

JIS 日标球阀

JIS Standard Ball Valve

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开 维 喜 阀 门 集 团 有 限 公 司
Kaiweixi Valve Group Co., Ltd.

JIS 日标球阀

型号: JIS	规格: 15A-100A
公称压力: 10K-20K	适用介质: 水、气、油
适用温度: -29℃~150℃	阀体材质: 铸钢、不锈钢
连接方式: 法兰	驱动方式: 手动
其他参数: 制造标准按 JIS B2071.	

JIS Standard Ball Valve

Model: JIS	Specifications: 15A-100A
Nominal Pressure: 10K-20K	Applicable Media: water, gas, oil
Applicable Temperature: -29℃~150℃	Body Material: Cast Steel, Stainless Steel
End Connection : Flange	Operation: Manual
Other Parameters: Manufacturing standard according to JIS B2071.	

JIS 日标球阀概述

JIS 日标球阀是严格遵循日本工业标准（JIS）设计制造的工业阀门，采用法兰或螺纹连接。其设计、尺寸、压力等级及材料要求全面符合 JIS B2003、JIS B2071 等相关规范，阀体通常采用铸钢、不锈钢或黄铜材质，通过球体 90 度旋转实现快速启闭。该阀门与日标管道系统（如 JIS B2220 法兰、JIS B0203 螺纹）完全兼容，广泛应用于船舶、机械、化工及日系工程项目中，是日标体系下可靠的流体截断与控制设备。

JIS Standard Ball Valve Overview

The JIS Standard Ball Valve is an industrial valve designed and manufactured in strict compliance with Japanese Industrial Standards (JIS). It features flange or threaded connections, with its design, dimensions, pressure ratings, and material requirements fully adhering to relevant standards such as JIS B2003 and JIS B2071. The valve body is typically made of cast steel, stainless steel, or brass, and rapid opening and closing are achieved through a 90-degree rotation of the ball. This valve is fully compatible with Japanese standard pipeline systems (e.g., JIS B2220 flanges, JIS B0203 threads). It is widely used in shipbuilding, machinery, chemical industries, and Japanese-standard engineering projects, serving as a reliable fluid isolation and control device within the JIS standard system.



JIS 日标球阀产品图
JIS Standard Ball Valve Product Image

JIS 日标球阀特点

- 1.严格 JIS 标准符合性：全过程遵循 JIS B2003、JIS B2071 等规范，在结构长度、法兰尺寸、压力等级及材料要求上与日标管道系统完全匹配。
- 2.双密封结构可选：提供软密封（如 PTFE）和金属硬密封选项，适应水、蒸汽、油品及腐蚀性介质等多种工况。
- 3.操作轻便安全可靠：90 度旋转启闭迅速，操作扭矩小。部分型号配备防火防静电设计，符合日标安全规范。
- 4.连接兼容性强：法兰接口符合 JIS B2220 标准，螺纹接口符合 JIS B0203 标准，与日标、部分国际标准管道具有良好的互换性。
- 5.维护简便应用广泛：结构设计便于拆卸维护，密封件可更换。适用于船舶、机械制造、化工设备及日资项目，通用性高。

JIS Standard Ball Valve Features

1. Strict Compliance with JIS Standards:

The entire process adheres to standards such as JIS B2003 and JIS B2071, ensuring complete compatibility with Japanese standard pipeline systems in terms of face-to-face dimensions, flange sizes, pressure ratings, and material requirements.

2. Optional Dual Seal Structures:

Offers both soft seal (e.g., PTFE) and metal hard seal options, making it suitable for a wide range of

applications, including water, steam, oil products, and corrosive media.

3. Easy and Safe Operation with High Reliability:

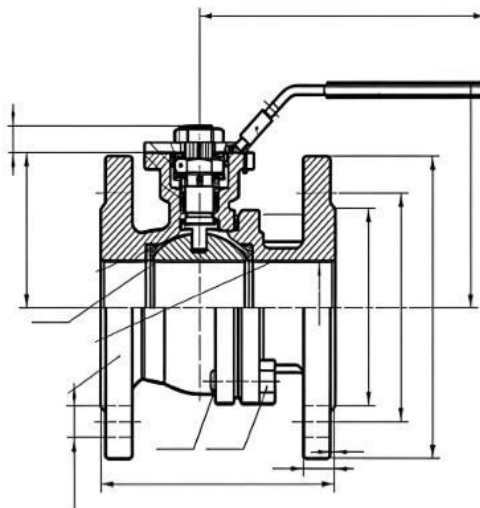
Provides rapid 90-degree opening and closing with low operating torque. Some models are equipped with fire-safe and anti-static designs, complying with Japanese safety standards.

