

齐力集团温州总部
Qili Group Wenzhou Headquarters



齐力集团安徽工厂
Qili Group Anhui Factory



齐力集团锻造工厂
Qili Group Forging Factory



齐力集团无尘车间
Qili Group Clean Workshop

中国·齐力控股集团有限公司
CHINA·QILI HOLDING GROUP CO., LTD.
安徽齐力不锈钢制品有限公司
ANHUI QILI STAINLESS STEEL PRODUCTS CO., LTD.
安徽齐力金属制品有限公司
ANHUI QILI METAL PRODUCTS CO., LTD.

中国 CHINA

集团总部：中国浙江省温州市滨海开发区滨海三路3839 - 1
生产基地：安徽省怀宁经济技术开发区兴业路1号
锻造冲板基地:安徽省怀宁经济开发区独秀大道32号
电话：+86-577-86990175
传真：+86-577-86990176
邮箱：sales@wzqlqgjx.cn
网址：www.cnqlgroup.com　　www.cnqlstainless.com

小程序
Applets

企业微信公众平台
Official account

国内官网
Website

国际 INTERNATIONAL

Headquarters: 3839-1 Binhai 3rd Road, Binhai Development Zone, Wenzhou,Zhejiang Province, China
Mass Production Factory: No. 1 Xingye Road, Huaining Economic Development Zone, Anhui Province
Forging & Punching Factory: No. 32 Duxiu Avenue, Huaining Economic Development Zone, Anhui Province
Tel: +86-577-86990175
Fax: +86-577-86990176
E-mail: sales@wzqlqgjx.cn
Http: www.qlstainless.com　　www.sanitary-valve-fittings.com

国际官网
Website

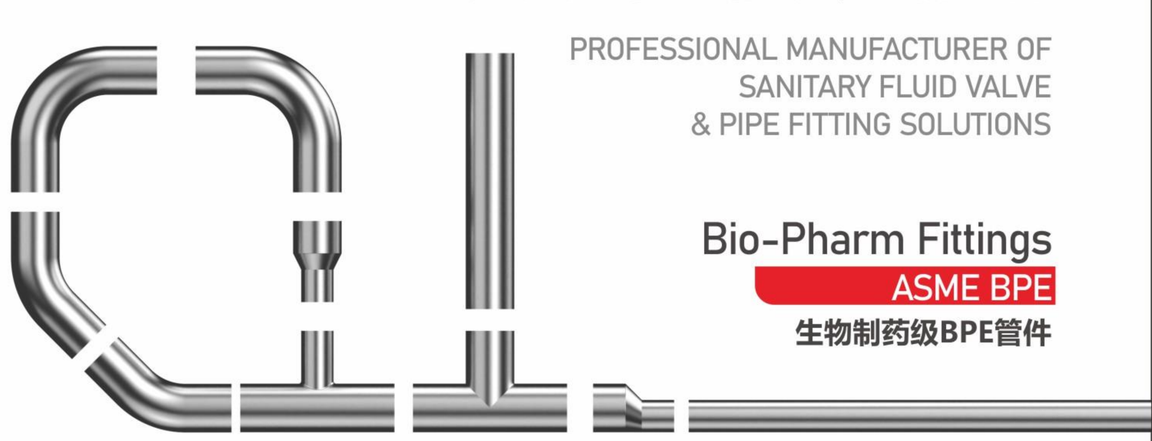
CERTIFIED
QUALITY
BPE-189

符合美国ASME BPE 标准

中国·齐力控股集团
CHINA·QILI HOLDING GROUP

高洁净流体设备
阀门及管道连接部件
解决方案一站式专业制造商

PROFESSIONAL MANUFACTURER OF
SANITARY FLUID VALVE
& PIPE FITTING SOLUTIONS



Bio-Pharm Fittings

ASME BPE

生物制药级BPE管件

ASME CERTIFIED QUALITY
BPE-189



The American Society of Mechanical Engineers

BPE

CERTIFICATE OF AUTHORIZATION

The named company is authorized by The American Society of Mechanical Engineers (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME BPE Standard on Bioprocessing Equipment. The use of the ASME Single Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any item produced under this certificate shall have been manufactured strictly in accordance with the provisions of the ASME BPE Standard on Bioprocessing Equipment.

COMPANY:

Qili Holding Group Co., Ltd.
No.62, Binhai 3rd Road, Binhai Development Zone
Wenzhou, Zhejiang, 325000
People's Republic of China

SCOPE:

Manufacture of ferrous fittings at the above location and with additional activities at No.3839-1 Binhai 3rd Road, Binhai Development Zone, Wenzhou, Zhejiang, 325000, People's Republic of China

AUTHORIZED: **July 09, 2024**

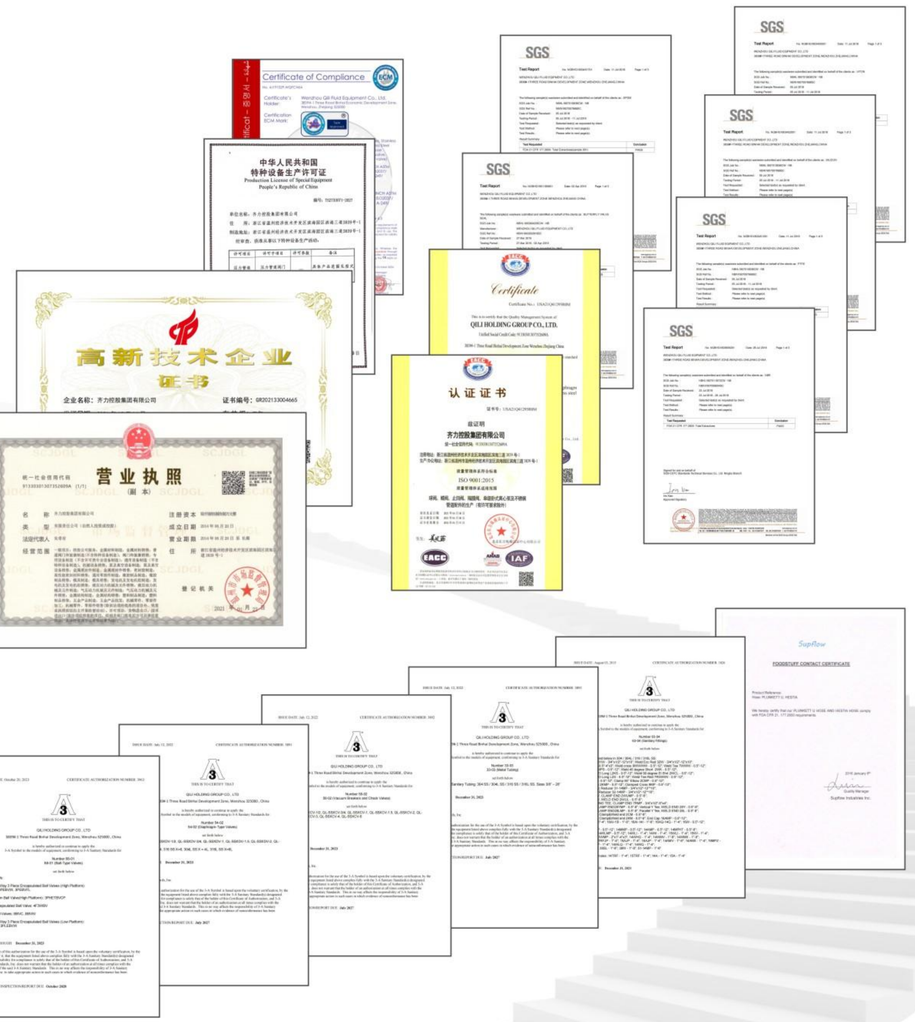
EXPIRES: **July 09, 2029**

CERTIFICATE NUMBER: **BPE-189**

Gary L. Scribner
Board Chair,
Conformity Assessment

Matthew Vaquez
Senior Director,
Engineering Operations

QILI is certified by ASME BPE,3A,CE,ISO 9001,FDA,TS cert.
will be your assurance of outstanding quality & service .





CERTIFIED QUALITY
BPE-189

美国机械工程师学会（ASME）于1997年首次发布了生物加工设备标准（BPE），从那时起，该标准成为全球生物技术和制药行业公认的标准规范。QILI生产的配件产品符合ASME BPE标准，每个组件都融合了我们作为世界领先的不锈钢制品制造商之一的经验。这同样适用于QILI长期以来生产的新T形管件和88°和92°弯头。

The American Society of Mechanical Engineers (ASME) first released the Bioprocessing Equipment Standard (BPE) in 1997, and since then, the standard has become a recognized standard specification in the global biotechnology and pharmaceutical industries. The accessory products produced by QILI comply with ASME BPE standards, and each component incorporates our experience as one of the world's leading stainless steel product manufacturers. This also applies to the new T-shaped fittings and 88 ° and 92 ° elbows that QILI has been producing for a long time.

集团简介
QILI GROUP PROFILE

集团优势
GROUP ADVANTAGES

- **2007**
  公司创建于(年)
  since (year)
- **8+**
  制造工厂(家)
  Manufacturing factory(Home)
- **50000+**
  使用面积(㎡)
  Usable area (㎡)
- **400+**
  员工人数(位)
  Number of employees (bit)

齐力控股集团，原温州齐力流体设备有限公司，专业生产卫生级不锈钢各种阀门及管道链接件，为客户提供一站式采购供应链服务，锻造、CNC精加工与销售为一体的八大主力生产工厂，产品远销欧洲，北美洲，南美洲，澳洲等等70多个国家和地区。集团聚焦于卫生级领域多年，解决客户遇到的技术难题是我们的荣幸，目前已获得国家高新企业和32项发明专利及各项国际认证。

产品广泛适用于制药工程，乳制品，食品，饮料，酿酒，糖浆，生物化工，半导体，锂电等领域。所有产品均按:3A、BPE、DIN、SMS、ISO、RJT、IDF、BS等标准制造，所有产品均达到GMP药典要求。主要产品有：卫生级泵，阀门系列，管件系列和各种管道连接件。

齐力人会把高质量的材料、先进的设计、严格的制造标准及质量保证体系完美结合，我们始终不会忘记客户给我们的支持与宝贵的意见，对外成就客户，对内成就团队，是企业发展追求的终身目标，热诚欢迎各位新老顾客莅临指导！

Qili Holding Group, formerly Wenzhou Qili Fluid Equipment Co., Ltd., specializing in the production of various sanitary stainless steel valves and pipeline fittings, providing customers with one-stop procurement supply chain services, forging, CNC finishing and sales as one of the eight main forces Production factories, products are exported to more than 70 countries and regions such as Europe, the North America, South America, and Australia etc. The group has been focusing on the sanitary field for many years, and it is our honor to solve the technical problems encountered by customers. At present, it has obtained 25 national high-tech enterprises and 32 invention patents and various international certifications.

Products are widely used in Pharmaceutical engineering, dairy products, food, beverages, brewing, syrup, biochemistry, semiconductors, lithium batteries and other fields. All products are manufactured according to: 3A,BPE,DIN,SMS,ISO,RJT,IDF,BS and other standards, and all products meet the requirements of GMP pharmacopoeia.The main products are:sanitary pumps,valve series,pipe fittings series and various pipe connectors.

Qili people will perfectly combine high-quality materials, advanced design, strict manufacturing standards and quality assurance system. We will never forget the support and valuable opinions given to us by our customers. We will achieve customers externally and achieve team internally. The lifelong goal of enterprise development, sincerely welcome all new and current customers to visit and guide!

智能制造
INTELLIGENT MANUFACTURING

齐力选用进口优质的BPE专用不锈钢原材料,采用行业先进的管道、管件生产加工、自动化的内外表面抛光、电解、清洗设备。结合20多年积累的生产工艺技术经验,严格按照美国ASME BPE-2022标准规范,生产制造高品质SF1和SF4全系列、管件产品,确保满足生物制药行业的使用要求。

Qili selects imported high-quality BPE special stainless steel raw materials, adopts the industry's advanced pipeline, pipe fitting production and processing, automatic internal and external surface polishing, electrolysis, cleaning equipment. Combined with more than 20 years of accumulated production technology experience, in strict accordance with American ASME BPE-2022 standard specifications, the production of high-quality SF1 and SF4 full series, pipe fittings products, to ensure that meet the requirements of the biopharmaceutical industry.











BPE管件工艺
BPE PIPE FITTING PROCESS

01 弯头下料 Raw material cutting

02 弯管 Curving

03 锯弯头 Cutting

04 去毛刺 Deburring

05 清洗 Cleaning

06 退火 Anneal

07 过球 Over the balls

08 外粗抛 External rough polishing

09 内粗抛 Internal rough polishing

10 内精抛 Internal fine polishing

11 内抛检验 Internal polishing inspection

12 车削 Turning

13 去毛刺 Deburring

14 整形(管口) Shaping

15 外精抛 External fine polishing

16 外抛检验 External polishing Inspection

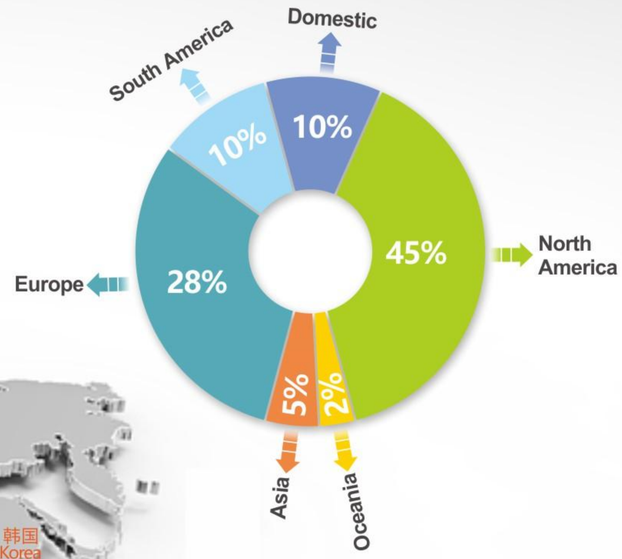
17 清洗 Cleaning

18 打字 Typing

19 包装 Packing



营销网络
MARKETING NETWORK









QILI HOLDING GROUP CO., LTD
齐力控股集团有限公司

BPE Fittings Workshop
BPE管件车间

Material Test Report

Certificate No.: QL-MTR-24001
Job No. (Lot No.):YPD20240702
Item No.: DT-4.1.2-1
Product: Weld Straight Tee
38.1x1.65 10PCS
Standard and year: ASME BPE 2022
Surface Finish: SF4
Date Issued: July 20,2024

Customer Order No.: QLS240630
ASME BPE Certificate No.: BPE-189
Expiration Date: July 09,2029

Raw Material Heat Analysis and Specification (Weight %)

Heat No.	C	Si	Mn	P	S	Cr	Ni	Mo	N	Material Specification/Standard
S609388	0.0143	0.520	1.388	0.0314	0.0052	16.807	10.025	2.058	0.0111	ASTM A269 TP316L

Mechanical property of Raw Material

Heat No.	Yield Strength (Rp0.2)Mpa	Tensile Strength Mpa	Elongation（%）	Width at guage length	Hardness (HRB)	Eddy current
S609388	286Mpa	602Mpa	55.0	12.5mm	80/81	Pass

Flaring test	Flange test	Flattening test	Reverse flattening test	Weld decay text A249 S7	Intergranular test A262 Practice E
Pass	Pass	Pass	Pass	Pass	Pass

Other Inspection and Test

Dimensions check	Heat treatment condition	Surface finish	
Pass	1120℃	EP	

We here by certify that the material described herein has been manufactured, examined and tested in accordance with the requirement of applicable material specifications as stated in this report.

SHALL NOT REPRODUCE - This certificate of results shall not be reproduced, except in full, without the written approval of QILI HOLDING GROUP CO., LTD.

Signature of CI & Date:

Primary location
No.62，Binhai 3rd Road, Binhai Development Zone, Wenzhou, Zhejiang, 325000
People's Republic of China

Adjunct location
No.3839-1Binhai 3rd Road, Binhai Development Zone, Wenzhou, Zhejiang, 32500
People's Republic of China

RETAIN/RECORD TRACEABLE INFORMATION FOR EACH BATCH OF PRODUCTS, ENSURE FACTORY CONTROL

保留/记录每一批次产品的信息可追溯，保证出厂受控

SF1



SF4



生物制药配件ASME-BPE
BIO-PHARM FITTINGS ASME BPE

Φ6.35 - Φ152.4
SF1: Ra≤0.5μm SF4: Ra≤0.375μm

QILI产品具有以下优点:
均匀的EP层，最大限度地减少胭脂
铬浓度更高，耐腐蚀性更好
保证所有内表面的光滑度
减少生物膜

QILI products with following advantages:
Homogeneously EP layer to minimize rouging
Higher chrome concentration for better corrosion resistance
Guaranteed smoothness of all internal surfaces to reduce Bio film

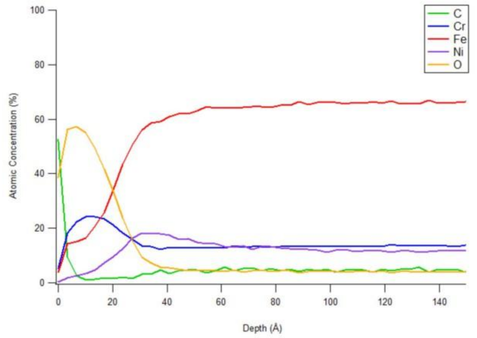


Figure 5 shows the AES Depth Profile (Atomic Concentration) Sample 90-deg-Elbow

电解层检测报告
Electrolytic layer detection report

按照BPE标准要求，对产品进行规范检验，检验内容包含原材料质量、产品尺寸公差、焊接、固溶、抛光、电解、光洁度、打标、包装、文件等。

According to the BPE standard requirements, the product undergoes standardized inspection, which includes inspection of raw material quality, product dimensional tolerances, welding, solid solution, polishing, electrolysis, smoothness, marking, packaging, documents, etc.

制药和超高工业的整个生产周期都需要绝对的卫生条件。

因此，内表面光滑的管、配件、阀门安装广泛，具有清洗容易、避免细菌污染的优点。

QILI GROUP只提供根据卫生设备设计的最高标准进行制造、质量控制、标记和认证的管道，并保证延长质量和可追溯性。
QILI GROUP仅使用最高质量的不锈钢材料，显著降低了安装前的检查要求。

QILI GROUP直接从库存中提供以下TP316L级不锈钢管，低硫含量为0.005%~0.017%，SF1和四氟化硫抛光（根据ASME BPE规范）

Absolutely hygienic conditions are necessary for the entire production cycle of pharmaceutical and ultra-high industries.

Therefore, tubes, fittings, and valves with a smooth internal surface are extensively installed with the advantages of cleaning easily and avoiding bacteria contamination.

QILI GROUP only offers tubes that are manufactured, quality controlled, marked, and certified according to the highest standards for hygienic equipment design and guarantees extended quality and traceability.
QILI GROUP tubing significantly reduces inspection equirements prior to installation by utilizing only the highest quality stainless steel materials.

QILI GROUP delivers directly from stock the following stainless steel tubes in grade TP316L with low sulfur content of 0.005% to 0.017% and SF1 and SF4 finishes (according to the ASME BPE specification)

化学成分(%)
Chemical composition(%)

C	Si	Mn	P	S	Cr	Ni	Mo
≤0.030	≤1.00	≤2.00	≤0.035	0.005-0.017	16.0-18.0	10.0-14.0	2.0-3.0

产品标准
Product standard

UNS	无缝管和焊接管 Seamless pipe and Welding pipe	锻造 Forging
S31603	ASTM A270 ASTM A270M ASTM A269 ASTM A269M	ASTM A743 ASTM A351 EN 1.4409 .....

表面处理
Surface Treatment

机械抛光加工后的内表面粗糙度最高可达到Ra0.5-0.375μm，外表面Ra0.8μm以内。
电解抛光加工后的内表面粗糙度最高可达到Ra0.12μm。

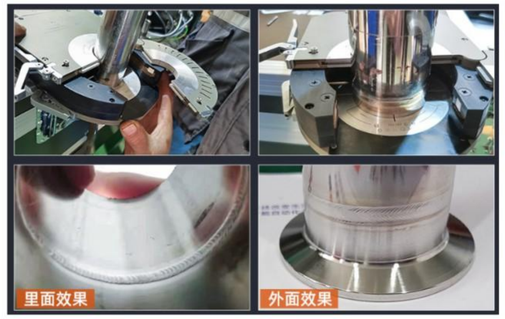
The maximum roughness of the inner surface after mechanical polishing can reach Ra0.5-0.375μm, and the outer surface can be within Ra0.8μm.
The maximum roughness of the inner surface after electrolytic polishing processing can reach Ra0.12μm.

非接液面 Non-Process contact surface	机械抛光Ra0.8μm以内 Mechanical Polishing Ra0.8 or less							
接液面 Process contact surface	/	无抛光处理 Unpolished	机械抛光 Mechanical Polishing			电解抛光 Electrolytic Polishing		
	抛光等级 Grade	SF0	SF1	SF2	SF3	SF4	SF5	SF6
	最大值 Ra(μm)	/	0.51	0.64	0.76	0.38	0.51	0.64

自动焊接
Automatic Welding

齐力所采购的原材料源自按照ASTM A270/270M、ASTM A269/269M生产的合格供应商，材料具有良好的焊接性能和耐腐蚀性能。
齐力目前采用自动式焊接技术替换手动焊接，有效改善工作环境和工作效率。

The raw materials purchased by Qili are sourced from qualified suppliers produced according to ASTM A270/270M and ASTM A269/269M, and the materials have good welding performance and corrosion resistance. Qili currently uses automatic welding technology to replace manual welding, effectively improving the working environment and efficiency.

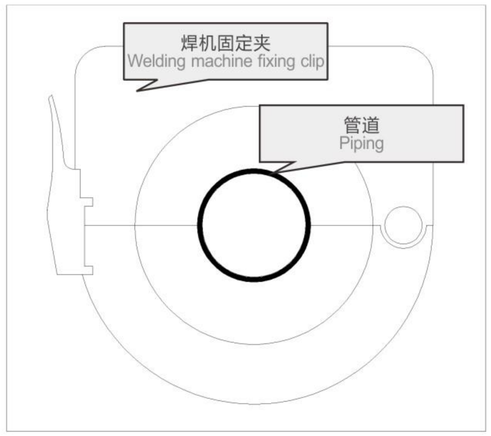




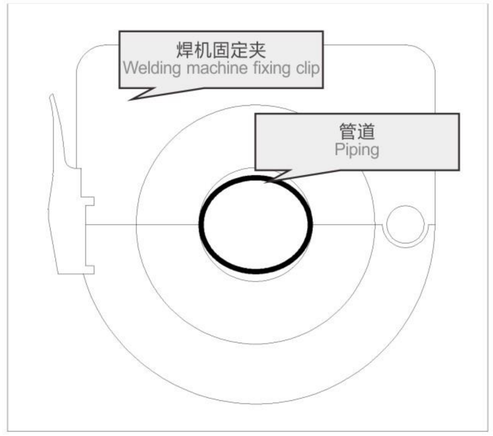
自动焊的注意要点
Key points to note for automatic welding

1.圆整度 Roundness

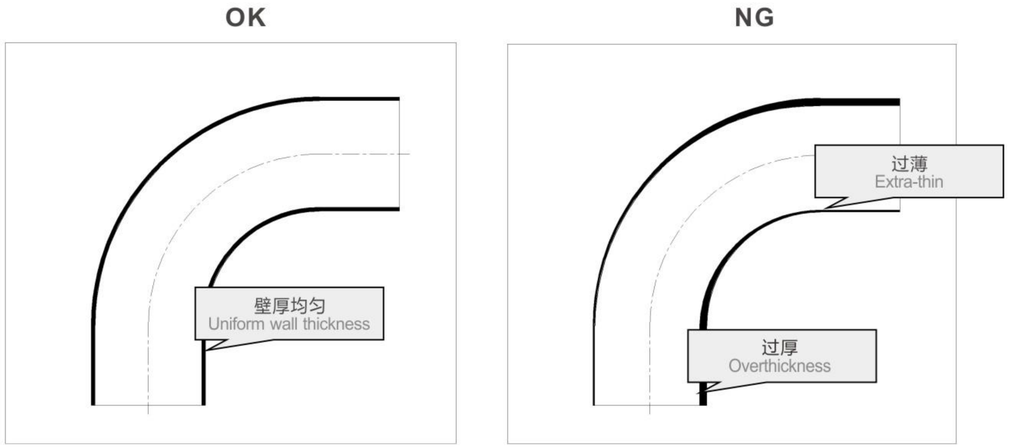
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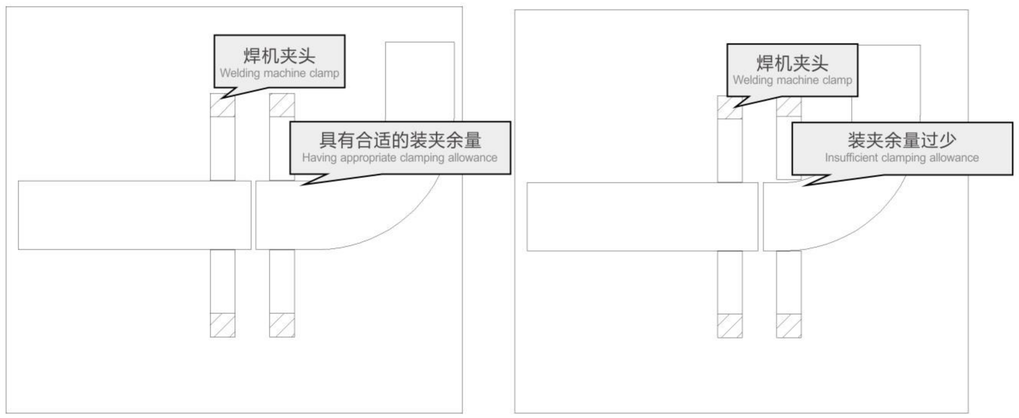
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2.壁厚 Wall thickness



3.切线余量 Tangent margin



自动焊的优点
The advantages of automatic welding

1.生产效率高。
2.焊接质量高而且稳定。
3.节省材料和电能消耗。
4.改善劳动条件，降低人工劳动强度。

1. High production efficiency.
2. High and stable welding quality.
3. Save materials and electricity consumption.
4. Improve working conditions and reduce the intensity of manual labor.

