

Q11F 螺纹铜球阀

Q11F Threaded Brass Ball Valve

使
用
说
明
书



开维喜阀门集团有限公司
Kaiweixi Valve Group Co., Ltd.

Q11F 螺纹铜球阀

型号: Q11F-16T/25T/40T
公称压力: PN16、PN25、PN40
适用温度: ≤120℃
连接方式: 内螺纹
其他参数: 制造标准按 GB/T 15185

规格: DN8-DN50
适用介质: 水及类似于水的介质
阀体材质: 铜
驱动方式: 手动

Q11F Threaded Brass Ball Valve

Model: Q11F-16T/25T/40T	Specifications: DN8-DN50
Nominal Pressure: 1PN16、PN25、PN40	Applicable Media: Water and water-like media
Applicable Temperature: -196℃ ~-29℃	Body Material: Brass
End Connection : NPT	Operation: Manual
Parameters: Manufacturing standard according to API6D.	

Q11F 螺纹铜球阀概述

Q11F 螺纹铜球阀是一种采用螺纹连接的黄铜制截止阀，通过旋转阀杆带动球体 90 度动作实现快速启闭。阀体采用锻造黄铜，结构紧凑，密封面通常覆盖聚四氟乙烯（PTFE），确保良好密封性。该阀门工作温度范围一般为-20℃至 150℃，适用于公称压力 PN16 及以下的管路系统，广泛用于水、油、气等非腐蚀性流体介质的控制，常见于建筑给排水、暖通、家用电器及一般工业设备管道中。

Q11F Threaded Brass Ball Valve Overview

The Q11F threaded Brass ball valve is a brass globe valve that uses threaded connections to quickly open and close by rotating the valve stem to drive the ball to move 90 degrees. The valve body is made of forged brass with a compact structure, and the sealing surface is usually covered with polytetrafluoroethylene (PTFE) to ensure good sealing performance. The working temperature range of this valve is generally -20 °C to 150 °C, suitable for pipeline systems with nominal pressure PN16 and below. It is widely used for controlling non corrosive fluid media such as water, oil, and gas, and is commonly found in building water supply and drainage, HVAC, household appliances, and general industrial equipment pipelines.



Q11F 螺纹铜球阀产品图

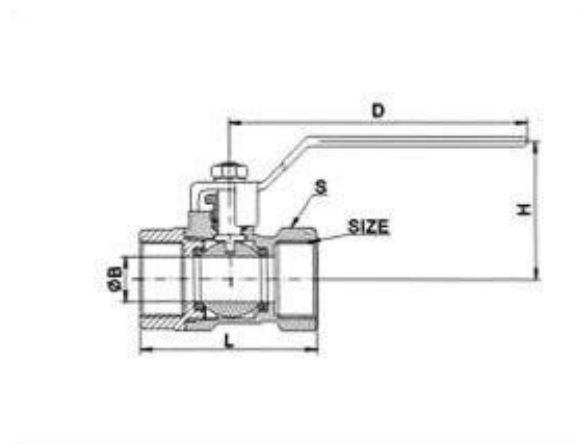
Q11F Threaded Brass Ball Valve Product Image

Q11F 螺纹铜球阀特点

1. 耐腐蚀与安全材质：阀体采用锻造黄铜，强度高且耐腐蚀，无锈蚀污染，适用于饮用水及一般流体介质，安全可靠。
2. 优良密封性能：球体密封面覆有 PTFE 等软质密封材料，摩擦系数小，密封性能好，可实现长期使用下的基本无泄漏。
3. 结构紧凑与轻量化：整体体积小、重量轻，配合螺纹连接（内螺纹或外螺纹），安装空间要求低，便于在紧凑管路中布置。
4. 操作简便快捷：启闭仅需旋转手柄 90 度，操作轻便迅速，流阻小，可实现管路的快速切断或接通。
5. 经济实用与维护简便：制造成本较低，性价比高，日常维护需求少，如密封失效可整体更换，维修成本低。

Q11F Threaded Brass Ball Valve Features

1. Corrosion resistant and safe material: The valve body is made of forged brass, which has high strength and corrosion resistance, no rust pollution, suitable for drinking water and general fluid media, and is safe and reliable.
2. Excellent sealing performance: The sealing surface of the sphere is covered with soft sealing materials such as PTFE, which has a low friction coefficient and good sealing performance, and can achieve basically no leakage under long-term use.
3. Compact and lightweight structure: With a small overall volume and light weight, coupled with threaded connections (internal or external), the installation space requirements are low, making it easy to arrange in compact pipelines.
4. Easy and fast operation: opening and closing only requires rotating the handle 90 degrees, making it easy and fast to operate, with low flow resistance, and can quickly cut off or connect pipelines.
5. Economical, practical, and easy to maintain: Low manufacturing cost, high cost-effectiveness, minimal daily maintenance requirements, and can be replaced as a whole if the seal fails, resulting in low maintenance costs.



