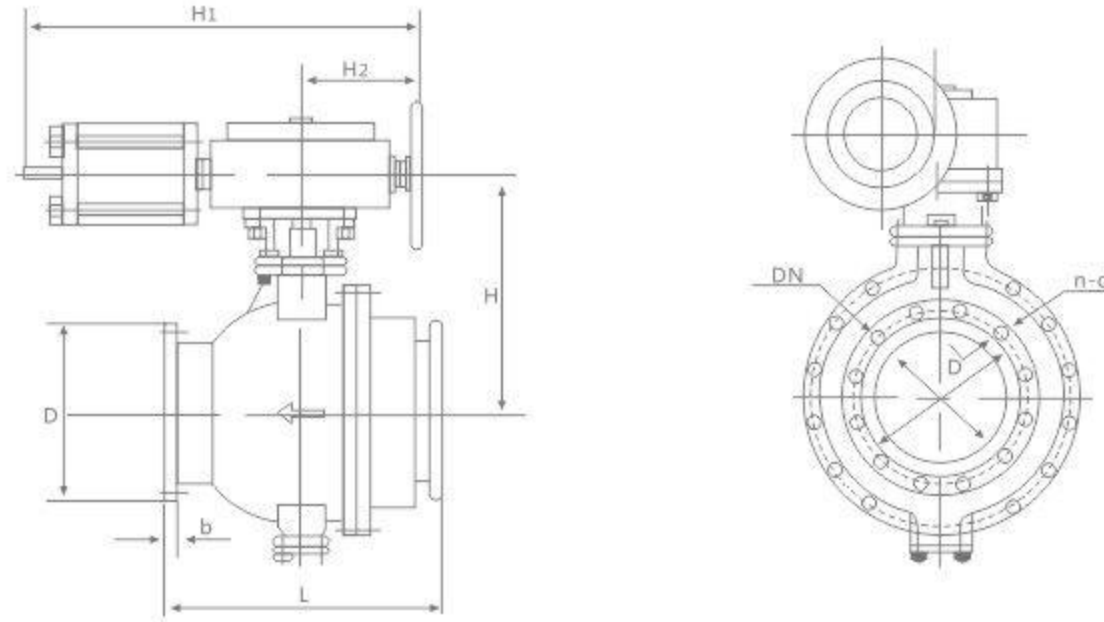
DUST UNLOADING BALL VALVE

卸灰球阀

LOW TEMPERATURE BALL VALVE

DQ41F-16/40P低温球阀

FQ347AF-2.5、6 FQ647AF-2.5、6 FQ947AF-2.5、6



卸灰球阀 Cinder ball valve

- 该阀门适用于冶金行业，切断含灰煤气管道，也可用于其它含灰气体管道作切断设备或放散阀。
- 公称压力：0.25MPa、0.6MPa
- 适用介质：空气、粉尘、含灰煤气
- 适用温度：≤250℃
- 球体材料：铸钢不锈钢该阀用0.25MPa气体进行试压5分钟，压降应小于3×103MPa
- 法兰连接尺寸按GB/T 1724.6-1988
- 该阀安装时介质流向应符合阀体上箭头指向。
- 传动方式：气动、电动、液动、电液联动。
- The valve used in metallurgy industry, coal gas pipeline off ash can also be used for other with gray gas pipeline to cut off the device or relief valve.
- Nominal Pressure: 0.25MPa, 0.6MPa
- Suitable medium: air, dust, ash gas
- Suitable Temperature: ≤250℃
- Ball material: stainless steel for the gas valve pressure test with 0.25MPa 5 minutes, the pressure drop should be less than 3 × 103MPa
- Flange dimensions according to GB / T 1724.6-1988
- This valve installs when the medium flows should conform to the valve chest the arrow direction.
- Type of drive: Air operated, electrically operated, the fluid moves, the battery solution linkage.

主要连接尺寸 Main connection dimensions

| 公称通径 DN | 尺寸Size (mm) | | | | | | | | 重量 Weight (kg) |
|------------|---------------|-----|-----|----|-------|------|------|------|------------------------|
| | L | D | D1 | b | n-d | H | H1 | H2 | |
| 150 | 394 | 285 | 240 | 20 | 8-22 | 980 | 1320 | 1720 | 200 |
| 200 | 457/500 | 340 | 295 | 20 | 8-22 | 1060 | 1320 | 720 | 240 |
| 250 | 533/600 | 395 | 355 | 20 | 12-22 | 1100 | 1320 | 720 | 340 |
| 300 | 610/700 | 445 | 410 | 28 | 12-22 | 1140 | 1320 | 720 | 450 |
| 350 | 686/800 | 505 | 470 | 28 | 16-22 | 1175 | 1320 | 720 | 560 |
| 400 | 762/900 | 565 | 525 | 28 | 16-22 | 1350 | 1580 | 850 | 840 |