手动焊的缺点
Disadvantages of manual welding

1.所需的人力资源多，耗用时间长，效率相对较低。
2.容易受人为因素的影响，焊接质量不易得到保障。
3.很可能会导致各种意外伤害。
4.需要更多的人力投入和时间消耗。

1. It requires a lot of human resources, consumes a long time, and has relatively low efficiency.
2. It is easily influenced by human factors, and the welding quality is not easily guaranteed.
3. It is likely to cause various accidental injuries.
4. More manpower input and time consumption are required.

产品打标包装
Production of packing



标签说明
Diversity of Marking

- BPE+公司logo
  Company logo
  —— 
- 材料标准
  Material standards
  —— ASTM A269 TP316L
- 尺寸信息
  Size information
  —— 76.2*1.65
- 炉号
  Furnace number
  —— S609388
- 生产工单号
  Production work order number
  —— YPD20240515
- 光洁度等级
  Grade of smoothness
  —— SF1



- **管帽颜色**
  Color of cap
  黄 Yellow cap - SF1 机械抛光
  白 White cap -SF4 电解抛光



每支产品端口盖上管帽，塑料袋密封包装，出货加以适当的大包装保护。
Each single tube and fitting capped on both ends ,packed in clean and sealing bag , final bulk loading into wooden case.

目录
CATALOGUE

BPE管件 BPE pipe fitting (A)

02	DT-4.1.1-1	90°长弯头	90° Long Elbow
02	DT-4.1.1-2	90°卡焊式长弯头	90° Clamp Long Elbow
02	DT-4.1.1-3	90°卡式弯头	90° Clamp Elbow
03	DT-4.1.1-4	45°长弯头	Weld 45 ° Elbow
03	DT-4.1.1-5	45°卡焊式长弯头	Weld/Clamp 45 ° Elbow
03	DT-4.1.1-6	45°卡式弯头	Clamp 45° Elbow
04	DT-4.1.1-7	180°长弯头	Weld 180° Long Bend
04	DT-4.1.1-8	180°卡式长弯头	Clamp 180° Long Bend
04	DT-4.1.1-9	88°焊接弯头	88°welded Elbow
05	DT-4.1.1-10	92°焊接弯头	92°welded elbow
05	DT-4.1.2-1	等径三通/四通	Weld equal Tee/Cross
05	DT-4.1.2-2	中卡式等径短三通	Weld/clamp Tee
06	DT-4.1.2-3	一端卡式等径短三通	Weld/clamp Tee
06	DT-4.1.2-4	卡式等径三通/四通	Clamp equal Tee/Cross
06	DT-4.1.2-5	卡式等径短三通	Clampd Tee
07	DT-4.1.2-6	变径长三通	Weld long reducing Tee

ASME BPE (ASME BPE 2022) (A)

08	DT-4.1.2-7	中卡式变径短三通	Weld/clamp reducing Tee
09	DT-4.1.2-8	卡式变径长三通	Clamp Reducing Tee
10	DT-4.1.2-9	卡式变径短三通	Clamp Reducing Tee
11	DT-4.1.2-10	仪表三通	Instrument Tee
11	DT-4.1.2-11	卡式仪表三通	Clamp Instrument Tee
11	DT-4.1.2-12	中卡式等径长三通	Medium card type equal diameter length tee
12	DT-4.1.2-13	中卡式变径长三通	Medium card type variable diameter long tee
13	DT-4.1.3-1	同心变径	Weld concentric Reducer
14	DT-4.1.3-1	偏心变径	Weld Eccentric Reducer
15	DT-4.1.3-2	大头卡式同心变径	Clamp/weld concentric reducer
16	DT-4.1.3-2	大头卡式偏心变径	Weld Eccentric Reducer
17	DT-4.1.3-3	卡式同心变径	Clamp concentric reducer
18	DT-4.1.3-3	卡式偏心变径	Clamp Eccentric Reducer
19	DT-4.1.4-1	卡式接头	Card Connector
19	DT-4.1.5-1	管帽	Weld end Cap
19	DT-4.1.5-2	端盖	Solid End Cap

卫生级球阀系列 Sanitary ball valve series (B)

21	卫生级三片式高平台全包无滞留球阀/3A焊接	Sanitary three-piece high platform encapsulate non-retention ball valve/3A welding
22	卫生级三片式高平台直通(半包)球阀	Sanitary three-piece high platform two way (half- encapsulate) ball valves
23-24	气动三片式无滞留球阀	Pneumatic three-piece non-retention ball valve
25	电动三片式无滞留全包球阀	Electric three-piece non-retention encapsulated ball valve
26	三片式球阀总装配-DIN快装/焊接	Three piece ball valve assembly - DIN clamped /welding
27	三片式全包法兰球阀-3A全通径	Three-piece encapsulate flanged ball valve-3A full bore
28	卫生级球阀	Sanitary ball valve
29	三片式低平台半包球阀	Three-piece low-platform hallf-encapsulate ball valve
30	三片式低平台总装配-3A焊接	Three-piece low platform general assembly - 3A welding
31	罐底球阀	Tank bottom ball valve
32	气动罐底球阀	Pneumatic tank bottom ball valve
33	分体式罐底直通球阀	Split type tank bottom through ball valve
34	手动快装/焊接蝶形球阀	Manual quick assembly/welding butterfly ball valve
35	气动蝶形球阀	Pneumatic butterfly ball valve
36	两片式手动快装球阀(带锁)/手动缩径三通球阀	2-PC manual clamped ball valve (with lock)/Manual reducing three-way ball valve
37-38	卫生级直通球阀	Sanitary two way ball valve

卫生级球阀系列 Sanitary ball valve series (B)

39	三通无滞留全包球阀/三通四方球阀-3A	Three-way non-retention encapsulate ball valve/Three-way ball valve-welding
40	气动三通无滞留全包球阀	Pneumatic three-way non-retention encapsulate ball valve
41	四方法兰球阀	3way flange ball valve
42	法兰直通球阀-DIN缩径	Flanged two way ball valves-DIN reduce port
43	四方三通球阀-DIN快装/焊接	Three-way ball valve - DIN clamp/welding
44	手动平台缩径三通球阀L型/T型	Manual platform reducing three-way ball valve L-type/T-type

卫生级隔膜阀系列 Sanitary diaphragm valve series (C)

46-47	直通隔膜阀	Two way diaphragm valve
48	气动隔膜阀	Pneumatic diaphragm valve
49	隔膜罐底阀	Tank bottom diaphragm valve
50	U型隔膜阀	U type diaphragm valve
51-52	隔膜片	Diaphragm sheet
53	手动隔膜阀取样阀	Manual diaphragm valve sampling valve
54	锻造焊接隔膜阀	Forged welded diaphragm valve

A

BPE管件系列
BPE Pipe Fitting Series

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The American Society of Mechanical Engineers

BPE

CERTIFICATE OF AUTHORIZATION

The named company is authorized by The American Society of Mechanical Engineers (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME BPE Standard on Bioprocessing Equipment. The use of the ASME Single Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any item produced under this certificate shall have been manufactured strictly in accordance with the provisions of the ASME BPE Standard on Bioprocessing Equipment.

COMPANY:

Qili Holding Group Co., Ltd.
No.62, Binhai 3rd Road, Binhai Development Zone
Wenzhou, Zhejiang, 325000
People's Republic of China

SCOPE:

Manufacture of ferrous fittings at the above location and with additional activities at No.3839-1 Binhai 3rd Road, Binhai Development Zone, Wenzhou, Zhejiang, 325000, People's Republic of China

AUTHORIZED: July 09, 2024
EXPIRES: July 09, 2029
CERTIFICATE NUMBER: BPE-189

Board Chair, Conformity Assessment

Senior Director, Engineering Operations

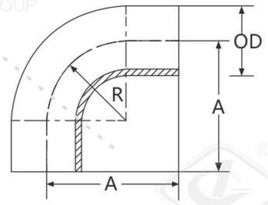


90°长弯头 90° Long elbow

BPE No.QL-001

DT-4.1.1-1





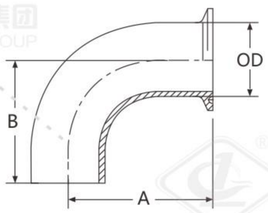
规格尺寸 OD		A		R		重量
英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	2.625	66.68	0.563	14.3	0.010
3/8"	9.53	2.625	66.68	1.125	28.58	0.016
1/2"	12.7	3.000	76.2	1.125	28.58	0.064
3/4"	19.05	3.000	76.2	1.125	28.58	0.101
1"	25.4	3.000	76.2	1.500	38.1	0.133
1 1/2"	38.1	3.750	95.25	2.250	57.15	0.247
2"	50.8	4.750	120.65	3.000	76.2	0.461
2 1/2"	63.5	5.500	139.7	3.750	95.25	0.600
3"	76.2	6.250	158.75	4.500	114.3	0.815
4"	101.6	8.000	203.2	6.000	152.4	1.790
6"	152.4	11.500	292.1	9.000	228.6	4.930

90°卡焊式长弯头 90° clamp long elbow

BPE No.QL-002

DT-4.1.1-2





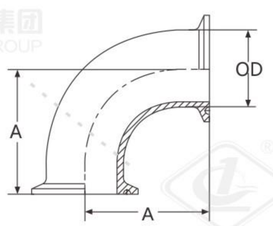
规格尺寸 OD		A		B		重量
英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	1.625	41.28	2.625	66.68	0.035
3/8"	9.53	1.625	41.26	2.625	66.68	0.038
1/2"	12.7	1.625	41.28	3.000	76.2	0.071
3/4"	19.05	1.625	41.28	3.000	76.2	0.094
1"	25.4	2.000	50.8	3.000	76.2	0.166
1 1/2"	38.1	2.750	69.85	3.750	95.25	0.230
2"	50.8	3.500	88.9	4.750	120.65	0.441
2 1/2"	63.5	4.250	107.95	5.500	139.7	0.586
3"	76.2	5.000	127.0	6.250	158.75	0.848
4"	101.6	6.625	168.28	8.000	203.2	1.743
6"	152.4	10.500	266.7	11.500	292.1	4.840

90°卡式弯头 90° clamp Elbow

BPE No.QL-003

DT-4.1.1-3



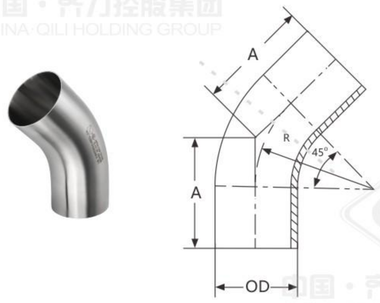


规格尺寸 OD		A		重量
英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	1.625	41.28	0.040
3/8"	9.53	1.625	41.28	0.040
1/2"	12.7	1.625	41.28	0.048
3/4"	19.05	1.625	41.28	0.058
1"	25.4	2.000	50.8	0.128
1 1/2"	38.1	2.750	69.85	0.172
2"	50.8	3.500	88.9	0.350
2 1/2"	63.5	4.250	107.95	0.473
3"	76.2	5.000	127.0	0.711
4"	101.6	6.625	168.28	1.475
6"	152.4	10.500	266.7	4.180

45°长弯头 Weld 45° Elbow

BPE No.QL-004

DT-4.1.1-4

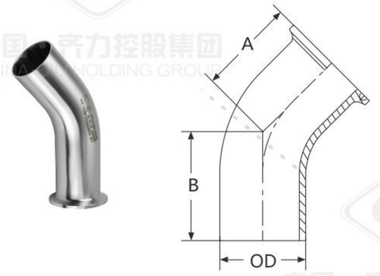


规格尺寸 OD		A		R		重量
英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	2.000	50.8	0.563	14.3	0.009
3/8"	9.53	2.000	50.8	1.125	28.58	0.014
1/2"	12.7	2.250	57.15	1.125	28.58	0.055
3/4"	19.05	2.250	57.15	1.125	28.58	0.087
1"	25.4	2.250	57.15	1.500	38.1	0.103
1 1/2"	38.1	2.500	63.5	2.250	57.15	0.220
2"	50.8	3.000	76.2	3.000	76.2	0.300
2 1/2"	63.5	3.375	85.73	3.750	95.25	0.421
3"	76.2	3.625	92.08	4.500	114.3	0.550
4"	101.6	4.500	114.3	6.000	152.4	1.165
6"	152.4	6.250	158.75	9.000	228.6	3.130

45°卡焊式长弯头 Weld/Clamp 45° Elbow

BPE No.QL-005

DT-4.1.1-5

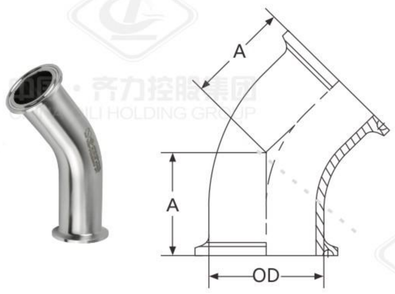


规格尺寸 OD		A		B		重量
英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	1.000	25.4	2.000	50.8	0.034
3/8"	9.53	1.000	25.4	2.000	50.8	0.036
1/2"	12.7	1.000	25.4	2.250	57.15	0.062
3/4"	19.05	1.000	25.4	2.250	57.15	0.080
1"	25.4	1.125	28.58	2.250	57.15	0.136
1 1/2"	38.1	1.438	36.53	2.500	63.5	0.203
2"	50.8	1.750	44.45	3.000	76.2	0.280
2 1/2"	63.5	2.063	52.4	3.375	85.73	0.407
3"	76.2	2.375	60.33	3.625	92.08	0.583
4"	101.6	3.125	79.38	4.500	114.3	1.118
6"	152.4	5.250	133.35	6.250	158.75	3.040

45°卡式弯头 Clamp 45° Elbow

BPE No.QL-006

DT-4.1.1-6

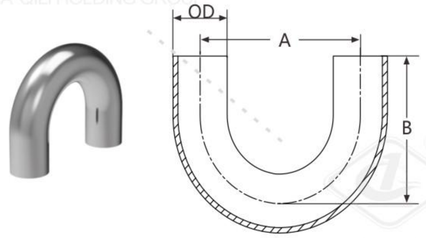


规格尺寸 OD		A		重量
英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	1.000	25.4	0.035
3/8"	9.53	1.000	25.4	0.035
1/2"	12.7	1.000	25.4	0.039
3/4"	19.05	1.000	25.4	0.044
1"	25.4	1.125	28.58	0.098
1 1/2"	38.1	1.438	36.53	0.145
2"	50.8	1.750	44.45	0.189
2 1/2"	63.5	2.063	52.4	0.294
3"	76.2	2.375	60.33	0.446
4"	101.6	3.125	79.38	0.850
6"	152.4	5.250	133.35	2.380

180°长弯头 Weld 180° Long Bend

BPE No.QL-007

DT-4.1.1-7

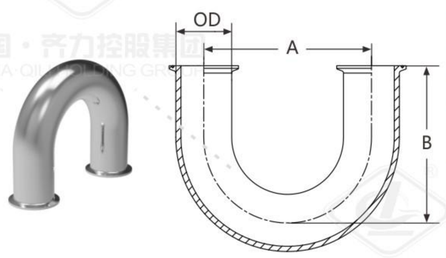


规格尺寸 OD		A		B		重量
英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	4.50	114.3	2.625	66.68	0.024
3/8"	9.53	4.50	114.3	2.625	66.68	0.038
1/2"	12.7	4.50	114.3	3.00	76.2	0.099
3/4"	19.05	4.50	114.3	3.00	76.2	0.156
1"	25.4	3.00	76.2	3.00	76.2	0.191
1 1/2"	38.1	4.50	114.3	4.50	114.3	0.440
2"	50.8	6.00	152.4	5.00	127.0	0.689
2 1/2"	63.5	7.50	190.5	5.75	146.05	1.019
3"	76.2	9.00	228.6	6.50	165.1	1.412
4"	101.6	12.00	304.8	8.50	215.9	2.489
6"	152.4	18.00	457.2	11.50	292.1	8.730

180°卡式长弯头 Clamp 180° Long Bend

BPE No.QL-008

DT-4.1.1-8

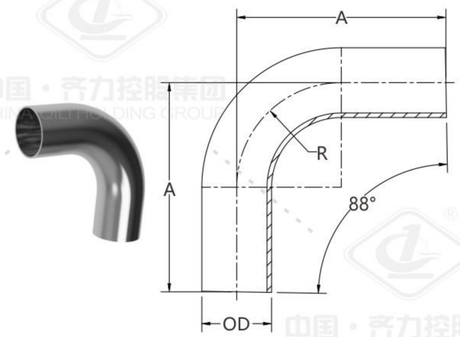


规格尺寸 OD		A		B		重量
英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	4.50	114.3	3.125	79.38	0.056
3/8"	9.53	4.50	114.3	3.125	79.38	0.068
1/2"	12.7	4.50	114.3	3.50	88.9	0.131
3/4"	19.05	4.50	114.3	3.50	88.9	0.183
1"	25.4	3.00	76.2	3.50	88.9	0.324
1 1/2"	38.1	4.50	114.3	5.00	127.0	0.525
2"	50.8	6.00	152.4	5.50	139.7	0.806
2 1/2"	63.5	7.50	190.5	6.25	158.75	1.175
3"	76.2	9.00	228.6	7.00	177.8	1.603
4"	101.6	12.00	304.8	9.125	231.78	2.845
6"	152.4	18.00	457.2	13.00	330.2	9.906

88°焊接弯头 88°Welded Elbow

BPE No.QL-009

DT-4.1.1-9

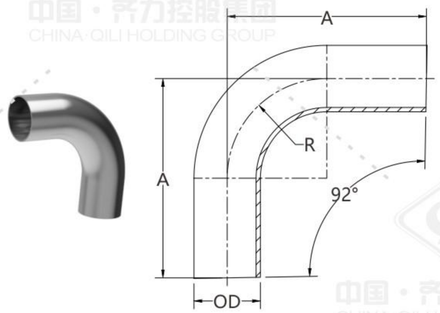


规格尺寸 OD		A		重量
英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	2.700	68.58	0.015
3/8"	9.53	2.700	68.58	0.023
1/2"	12.7	3.065	77.85	0.064
3/4"	19.05	3.065	77.85	0.101
1"	25.4	3.050	77.47	0.133
1 1/2"	38.1	3.800	96.52	0.249
2"	50.8	4.810	122.17	0.421
2 1/2"	63.5	5.560	141.22	0.606
3"	76.2	6.310	160.27	0.823
4"	101.6	8.065	204.85	1.783
6"	152.4	11.580	294.13	5.019

92°焊接弯头 92°Welded Elbow

BPE No.QL-010

DT-4.1.1-10

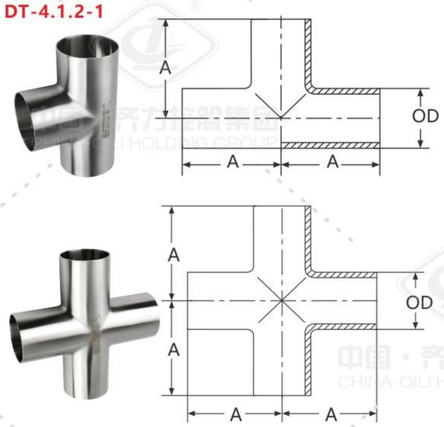


规格尺寸 OD		A		重量
英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	2.530	64.26	0.015
3/8"	9.53	2.530	64.26	0.023
1/2"	12.7	2.930	74.42	0.064
3/4"	19.05	2.930	74.42	0.101
1"	25.4	2.950	74.93	0.133
1 1/2"	38.1	3.690	93.73	0.249
2"	50.8	4.690	119.13	0.421
2 1/2"	63.5	5.440	138.18	0.606
3"	76.2	6.190	157.23	0.823
4"	101.6	7.930	201.42	1.783
6"	152.4	11.410	289.81	5.019

等径三通/四通 Weld Equal Tee/Cross

BPE No.QL-011

DT-4.1.2-1

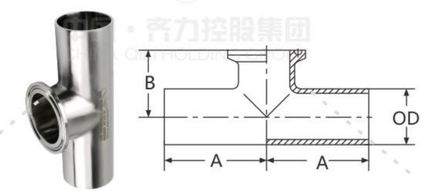


规格尺寸 OD		A		重量
英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	1.750	44.45	0.020
3/8"	9.53	1.750	44.45	0.030
1/2"	12.7	1.875	47.63	0.060
3/4"	19.05	2.000	50.8	0.100
1"	25.4	2.125	53.98	0.140
1 1/2"	38.1	2.375	60.33	0.260
2"	50.8	2.875	73.03	0.400
2 1/2"	63.5	3.125	79.38	0.560
3"	76.2	3.375	85.73	0.720
4"	101.6	4.125	104.78	1.390
6"	152.4	5.625	142.88	3.660

中卡式等径短三通 Weld/Clamp Tee

BPE No.QL-012

DT-4.1.2-2

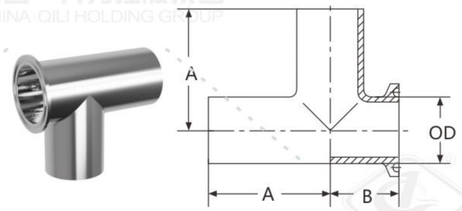


规格尺寸 OD		A		B		重量
英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	1.750	44.45	1.000	25.4	0.064
3/8"	9.53	1.750	44.45	1.000	25.4	0.075
1/2"	12.7	1.875	47.63	1.000	25.4	0.055
3/4"	19.05	2.000	50.8	1.125	28.58	0.080
1"	25.4	2.125	53.98	1.125	28.58	0.130
1 1/2"	38.1	2.375	60.33	1.375	34.93	0.180
2"	50.8	2.875	73.03	1.625	41.28	0.300
2 1/2"	63.5	3.125	79.38	1.875	47.63	0.440
3"	76.2	3.375	85.73	2.125	53.98	0.790
4"	101.6	4.125	104.78	2.750	69.85	1.110
6"	152.4	5.625	142.88	4.625	117.48	3.140

一端卡式等径短三通 Weld/Clamp Tee

BPE No.QL-013

DT-4.1.2-3



规格尺寸 OD		A		B		重量
英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	1.750	44.45	0.875	22.23	0.032
3/8"	9.53	1.750	44.45	0.875	22.23	0.035
1/2"	12.7	1.875	47.63	0.875	22.23	0.061
3/4"	19.05	2.000	50.8	1.000	25.4	0.112
1"	25.4	2.125	53.98	1.125	28.58	0.185
1 1/2"	38.1	2.375	60.33	1.375	34.93	0.262
2"	50.8	2.875	73.03	1.625	41.28	0.405
2 1/2"	63.5	3.125	79.38	1.875	47.63	0.579
3"	76.2	3.375	85.73	2.125	53.98	0.792
4"	101.6	4.125	104.78	2.750	69.85	1.426
6"	152.4	5.625	142.88	4.625	117.48	3.966