4. Strong Connection Compatibility:

Flange connections conform to JIS B2220 standards, and threaded connections comply with JIS B0203 standards, ensuring excellent interchangeability with Japanese standard pipelines and certain international standard pipelines.

5. Easy Maintenance and Wide Application Range:

Designed for easy disassembly and maintenance, with replaceable sealing components. Suitable for shipbuilding, machinery manufacturing, chemical equipment, and Japanese-funded projects, offering high versatility.



JIS 日标球阀结构图

JIS Standard Ball Valve Structure Diagram

零部件名称材料表

Parts Name Material List

序号 NO.	名称 Name	材料 Material
1	阀体 body	SSC13A/SSC14A
2	球体 ball	SSC13A/SSC14A
3	密封垫 seal gasket	RPTFE
4	填料 packing	PTFE
5	阀杆 stem	304
6	O 型圈 O ring	NBR

性能规范表 Performance Specification

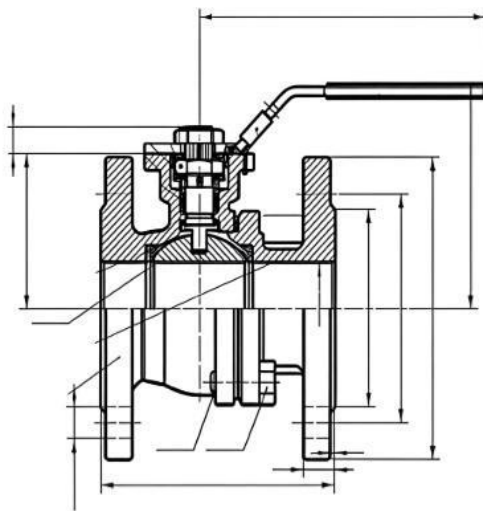
公称压力 Nominal Pressure	10K/20K	Mpa
强度试验压力 Shell Test	2.4/5.8	
密封试验压力 Seal Test	1.5/4	
适用温度 Suitable Temp.	150	℃

外形尺寸标准要求

- 1、阀门的结构长度按 JIS B2002 的标准
- 2、连接法兰按 JIS B2220 的标准

Dimensions Standard Requirements

1. The structural length of the valve shall conform to the standard JIS B2002.
2. The connecting flange shall conform to the standard JIS B2220.



JIS 日标球阀外形图

JIS Standard Ball Valve View Drawing

JIS 日标球阀外形尺寸表

JIS Standard Ball Valve Dimensions Table

SIZE	15A	20A	25A	32A	40A	50A	65A	80A	100A
Φ d	15	20	25	32	38	50	65	76	100
L	108	117	127	140	165	178	190	203	229
T	12	14	14	16	16	16	18	18	18
f	1	1	1	2	2	2	2	2	2
D1	95	100	125	135	140	155	175	185	210
D2	70	75	90	100	105	120	140	150	175
D3	51	56	67	76	81	96	116	126	151
n	4	4	4	4	4	4	4	8	8
Φ d1	15	15	19	19	19	19	19	19	19
H1	48	53	64	71	76	84.5	101.5	111.5	141
H2	8	8	11	11	14	14	17	17	22

H	80	85	100	108	114	124	148	158	189
W	140	140	160	160	185	185	230	230	320
K	M12X15	M2Xi5	M14X15	M4X1.5	MI18×1S	MI8X15	MEX15	M22XLS	M8X2
P	9	9	11	11	14	14	17	17	22
A1	3	3	3	3	3.5	3.5	4.5	4.5	
A2	3	3	3.5	3.5	4.5	4.5	5.5	5.5	M10
BI	36	36	42	42	50	50	70	70	
B2	42	42	50	50	70	70	102	102	102

JIS 日标球阀安装、使用与维护说明

安装指南

1. 安装前准备：核对阀门型号、压力等级（JIS 10K/20K）、法兰标准（JIS B2220）及阀体材质是否符合管路设计要求。清洁阀门内腔及管道法兰密封面，确保无杂质。
2. 法兰连接与紧固：使用符合 JIS 标准的垫片及螺栓螺母。将阀门置于管道法兰之间，确保阀体流向箭头与介质流向一致。按 JIS 规范要求的对角线顺序分步、均匀拧紧所有螺栓至规定扭矩。
3. 安装方向：阀门可安装于水平或垂直管道，推荐阀杆垂直向上安装。若垂直安装需确保执行机构固定可靠。
4. 系统初步测试：安装后手动操作阀门全行程数次，确认启闭顺畅无卡阻。缓慢开启上游阀门，检查连接处有无泄漏。
5. 压力测试：阀门参与管道系统压力试验，试验压力需符合 JIS B2003 等规范，试验后复查密封性。