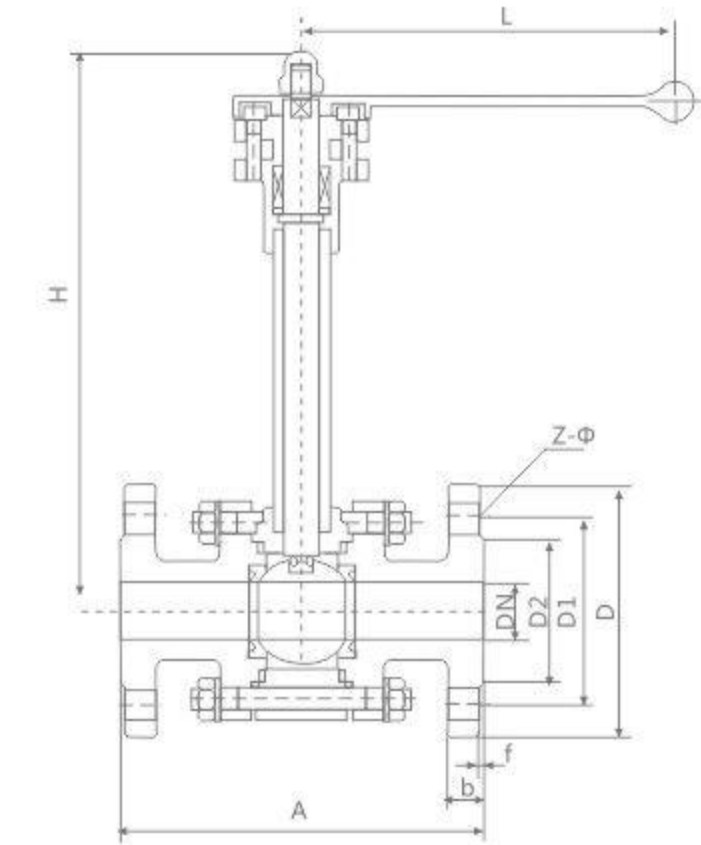
DQ41F-16/40P

产品规范

- 公称压力：1.6MPa
- 公称通径：10mm~200mm
- 适用介质：L02、LN2、LAr、LNG、LC2H4等
- 适用温度：-196~+80℃
- 连接方式：法兰
- 介质流向：由阀门从左向右流动

Product specification

- Nominal pressure: 1.6 MPa
- Nominal size: 10 mm to 200 mm
- Applicable medium: L02, LN2, LAr, LNG, LC2H4, etc
- Applicable temperature: 196 ~ + 80 °C
- Connection mode: flange
- Medium flow: the valve flow from left to right



主要外形和连接尺寸 Main external and connection dimension

| 产品代号 | 通径 DN (mm) | 主要连接尺寸 Main connecting dimensions | | | | | | | | | 重量 (kg) |
|--------------|--------------------|-----------------------------------|-----|-----|-----|-----|-------|----|---|-----|--------------|
| | | A | H | D | D1 | D2 | Z-φd | b | f | L | |
| 222Q15AB2A3 | 15 | 130 | 207 | 95 | 65 | 45 | 4-14 | 16 | 2 | 140 | 4.2 |
| 222Q20AB2A3 | 20 | 140 | 239 | 105 | 75 | 55 | 4-14 | 16 | 2 | 160 | 5.6 |
| 222Q25AB2A3 | 25 | 150 | 254 | 115 | 85 | 65 | 4-14 | 16 | 2 | 180 | 7.2 |
| 222Q32AB2A3 | 32 | 165 | 280 | 135 | 100 | 78 | 4-18 | 18 | 2 | 200 | 11.3 |
| 222Q40AB2A3 | 40 | 180 | 292 | 145 | 110 | 85 | 4-18 | 18 | 2 | 200 | 13.8 |
| 222Q50AB2A3 | 50 | 200 | 322 | 160 | 125 | 100 | 4-18 | 18 | 3 | 250 | 18.6 |
| 222Q65AB2A3 | 65 | 220 | 354 | 180 | 145 | 120 | 4-18 | 18 | 3 | 320 | 32.8 |
| 222Q80AB2A3 | 80 | 250 | 375 | 195 | 160 | 135 | 8-18 | 20 | 3 | 320 | 46.2 |
| 222Q100AB2A3 | 100 | 280 | 420 | 215 | 180 | 155 | 8-18 | 20 | 3 | 360 | 60.3 |
| 222Q125AB2A3 | 125 | 320 | 452 | 245 | 210 | 185 | 8-18 | 22 | 3 | 500 | 101.6 |
| 222Q150AB2A3 | 150 | 360 | 491 | 280 | 240 | 210 | 8-23 | 24 | 3 | 700 | 166.2 |
| 222Q200AB2A3 | 200 | 400 | 544 | 335 | 295 | 265 | 12-23 | 26 | 3 | 900 | 274.6 |