卡式等径三通/四通 Clamp Equal Tee/Cross

BPE No.QL-014

DT-4.1.2-4

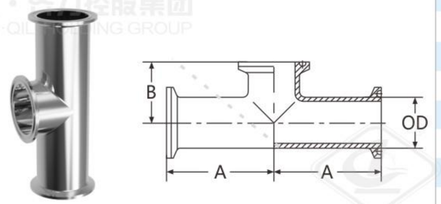


规格尺寸 OD		A		重量
英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	2.250	57.15	0.145
3/8"	9.53	2.250	57.15	0.158
1/2"	12.7	2.375	60.33	0.199
3/4"	19.05	2.500	63.5	0.250
1"	25.4	2.625	66.68	0.461
1 1/2"	38.1	2.875	73.03	0.482
2"	50.8	3.375	85.73	0.777
2 1/2"	63.5	3.625	92.08	1.082
3"	76.2	3.875	98.43	1.547
4"	101.6	4.750	120.65	2.554
6"	152.4	7.125	180.98	6.633

卡式等径短三通 Clampd Tee

BPE No.QL-015

DT-4.1.2-5



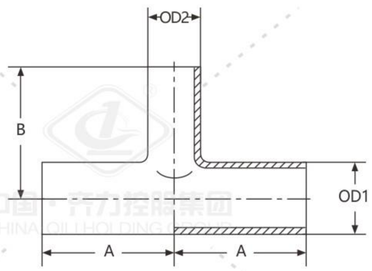
规格尺寸 OD		A		B		重量
英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm	kg
1/2"	12.7	2.375	60.33	1.000	25.4	0.133
3/4"	19.05	2.500	63.5	1.125	28.58	0.163
1"	25.4	2.625	66.68	1.125	28.58	0.313
1 1/2"	38.1	2.875	73.03	1.375	34.93	0.323
2"	50.8	3.375	85.73	1.625	41.28	0.533
2 1/2"	63.5	3.625	92.08	1.875	47.63	0.683
3"	76.2	3.875	98.43	2.125	53.98	1.093
4"	101.6	4.750	120.65	2.750	69.85	1.782
6"	152.4	7.125	180.98	4.625	117.48	4.711

变径长三通 Weld Long Reducing Tee

BPE No.QL-016

DT-4.1.2-6





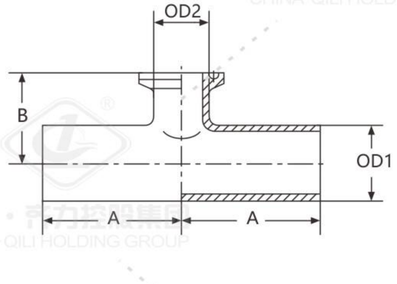
规格尺寸 OD				A		B		重量
英寸 Inch		OD1	OD2	英寸 Inch	mm	英寸 Inch	mm	kg
3/8"	1/4"	9.53	6.35	1.750	44.45	1.750	44.45	0.050
1/2"	1/4"	12.7	6.35	1.875	47.63	1.875	47.63	0.056
	3/8"		9.53	1.875	47.63	1.875	47.63	0.058
3/4"	1/4"	19.05	6.35	2.00	50.8	2.000	50.8	0.065
	3/8"		9.53	2.00	50.8	2.000	50.8	0.067
	1/2"		12.7	2.00	50.8	2.000	50.8	0.070
1"	1/4"	25.4	6.35	2.125	53.98	2.125	53.98	0.074
	3/8"		9.53	2.125	53.98	2.125	53.98	0.076
	1/2"		12.7	2.125	53.98	2.125	53.98	0.080
	3/4"		19.05	2.125	53.98	2.125	53.98	0.090
1 1/2"	1/2"	38.1	12.7	2.375	60.33	2.375	60.33	0.150
	3/4"		19.05	2.375	60.33	2.375	60.33	0.170
	1"		25.4	2.375	60.33	2.375	60.33	0.180
2"	1/2"	50.8	12.7	2.875	73.03	2.625	66.68	0.250
	3/4"		19.05	2.875	73.03	2.625	66.68	0.290
	1"		25.4	2.875	73.03	2.625	66.68	0.320
	1 1/2"		38.1	2.875	73.03	2.625	66.68	0.360
2 1/2"	1/2"	63.5	12.7	3.125	79.38	2.875	73.03	0.360
	3/4"		19.05	3.125	79.38	2.875	73.03	0.380
	1"		25.4	3.125	79.38	2.875	73.03	0.400
	1 1/2"		38.1	3.125	79.38	2.875	73.03	0.400
	2"		50.8	3.125	79.38	2.875	73.03	0.530
3"	1/2"	76.2	12.7	3.375	85.73	3.125	79.38	0.640
	3/4"		19.05	3.375	85.73	3.125	79.38	0.650
	1"		25.4	3.375	85.73	3.125	79.38	0.660
	1 1/2"		38.1	3.375	85.73	3.125	79.38	0.680
	2"		50.8	3.375	85.73	3.125	79.38	0.720
	2 1/2"		63.5	3.375	85.73	3.125	79.38	0.740
4"	1/2"	101.6	12.7	4.125	104.78	3.625	92.08	0.910
	3/4"		19.05	4.125	104.78	3.625	92.08	0.920
	1"		25.4	4.125	104.78	3.625	92.08	0.930
	1 1/2"		38.1	4.125	104.78	3.625	92.08	0.950
	2"		50.8	4.125	104.78	3.875	98.43	0.990
	2 1/2"		63.5	4.125	104.78	3.875	98.43	1.010
	3"		76.2	4.125	104.78	3.875	98.43	1.040
6"	1/2"	152.4	12.7	5.625	142.88	4.625	117.48	2.275
	3/4"		19.05	5.625	142.88	4.625	117.48	2.284
	1"		25.4	5.625	142.88	4.625	117.48	2.983
	1 1/2"		38.1	5.625	142.88	4.625	117.48	2.993
	2"		50.8	5.625	142.88	4.875	123.83	3.012
	2 1/2"		63.5	5.625	142.88	4.875	123.83	3.016
	3"		76.2	5.625	142.88	4.875	123.83	3.017
	4"		101.6	5.625	142.88	5.125	130.18	3.106

中卡式变径短三通 Weld/clamp Reducing Tee

BPE No.QL-017

DT-4.1.2-7





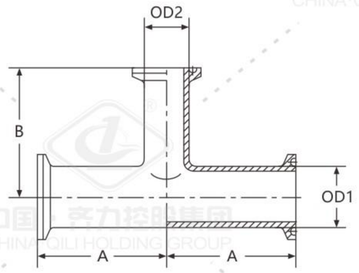
规格尺寸 OD				A		B		重量
英寸 Inch		OD1	OD2	英寸 Inch	mm	英寸 Inch	mm	kg
3/8"	1/4"	9.53	6.35	1.750	44.45	1.00	25.4	0.030
1/2"	1/4"	12.7	6.35	1.875	47.63	1.00	25.4	0.040
	3/8"		9.53	1.875	47.63	1.00	25.4	0.040
3/4"	1/4"	19.05	6.35	2.00	50.8	1.00	25.4	0.090
	3/8"		9.53	2.00	50.8	1.00	25.4	0.090
	1/2"		12.7	2.00	50.8	1.00	25.4	0.090
1"	1/4"	25.4	6.35	2.125	53.98	1.125	28.58	0.120
	3/8"		9.53	2.125	53.98	1.125	28.58	0.120
	1/2"		12.7	2.125	53.98	1.125	28.58	0.120
	3/4"		19.05	2.125	53.98	1.125	28.58	0.120
1 1/2"	1/2"	38.1	12.7	2.375	60.33	1.375	34.93	0.170
	3/4"		19.05	2.375	60.33	1.375	34.93	0.170
	1"		25.4	2.375	60.33	1.375	34.93	0.210
2"	1/2"	50.8	12.7	2.875	73.03	1.625	41.28	0.240
	3/4"		19.05	2.875	73.03	1.625	41.28	0.240
	1"		25.4	2.875	73.03	1.625	41.28	0.290
	1 1/2"		38.1	2.875	73.03	1.625	41.28	0.270
2 1/2"	1/2"	63.5	12.7	3.125	79.38	1.875	47.63	0.350
	3/4"		19.05	3.125	79.38	1.875	47.63	0.350
	1"		25.4	3.125	79.38	1.875	47.63	0.400
	1 1/2"		38.1	3.125	79.38	1.875	47.63	0.380
	2"		50.8	3.125	79.38	1.875	47.63	0.410
3"	1/2"	76.2	12.7	3.375	85.73	2.125	53.98	0.630
	3/4"		19.05	3.375	85.73	2.125	53.98	0.630
	1"		25.4	3.375	85.73	2.125	53.98	0.680
	1 1/2"		38.1	3.375	85.73	2.125	53.98	0.660
	2"		50.8	3.375	85.73	2.125	53.98	0.690
	2 1/2"		63.5	3.375	85.73	2.125	53.98	0.720
4"	1/2"	101.6	12.7	4.125	104.78	2.625	66.68	0.930
	3/4"		19.05	4.125	104.78	2.625	66.68	0.930
	1"		25.4	4.125	104.78	2.625	66.68	0.980
	1 1/2"		38.1	4.125	104.78	2.625	66.68	0.950
	2"		50.8	4.125	104.78	2.625	66.68	0.960
	2 1/2"		63.5	4.125	104.78	2.625	66.68	0.990
	3"		76.2	4.125	104.78	2.625	66.68	1.060
6"	1/2"	152.4	12.7	5.625	142.88	3.625	92.08	2.790
	3/4"		19.05	5.625	142.88	3.625	92.08	2.973
	1"		25.4	5.625	142.88	3.625	92.08	3.002
	1 1/2"		38.1	5.625	142.88	3.625	92.08	3.019
	2"		50.8	5.625	142.88	3.625	92.08	3.028
	2 1/2"		63.5	5.625	142.88	3.625	92.08	3.037
	3"		76.2	5.625	142.88	3.625	92.08	3.056
	4"		101.6	5.625	142.88	3.750	95.25	3.139

卡式变径长三通 Clamp Reducing Tee

BPE No.QL-018

DT-4.1.2-8





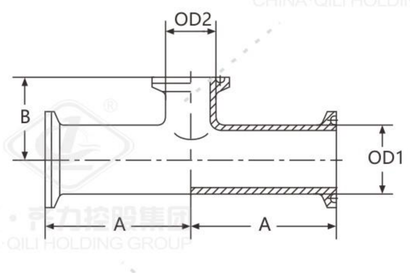
规格尺寸 OD				A		B		重量
英寸 Inch		OD1	OD2	英寸 Inch	mm	英寸 Inch	mm	kg
3/8"	x 1/4"	9.53	x 6.35	2.250	57.15	2.250	57.15	0.120
1/2"	x 1/4"	12.7	x 6.35	2.375	60.33	2.375	60.33	0.160
	x 3/8"		x 9.53	2.375	60.33	2.375	60.33	0.160
3/4"	x 1/4"	19.05	x 6.35	2.50	63.5	2.500	63.5	0.120
	x 3/8"		x 9.53	2.50	63.5	2.500	63.5	0.130
	x 1/2"		x 12.7	2.50	63.5	2.500	63.5	0.160
1"	x 1/4"	25.4	x 6.35	2.625	66.68	2.625	66.68	0.260
	x 3/8"		x 9.53	2.625	66.68	2.625	66.68	0.270
	x 1/2"		x 12.7	2.625	66.68	2.625	66.68	0.270
	x 3/4"		x 19.05	2.625	66.68	2.625	66.68	0.280
1 1/2"	x 1/2"	38.1	x 12.7	2.875	73.03	2.875	73.03	0.30
	x 3/4"		x 19.05	2.875	73.03	2.875	73.03	0.310
	x 1"		x 25.4	2.875	73.03	2.875	73.03	0.370
2"	x 1/2"	50.8	x 12.7	3.375	85.73	3.125	79.38	0.490
	x 3/4"		x 19.05	3.375	85.73	3.125	79.38	0.490
	x 1"		x 25.4	3.375	85.73	3.125	79.38	0.530
	x 1 1/2"		x 38.1	3.375	85.73	3.125	79.38	0.540
2 1/2"	x 1/2"	63.5	x 12.7	3.625	92.08	3.375	85.73	0.610
	x 3/4"		x 19.05	3.625	92.08	3.375	85.73	0.610
	x 1"		x 25.4	3.625	92.08	3.375	85.73	0.660
	x 1 1/2"		x 38.1	3.625	92.08	3.375	85.73	0.640
	x 2"		x 50.8	3.625	92.08	3.375	85.73	0.800
3"	x 1/2"	76.2	x 12.7	3.875	98.43	3.625	92.08	1.030
	x 3/4"		x 19.05	3.875	98.43	3.625	92.08	1.030
	x 1"		x 25.4	3.875	98.43	3.625	92.08	1.080
	x 1 1/2"		x 38.1	3.875	98.43	3.625	92.08	1.060
	x 2"		x 50.8	3.875	98.43	3.625	92.08	1.130
	x 2 1/2"		x 63.5	3.875	98.43	3.625	92.08	1.180
4"	x 1/2"	101.6	x 12.7	4.750	120.65	4.125	104.78	1.460
	x 3/4"		x 19.05	4.750	120.65	4.125	104.78	1.460
	x 1"		x 25.4	4.750	120.65	4.125	104.78	1.510
	x 1 1/2"		x 38.1	4.750	120.65	4.125	104.78	1.490
	x 2"		x 50.8	4.750	120.65	4.375	111.13	1.500
	x 2 1/2"		x 63.5	4.750	120.65	4.375	111.13	1.550
	x 3"		x 76.2	4.750	120.65	4.375	111.13	1.650
6"	x 1/2"	152.4	x 12.7	7.125	180.98	5.125	130.18	3.356
	x 3/4"		x 19.05	7.125	180.98	5.125	130.18	3.362
	x 1"		x 25.4	7.125	180.98	5.125	130.18	4.207
	x 1 1/2"		x 38.1	7.125	180.98	5.125	130.18	4.192
	x 2"		x 50.8	7.125	180.98	5.375	136.53	4.227
	x 2 1/2"		x 63.5	7.125	180.98	5.375	136.53	4.249
	x 3"		x 76.2	7.125	180.98	5.375	136.53	4.269
	x 4"		x 101.6	7.125	180.98	5.750	146.05	4.443

卡式变径短三通 Clamp Reducing Tee

BPE No.QL-019

DT-4.1.2-9



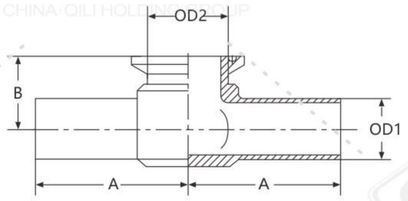


规格尺寸 OD				A		B		重量
英寸 Inch		OD1	OD2	英寸 Inch	mm	英寸 Inch	mm	kg
3/8"	x 1/4"	9.53	x 6.35	2.250	57.15	1.00	25.4	0.060
1/2"	x 1/4"	12.7	x 6.35	2.375	60.33	1.00	25.4	0.090
	x 3/8"		x 9.53	2.375	60.33	1.00	25.4	0.090
3/4"	x 1/4"	19.05	x 6.35	2.50	63.5	1.00	25.4	0.120
	x 3/8"		x 9.53	2.50	63.5	1.00	25.4	0.120
	x 1/2"		x 12.7	2.50	63.5	1.00	25.4	0.120
1"	x 1/4"	25.4	x 6.35	2.625	66.68	1.125	28.58	0.250
	x 3/8"		x 9.53	2.625	66.68	1.125	28.58	0.250
	x 1/2"		x 12.7	2.625	66.68	1.125	28.58	0.260
	x 3/4"		x 19.05	2.625	66.68	1.125	28.58	0.260
1 1/2"	x 1/2"	38.1	x 12.7	2.875	73.03	1.375	34.93	0.280
	x 3/4"		x 19.05	2.875	73.03	1.375	34.93	0.280
	x 1"		x 25.4	2.875	73.03	1.375	34.93	0.290
2"	x 1/2"	50.8	x 12.7	3.375	85.73	1.625	41.28	0.380
	x 3/4"		x 19.05	3.375	85.73	1.625	41.28	0.380
	x 1"		x 25.4	3.375	85.73	1.625	41.28	0.430
	x 1 1/2"		x 38.1	3.375	85.73	1.625	41.28	0.410
2 1/2"	x 1/2"	63.5	x 12.7	3.625	92.08	1.875	47.63	0.550
	x 3/4"		x 19.05	3.625	92.08	1.875	47.63	0.550
	x 1"		x 25.4	3.625	92.08	1.875	47.63	0.590
	x 1 1/2"		x 38.1	3.625	92.08	1.875	47.63	0.580
	x 2"		x 50.8	3.625	92.08	1.875	47.63	0.610
3"	x 1/2"	76.2	x 12.7	3.875	98.43	2.125	53.98	0.980
	x 3/4"		x 19.05	3.875	98.43	2.125	53.98	0.980
	x 1"		x 25.4	3.875	98.43	2.125	53.98	1.020
	x 1 1/2"		x 38.1	3.875	98.43	2.125	53.98	1.000
	x 2"		x 50.8	3.875	98.43	2.125	53.98	1.030
	x 2 1/2"		x 63.5	3.875	98.43	2.125	53.98	1.060
4"	x 1/2"	101.6	x 12.7	4.750	120.65	2.625	66.68	1.360
	x 3/4"		x 19.05	4.750	120.65	2.625	66.68	1.360
	x 1"		x 25.4	4.750	120.65	2.625	66.68	1.410
	x 1 1/2"		x 38.1	4.750	120.65	2.625	66.68	1.390
	x 2"		x 50.8	4.750	120.65	2.625	66.68	1.400
	x 2 1/2"		x 63.5	4.750	120.65	2.625	66.68	1.430
	x 3"		x 76.2	4.750	120.65	2.625	66.68	1.500
6"	x 1/2"	152.4	x 12.7	7.125	180.98	3.625	92.08	4.133
	x 3/4"		x 19.05	7.125	180.98	3.625	92.08	4.136
	x 1"		x 25.4	7.125	180.98	3.625	92.08	4.152
	x 1 1/2"		x 38.1	7.125	180.98	3.625	92.08	4.156
	x 2"		x 50.8	7.125	180.98	3.625	92.08	4.157
	x 2 1/2"		x 63.5	7.125	180.98	3.625	92.08	4.159
	x 3"		x 76.2	7.125	180.98	3.625	92.08	4.188
	x 4"		x 101.6	7.125	180.98	3.750	95.25	4.213

仪表三通 Instrument Tee

BPE No.QL-020

DT-4.1.2-10

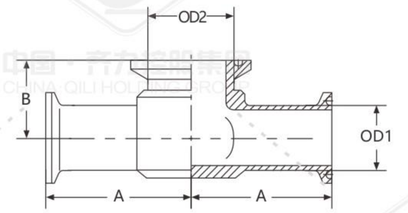


规格尺寸 OD				A		B		重量
英寸 Inch		OD1	OD2	英寸 Inch	mm	英寸 Inch	mm	kg
1/2"	x 1 1/2"	12.7	x 38.1	2.50	63.5	0.875	22.23	0.301
3/4"	x 1 1/2"	19.05	x 38.1	2.50	63.5	1.000	25.4	0.398
1"	x 1 1/2"	25.4	x 38.1	2.50	63.5	1.125	28.58	0.470
1/2"	x 2"	12.7	x 50.8	2.75	69.85	1.000	25.4	0.431
3/4"	x 2"	19.05	x 50.8	2.75	69.85	1.125	28.58	0.529
1"	x 2"	25.4	x 50.8	2.75	69.85	1.250	31.75	0.639
1 1/2"	x 2"	38.1	x 50.8	2.75	69.85	1.500	38.1	0.798

卡式仪表三通 Clamp Instrument Tee

BPE No.QL-021

DT-4.1.2-11

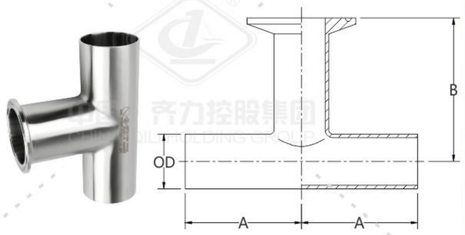


规格尺寸 OD				A		B		重量
英寸 Inch		OD1	OD2	英寸 Inch	mm	英寸 Inch	mm	kg
1/2"	x 1 1/2"	12.7	x 38.1	3.000	76.2	0.875	22.23	0.333
3/4"	x 1 1/2"	19.05	x 38.1	3.000	76.2	1.000	25.4	0.424
1"	x 1 1/2"	25.4	x 38.1	3.000	76.2	1.125	28.58	0.604
1/2"	x 2"	12.7	x 50.8	3.250	82.55	1.000	25.4	0.463
3/4"	x 2"	19.05	x 50.8	3.250	82.55	1.125	28.58	0.555
1"	x 2"	25.4	x 50.8	3.250	82.55	1.250	31.75	0.773
1 1/2"	x 2"	38.1	x 50.8	3.250	82.55	1.500	38.1	0.882

中卡式等径长三通 Medium Card Type Equal Diameter Length Tee

BPE No.QL-022

DT-4.1.2-12



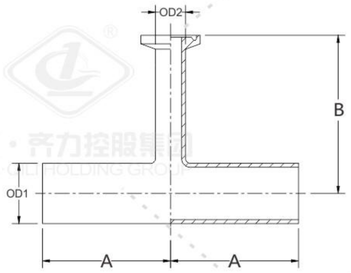
规格尺寸 OD		A		B		重量
英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	1.750	44.45	2.250	57.15	0.032
3/8"	9.53	1.750	44.45	2.250	57.15	0.040
1/2"	12.7	1.875	47.63	2.375	60.33	0.078
3/4"	19.05	2.000	50.80	2.500	63.50	0.115
1	25.4	2.125	53.98	2.625	66.68	0.209
1 1/2"	38.1	2.375	60.33	2.875	73.03	0.278
2"	50.8	2.875	73.03	3.375	85.73	0.438
2 1/2"	63.5	3.125	79.38	3.625	92.08	0.581
3"	76.2	3.375	85.73	3.875	98.43	0.738
4"	101.6	4.125	104.78	4.750	120.65	1.490
6"	152.4	5.625	142.88	7.125	180.98	4.020

中卡式变径长三通 Medium Card Type Variable Diameter Long Tee

BPE No.QL-023

DT-4.1.2-13



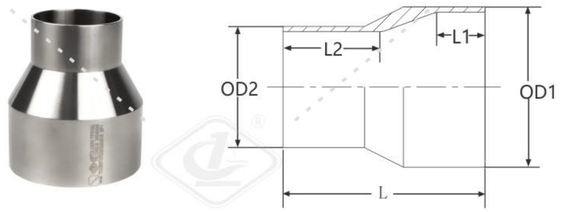


规格尺寸 OD				A		B		重量
英寸 Inch				英寸 Inch	mm	英寸 Inch	mm	kg
3/8"	x	1/4"		1.750	44.45	2.250	57.15	0.038
1/2"	x	1/4"		1.875	47.63	2.375	60.33	0.064
	x	3/8"		1.875	47.63	2.375	60.33	0.066
3/4"	x	1/4"		2.000	50.80	2.500	63.50	0.094
	x	3/8"		2.000	50.80	2.500	63.50	0.095
	x	1/2"		2.000	50.80	2.500	63.50	0.107
1"	x	1/4"		2.125	53.98	2.625	66.68	0.127
	x	3/8"		2.125	53.98	2.625	66.68	0.128
	x	1/2"		2.125	53.98	2.625	66.68	0.140
	x	3/4"		2.125	53.98	2.625	66.68	0.147
1 1/2"	x	1/2"		2.375	60.33	2.875	73.03	0.215
	x	3/4"		2.375	60.33	2.875	73.03	0.222
	x	1"		2.375	60.33	2.875	73.03	0.284
2"	x	1/2"		2.875	73.03	3.125	79.38	0.329
	x	3/4"		2.875	73.03	3.125	79.38	0.336
	x	1"		2.875	73.03	3.125	79.38	0.398
	x	1 1/2"		2.875	73.03	3.125	79.38	0.390
2 1/2"	x	1/2"		3.125	79.38	3.375	85.73	0.437
	x	3/4"		3.125	79.38	3.375	85.73	0.445
	x	1"		3.125	79.38	3.375	85.73	0.506
	x	1 1/2"		3.125	79.38	3.375	85.73	0.499
	x	2"		3.125	79.38	3.375	85.73	0.531
3"	x	1/2"		3.375	85.73	3.625	92.08	0.559
	x	3/4"		3.375	85.73	3.625	92.08	0.566
	x	1"		3.375	85.73	3.625	92.08	0.628
	x	1 1/2"		3.375	85.73	3.625	92.08	0.620
	x	2"		3.375	85.73	3.625	92.08	0.651
	x	2 1/2"		3.375	85.73	3.625	92.08	0.684
4"	x	1/2"		4.125	104.78	4.125	104.78	1.129
	x	3/4"		4.125	104.78	4.125	104.78	1.136
	x	1"		4.125	104.78	4.125	104.78	1.197
	x	1 1/2"		4.125	104.78	4.125	104.78	1.186
	x	2"		4.125	104.78	4.375	111.13	1.226
	x	2 1/2"		4.125	104.78	4.375	111.13	1.255
	x	3"		4.125	104.78	4.375	111.13	1.285
6"	x	3"		5.625	142.88	5.375	136.53	3.112
	x	4"		5.625	142.88	5.750	146.05	3.284