使用操作

1. 启闭操作：通过手柄或执行器进行 90 度旋转操作。操作应平稳到位，达到全开或全关位置时停止，避免强行过位操作。
2. 状态确认：通过手柄位置指示器或执行器反馈信号明确判断阀门开关状态。关键管线建议设置状态标识牌。
3. 常规运行：本阀门用于全开或全关闭断，不应用于流量调节。长期全开运行时，建议定期进行全行程开关操作以保持阀座弹性。
4. 注意事项：带压操作时若感觉扭矩异常增大，应立即停止并检查系统压力是否超标或阀门是否有卡阻现象。

维护保养

1. 定期检查：定期检查法兰连接处有无泄漏，阀体表面有无异常腐蚀或损伤。检查所有外部紧固件是否松动。
2. 阀座密封维护：若阀门出现轻微内漏，可能是阀座密封面磨损或杂质附着。可在系统泄压后尝试清洗阀座区域，若无效则需更换阀座密封件。
3. 阀杆填料维护：若阀杆处出现外漏，可均匀适度拧紧填料压盖螺母。若无效或泄漏严重，需在系统泄压后更换填料。
4. 内部检修：需拆卸阀门内部时，应先确认系统已完全泄压。检查球体与阀座密封面磨损情况，必要时更换密封件。注意浮动球体与阀杆连接状态。
5. 长期停用：阀门长期存放应处于全开或全关状态，对阀杆及外露金属表面采取防锈措施。重新启用前需进行压力测试和操作灵活性检查。

Installation, Operation, and Maintenance Instructions for JIS Standard Ball Valve

Installation Guide

1. Pre-Installation Preparation

Verify that the valve model, pressure rating (JIS 10K/20K), flange standard (JIS B2220), and body material comply with pipeline design requirements. Clean the internal cavity of the valve and the sealing surfaces of the pipeline flanges to ensure they are free from contaminants.

2. Flange Connection and Tightening

Use gaskets, bolts, and nuts compliant with JIS standards. Position the valve between the pipeline flanges, ensuring the flow direction arrow on the valve body aligns with the medium flow direction. Gradually and evenly tighten all bolts to the specified torque in a diagonal sequence as required by JIS standards.

3. Installation Orientation

The valve can be installed in horizontal or vertical pipelines. It is recommended to install the valve with the stem oriented vertically upward. For vertical installation, ensure the actuator is securely fixed.

4. Preliminary System Testing

After installation, manually operate the valve through its full stroke several times to confirm smooth opening and closing without jamming. Slowly open the upstream valve and inspect all connections for leaks.

5. Pressure Testing

The valve must participate in the pipeline system's pressure test. The test pressure must comply with JIS B2003 and other relevant standards. After testing, recheck the sealing performance.

Operation Instructions

1. Opening and Closing Operations

Operate the valve by rotating it 90 degrees using a handle or actuator. The operation should be smooth and precise, stopping once the fully open or fully closed position is reached. Avoid over-torquing or forcing the valve beyond its limits.

2. Status Confirmation

Confirm the valve's open or closed status using the handle position indicator or actuator feedback signal. For critical pipelines, it is recommended to install status identification plates.

3. Normal Operation

This valve is designed for on/off isolation and should not be used for flow regulation. If the valve remains fully open for extended periods, perform periodic full-stroke opening and closing operations to maintain seat elasticity.

4. Precautions

If abnormal torque increase is felt during pressurized operation, stop immediately and check whether the system pressure exceeds limits or if the valve is jammed.

Maintenance

1. Regular Inspections

Periodically inspect flange connections for leaks and check the valve body surface for abnormal corrosion or damage. Ensure all external fasteners are secure and not loose.

2. Seat Seal Maintenance

If minor internal leakage occurs, it may be due to wear of the seat sealing surface or contamination. After depressurizing the system, attempt to clean the seat area. If leakage persists, replace the seat seal.

3. Stem Packing Maintenance

If external leakage occurs at the stem, evenly and moderately tighten the packing gland nut. If ineffective or if leakage is severe, replace the packing after depressurizing the system.

4. Internal Inspection

Before disassembling the valve internals, ensure the system is fully depressurized. Inspect the wear condition of the ball and seat sealing surfaces, and replace seals if necessary. Pay attention to the connection between the floating ball and the stem.

5. Long-Term Storage

For long-term storage, the valve should be in the fully open or fully closed position. Apply anti-rust measures to the stem and other exposed metal surfaces. Perform pressure testing and operational flexibility checks before returning the valve to service.

非常感谢您的阅读！

Thank you very much for reading!

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