同心变径 Weld Concentric Reducer

BPE No.QL-024

DT-4.1.3-1

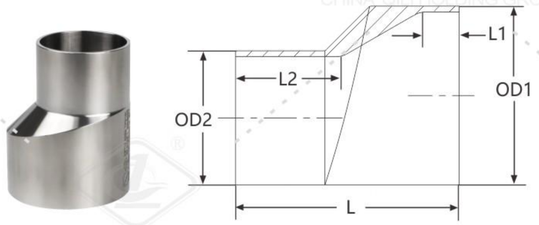


规格尺寸		L		L1	L2	重量
英寸 Inch	OD1 x OD2	英寸 Inch	mm	mm	mm	kg
3/8" x 1/4"	9.53 x 6.35	1.625	41.28	9.53	22.23	0.008
1/2" x 1/4"	12.7 x 6.35	1.875	47.63	9.53	22.23	0.021
x 3/8"	x 9.53	1.875	47.63	9.53	22.23	0.022
3/4" x 3/8"	19.05 x 9.53	2.00	50.80	9.53	22.23	0.041
x 1/2"	x 12.7	2.125	53.98	9.53	28.58	0.042
1" x 1/2"	25.4 x 12.7	2.50	63.50	9.53	28.58	0.071
x 3/4"	x 19.05	2.125	53.98	9.53	28.58	0.060
1 1/2" x 3/4"	38.1 x 19.05	3.00	76.20	9.53	28.58	0.146
x 1"	x 25.4	2.50	63.50	9.53	28.58	0.124
2" x 1"	50.8 x 25.4	3.375	85.73	9.53	28.58	0.242
x 1 1/2"	x 38.1	2.50	63.50	9.53	28.58	0.176
2 1/2" x 1 1/2"	63.5 x 38.1	3.375	85.73	9.53	28.58	0.325
x 2"	x 50.8	2.50	63.50	9.53	28.58	0.228
3" x 1 1/2"	76.2 x 38.1	4.25	107.95	9.53	28.58	0.509
x 2"	x 50.8	3.375	85.73	9.53	28.58	0.544
x 2 1/2"	x 63.5	2.625	66.68	9.53	28.58	0.362
4" x 2"	101.6 x 50.8	5.125	130.18	9.53	28.58	1.315
x 2 1/2"	x 63.5	4.25	107.95	9.53	28.58	1.096
x 3"	x 76.2	3.875	98.43	9.53	41.28	0.891
6" x 3"	152.4 x 76.2	7.25	184.15	9.53	41.28	3.975
x 4"	x 101.6	5.625	142.88	9.53	41.28	3.057

偏心变径 Weld Eccentric Reducer

BPE No.QL-025

DT-4.1.3-1

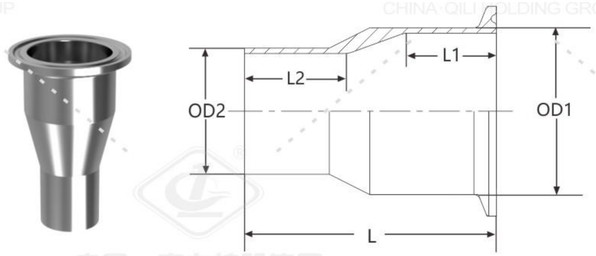


规格尺寸		L		L1	L2	重量
英寸 Inch	OD1 x OD2	英寸 Inch	mm	mm	mm	kg
3/8" x 1/4"	9.53 x 6.35	1.625	41.28	9.53	22.23	0.008
1/2" x 1/4"	12.7 x 6.35	1.875	47.63	9.53	22.23	0.021
x 3/8"	x 9.53	1.875	47.63	9.53	22.23	0.022
3/4" x 3/8"	19.05 x 9.53	2.00	50.80	9.53	22.23	0.041
x 1/2"	x 12.7	2.125	53.98	9.53	28.58	0.041
1" x 1/2"	25.4 x 12.7	2.50	63.50	9.53	28.58	0.071
x 3/4"	x 19.05	2.125	53.98	9.53	28.58	0.060
1 1/2" x 3/4"	38.1 x 19.05	3.00	76.20	9.53	28.58	0.145
x 1"	x 25.4	2.50	63.50	9.53	28.58	0.122
2" x 1"	50.8 x 25.4	3.375	85.73	9.53	28.58	0.238
x 1 1/2"	x 38.1	2.50	63.50	9.53	28.58	0.174
2 1/2" x 1 1/2"	63.5 x 38.1	3.375	85.73	9.53	28.58	0.320
x 2"	x 50.8	2.50	63.50	9.53	28.58	0.226
3" x 1 1/2"	76.2 x 38.1	4.25	107.95	9.53	28.58	0.691
x 2"	x 50.8	3.375	85.73	9.53	28.58	0.538
x 2 1/2"	x 63.5	2.625	66.68	9.53	28.58	0.360
4" x 2"	101.6 x 50.8	5.125	130.18	9.53	28.58	1.299
x 2 1/2"	x 63.5	4.25	107.95	9.53	28.58	1.086
x 3"	x 76.2	3.875	98.43	9.53	41.28	0.884
6" x 3"	152.4 x 76.2	7.25	184.15	9.53	41.28	3.936
x 4"	x 101.6	5.625	142.88	9.53	41.28	3.032

大头卡式同心变径 Clamp/weld Concentric Reducer

BPE No.QL-026

DT-4.1.3-2

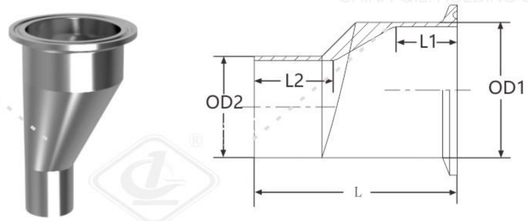


规格尺寸		L		L1	L2	重量
英寸 Inch	OD1 x OD2	英寸 Inch	mm	mm	mm	kg
3/8" x 1/4"	9.53 x 6.35	2.215	53.98	9.53	22.23	0.023
1/2" x 1/4"	12.7 x 6.35	2.375	60.33	9.53	22.23	0.036
x 3/8"	x 9.53	2.375	60.33	9.53	22.23	0.037
3/4" x 3/8"	19.05 x 9.53	2.500	63.50	9.53	22.23	0.052
x 1/2"	x 12.7	2.625	66.68	9.53	28.58	0.054
1" x 1/2"	25.4 x 12.7	3.000	76.20	9.53	28.58	0.134
x 3/4"	x 19.05	2.625	66.68	9.53	28.58	0.125
1 1/2" x 3/4"	38.1 x 19.05	3.500	88.90	9.53	28.58	0.183
x 1"	x 25.4	3.000	76.20	9.53	28.58	0.162
2" x 1"	50.8 x 25.4	3.875	98.43	9.53	28.58	0.294
x 1 1/2"	x 38.1	3.000	76.20	9.53	28.58	0.231
2 1/2" x 1 1/2"	63.5 x 38.1	3.875	98.43	9.53	28.58	0.394
x 2"	x 50.8	3.000	76.20	9.53	28.58	0.300
3" x 1 1/2"	76.2 x 38.1	4.750	120.65	9.53	28.58	0.786
x 2"	x 50.8	3.875	98.43	9.53	28.58	0.633
x 2 1/2"	x 63.5	3.125	79.38	9.53	28.58	0.454
4" x 2"	101.6 x 50.8	5.750	146.05	9.53	28.58	1.472
x 2 1/2"	x 63.5	4.875	123.83	9.53	28.58	1.258
x 3"	x 76.2	4.500	114.30	9.53	41.28	1.059
6" x 3"	152.4 x 76.2	8.000	203.20	9.53	41.28	4.307
x 4"	x 101.6	6.375	161.93	9.53	41.28	3.406

大头卡式偏心变径 Weld Eccentric Reducer

BPE No.QL-027

DT-4.1.3-2

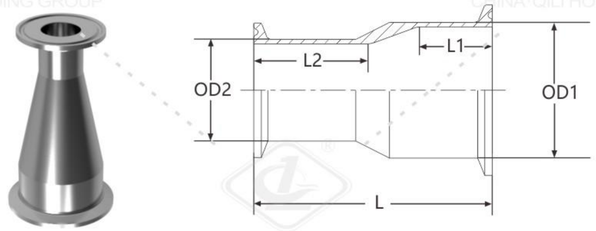


规格尺寸		L		L1	L2	重量
英寸 Inch	OD1 x OD2	英寸 Inch	mm	mm	mm	kg
3/8" x 1/4"	9.53 x 6.35	2.125	53.98	9.53	22.23	0.023
1/2" x 1/4"	12.7 x 6.35	2.375	60.33	9.53	22.23	0.036
x 3/8"	x 9.53	2.375	60.33	9.53	22.23	0.037
3/4" x 3/8"	19.05 x 9.53	2.500	63.50	9.53	22.23	0.052
x 1/2"	x 12.7	2.625	66.68	9.53	28.58	0.053
1" x 1/2"	25.4 x 12.7	3.000	76.20	9.53	28.58	0.134
x 3/4"	x 19.05	2.625	66.68	9.53	28.58	0.125
1 1/2" x 3/4"	38.1 x 19.05	3.500	88.90	9.53	28.58	0.182
x 1"	x 25.4	3.000	76.20	9.53	28.58	0.160
2" x 1"	50.8 x 25.4	3.875	98.43	9.53	28.58	0.290
x 1 1/2"	x 38.1	3.000	76.20	9.53	28.58	0.229
2 1/2" x 1 1/2"	63.5 x 38.1	3.875	98.43	9.53	28.58	0.389
x 2"	x 50.8	3.000	76.20	9.53	28.58	0.298
3" x 1 1/2"	76.2 x 38.1	4.750	120.65	9.53	28.58	0.968
x 2"	x 50.8	3.875	98.43	9.53	28.58	0.627
x 2 1/2"	x 63.5	3.125	79.38	9.53	28.58	0.452
4" x 2"	101.6 x 50.8	5.750	146.05	9.53	28.58	1.456
x 2 1/2"	x 63.5	4.875	123.83	9.53	28.58	1.248
x 3"	x 76.2	4.500	114.30	9.53	41.28	1.052
6" x 3"	152.4 x 76.2	8.000	203.20	9.53	41.28	4.268
x 4"	x 101.6	6.375	161.93	9.53	41.28	3.381

卡式同心变径 Clamp Concentric Reducer

BPE No.QL-028

DT-4.1.3-3

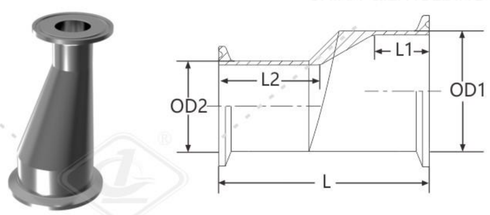


规格尺寸		L		L1	L2	重量
英寸 Inch	OD1 x OD2	英寸 Inch	mm	mm	mm	kg
3/8" x 1/4"	9.53 x 6.35	2.625	66.68	9.53	22.23	0.038
1/2" x 1/4"	12.7 x 6.35	2.875	73.03	9.53	22.23	0.054
x 3/8"	x 9.53	2.875	73.03	9.53	22.23	0.054
3/4" x 3/8"	19.05 x 9.53	3.000	76.20	9.53	22.23	0.071
x 1/2"	x 12.7	3.125	79.38	9.53	28.58	0.071
1" x 1/2"	25.4 x 12.7	3.500	88.90	9.53	28.58	0.153
x 3/4"	x 19.05	3.125	79.38	9.53	28.58	0.140
1 1/2" x 3/4"	38.1 x 19.05	4.000	101.60	9.53	28.58	0.202
x 1"	x 25.4	3.500	88.90	9.53	28.58	0.232
2" x 1"	50.8 x 25.4	4.375	111.13	9.53	28.58	0.366
x 1 1/2"	x 38.1	3.500	88.90	9.53	28.58	0.276
2 1/2" x 1 1/2"	63.5 x 38.1	4.375	111.13	9.53	28.58	0.443
x 2"	x 50.8	3.500	88.90	9.53	28.58	0.362
3" x 1 1/2"	76.2 x 38.1	5.250	133.35	9.53	28.58	0.837
x 2"	x 50.8	4.375	111.13	9.53	28.58	0.698
x 2 1/2"	x 63.5	3.625	92.08	9.53	28.58	0.533
4" x 2"	101.6 x 50.8	6.250	158.75	9.53	28.58	1.549
x 2 1/2"	x 63.5	5.375	136.53	9.53	28.58	1.350
x 3"	x 76.2	5.000	127.00	9.53	41.28	1.166
6" x 3"	152.4 x 76.2	8.500	215.90	9.53	41.28	4.442
x 4"	x 101.6	7.000	177.80	9.53	41.28	3.621

卡式偏心变径 Clamp Eccentric Reducer

BPE No.QL-029

DT-4.1.3-3

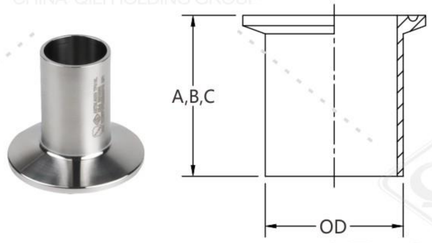


规格尺寸		L		L1	L2	重量
英寸 Inch	OD1 x OD2	英寸 Inch	mm	mm	mm	kg
3/8" x 1/4"	9.53 x 6.35	2.625	66.68	9.53	22.23	0.053
1/2" x 1/4"	12.7 x 6.35	2.875	73.03	9.53	22.23	0.069
x 3/8"	x 9.53	2.875	73.03	9.53	22.23	0.069
3/4" x 3/8"	19.05 x 9.53	3.000	76.20	9.53	22.23	0.082
x 1/2"	x 12.7	3.125	79.38	9.53	28.58	0.083
1" x 1/2"	25.4 x 12.7	3.500	88.90	9.53	28.58	0.216
x 3/4"	x 19.05	3.125	79.38	9.53	28.58	0.205
1 1/2" x 3/4"	38.1 x 19.05	4.000	101.60	9.53	28.58	0.239
x 1"	x 25.4	3.500	88.90	9.53	28.58	0.270
2" x 1"	50.8 x 25.4	4.375	111.13	9.53	28.58	0.418
x 1 1/2"	x 38.1	3.500	88.90	9.53	28.58	0.331
2 1/2" x 1 1/2"	63.5 x 38.1	4.375	111.13	9.53	28.58	0.512
x 2"	x 50.8	3.500	88.90	9.53	28.58	0.434
3" x 1 1/2"	76.2 x 38.1	5.250	133.35	9.53	28.58	1.114
x 2"	x 50.8	4.375	111.13	9.53	28.58	0.787
x 2 1/2"	x 63.5	3.625	92.08	9.53	28.58	0.625
4" x 2"	101.6 x 50.8	6.250	158.75	9.53	28.58	1.706
x 2 1/2"	x 63.5	5.375	136.53	9.53	28.58	1.512
x 3"	x 76.2	5.000	127	9.53	41.28	1.334
6" x 3"	152.4 x 76.2	8.500	215.90	9.53	41.28	4.774
x 4"	x 101.6	7.000	177.8	9.53	41.28	3.970

卡式接头 Card Connector

BPE No.QL-030

DT-4.1.4-1

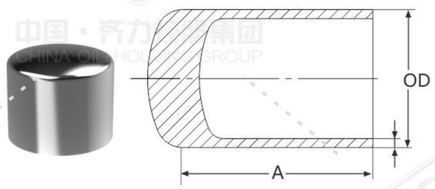


规格尺寸 OD		A		B		C	
英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm
1/4"	6.35	1.750	44.45	1.125	28.58	0.500	12.70
3/8"	9.53	1.750	44.45	1.125	28.58	0.500	12.70
1/2"	12.7	1.750	44.45	1.125	28.58	0.500	12.70
3/4"	19.05	1.750	44.45	1.125	28.58	0.500	12.70
1"	25.4	1.750	44.45	1.125	28.58	0.500	12.70
1 1/2"	38.1	1.750	44.45	1.125	28.58	0.500	12.70
2"	50.8	2.250	57.15	1.125	28.58	0.500	12.70
2 1/2"	63.5	2.250	57.15	1.125	28.58	0.500	12.70
3"	76.2	2.250	57.15	1.125	28.58	0.500	12.70
4"	101.6	2.250	57.15	1.125	28.58	0.625	15.88
6"	152.4	3.000	76.20	1.500	38.10	0.750	19.05

管帽 Weld end Cap

BPE No.QL-031

DT-4.1.5-1

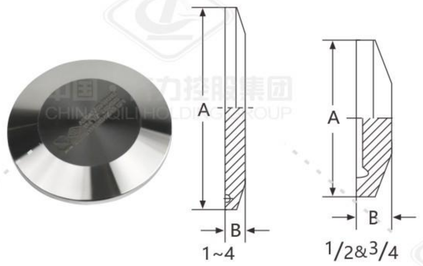


规格尺寸 OD		A		重量
英寸 Inch	mm	英寸 Inch	mm	kg
1/2"	12.7	1.50	38.1	0.031
3/4"	19.05	1.50	38.1	0.037
1"	25.4	1.50	38.1	0.098
1 1/2"	38.1	1.50	38.1	0.092
2"	50.8	1.50	38.1	0.148
2 1/2"	63.5	1.50	38.1	0.194
3"	76.2	1.750	44.45	0.231
4"	101.6	2.00	50.8	0.389
6"	152.4	2.50	63.5	1.075

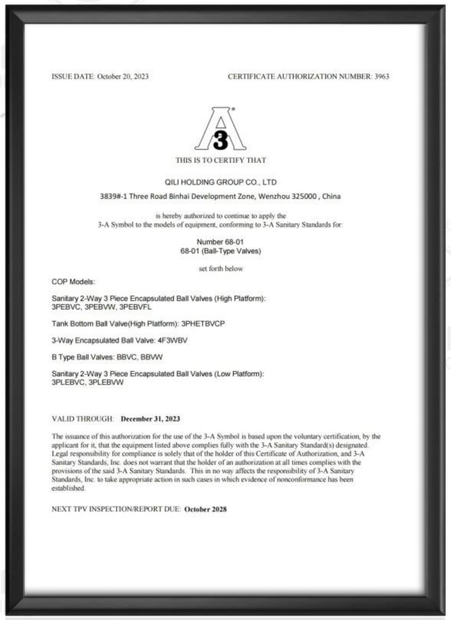
端盖 Solid End Cap

BPE No.QL-032

DT-4.1.5-2



规格尺寸 OD		A		B		重量
英寸 Inch	mm	英寸 Inch	mm	英寸 Inch	mm	kg
1/4"	6.35	0.984	25.0	0.187	4.75	0.014
3/8"	9.53	0.984	25.0	0.187	4.75	0.014
1/2"	12.7	0.984	25.0	0.187	4.75	0.014
3/4"	19.05	0.984	25.0	0.187	4.75	0.032
1"	25.4	1.984	50.39	0.250	6.35	0.130
1 1/2"	38.1	1.984	50.39	0.250	6.35	0.330
2"	50.8	2.516	63.91	0.250	6.35	0.460
2 1/2"	63.5	3.047	77.39	0.250	6.35	0.640
3"	76.2	3.579	90.91	0.250	6.35	0.820
4"	101.6	4.682	118.92	0.312	7.92	1.530
6"	152.4	6.570	166.88	0.437	11.1	1.891



ISSUE DATE: October 20, 2023 CERTIFICATE AUTHORIZATION NUMBER: 3963

THIS IS TO CERTIFY THAT

QILI HOLDING GROUP CO., LTD

3839#-1 Three Road Binhai Development Zone, Wenzhou 325000 , China

is hereby authorized to continue to apply the
3-A Symbol to the models of equipment, conforming to 3-A Sanitary Standards for:

Number 68-01
68-01 (Ball-Type Valves)

set forth below

COP Models:

Sanitary 2-Way 3 Piece Encapsulated Ball Valves (High Platform):
3PEBVC, 3PEBVW, 3PEBVFL

Tank Bottom Ball Valve(High Platform): 3PHETBVCP

3-Way Encapsulated Ball Valve: 4F3WBV

B Type Ball Valves: BBVC, BBVW

Sanitary 2-Way 3 Piece Encapsulated Ball Valves (Low Platform):
3PLEBVC, 3PLEBVW

VALID THROUGH: **December 31, 2023**

The issuance of this authorization for the use of the 3-A Symbol is based upon the voluntary certification, by the applicant for it, that the equipment listed above complies fully with the 3-A Sanitary Standard(s) designated. Legal responsibility for compliance is solely that of the holder of this Certificate of Authorization, and 3-A Sanitary Standards, Inc. does not warrant that the holder of an authorization at all times complies with the provisions of the said 3-A Sanitary Standards. This in no way affects the responsibility of 3-A Sanitary Standards, Inc. to take appropriate action in such cases in which evidence of nonconformance has been established.

NEXT TPV INSPECTION/REPORT DUE: **October 2028**

B

卫生级球阀系列

Sanitary ball valve series

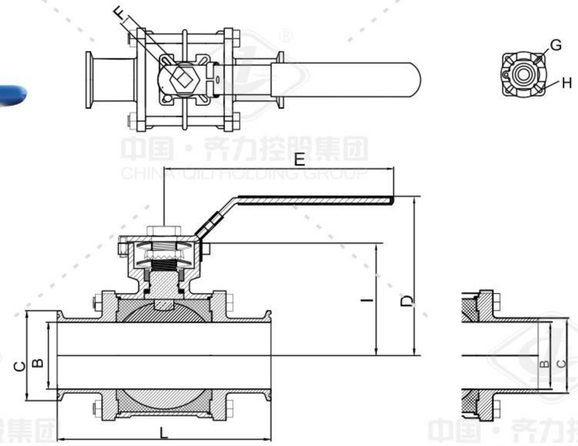


卫生级三片式高平台全包无滞留球阀/3A焊接

Sanitary three-piece high platform encapsulate non-retention ball valve/3A welding

中国·齐力控股集团
CHINA·QILI HOLDING GROUP





该阀为全包式阀座设计，解决了液体滞留阀腔的问题，该球阀主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

技术参数

规格：1/2"-6"
材质：304/CF8, 316L/CF3M
适用温度： - 20℃-150℃
密封材质：PTFE
压力：8-20bar
操作方式：手动、气动、电动
无需拆卸管道，只要拆卸阀门可自行维修更换，操纵扭矩小
连接方式：卡箍、焊接、螺纹、SMS、ISO、DIN、RJT、IDF、BPE
阀体内部处理；内表面CNC加工、Ra0. 6μm
认证：3-A-68-00、PED/97/23/EC

The valve is designed with encapsulated seat, which solves the problem of liquid retaining. The ball valve is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

Technical parameter

Specification: 1/2"-6"
Material: 304/CF8, 316L/CF3M
Applicable temperature: -20 ° C-150° C
Sealing material: PTFE
Pressure: 8-10bar
Mode of operation: manual, pneumatic, electric
No need of pipline dissaembling, only need to disassemble the valves,small torque
Connection method: clamp, welding, thread, SMS, ISO, DIN, RJT, IDF, BPE
Internal treatment of the valve body: CNC machining, Ra0.6μm
Certification: 3-A-68-00、PED/97/23/EC

1/2"-6" Encapsulated and ISO mount ing pad
Flange connection size please refer to the standard ISO5.

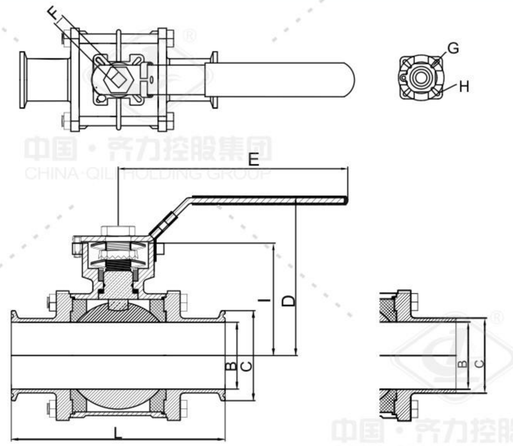
No.QL-001

SIZE	L±1	B±0.1	C±0.1		D±0.1	E±5	F±0.05	G	H	I±2	N·m
			快装 Clamp	焊接 Welding							
1/2"	90.5	9.4	25	12.7	64	131	9	F03	F04	37	4~10
3/4"	103.4	15.75	25	19.05	68	131	9	F03	F04	43	4~10
1"	114.2	22.1	50.5	25.4	86	169	11	F04	F05	51	5~15
1.5"	136.7	34.8	50.5	38.1	122.5	213	14	F05	F07	71	10~25
2"	153.2	47.5	64	50.8	122.5	213	14	F05	F07	79	15~30
2.5"	167.3	60.2	77.5	63.5	139.5	213	14	F05	F07	94	20~35
3"	192.3	72.9	91	76.2	165	320	17	F07	F10	109.5	40~65
4"	239.5	97.4	119	101.6	177	320	17	F07	F10	123	40~80
6"	378	146.8	167	152.4	205	490	27	F10	F12	169	60~120

卫生级三片式高平台直通(半包)球阀

Sanitary three-piece high platform two way (half- encapsulate)ball valves





该阀为半包式阀座设计，解决了液体滞留阀腔的问题，该球阀主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

技术参数

规格：1/2"-6"
材质：304/CF8, 316L/CF3M
适用温度： - 20℃-150℃
密封材质：PTFE
压力：8-20bar
操作方式：手动、气动、电动
无需拆卸管道，只要拆卸阀门可自行维修更换，操纵扭矩小
连接方式：卡箍、焊接、螺纹、SMS、ISO、DIN、RJT、IDF、BPE
阀体内部处理；内表面CNC加工、Ra0. 6μm
认证：3-A-68-00、PED/97/23/EC

The valve is designed with a semi enclosed seat, which solves the problem of liquid retaining. The ball valve is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

Technical parameter

Specification: 1/2"-6"
Material: 304/CF8, 316L/CF3M
Applicable temperature: -20 ° C-150° C
Sealing material: PTFE
Pressure: 8-10bar
Mode of operation: manual, pneumatic, electric
No need of pipline dissaembling, only need to disassemble the valves,small torque
Connection method: clamp, welding, thread, SMS, ISO, DIN, RJT, IDF, BPE
Internal treatment of the valve body: CNC machining, Ra0.6μm
Certification: 3-A-68-00、PED/97/23/EC

1/2"-6" Encapsulated and ISO mount ing pad
Flange connection size please refer to the standard ISO5.

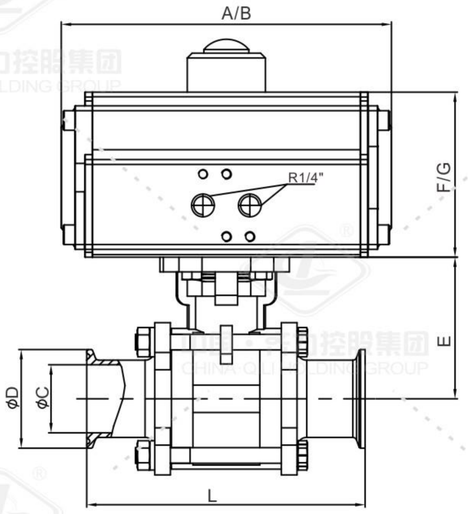
No.QL-002

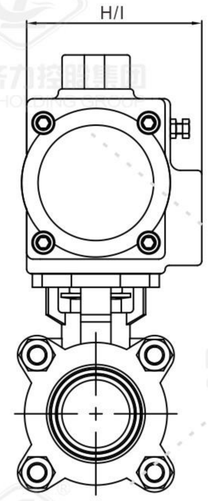
SIZE	L±1	B±0.1	C±0.1		D±0.1	E±5	F±0.05	G	H	I±2	N·m
			快装 Clamp	焊接 Welding							
1/2"	90.5	9.4	25	12.7	64	131	9	F03	F04	37	4~10
3/4"	103.4	15.75	25	19.05	68	131	9	F03	F04	43	4~10
1"	114.2	22.1	50.5	25.4	86	169	11	F04	F05	51	5~15
1.5"	136.7	34.8	50.5	38.1	122.5	213	14	F05	F07	71	10~25
2"	153.2	47.5	64	50.8	122.5	213	14	F05	F07	79	15~30
2.5"	167.3	60.2	77.5	63.5	139.5	213	14	F05	F07	94	20~35
3"	192.3	72.9	91	76.2	165	320	17	F07	F10	109.5	40~65
4"	239.5	97.4	119	101.6	177	320	17	F07	F10	123	40~80
6"	378	146.8	167	152.4	205	490	27	F10	F12	169	60~120

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









气动球阀：
主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

* 阀体结构：直通
* 规格：1/2"-6"、DN15-DN100
* 温度： - 20℃-150℃
* 压力：8-10bar/10kg
* 材质：316L
* 认证：3-A-68-00、PED、97/23/EC
* 气动执行器：双作用、单作用，铝制气动头、不锈钢气动头
* 调节型连接：卡箍、焊接、螺纹、DIN、SMS、ISO、IDF、BPE、RJT
* 密封材质：PTFE、TFM 1600、UHMWPE
* 扭矩：1N.M-100N.M

Pneumatic ball valve
It is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

* Valve body: full bore
* Size: 1/2"-6", DN15-DN100
* Temperature:-20℃-150℃
* Pressure: 8-10bar/10kg
* Material: 316L
* Certification: 3-A-68-00、PED、97/23/EC
* Pneumatic actuator: single acting,double acting,aluminium,stainless steel
* Connection: tri-clamped,welded,threaded, DIN, SMS, ISO, IDF, BPE, RJT
* Sealing material: PTFE、TFM 1600、UHMWPE
* Torque: 1N. M—-100N. M

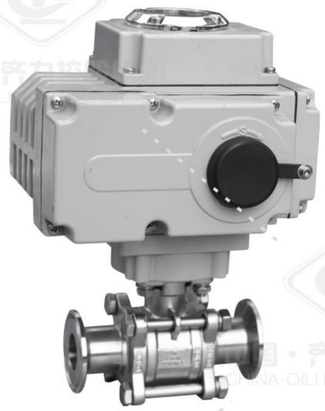


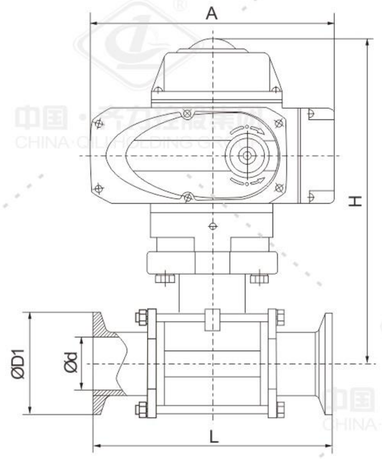
外形尺寸
DIMENSION

No.QL-003

SIZE	A/B (单/双)	C ±0.1	D ±0.1	E ±2	F/G (单/双)	H/I (单/双)	L ±1	Single acting actuator (单作用)	Double acting actuator (双作用)
1/2"	169/154	9.4	25.2	37	88/72	82/71	90.5	AT63	At52
3/4"	169/154	15.75	25.2	43	88/72	82/71	103.4	AT63	AT52
1"	201/169	22.1	50.5	51	100/88	94/82	114.2	AT75	AT63
1.25"	201/169	28.5	50.5	61	100/88	94/82	126	AT75	AT63
1.5"	209/201	34.8	50.5	71	108/100	101/94	136.7	AT83	AT75
2"	275/209	47.5	64	79	133/108	122/101	153.2	AT105	AT83
2.5"	275/209	60.2	77.5	94	133/108	122/101	167.3	AT105	AT83
3"	332/275	72.9	91	109.5	155/133	138/122	192.3	AT125	AT105
4"	385/332	97.4	119	123	172/155	153/138	239.5	AT140	AT125
6"	507/450	146.8	167	169	230/197	206/174	378	AT190	AT160

电动三片式无滞留全包球阀
Electric three-piece non-retention encapsulated ball valve





电动球阀：
主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

* 阀体结构：直通
* 规格：1/2"-6"、DN15-DN100
* 温度： - 20℃-150℃
* 压力：8-30bar/30kg
* 材质：316L
* 认证：3-A-68-00、PED、97/23/EC
* 电动执行器：开关型、
* 调节型连接：卡箍、焊接、螺纹、DIN、SMS、ISO、IDF、BPE、RJT
* 密封材质：PTFE、TFM 1600、UHMWPE
* 扭矩：1N.M-100N.M

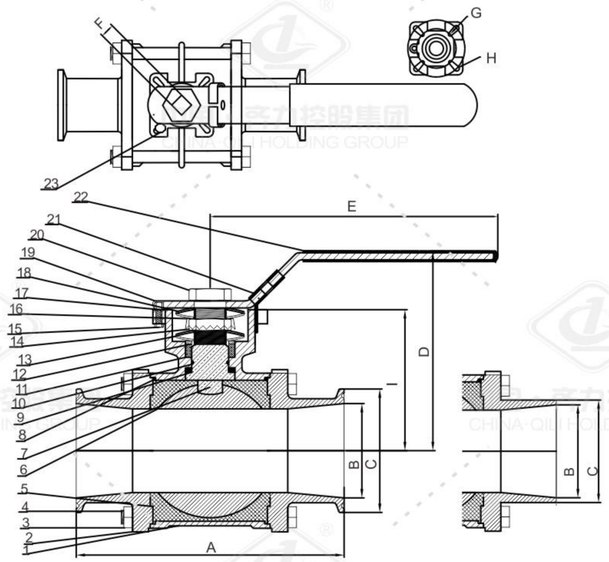
Electric ball valve
It is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

* Valve body: full bore
* Size: 1/2"-6"、 DN15-DN100
* Temperature:-20℃-150℃
* Pressure: 8-30bar/30kg
* Material: 316L
* Certification: 3-A-68-00、PED、97/23/EC
* Electric actuator: switching type,regulating type
* Connection: tri-clamped,welded,threaded, DIN, SMS, ISO, IDF, BPE, RJT
* Sealing material: PTFE、TFM 1600、UHMWPE
* Torque: 1N. M-100N. M

No.QL-004

SIZE	电动头型号 Electric head model	d±0.1	L±1	D1±0.1	A±5	H±5
1/2"	05	9.4	90.5	25.0	146	137
3/4"	05	15.8	103.4	25.0	146	141
1"	05	22.1	114.2	50.5	146	151
1 1/4"	05	28.5	125	50.5	163	172
1.5"	05	34.8	136.7	50.5	163	185
2"	15	47.5	153.2	64.0	214	209
2.5"	15	60.2	167.3	77.5	252	240
3"	40	72.9	192.3	91.0	270	264
4"	40	97.4	239.5	119	316	310

NO	NAME	NUMBER	MATERIAL
1	Body	1	ASTM-A351-CF3M
2	Cap	2	ASTM-A351-CF3M
3	Hexnut	4	SS304
4	Bolt	4	SS304
5	Seat	2	PTFE
6	Ball	1	SS316L
7	Stem	1	SS316L
8	Stem packing	2	PTFE
9	Ring	1	PTFE
10	O-Ring	1	VITON
11	Thrust washer	3	PTFE
12	Gasret	1	SS304
13	Butterfly spring	1	SS304
14	Hexnut	1	SS304
15	Hexnut	1	SS304
16	Belleviue washer	1	SS304
17	Bolt	1	SS304
18	Butterfly spring	2	SS304
19	Handle	1	SS304
20	Handle nut	1	SS304
21	Lock washer	1	SS304
22	Handle cover	1	PLASTIC



DN10-DN100 Encapsulated and ISO mounting pad.
Flange connection size please refer to the standard ISO5211

卫生级三片式高平台全包式非固位球阀。
阀门设计为全包式阀座，解决了液体滞留阀腔的问题。该球阀主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

技术参数

规格：DN10-DN100
材质：304/CF8,316L/CF3M
适用温度：-20℃-150℃
密封材料：聚四氟乙烯
压力：8-10bar
操作方式：手动、气动、电动无需拆卸管路，只要能拆卸阀门，即可自行维修更换
连接方式：卡箍，焊接，螺纹，SMS，ISO，DIN，RJT，IDF，BPE
阀体内部处理：内表面CNC加工，Ra0.6μm
认证：3A

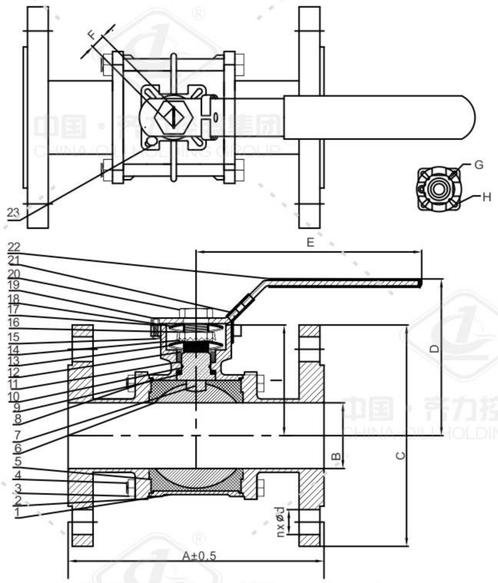
Sanitary three-piece high platform encapsulated ball valve.
The valve is designed with encapsulated seat, which solves the problem of liquid retaining. The ball valve is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

Technical parameter

Specification: DN10-DN100
Material: 304/CF8,316L/CF3M
Applicable temperature: -20 °C -150°C
Sealing material: PTFE
Pressure: 8-10bar
Mode of operation: manual,pneumatic,electric,only need to disassemble the valves,No need to disassemble the pipeline ,small torque
Connection method: clamp,welding,thread,SMS,ISO,DIN,RJT,IDF,BPE
Internal treatment of the valve body: CNC machiningof the inner surface,Ra0.6μm
Certification: 3A

No.QL-005

SIZE	A	B	C		D	E	F	G	H	I	N·m
			快装 Clamp	焊接 Welding							
DN10	90.5	10	34	13	64	131	9	F03	F04	37	4~10
DN15	103.4	15/16	34	18/16	68	131	9	F03	F04	43	4~10
DN20	114.2	19/20	34	22/23	86	169	11	F04	F05	51	4~10
DN25	114.2	25/26	50.5	28/29	86	169	11	F04	F05	51	5~15
DN32	136.7	31/32	50.5	34/35	122.5	213	14	F05	F07	72	10~20
DN40	136.7	37/38	50.5	40/41	122.5	213	14	F05	F07	72	10~25
DN50	153.2	49/50	64	52/53	122.5	213	14	F05	F07	79	15~30
DN65	167.3	66	91	70	139.5	213	14	F05	F07	94	20~35
DN80	192.3	81	106	85	165	320	17	F07	F10	109.5	40~65
DN100	239.5	100	119	104	177	320	17	F07	F10	123	40~80
DN150	378	150	183	154	205	490	27	F10	F10	169	60~120



1/2"-6"Encapsulated and ISO mounting pad.
Flange connection size please refer to the standard ISO05211

NO	NAME	NUMBER	MATERIAL
1	Body	1	ASTM-A351-CF3M
2	Cap	2	ASTM-A351-CF3M
3	Hexnut	4	SS304
4	Bolt	4	SS304
5	Seat	2	PTFE
6	Ball	1	SS316L
7	Stem	1	SS316L
8	Stem packing	2	PTFE
9	Ring	1	PTFE
10	O-Ring	1	VITON
11	Thrust washer	3	PTFE
12	Gasret	1	SS304
13	Butterfly spring	2	SS304
14	Hexnut	1	SS304
15	Hexnut	1	SS304
16	Belleviue washer	1	SS304
17	Bolt	1	SS304
18	Butterfly spring	2	SS304
19	Handle	1	SS304
20	Handle nut	1	SS304
21	Lock washer	1	SS304
22	Handle cover	1	PLASTIC

卫生级三片式高平台全包式非固位球阀。
阀门设计为全包式阀座，解决了液体滞留阀腔的问题。该球阀主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

Sanitary three-piece high platform encapsulated ball valve.
The valve is designed with encapsulated seat, which solves the problem of liquid retaining. The ball valve is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

技术参数

规格：1/2"-6"
材质：304/CF8,316L/CF3M
适用温度：-20℃-150℃
密封材料：聚四氟乙烯
压力：8-10bar
操作方式：手动、气动、电动无需拆卸管路，只要能拆卸阀门，即可自行维修更换
连接方式：卡箍，焊接，螺纹，SMS，ISO，DIN，RJT，IDF，BPE
阀体内部处理：内表面CNC加工，Ra0.6μm
认证：3A

Technical parameter

Specification: 1/2"-6"
Material: 304/CF8,316L/CF3M
Applicable temperature: -20 °C -150°C
Sealing material: PTFE
Pressure: 8-10bar
Mode of operation: manual,pneumatic,electric,only need to disassemble the valves,No need to disassemble the pipeline ,small torque
Connection method: clamp,welding,thread,SMS,ISO,DIN,RJT,IDF,BPE
Internal treatment of the valve body: CNC machiningof the inner surface,Ra0.6μm
Certification: 3A

No.QL-006

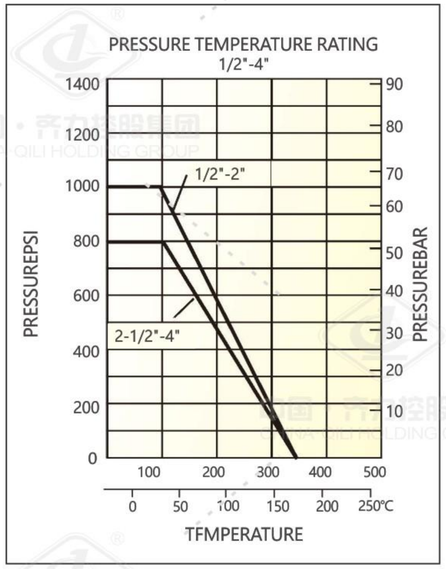
SIZE	A	B	C	D	E	F	G	H	I	N·m
1/2"	112.5	9.4	95	64	131	9	F03	F04	37	4~10
3/4"	129.4	15.75	105	68	131	9	F03	F04	43	4~10
1"	140	22.1	115	86	169	11	F04	F05	51	5~15
1.25"	156	28.5	140	86	169	11	F04	F05	61	10~20
1.5"	167	34.8	150	122.5	213	14	F05	F07	71	10~25
2"	185	47.5	165	122.5	213	14	F05	F07	79	15~30
2.5"	201	60.2	185	139.5	213	14	F05	F07	94	20~35
3"	226.3	72.9	200	165	320	17	F07	F10	109.5	40~65
4"	277.5	97.4	220	177	320	17	F07	F10	123	40~80
6"	420	146.8	285	205	490	27	F10	F12	169	60~120


焊接式 Welded type


螺纹式 T hread type


快装式 Clamp type


由任式 Union type



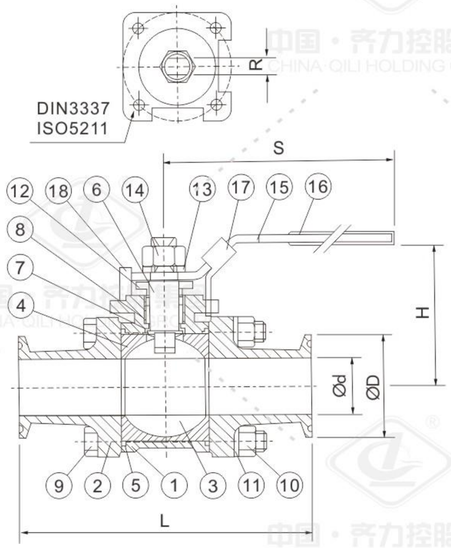
全包式球阀
Encapsulated ball valve

Locking device can be required.
100% air tested under water at 100%PSI, open and closed positions
Hydrostatic test pressure 1/4"-2" 1, 500PSI, 2 1/2"~4" 1, 200PSI.
Standard End : Weld & Clamp-End

Other SMS. DIN. RJT. IDF Male/Male can be required.

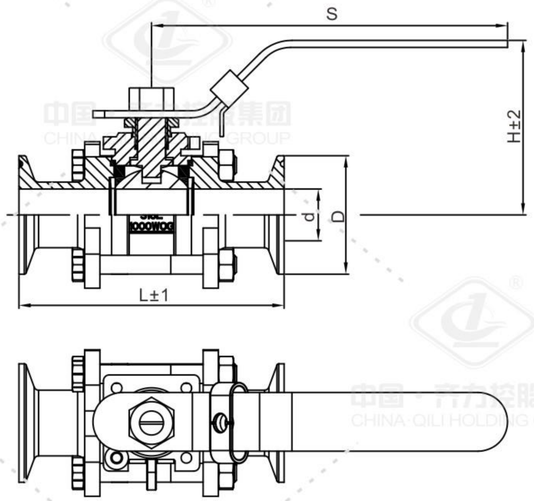
No.QL-007

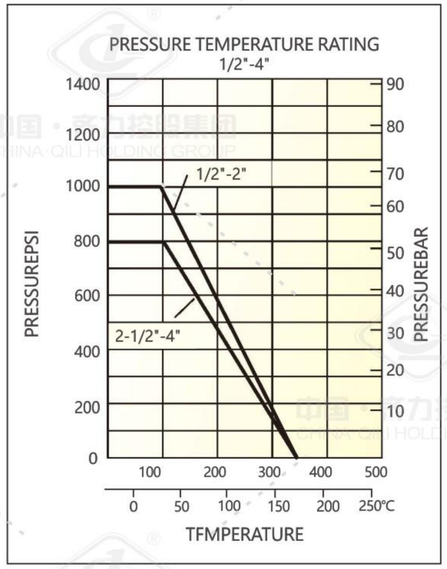
SIZE	L±1	d ±0.06	D ±0.06	H±1	S±1
1/2"	90.5	9.4	25.2	60	133
3/4"	103.4	15.75	25.2	65	133
1"	114.2	22.1	50.5	69	170
1.25"	125	28.45	50.5	75	170
1.5"	136.7	34.8	50.5	89	190
2"	153.2	47.5	64	97	230
2.5"	167.3	60.2	77.5	127	230



NO	PART NAME	MATERIAL
1	BODY	ASTM-A351-CF8M
2	CAP	ASTM-A351-CF8M
3	BALL	A351-CF8M
4	SEAT	PTFE
5	GASKET	PTFE
6	STEM	316
7	THRUST WASHER	PTFE
8	STEM PACKING	PTFE
9	BOLT	304
10	HEX NUT	304
11	BOLT WASHER	304
12	GLAND	304
13	WASHER	304
14	NUT	304
15	HANDLE	304
16	PLSTIC COVER	PLASTIC

三片式低平台半包球阀
Three-piece low-platform hallf-encapsulate ball valve





半包式球阀
half-encapsulated ball valve

该球阀主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。
该领域具有广泛的应用，
技术参数规格：1/2 "-4"
材质：304 / CF8、316L / CF8M
适用温度：-20°C-150°C
密封材料：PTFE
压力：8-10bar
操作方式：手动，气动，电动无需拆卸管道，只要可以拆卸阀门，就可以自行修理和更换
连接方式：快装，焊接，螺纹，SMS，ISO，DIN，RJT,IDF,BPE
阀体的内部处理：内表面的数控加工，Ra0.6μm
认证：3A

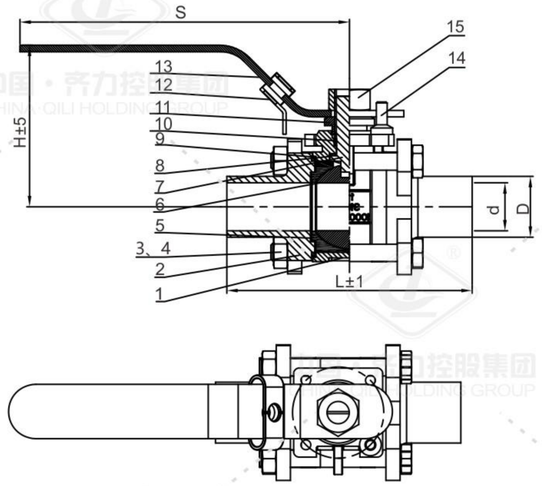
The ball valve is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.
This field has a wide range of applications,
Technical parameters and specifications: 1 / 2 "- 4"
Material: 304 / CF8, 316L / CF8M
Applicable temperature: - 20 ° C-150 ° C
Sealing material: PTFE
Pressure: 8-10bar
Operation mode: manual, pneumatic and electric, no need to disassemble the pipe, as long as the valve can be disassembled, it can be repaired and replaced by itself
Connection mode: clamp, welding, thread, SMS, ISO, DIN, RJT,IDF,BPE
Internal treatment of valve body: numerical control processing of internal surface, Ra0.6μm
Certification: 3A

No.QL-008

SIZE	L±1	d ±0.06	D ±0.06	H±1	S±1
1/2"	90.5	9.4	25.2	60	133
3/4"	103.4	15.75	25.2	65	133
1"	114.2	22.1	50.5	69	170
1.25"	125	28.45	50.5	75	170
1.5"	136.7	34.8	50.5	89	190
2"	153.2	47.5	64	97	230
2.5"	167.3	60.2	77.5	127	230

NO	PART NAME	MATERIAL
1	BODY	ASTM-A351-CF8M
2	CAP	ASTM-A351-CF8M
3	BALL	A351-CF8M
4	SEAT	PTFE
5	GASKET	PTFE
6	STEM	316
7	THRUST WASHER	PTFE
8	STEM PACKING	PTFE
9	BOLT	304
10	HEX NUT	304
11	BOLT WASHER	304
12	GLAND	304
13	WASHER	304
14	NUT	304
15	HANDLE	304
16	PLSTIC COVER	PLASTIC

三片式低平台总装配-3A焊接
Three-piece low platform general assembly - 3A welding



NO	NAME	NUMBER	MATERIAL
1	Body	1	ASTM-A351-CF3M
2	Cap	2	ASTM-A351-CF3M
3	Hexnut	4	SS304
4	Bolt	4	SS304
5	Seat	2	PTFE
6	Ball	1	SS316L
7	Stem	1	SS316L
8	Stem packing	2	PTFE
9	Ring	1	PTFE
10	Thrust washer	3	PTFE
11	Compression nut	1	SS304
12	Lock washer	1	SS304
13	Handle cover	1	PLASTIC
14	Stop pin	1	SS304
15	Handle nut	1	SS304

卫生级三片式低平台全包无滞留球阀。
阀门设计为全包式阀座，解决了液体滞留阀腔的问题。该球阀主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

技术参数
规格: 1/2"-4"
材质:304/CF8，316L/CF3M
适用温度:-20C-150℃
密封材质:PTFE
压力:8-10bar
操作方式:手动、气动、电动
无需拆卸管道，只要拆卸阀门可自行维修更换，操纵扭矩小
连接方式:卡箍、焊接、螺纹、SMS、ISO、DIN、RJT、IDF、BPE
阀体内部处理:内表面CNC加工、Ra0.6μm
认证:3A

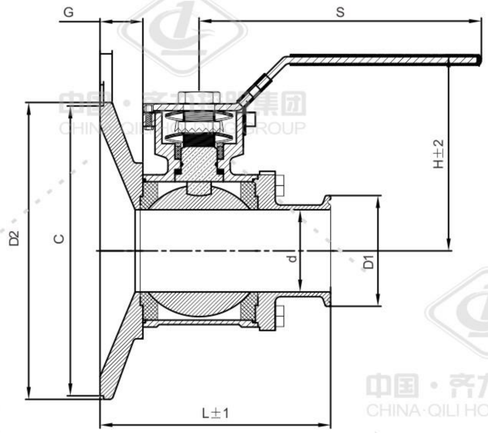
Sanitary three-piece low-platform encapsulated non-retention ball valve.
The valve is designed with encapsulated seat, which solves the problem of liquid retaining. The ball valve is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

Technical parameter
Size: 1/2"—4"
Material: 304 / CF8, 316L / CF8M
Mapplicable temperature: - 20 ° C-150 ° C
Seal material: PTFE
Pressure: 8-10bar
Operation mode: manual, pneumatic ,electric No need to disassemble the pipeline, as long as the valve is disassembled, it can be repaired and replaced by itself, and the operating torque is small.
Connection: Clamp, Welding, Thread, SMS, ISO, DIN, RJT, IDF, BTE
Internal treatment of valve body: CNC machining of inner surface, Ra0.6μm
Certification: 3A

No.QL-009

SIZE	L±1	d ±0.06	D ±0.06	H±5	S±10	
1/2"	90.5	9.4	12.7	60	133	
3/4"	103.4	15.75	19.1	65	133	
1"	114.2	22.1	25.4	75	170	
1.25"	125	28.45	31.8	75	170	
1.5"	136.7	34.8	38.1	89	190	
2"	152	47.5	50.8	114	230	
2.5"	167.3	60.2	63.5	127	230	
3"	192.3	72.9	76.2	165	320	高平台
4"	239.5	97.4	101.6	177	320	高平台





设计和特点

该阀是一款专门设计应用于压力容器和储罐等设备的排空和放料的罐底阀门，全包球座和密封自动补偿设计，因此具有压力高，耐高温，扭矩小，寿命长等特点。

罐底球阀：
主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

* 阀体结构：直通
* 规格：1/2"-4",DN10-DN100
* 温度：-20℃-150℃
* 压力：8-30bar/30kg
* 材质：316L/304L
* 认证：3-A-68-00、PED、97/23/EC
* 连接：卡箍、焊接、螺纹、
DIN、SMS、ISO、IDF、BPE、RJT
* 密封材质：PTFE、TFM 1600、UHMWPE
* 扭矩：1N.M-100N.M

Design and features

It is a tank bottom valve specially designed for the emptying and discharging of pressure vessels and storage tanks. It has a encapsulated ball seat and seal automatic compensation design, which brings features of high pressure, high temperature resistance, small torque, and long life.

Tank bottom ball valve: mainly used in processing beverages, brewing, oil refining, cosmetics and chemical industries

* Valve body structure: straight through
* Specification: 1/2"-4", DN15-DN100
* Temperature: -20℃-150℃
* Pressure: 8-30bar/30kg
* Material: 316L
* Certification: 3-A-68-00, PED, 97/23/EC
* Connection: clamp, welding, thread, DIN, SMS, ISO, IDF, BPE, RJT
* Sealing material: PTFE, TFM 1600, UHMWPE
* Torque: 1N.M-100N.M

No.QL-010

SIZE	d ±0. 06	D1 ±0. 06	D2 ±0. 1	L ±0.3	H ±2	S ±2	C -0 -0.1	G ±0.5
1"	22.1	50.5	100	117	86	168	93	43
1.5"	34.8	50.5	120	120	122.5	220	110	26
2"	47.5	64	155	135.5	122.5	220	145	27
2.5"	60.2	77.5	180	146	139.5	220	170	25
3"	72.9	91	212	170.8	165	320	210	30
4"	97.4	119	240	200	177	320	235	34

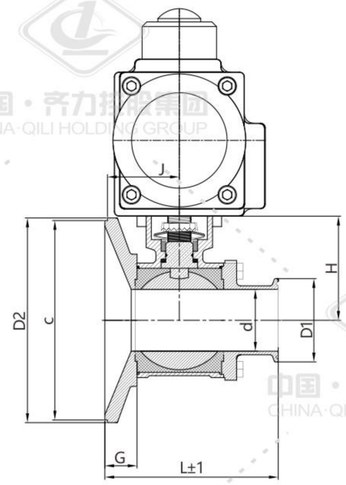


设计和特点

该阀是一款专门设计应用于压力容器和储罐等设备的排空和放料的罐底阀门，全包球座和密封自动补偿设计，因此具有压力高，耐高温，扭矩小，寿命长等特点。

罐底球阀：
主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

* 阀体结构：直通
* 规格：1/2"-4"、DN15-DN100
* 温度：- 20℃-150℃
* 压力：8-30bar/30kg
* 材质：316L
* 认证：3-A-68-00、PED、97/23/EC
* 气动执行器：双作用、单作用、铝制气动头、不锈钢气动头
* 连接：卡箍、焊接、螺纹、DIN、SMS、ISO、IDF、BPE、RJT
* 密封材质：PTFE、TFM 1600、UHMWPE
* 扭矩：1N.M-100N.M



Design and features

It is a tank bottom valve specially designed for the emptying and discharging of pressure vessels and storage tanks. It has a encapsulated ball seat and seal automatic compensation design, which brings features of high pressure, high temperature resistance, small torque, and long life.

Tank bottom ball valve:
It is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

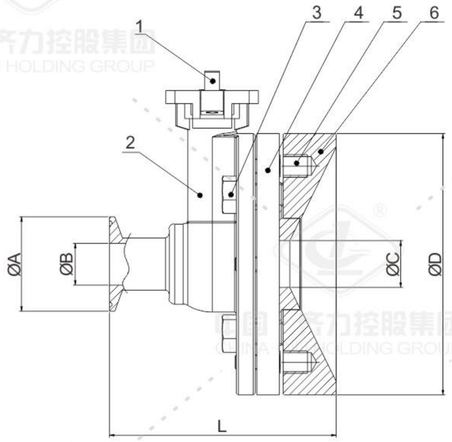
* Valve body:straight
* Size: 1/2"-4",DN15-DN100
* Temperature:-20℃-150℃
* Pressure: 8–30bar/30kg
* Material: 316L
* Certification: 3-A-68-00、PED、97/23/EC
* Pneumatic actuator: single acting,double acting,aluminium,stainless steel
* Connection:tri-clamped,welded,threaded, DIN, SMS, ISO, IDF, BPE, RJT
* Sealing material: PTFE、TFM 1600、UHMWPE
* Torque: 1N. M-100N. M

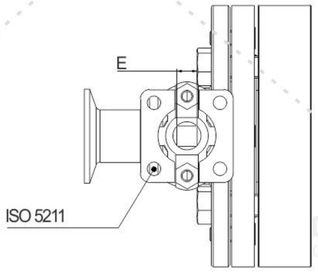
No.QL-011

SIZE	d ±0. 06	D1 ±0. 06	D2 ±0. 1	L ±0.3	H ±2	C -0 -0.1	J ±0.5	G ±0.5	N·m	Single acting actuator (单作用)	Double acting actuator (双作用)
1"	22.1	50.5	100	117	51	93	44	43	5~15	AT75	AT63
1.5"	34.8	50.5	120	120	71	110	47.3	26	10~25	AT83	AT75
2"	47.5	64	155	135.5	79	145	57	27	15~30	AT105	AT83
2.5"	60.2	77.5	180	146	94	170	59.4	25	20~35	AT105	AT83
3"	72.9	91	212	170.8	109.5	210	71.7	30	40~65	AT125	AT105
4"	97.4	119	240	200	123	235	77.5	34	40~80	AT140	AT125

分体式罐底直通球阀
Split type tank bottom through ball valve

手动快装/焊接蝶形球阀
Manual quick assembly/welding butterfly ball valve

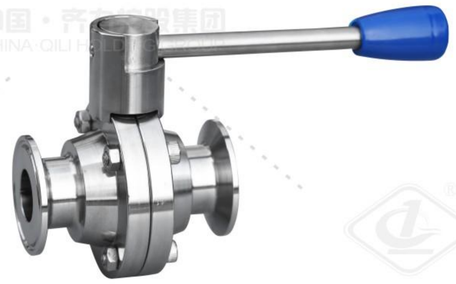


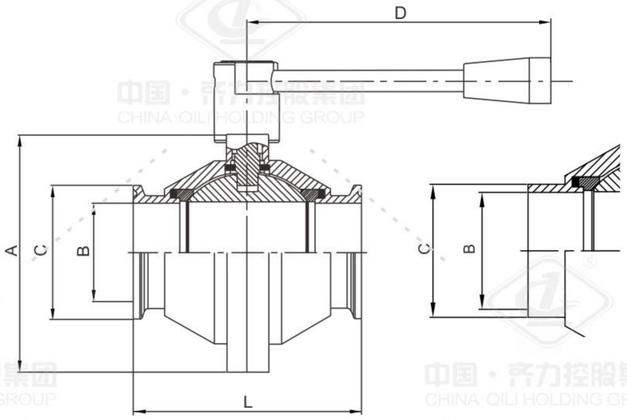


NO.	NAME	NUMBER	MATERIAL
1	STEM	1	316L
2	BODY	1	ASTM-A351-CF8M
3	BOLT	4/6	304
4	ADAPTER FLANGE	1	ASTM-A351-CF8M
5	INNER BOLT	4/6	304
6	BONNET	1	ASTM-A351-CF8M

No.QL-012

SIZE	A ±0.15	B ±0.15	C ±0.15	D ±0.2	E ±0.1	L ±2	ISO 5211
1"	50.5	22.1	25	140	11x11	121.5	F05
1.5"	50.5	34.8	40	155	14x14	134	F05/F07
2"	64	47.5	50	175	14x14	139	F05/F07
2.5"	77.5	60.2	65	195	14x14	181.5	F07/F10
3"	91	72.9	80	250	17x17	184	F07/F10
4"	119	97.4	100	280	17x17	224	F07/F10





蝶形球阀：
主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

* 阀体结构：直通
* 规格：1/2" -6寸"、DN15-DN100
* 温度：-20℃-150℃
* 压力：8-30bar/30kg
* 材质：316L
* 认证：3-A-68-00、PED、97/23/EC
* 连接：卡箍、焊接、螺纹、DIN、SMS、ISO、IDF、BPE、RJT
* 密封材质：PTFE、TFM 1600、UHMWPE
* 扭矩：1N.M-50N.M

Butterfly ball valve:
It is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

* Valve body structure: full bore
* Specification: 1/2" -6 inch", DN15-DN100
* Temperature: -20℃-150℃
* Pressure: 8-30bar/30kg
* Material: 316L
* Certification: 3-A-68-00, PED, 97/23/EC
* Connection: clamp, welding, thread, DIN, SMS, ISO, IDF, BPE, RJT
* Sealing material: PTFE, TFM 1600, UHMWPE
* Torque: 1N.M-50N.M

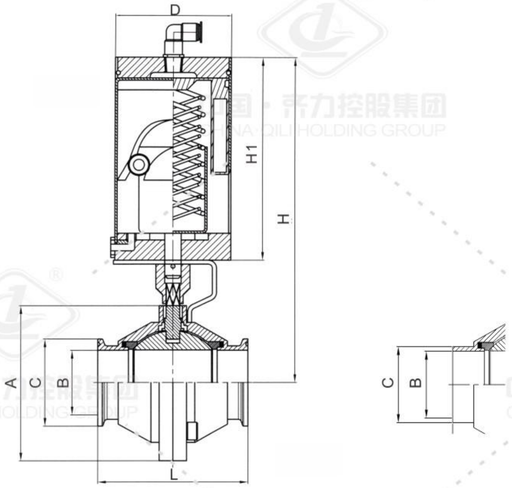
No.QL-013

SIZE	A±0.13	B±0.13	C±0.13		D±1	L±0.5
			快装 Clamp	焊接 Welding		
1/2"	64	9.4	25.2	12.7	140	70
3/4"	64	15.75	25.2	19.05	140	70
1"	76.5	22.1	50.5	25.4	140	85
1.5"	99	34.8	50.5	38.1	140	100
2"	112	47.5	64	50.8	140	110
2.5"	141	60.2	77.5	63.5	205	125
3"	163	72.9	91	76.2	205	135
4"	194	97.4	119	101.6	206	170

气动蝶形球阀
Pneumatic butterfly ball valve

两片式手动快装球阀(带锁)/手动缩径三通球阀
2-PC manual clamped ball valve (with lock)/Manual reducing three-way ball valve





气动球阀：
主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

* 阀体结构：直通
* 规格：1/2" -6"、DN15-DN100
* 温度：-20℃-150℃
* 压力：8-30bar/30kg
* 材质：316L
* 认证：3-A-68-00、PED、97/23/EC
* 连接：卡箍、焊接、螺纹、DIN、SMS、ISO、IDF、BPE、RJT
* 密封材质：PTFE、TFM 1600、UHMWPE
* 扭矩：1N.M-50N.M

Pneumatic ball valve:
It is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

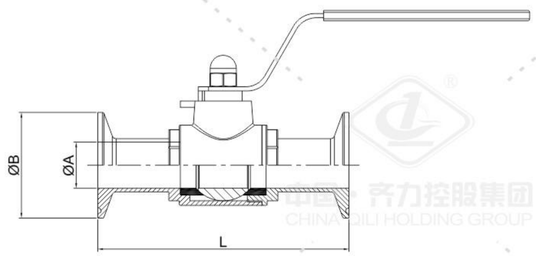
* Valve body structure: full bore
* Specification: 1/2" -6" , DN15-DN100
* Temperature: -20℃-150℃
* Pressure: 8-30bar/30kg
* Material: 316L
* Certification: 3-A-68-00, PED, 97/23/EC
* Connection: clamp, welding, thread, DIN, SMS, ISO, IDF, BPE, RJT
* Sealing material: PTFE, TFM 1600, UHMWPE
* Torque: 1N.M-50N.M

No.QL-014

SIZE	A±0.13	B±0.13	C±0.13		D±1	L±0.5	H1±2	H±5
			快装 Clamp	焊接 Welding				
1/2"	64	9.4	25.2	12.7	85	70	148	216
3/4"	64	15.75	25.2	19.05	85	70	148	216
1"	76.5	22.1	50.5	25.4	85	85	148	220
1.5"	99	34.8	50.5	38.1	85	100	148	230
2"	112	47.5	64	50.8	85	110	148	234.5
2.5"	141	60.2	77.5	63.5	85	125	148	253
3"	163	72.9	91	76.2	108	135	182	300
4"	194	97.4	119	101.6	108	170	182	318

两片式手动快装球阀(带锁) 2-PC manual clamped ball valve (with lock)

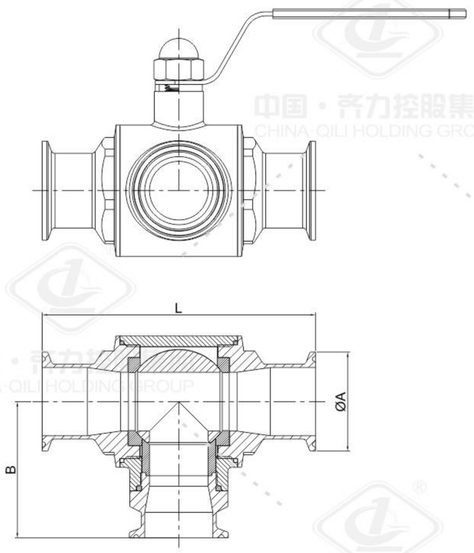
No.QL-015



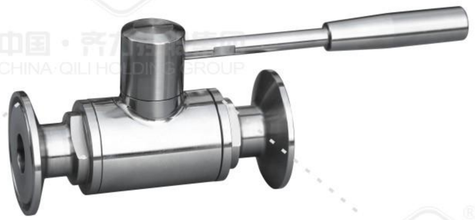
SIZE	ØA	ØB	L
1/2"	9.4	25	74
3/4"	15.8	25	99.5
1"	22.1	50.5	110
1.5"	34.8	50.5	134
2"	47.5	64	156.5
2.5"	60.2	77.5	170
3"	72.9	91	195
4"	97.4	119	240

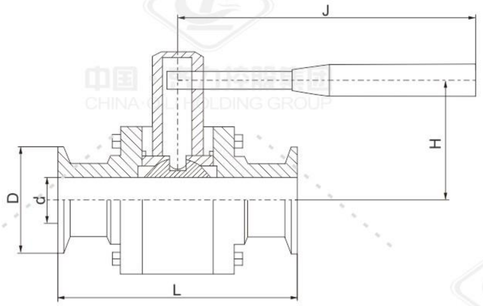
手动缩径三通球阀 Manual reducing three-way ball valve

No.QL-016



SIZE	ØA	ØB	L
3/4"	50.5	54	108
1"	50.5	60	120
1.25"	50.5	64	128
1.5"	50.5	72	144
2"	64	84	168
2.5"	77.5	90	180
3"	91	110	220
3.5"	106	122	244
4"	119	235	270





设计和特点

无需维护，比其他的阀门更小更轻，操纵扭矩小垫圈根据PTFE FDA177. 2600无论液体是何种流向，手柄可以安装在侧边的阀体上，无论是何种连接方式，阀体都可进行列换，而不会尽管变阀门的总长度连接：螺纹，焊接，卡箍，法兰，DIN,SMS,RJT,FIL可装配气动执行器，电动执行器物料接触部位AIS,304/316L,其他部位AISI304认证：PED,97/23/EC

Design and features

No maintenance required, smaller and lighter than other valves, control torque small washer according to Ptfe 177. Regardless of the flow direction of the fluid, the handle can be attached to the side body in either connection, the body can be changed without changing the total length of the valve connection: thread, solder, clamp, Farlane, DIN, SMS, RJT, fil can be equipped with pneumatic actuator, electricactuator material contact parts AIS, 304/316L, other parts AISI304 certification: PED, 97/23/EC

直通球阀：
主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

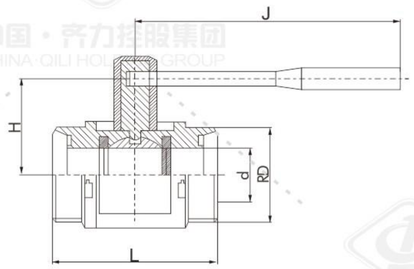
* 阀体结构：直通
* 规格：1/2” 6寸” 、DN15-DN100
* 温度： - 20℃至150℃
* 压力：8-30bar/30kg
* 材质：316L
* 认证：3-A-68-00、PED、97/23/EC
* 连接：卡箍、焊接、螺纹、DIN、SMS、ISO、IDF、BPE、RJT
* 密封材质：PTFE、TFM 1600、UHMWPE
* 扭矩：1N.M-50N.M

full bore ball valve:
It is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

* Valve body: straight
* Size: 1/2"-6", DN15-DN100
* Temperature:-20℃-150℃
* Pressure: 8---30bar/30kg
* Material: 316L
* Certification: 3-A-68-00、PED、97/23/EC
* Connection: tri-clamped,welded,threaded, DIN, SMS, ISO, IDF, BPE, RJT
* Sealing material: PTFE、TFM 1600、UHMWPE
* Torque: 1N.M-50N.M

No.QL-017

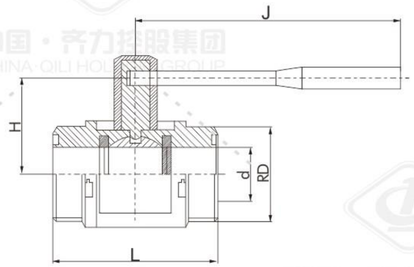
SIZE	D	d	L	H	J
1/2"	25	9.4	95	35	142
3/4"	25	15.8	95	38	142
1"	50.5	22.1	100	42	142
1 1/4"	50.5	28.5	108	48	142
1 1/2"	50.5	34.8	115	52	142
2"	64	47.5	136	60	160
2 1/2"	77.5	60.2	150	73	160
3"	91	72.2	172	83	190
4"	119	97.4	204	93	190



直通螺纹球阀（DIN）
Full bore Thread Ball Valve (DIN)

No.QL-018

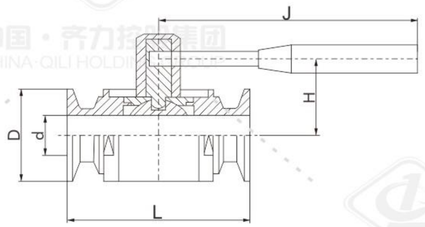
SIZE	RD	d	L	H	J	N.W
DN 10	RD28X1/8"	10	95	40	124	820
DN 15	RD34X1/8"	15	95	40	124	820
DN 20	RD44X1/8"	19	95	40	124	945
DN 25	RD52X1/6"	25	100	48	162	1300
DN 32	RD58X1/6"	31	108	50	162	1740
DN 40	RD65X1/6"	37	115	60	162	2160
DN 50	RD78X1/6"	49	133.5	68	162	2960
DN 65	RD98X1/6"	66	161	89	189	5100
DN 80	RD110X1/4"	81	180	100	189	7390
DN 100	RD130X1/4"	100	204	115.5	250	11120



直通螺纹球阀（SMS）
Full bore Thread Ball Valve (SMS)

No.QL-019

SIZE	RD	d	L	H	J	N.W
1/2"	RD36X1/8"	9.7	95	40	124	945
3/4"	RD36X1/8"	15	95	40	124	900
1"	RD40X1/8"	22.4	100	48	162	1200
1 1/4"	RD48X1/8"	28.8	108	50	162	1600
1 1/2"	RD50X1/8"	35.1	115	60	162	2340
2"	RD70X1/8"	47.8	133.5	68	162	2860
2 1/2"	RD85X1/8"	59.5	150	80	189	4560
3"	RD98X1/8"	72.2	172	94	189	6200
4'	RD125X1/8"	97.6	204	115.5	250	11290



直通卡箍球阀（ISO、IDF、SMS、3A、DS）
Full bore clamp ball valve(ISO、IDF、SMS、3A、DS)

No.QL-020

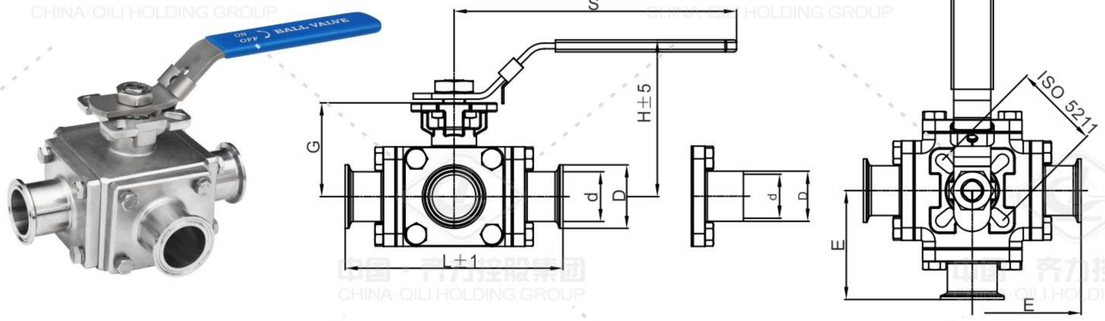
SIZE	d	L	H	J	N.W
1/2"	25.4	95	40	124	810
3/4"	25.4	95	40	124	780
1"	50.5	100	48	162	1265
1 1/4"	50.5	128	50	162	1520
1 1/2"	50.5	115	60	162	2000
2"	64	133.5	68	162	2685
2 1/2"	77.5	150	80	189	4115
3"	91	172	94	189	5628
4"	119	206	115.5	250	10890

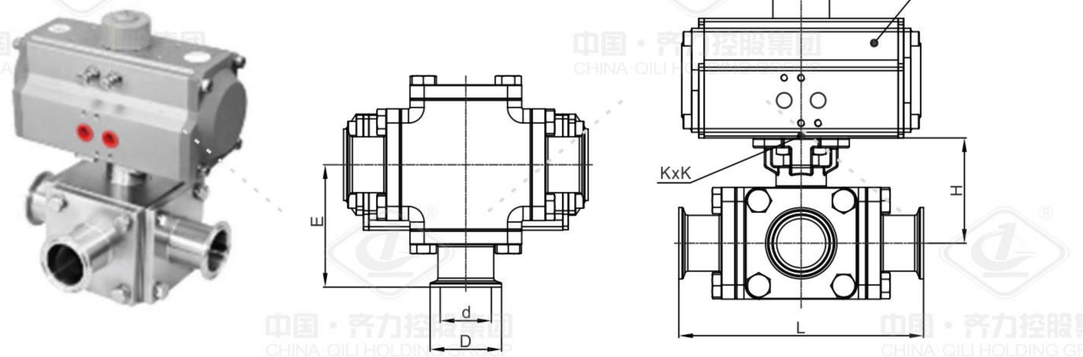
三通无滞留全包球阀/三通四方球阀-3A

Three-way non-retention encapsulate ball valve/Three-way ball valve-welding

气动三通无滞留全包球阀

Pneumatic three-way non-retention encapsulate ball valve





三通球阀：
主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

* 阀体结构：直通、三通、四通
* 规格：1/2"- 4"、DN15-DN100
* 温度：-20℃-150℃
* 压力：8-30bar/30kg
* 材质：316L
* 认证：3-A-68-00、PED、97/23/EC
* 连接：卡箍、焊接、螺纹、
DIN、SMS、ISO、IDF、BPE、RJT
* 密封材质：PTFE、TFM 1600、UHMWPE
* 扭矩：1N.M-100N.M

Three-way ball valve:
It is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

* Valve body structure: two way, three-way, four-way
* Specification: 1/2" 4 inch", DN15-DN100
* Temperature: -20℃-150℃
* Pressure: 8-30bar/30kg
* Material: 316L
* Certification: 3-A-68-00, PED, 97/23/EC
* Connection: clamp, welding, thread, DIN, SMS, ISO, IDF, BPE, RJT
* Gasket material: PTFE, TFM 1600, UHMWPE
* Torque: 1N.M-100N.M

气动球阀：
主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

* 阀体结构：直通、三通、四通
* 规格：1/2"-4"、DN15-DN100
* 温度： - 20℃至150℃
* 压力：8-30bar/30kg
* 材质：316L
* 认证：3-A-68-00、PED、97/23/EC
* 气动执行器：双作用、单作用、铝制气动头、不锈钢气动头
* 连接：卡箍、焊接、螺纹、DIN、SMS、ISO、IDF、BPE、RJT
* 密封材质：PTFE、TFM 1600、UHMWPE
* 扭矩：1N.M-100N.M

Pneumatic ball valve:
It is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

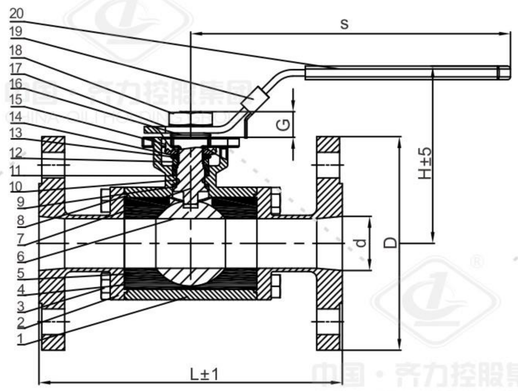
* Valve body structure: two way, three-way, four-way
* Specification: 1/2"- 4", DN15-DN100
* Temperature: -20℃-150℃
* Pressure: 8-30bar/30kg
* Material: 316L
* Certification: 3-A-68-00, PED, 97/23/EC
* Connection: clamp, welding, thread, DIN, SMS, ISO, IDF, BPE, RJT
* Gasket material: PTFE, TFM 1600, UHMWPE
* Torque: 1N.M-100N.M
and chemical industries

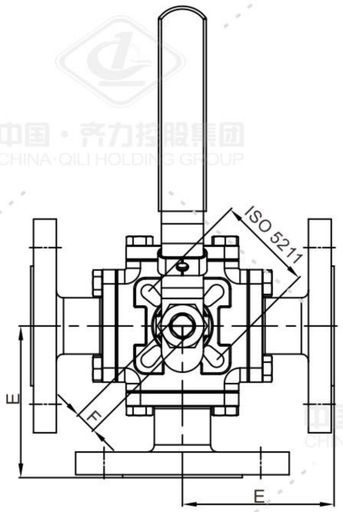
No.QL-021

SIZE	L±0.5	d±0.1	D±0.1		E±0.5	H±5	S±5	ISO5211		N·m	kxk
			快装 Clamp	焊接 Welding							
1/2"	106	9.4	25.2	12.7	53	89	169	F03	F04	10~20	9*9
3/4"	106	15.75	25.2	19.05	53	89	169	F03	F04	10~20	9*9
1"	160	22.1	50.5	25.4	80	102	169	F04	F05	10~25	11*11
1 1/4"	160	28.45	50.5	31.8	80	102	213	F04	F05	15~40	11*11
1.5"	183	34.8	50.5	38.1	91.5	127	213	F05	F07	15~40	14*14
2"	216	47.5	64.0	50.8	108	139.0	213	F07	F10	30~60	17*17
2.5"	241	60.2	77.5	63.5	120.5	165.0	213	F07	F10	40~80	17*17
3"	279.5	72.9	91.0	76.2	139.75	170.0	320	F10	F12	50~100	27*27
4"	324	97.4	119.0	101.6	162	193.0	320	F10	F12	60~120	27*27

No.QL-022

SIZE	L ±0.5	d ±0.1	D ±0.1	E ±0.5	H ±0.5	ISO 5211		N·m	KxK	Single acting actuator (单作用)	Double acting actuator (双作用)
1/2"	106	9.4	25.2	53	47.8	F03	F04	10~20	9*9	AT63	AT52
3/4"	106	15.75	25.2	53	58.2	F03	F04	10~20	9*9	AT63	AT52
1"	160	22.1	50.5	80	64	F04	F05	10~25	11*11	AT75	AT63
1 1/4"	160	28.45	50.5	80	79	F04	F05	15~40	11*11	AT75	AT63
1.5"	183	34.8	50.5	91.5	88.5	F05	F07	15~40	14*14	AT83	AT75
2"	216	47.5	64.0	108	105.8	F07	F10	30~60	17*17	AT105	AT83
2.5"	241	60.2	77.5	120.5	17.3	F07	F10	40~80	17*17	AT125	AT105
3"	279.5	72.9	91.0	139.75	128	F10	F12	50~100	27*27	AT140	AT125
4"	324	97.4	119.0	162	140	F10	F12	60~120	27*27	AT190	AT160





1/2"-4"Encapsulated and ISO mounting pad.
Flange connection size please refer to the standard ISO5211

NO	NAME	NUMBER	MATERIAL
1	Body	1	ASTM-A351-CF3M
2	Cap	4	ASTM-A351-CF3M
3	Bolt	16	SS304
4	Seat	2	PTFE
5	Ball	1	SS316L
6	Stem	1	SS316L
7	Stem packing	4	PTFE
8	Ring	1	PTFE
9	O-Ring	1	VITON
10	Thrust washer	3	PTFE
11	Gasret	1	SS304
12	Hexnut	2	SS304
13	Butterfly spring	2	SS304
14	Hexnut	1	SS304
15	Belleviue washer	1	SS304
16	Butterfly spring	2	SS304
17	Handle	1	SS304
18	Handle nut	1	SS304
19	Lock washer	1	SS304
20	Handle cover	1	PLASTIC

技术参数

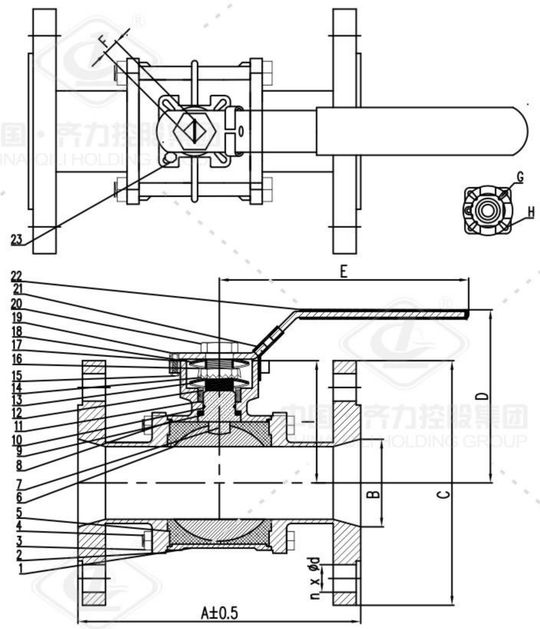
规格：1/2"-4"
材质：316L/CF3M
适用温度：-4/302°F(-20/150°C)
密封材料：聚四氟乙烯
压力：1/2"-2"=1000PSI；2.5"-4"=800PSI
球表面处理：ID Ra≤0.6um；OD Ra≤0.6μm
阀体内部处理：内表面CNC加工，Ra0.6μm
认证：3A

Technical parameter

Technical Parameters:
Specification: 1/2"-4"
Material: 316L/CF3M
Applicable temperature:-4/302°F(-20/150°C)
Sealing material: PTFE
Pressure:1/2"-2"=1000PSI;2.5"-4"=800PSI.
Ball Finish: ID Ra≤0.6μm;OD Ra≤0.6μm.
Internal treatment :CNC machining,Ra0.6μm
Certification: 3A

No.QL-023

SIZE	L ±0.5	d ±0.1	D ±0.1	E ±0.5	F ±0.2	H ±5	S ±5	G ±1	ISO 5211		N·m
1/2"	135	15	95	67.5	9	89	169	12	F03	F04	15~25
3/4"	135	20	105	67.5	9	89	169	12	F03	F04	15~25
1"	190	26	115	95	11	102.0	169	14	F05	F07	20~30
1.5"	213	38	150	106.5	14	127	213	19	F05	F07	25~35
2"	235	50	165	117.5	17	139.0	213	19	F07	F10	30~45
2.5"	260	66	185	130	17	165.7	213	20	F07	F10	35~65
3"	306.5	81	200	153.25	27	170.0	500	26	F10	F12	40~80
4"	352	100	220	176	27	193.0	500	26	F10	F12	50~90



1/2"-6"Encapsulated and ISO mounting pad.
Flange connection size please refer to the standard ISO5211

NO	NAME	NUMBER	MATERIAL
1	Body	1	ASTM-A351-CF3M
2	Cap	2	ASTM-A351-CF3M
3	Hexnut	4	SS304
4	Bolt	4	SS304
5	Seat	2	PTFE
6	Ball	1	SS316L
7	Stem	1	SS316L
8	Stem packing	2	PTFE
9	Ring	1	PTFE
10	O-Ring	1	VITON
11	Thrust washer	3	PTFE
12	Gasret	1	SS304
13	Butterfly spring	2	SS304
14	Hexnut	1	SS304
15	Hexnut	1	SS304
16	Belleviue washer	1	SS304
17	Bolt	1	SS304
18	Butterfly spring	2	SS304
19	Handle	1	SS304
20	Handle nut	1	SS304
21	Lock washer	1	SS304
22	Handle cover	1	PLASTIC
23	Stop pin	1	SS304

卫生级三片式高平台全包式非固位球阀。
阀门设计为全包式阀座，解决了液体滞留阀腔的问题。该球阀主要应用于加工食品、饮料、乳制品、制药、酿酒、化妆品、化学工业和半导体行业。

技术参数

规格：1/2"-6"
材质：304/CF8,316L/CF3M
适用温度：-20℃-150℃
密封材料：聚四氟乙烯
压力：8-10bar
操作方式：手动、气动、电动无需拆卸管路，只要能拆卸阀门，即可自行维修更换
连接方式：卡箍，焊接，螺纹，SMS，ISO，DIN，RJT，IDF，BPE
阀体内部处理：内表面CNC加工，Ra 0.6μm
认证：3A

Sanitary three-piece high platform all-inclusivenon-retaining ball valve.
The valve is designed with encapsulated seat, which solves the problem of liquid retaining. The ball valve is mainly used in food processing, beverage, dairy products, pharmacy, wine making, cosmetics, chemical industry and semiconductor industry.

Technical parameter

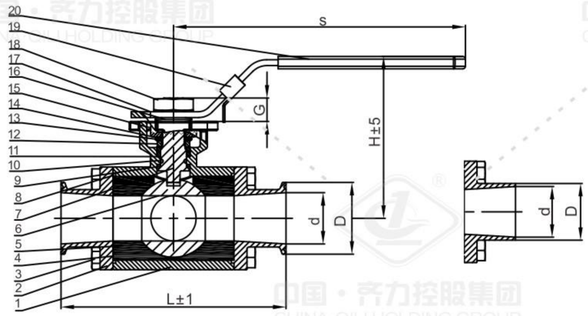
Specification: 1/2"-6"
Material: 304/CF8,316L/CF3M
Applicable temperature: -20 °C -150°C
Sealing material: PTFE
Pressure: 8-10bar
Mode of operation: manual，pneumatic,electric,No rieed to disassemble the pipeline, as long as thevalve can be disassembled, it can be repaired andreplaced by itself
Connection method: clamp，welding，thread,SMS,ISO，DIN,
RJT，IDF，BPE
internal treatment: CNC machining，Ra0.6μm
Certification: 3A

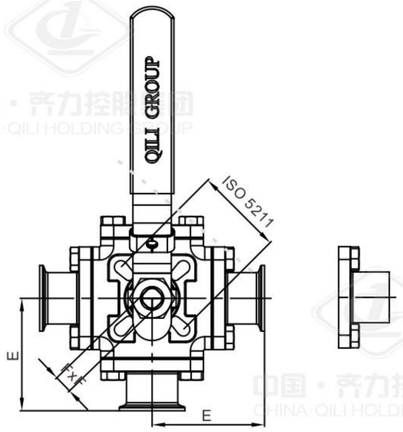
No.QL-024

SIZE	A	B	C	D	E	F	G	H	I	N·m
1/2"	112.5	16	95	64	131	9	F03	F04	37	4~10
3/4"	129.4	20	105	68	131	9	F03	F04	43	4~10
1"	140	26	115	86	169	11	F04	F05	51	5~15
1.25"	156	32	140	86	169	11	F04	F05	61	10~20
1.5"	167	38	150	122.5	213	14	F05	F07	71	10~25
2"	185	50	165	122.5	213	14	F05	F07	79	15~30
2.5"	201	66	185	139.5	213	14	F05	F07	94	20~35
3"	226.3	81	200	165	320	17	F07	F10	109.5	40~65
4"	277.5	100	220	177	320	17	F07	F10	123	40~80
6"	420	150	285	205	490	27	F10	F12	169	60~120

四方三通球阀-DIN快装/焊接
Three-way ball valve - DIN clamp/welding

手动平台缩径三通球阀L型/T型
Manual platform reducing three-way ball valve L-type/T-type





1/2"-4"Encapsulated and ISO mounting pad.
Mounting pad connection size please refer to the standard ISO5211

NO	NAME	NUMBER	MATERIAL
1	Body	1	ASTM-A351-CF8M
2	Cap	4	ASTM-A351-CF8M
3	Bolt	16	SS304
4	Seat	2	PTFE
5	Ball	1	SS316L
6	Stem	1	SS316L
7	Stem packing	4	PTFE
8	Ring	1	PTFE
9	O-Ring	1	VITON
10	Thrust washer	3	PTFE
11	Gasret	1	SS304
12	Hexnut	2	SS304
13	Butterfly spring	2	SS304
14	Hexnut	1	SS304
15	Belleviue washer	1	SS304
16	Butterfly spring	2	SS304
17	Handle	1	SS304
18	Handle nut	1	SS304
19	Lock washer	1	SS304
20	Handle cover	1	PLASTIC

技术参数

规格：1/2"-4"
材质：316L/CF8M
适用温度：-4/302°F(-20/150°C)
密封材料：聚四氟乙烯
压力：1/2"-2"=1000PSI；2.5"-4"=800PSI
球表面处理：ID Ra≤0.6μm；OD Ra≤0.6μm
阀体内部处理：内表面CNC加工，Ra0.6μm
认证：3A

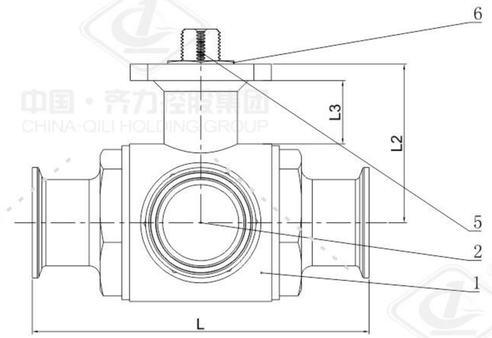
Technical parameter

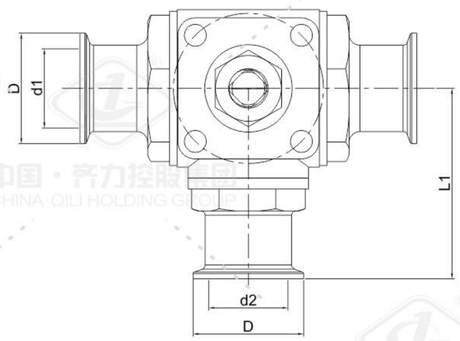
Size: 1/2"-4"
Material: 316L/CF8M
Applicable temperature:-4/302°F(-20/150°C)
Sealing material: PTFE
Pressure:1/2"-2"=1000PSI; 2.5"-4"=800PSI.
Ball surface Finish: ID Ra≤0.6μm; OD Ra≤0.6μm.
Internal treatment:CNC machining ,Ra0.6μm
Certification: 3A

No.QL-025

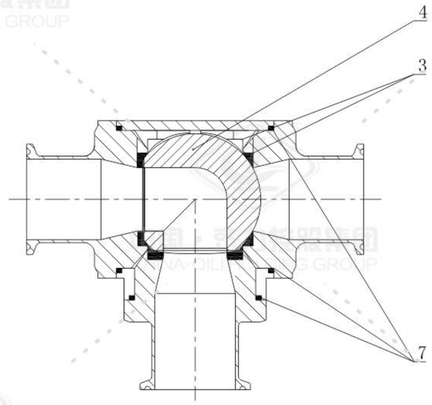
SIZE	L±0.5	d±0.1	D±0.1		E±0.5	H±5	S±5	G±1	ISO 5211	
			快装 Clamp	焊接 Welding						
DN15	106	16/15	34	19/18	53	89	169	9	F03	F04
DN20	106	20/19	34	23/22	53	89	169	9	F03	F04
DN25	160	26/25	50.5	29/28	80	102.0	169	11	F05	F07
DN32	160	32/31	50.5	35/34	80	102.0	213	11	F05	F07
DN40	183	38/37	50.5	41/40	91.5	127	213	14	F05	F07
DN50	216	50/49	64.0	53/52	108	139.0	213	17	F07	F10
DN65	241	66	91.0	70	120.5	165.7	213	17	F07	F10
DN80	279.5	81	106.0	85	139.75	170.0	500	27	F10	F12
DN100	324	100	119.0	104	162	193.0	500	27	F10	F12



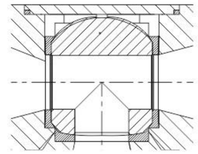




1"-4"Non-Encapsulated and ISO mounting pad.
Flange connection size please refer to the standard ISO5211



L型



T型

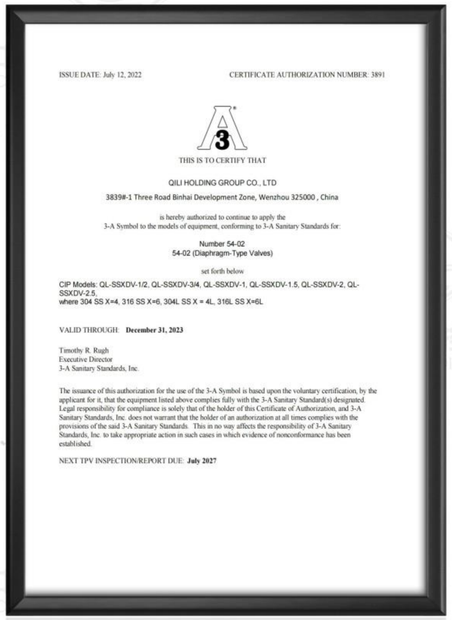
NO	NAME	NUMBER	MATERIAL
1	Body	1	ASTM-A351-CF8M
2	Cap	3	ASTM-A351-CF8M
3	Seat	3	PTFE
4	Ball-T	1	SS316
5	Stem	1	SS316
6	nut	1	SS304
7	Ring	3	PTFE

No.QL-026

SIZE	d1	d2	D	L±0.3	L1±0.3	ISO 5211
1"	22.1	22.1	50.5	132	66	F05
1 1/2"	34.8	34.8	50.5	140	70	F05
2"	47.5	47.5	64	216	108	F05
2 1/2"	60.2	60.2	77.5	241	120.5	F07
3"	72.9	72.9	91	279	139.5	F07
4"	97.4	97.4	119	300	150	F07/F10

卫生级隔膜阀系列
Sanitary diaphragm valve series

>>>>



ISSUE DATE: July 12, 2022 CERTIFICATE AUTHORIZATION NUMBER: 3891

THIS IS TO CERTIFY THAT

QILI HOLDING GROUP CO., LTD

3839#-1 Three Road Binhai Development Zone, Wenzhou 325000 , China

is hereby authorized to continue to apply the
3-A Symbol to the models of equipment, conforming to 3-A Sanitary Standards for:

Number 54-02
54-02 (Diaphragm-Type Valves)

set forth below

CIP Models: QL-SSXDV-1/2, QL-SSXDV-3/4, QL-SSXDV-1, QL-SSXDV-1.5, QL-SSXDV-2, QL-SSXDV-2.5,
where 304 SS X=4, 316 SS X=6, 304L SS X = 4L, 316L SS X=6L

VALID THROUGH: **December 31, 2023**

Timothy R. Rugh
Executive Director
3-A Sanitary Standards, Inc.

The issuance of this authorization for the use of the 3-A Symbol is based upon the voluntary certification, by the applicant for it, that the equipment listed above complies fully with the 3-A Sanitary Standard(s) designated. Legal responsibility for compliance is solely that of the holder of this Certificate of Authorization, and 3-A Sanitary Standards, Inc. does not warrant that the holder of an authorization at all times complies with the provisions of the said 3-A Sanitary Standards. This in no way affects the responsibility of 3-A Sanitary Standards, Inc. to take appropriate action in such cases in which evidence of nonconformance has been established.

NEXT TPV INSPECTION/REPORT DUE: **July 2027**



直通隔膜阀
Two way diaphragm valve





隔膜阀DN8-100

No.QL-001

型号	GEMÜ 601	GEMÜ 602	GEMÜ 612	GEMÜ 673	GEMÜ 673P9
驱动类型	手动	手动	手动	手动	手动
执行机构	不锈钢执行器顶部，塑料手轮,带可视位置指示器和关闭限位	不锈钢执行器顶部，不锈钢手轮,带可视位置指示器和关闭限位	不锈钢执行器顶部，塑料手轮,带可视位置指示器和关闭限位	不锈钢执行器顶部，塑料手轮,带可视位置指示器和关闭限位	不锈钢执行器顶部，塑料手轮,带可视位置指示器和关闭限位，特殊密封件向外突出
DN	4-15	4-15	10-20	15-50	40-50
可耐受高压灭菌	•	•	•	•	•
工作温度*	-10-150℃	-10-150℃	-10-150℃	-10-150℃	-10-150℃
工作压力*	0-10bar	0-10bar	0-10bar	0-10bar	0-10bar
电压	-	-	-	-	-
MG 8	•	•	-	-	•
MG 10	-	-	•	-	•
MG 25	-	-	-	•	•
MG 40	-	-	-	•	•
MG 50	-	-	-	•	•
MG 80	-	-	-	-	-
MG 100	-	-	-	-	-

型号	GEMÜ 653	GEMÜ 654	GEMÜ 611	GEMÜ 671	GEMÜ 618	GEMÜ 648	GEMÜ 698
驱动类型	手动	手动	手动	手动	电动	电动	电动
执行机构	不锈钢执行器顶部，塑料手轮,带可视位置指示器、行程开关限位，可锁定,可安装位置指示器	不锈钢执行器顶部,不锈钢,手轮，带可视,位置指示器、行程开关限位,可锁定，可安装位置指示器	塑料执行器顶部,塑料手轮，带可视位置指示器，可关闭	塑料执行器顶部，塑料手轮，带可视位置指示器,可选配位置指示器，可关闭	塑料执行器顶部，带/不带不锈钢压块，带可视位置指示器	塑料执行器顶部，带可视位置指示器，带不锈钢压块，	塑料执行器顶部，带不锈钢压块，带可视位置指示器和手动紧急操作装置
DN	10-100	4-100	10-20	15-100	4-15	15-100	15-50
可耐受高压灭菌	•	•	•	–	–	–	–
工作温度*	-10-150℃	-10-150℃	-10-80℃	-10-80℃	0-130℃ (不带压块150~50℃)	0-150℃	0-150℃
工作压力*	0-10bar	0-10bar	0-10bar	0-10bar	0-10bar	0-10bar	0-10bar
电压	–	–	–	–	24VAC,120VAC 230VAC,50/60Hz	24VDC,120VAC 50/60Hz 230VAC,50/60Hz	24VAC,120VAC 230VAC,50/60Hz
MG 8	–	–	–	–	–	–	–
MG 10	•	•	•	–	–	–	–
MG 25	•	•	–	•	•	•	•
MG 40	•	•	–	•	•	•	•
MG 50	•	•	–	•	•	•	•
MG 80	•	•	–	•	•	•	–
MG 100	•	•	–	•	•	•	–

取决于膜片材质，参见技术数据页



两位两通阀门
精密铸造
直通结构,适用于所有的
国际标准的对焊接口



两位两通阀门
铸造结构
直通结构，适用于所有
的国际标准的对焊接口



隔膜取样



T型阀门
例如用于无死区的
环形管道



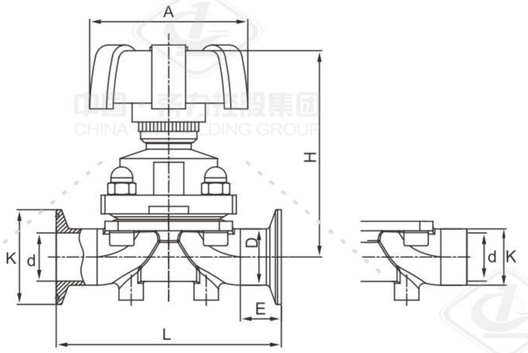
用于不锈钢
容器和罐



多通道阀体
视用途而定







新一代隔膜阀

齐力公司在2021年对所有的隔膜阀进行了全面的技术升级，升级后的设计更符合GMPASMEBPE,EHEDG以及3A的高洁净技术要求。

New generation diaphragm valve
In 2021, Qili has carried out a comprehensive technical upgrade for all diaphragm valves. The upgraded design is more in line with the high clean technology requirements of GMP, ASMEBPE, EHEDG and 3A.

工作原理

手动或气动操作，专门应用于制药工业中的卫生和无菌过程。该阀门非常适用于流体控制和开关的任务，膜片提供阀体密封和阀座密封。里面没有路径通到外部环境，所以该阀适用于无菌过程，当阀门关闭时，支撑膜片的压力垫朝阀体上的密封面移动，当压力板移动时，膜片弯曲，被迫推向阀体中心的阀座区域，因此关闭了通向阀体的流体路径，阀体和压力板的相互关系,防止了膜片的挤压。

working principle
Manual or pneumatic operation, dedicated to hygienic and aseptic processes in the pharmaceutical industry. The valve is well suited for fluid control and switching tasks, the diaphragm provides body and seat sealing. There is no path inside to the outside environment, so the valve is suitable for aseptic processes. When the valve is closed, the pressure pad supporting the diaphragm moves towards the sealing surface on the valve body. When the pressure plate moves, the diaphragm flexes and is forced to push . The seat area towards the center of the valve body, thus closing off the fluid path to the valve body, the mutual relationship of the valve body and the pressure plate, prevents extrusion of the diaphragm.

技术参数

规格:1/2"~2.5"; DN15-DN65
压力:10bar (145PSI)
材质:316L (CF3M)
温度:-20℃~150℃
连接:卡箍，焊接，螺纹，3A, BPM,DIN ,SMS，IDF，ISO
阀体结构:直通、三通、U型三通、罐底阀、多通道隔膜阀
膜片材料:EPDM+PTFE（双层）EPDM/Sili com/FPM(Vitong)
认证:3A-54-O2/1580

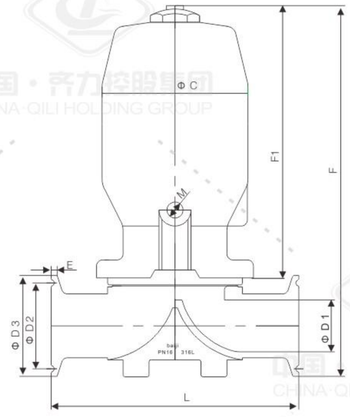
Technical Parameters
Size: 1/2"~2.5"; DN15-DN65
Pressure : 10bar(145PSI)
Material : 316L(CF3M)
Applicable temperature:-20℃~150℃
Connection method:Clamp welding thread 3A BPE DIN SMS IDF ISO
Valve body structure: 2 way,3way,U-type 3way,tank bottom valve,Multi way diaphragm valve.
Diaphragm material: EPDM+PTFE(double deck)/EPDM/Silicon/FPM(Viton)
Certification : 3A-54-02/1580

No.QL-002

NPS	DN	L	A	Kxd 快装 Clamp	Kxd 焊接 Welding	H开/H关	D	E
1/2"	DN15	117	33	25x9.4	12.7x9.4	92/87	12.7	38
3/4"	DN20	117	58	25x15.8	19.1x15.8	85/79	19.1	26
1"	DN25	127	90	50.5x22.1	25.4x22.1	102/91	25.4	26
1 1/4"	DN32	159	90	50.5x28.5	31.8x28.5	108/97	31.8	45.5
1 1/2"	DN40	159	114	50.5x34.8	38.1x34.8	122/110	38.1	33
2"	DN50	190	140	64x47.5	50.8x47.5	138/126	50.8	38
2 1/2"	DN65	216	140	77.5x60.2	63.5x60.2	142/130	63.5	54



隔膜阀适用于制药、生物、乳品、饮料、化工、化妆品、食品、电子等流体相关行业的流体控制系统。其优点在于使用无死角、无泄漏、易清洗、维护成本低、易操作等多项优点。可实现自控与手控，为降低企业运行成本提供良好的产品、45度安装时具有排放干净;阀内无泄漏风险;抗腐蚀性能高;粘度较高的物料容易通过可替代球阀、蝶阀对洁净度要求高的产品。



Diaphragm valves are suitable for fluid control systems in fluid-related industries such as pharmaceuticals, biology, dairy products, beverages, chemicals, cosmetics, food, and electronics. Its advantage lies in the use of no dead angle, no leakage, easy cleaning, low maintenance cost, easy operation and many other advantages. It can realize automatic control and manual control, and provide good products to reduce the operating cost of enterprises. It has clean discharge when installed at 45 degrees; there is no risk of leakage in the valve; high corrosion resistance; materials with high viscosity can easily pass through alternative ball valves and butterfly valves for cleanliness.Products with high requirements

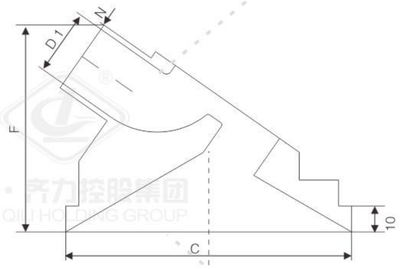
No.QL-003

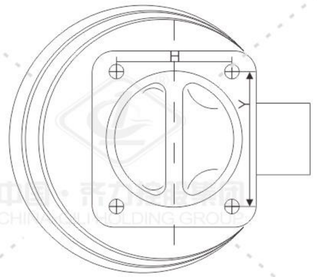
规格	L	F	F1	D1	C	D3
DN8	72	98	75	8	41	25.2
DN10	72	98	75	10	41	25.2
DN15	106	140	140	13	51	25.2
DN20	125	174	174	16	72	50.5
DN25	126	174	174	22	72	50.5
DN32	161	224	224	29	92	50.5
DN40	162	224	224	35	92	50.5
DN50	196	254	254	49	112	64
DN65	220	278	278	59	138	77.5
DN70	256	380	380	72	190	91
DN80	256	395	395	85	190	106
DN100	350	450	450	98	250	119
DN125	350	460	460	125	250	155











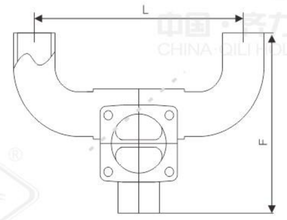
罐底阀应用于生物制药，食品，精细化工等行业的配料容器放料使用，该阀结构在搅拌器开启时，底部物料能充分随水流搅拌均匀，与设备连接分为焊接式，法兰式两种。
安装使用45度出料可使容器内物料排放干净，满足GMP要求，是管道卫生级洁净阀门。

The tank bottom valve is used in the batching container discharge of biopharmaceutical, food, fine chemical and other industries. When the agitator is turned on, the bottom material can be fully stirred evenly with the water flow. The connection with the equipment is divided into welding type and flange type. two kinds.
The installation and use of 45-degree discharge can make the material in the container discharge cleanly, which meets the requirements of GMP. It is a sanitary clean valve for pipelines.

No.QL-004

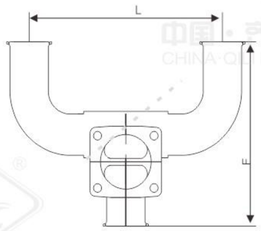
规格	C	F	D1	N	D3
DN15	70	40	13	1.5	25.2
DN20	105	64	16	1.5	50.5
DN25	105	64	22	1.5	50.5
DN32	140	85	29	1.5	50.5
DN40	140	85	35	1.5	50.5
DN50	160	94	49	1.5	64
DN65	200	110	59	2	77.5
DN70	238	120	72	2	91
DN80	238	120	85	2	106





U型一体式隔膜阀按生产工艺在管道上进行采样及做用水点使用，符合GPM要求，阀门安装在环形管道上使用，保证其用水点做到无死角。密封材料采用进口PTFE材料作为隔膜片，符合洁净要求。阀门采用限位装置保证其关闭时不会因用力过大损坏膜片。是目前生物制药厂广泛使用的阀门。





The U-shaped integrated diaphragm valve is used for sampling on the pipeline and as a water point according to the production process, which meets the requirements of GPM. The valve is installed on the circular pipeline to ensure that the water point has no dead angle. The sealing material adopts imported PTFE material as the diaphragm, which meets the cleanliness requirements. The valve adopts a limit device to ensure that the diaphragm will not be damaged due to excessive force when it is closed. It is a valve widely used in biopharmaceutical factories at present.

No.QL-005

规格	L	F	规格	L	F
Φ12.7x12.7	定制	定制	Φ32x25.4	163	149
Φ19x12.7	定制	定制	Φ38x25.4	181	164
Φ25.4x12.7	定制	定制	Φ50.8x25.4	246	193
Φ38x12.7	定制	定制	Φ32x32	188	172
Φ19x19	定制	定制	Φ38x32	207	210
Φ25.4x19	135	119	Φ50.8x32	265	214
Φ32x19	138	130	Φ38x38	207	210
Φ38x19	156	142	Φ50.8x38	265	214
Φ50.8x19	183	183	Φ50.8x38	283	239
Φ63.5x19	195	195	Φ63x63	315	280
Φ25.4x25.4	160	142	Φ76x63	325	285

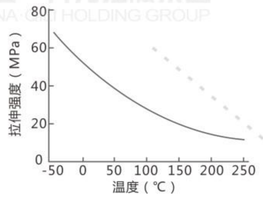
No.QL-006

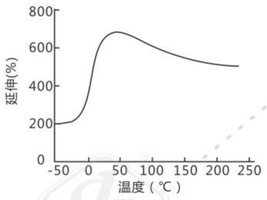
规格	L	F	规格	L	F
Φ12.7x12.7	定制	定制	Φ32x25.4	163	170
Φ19x12.7	定制	定制	Φ38x25.4	181	185
Φ25.4x12.7	定制	定制	Φ50.8x25.4	246	214
Φ38x12.7	定制	定制	Φ32x32	188	193
Φ19x19	定制	定制	Φ38x32	207	231
Φ25.4x19	135	140	Φ50.8x32	265	235
Φ32x19	138	151	Φ38x38	207	231
Φ38x19	156	163	Φ50.8x38	265	235
Φ50.8x19	183	204	Φ50.8x50.8	283	260
Φ63.5x19	195	249	Φ63x63	315	300
Φ25.4x25.4	160	163	Φ76x63	325	310

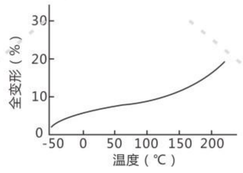


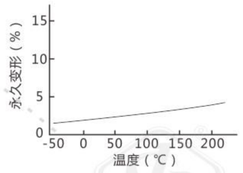
由具有改性的三元乙丙橡胶制造而成聚答物材料用高强度织造材料粘合以确保最大的强度和耐久性，使用了最新的硫化技术，提高了用寿命更加长久，提高了可靠性。

Made of modified EPDM rubber, the polymer material is bonded with high strength woven materials to ensure maximum strength and durability. The latest vulcanization technology is used to improve the service life and reliability









PTFE(+EPDM支持片)双层隔膜片是国际上使用于卫生隔膜阀门上的高标准隔膜片形式，是满足频繁使用SIP灭菌的生产工艺最可靠产品;广泛用于血液制品、疫苗、生物制药、大/小容量注射剂、无菌生产、发酵、注射用水供应及分配回路上等领域。

PTFE (+EPDM support sheet) double-layer diaphragm is a high-standard diaphragm form used internationally on sanitary diaphragm valves. It is the most reliable product that meets the production process of frequent use of SIP sterilization; it is widely used in blood products, vaccines, biological Pharmaceuticals, large/small volume injections, aseptic production, fermentation, water for injection supply and distribution circuits, etc.

双层隔膜片配的EPDM支持片,除了起着保护与产品接触的PTFE片的作用外,还能加强PTFE片的密封效果。
PTFE隔膜片配上EPDM支持片一起使用,其可靠性及使用寿命都达到最佳水平。

The EPDM supporting sheet of the double-layer diaphragm can not only protect the PTFE sheet in contact with the product, but also strengthen the sealing effect of the PTFE sheet.
The PTFE diaphragm is used together with the EPDM support sheet, and its reliability and service life have reached the best level.

性能特点：

- 优异的耐蠕变和耐压性能
- 优异的热机械性能
- 优异的弯曲寿命
- 结构严密，无气孔
- 表面光滑不残留
- 突出的使用寿命

指标：

- 执行标准：FDA21CFR177.2600
- 工作温度：-120℃~150℃
- 工作压力：Max.0.6Mpa
- 设计寿命：300，000次times/25℃
- 隔膜材料：PTFE
- 隔膜规格：DN8-DN125

Property features:

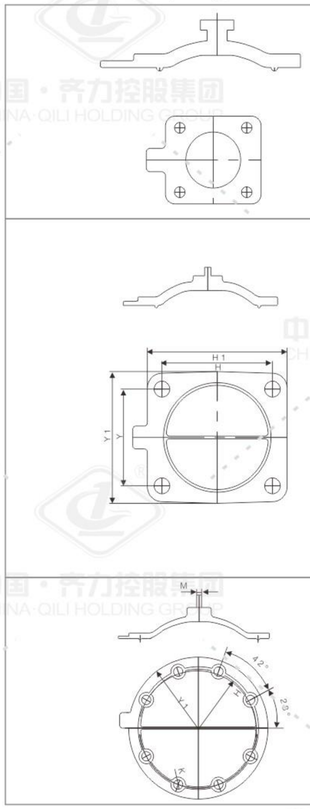
- Good anti-creep and pressure-resistant property
- Good thermal mechanical property
- Good flexing lifetime
- Tight structure, without air hole
- Smooth surface without residues
- Durable service lifetime

Index:

- Executive standard:FDA21CFR177.26
- Working temperature: -120℃~150℃
- Working pressure:Max.0.6Mpa
- Designed lifetime:>300,000次times/25℃
- Diaphragm material: new type : PTFE
- Diaphragm specification :DN8-DN125

隔膜片尺寸表/Diaphragm size table

No.QL-007



规格	H x Y	H1 x Y1	M	K
DN6	21x21	35x35	9.5	5
DN8	21x21	35x35	9.5	5
DN10	21x21	35x35	9.5	5
DN15	34x40	51x48	M4	6
DN20	55x46	74x68	M6	9
DN25	55x46	74x68	M6	9
DN32	70x65	102x90	M6	11
DN40	70x65	102x90	M6	11
DN50	75x84	112x105	M6	13
DN65	108x95	134x126	M8	15
DN70	126x114	185x156	M8	15
DN80	126x114	185x156	M8	15
DN100	194x8	135	M8	15
DN125	194x8	135	M8	15

隔膜阀单头消毒:

规格：1/2"-4", DN10-DN100
温度：-20℃到150℃
压力：10-bar
材质：316L
比其他的阀门更小更轻
操纵扭矩小

Diaphragm Valve Single Head Disinfection:

Specifications: 1/2"-4", DN10-DN100
Temperature: -20℃ to 150℃
Pressure: 10-bar
Material: 316L
The smaller lighter than the other valves
Operating torque is small



隔膜阀双头消毒:

规格：1/2"-4", DN10-DN100
温度：-20℃到150℃
压力：10-bar
材质：316L
比其他的阀门更小更轻
操纵扭矩小

Double Headed Disinfection Of Diaphragm Valve:

Specifications: 1/2"-4", DN10-DN100
Temperature: -20℃ to 150℃
Pressure: 10-bar
Material: 316L
The smaller lighter than the other valves
Operating torque is small



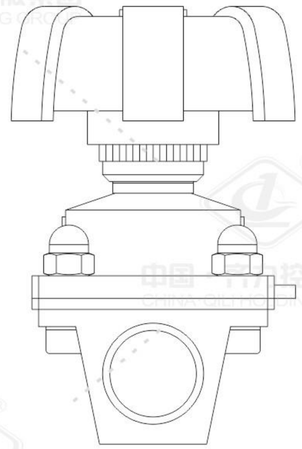
三通法兰式隔膜阀:

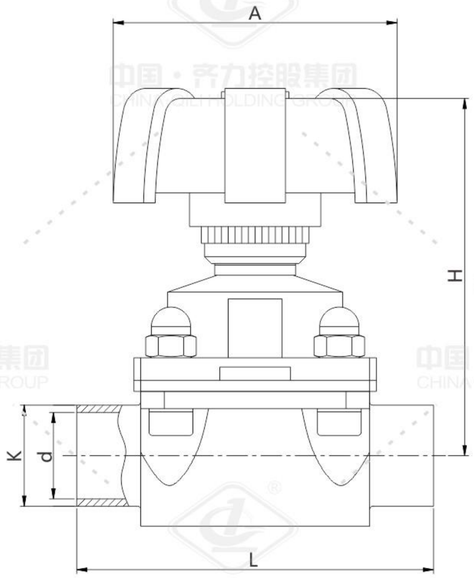
规格：1/2"-4", DN10-DN100
温度：-20℃到150℃
压力：10-bar
材质：316L
比其他的阀门更小更轻
操纵扭矩小

Three Way Flange Type Diaphragm Valve:

Specifications: 1/2"-4", DN10-DN100
Temperature: -20℃ to 150℃
Pressure: 10-bar
Material: 316L
The smaller lighter than the other valves
Operating torque is small







隔膜阀是一种用途广泛的隔膜产品,适用于制药、生物、乳品、饮料、化工、化妆品、食品、电子等流体相关行业的流体控制系统。其优点在于使用无死角、无泄漏、易清洗、维护成本低、易操作等多项优点。可实现自控与手控，为降低企业运行成本提供良好的产品、35度安装时具有排放干净;阀内无泄漏风险;抗腐蚀性能高;粘度较高的物料容易通过可替代球阀、蝶阀对洁净度要求高的产品。

Diaphragm valve is a diaphragm product with a wide range of uses, suitable for fluid control systems in pharmaceutical, biological, dairy, beverage, chemical, cosmetic, food, electronics and other fluid-related industries. Its advantage lies in the use of no dead angle, no leakage, easy cleaning, low maintenance cost, easy operation and many other advantages. It can realize automatic control and manual control to reduce the operating cost of enterprises. It has clean discharge when installed at 35 degrees; there is no risk of leakage in the valve; high corrosion resistance; materials with high viscosity can easily pass through so that it can replace products that require high cleanliness like ball valves and butterfly valves.

No.QL-008

NPS	DN	L±1	A±5	Kxd(3A)	Kxd(DIN)	H
1/2"	DN10	89	33	12.7x9.4	13/12x10/9	70
3/4"	DN15/20	109	58	19.1x15.8	19/18x16/15	70
1"	DN25	127	90	25.4x22.1	29/28x26/25	119
1 1/4"	DN32	159	90	31.8x28.5	35/34x32/31	139
1 1/2"	DN40	159	114	38.1x34.8	41/40x38/37	139
2"	DN50	190	140	50.8x47.5	53/52x50/49	150
2 1/2"	DN65	216	140	63.5x60.2	70x66	162
3"	DN80	256	140	76.2x72.9	85x81	170
4"	DN100	350	140	101.6x97.4	104x100	310