Q11F 螺纹铜球阀结构图

Q11F Threaded Brass Ball Valve Structures 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	黄铜 Brass
2	球体 Ball	黄铜 Brass
3	密封圈 sealing ring	PTFE
4	填料 packing	PTFE、石墨 Graphite
5	阀杆 Stem	不锈钢 Stainless Steel

性能规范表 Performance Specification

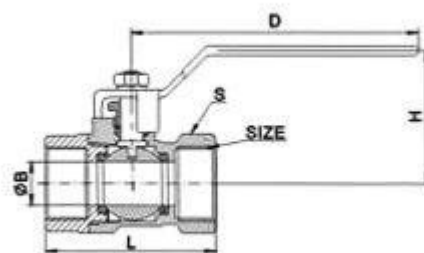
公称压力 Nominal Pressure	1.6/2.5/4	Mpa
强度试验压力 Shell Test	2.4/3.75/6	
密封试验压力 Seal Test	1.76/2.75/4.4	
适用温度 Suitable Temp.	≤120	℃

外形尺寸标准要求

- 1、阀门的结构长度按 GB/T 12221 的标准.
- 2、管螺纹连接按 ISO228 的标准.

Dimensions Standard Requirements

1. The structural length of the valve shall conform to the standard GB/T 12221.
2. The connecting flange shall conform to the standard ISO228.



Q11F 螺纹铜球阀外形图

Q11F Threaded Brass Ball Valve View Drawing

Q11F 螺纹铜球阀外形尺寸表

Q11F Threaded Brass Ball Valve Dimensions Table

DN	SIZE	L	H	D	s	@B
8	1/4	42	32	55	17	8

10	3/8	45.5	43	80	21	10
15	1/2	51	46	84	25	13
20	3/4	57	50	92	31	15
25	1	65	60	108	38	20
32	1 1/4	73	64	118	46	29
40	1 1/2	79.5	72	134	53	31
50	2	92	90	153	65	39.5

Q11F 螺纹铜球阀安装、使用与维护说明书

安装指南

1. 安装前准备：核对阀门规格、压力及温度是否满足管路要求。清除阀门内腔及管道端口处的毛刺、碎屑等杂物，确保流道通畅。
2. 螺纹连接操作：在管道外螺纹上顺时针方向缠绕适量的聚四氟乙烯生料带或涂抹合适的密封剂，以增强密封效果并便于日后拆卸。
3. 阀门安装：手动将阀门旋入管道螺纹，初始确保对正，避免错扣。使用合适的扳手卡住阀门阀体上的扳手位（如有）或六角部位进行紧固，切勿直接扳动手柄或阀杆施力，以防损坏。
4. 安装方向与位置：阀门可安装于任意方向，但建议将手柄操作空间及阀门日后可能的维护需求纳入考虑。介质流向一般无限制，但部分产品可能有流向标识，安装时请留意。
5. 最终检查：安装完成后，检查阀门与管道连接处是否紧密，确认手柄可顺畅旋转至全开或全关位置。

使用操作

1. 启闭操作：通过手柄缓慢旋转阀杆 90 度以实现开启或关闭。全开时手柄与管道流向平行，全关时垂直。操作时力度应均匀，遇异常阻力时不可强行扭转。
2. 状态确认：阀门完全开启或关闭后，请勿继续加大力矩旋转，以免损坏阀杆或内部密封部件。
3. 日常使用：该阀门主要用于截断或接通介质，不应用于精密调节流量。长期处于开启状态时，建议定期操作一至两次，以保持其灵活性。

维护保养

1. 定期检查：定期观察阀门外部及连接处有无渗漏痕迹，检查手柄是否牢固，有无松动现象。
2. 泄漏处理：若螺纹连接处出现轻微泄漏，可在系统泄压后尝试进一步拧紧。若阀门自身密封处泄漏，通常需更换阀门。
3. 操作维护：如感觉阀门操作力矩明显增大，可在阀杆螺纹处少量添加适用密封脂润滑。若阀门出现无法完全关闭或内部泄漏，通常表明内部密封件（如阀座）已磨损，建议整体更换阀门。
4. 拆卸与更换：拆卸阀门前，请确保管路已完全泄压并冷却。旋下旧阀门后，应清理管道螺纹上的旧密封材料残渣，再安装新阀门。

5. 储存: 阀门备用时应存放于干燥室内, 保持全开或全关状态, 避免异物进入端口, 防止磕碰螺纹及密封面。

Installation, Use, and Maintenance Manual for Q11F Threaded Brass Ball Valve

Installation Guide

1. Preparation before installation: Check whether the valve specifications, pressure, and temperature meet the pipeline requirements. Remove burrs, debris, and other debris from the valve cavity and pipeline ports to ensure smooth flow.
2. Threaded connection operation: Wrap an appropriate amount of PTFE tape or apply a suitable sealant clockwise on the external thread of the pipeline to enhance the sealing effect and facilitate future disassembly.
3. Valve installation: Manually screw the valve into the pipeline thread, ensuring initial alignment to avoid misalignment. Use a suitable wrench to tighten the wrench position (if any) or hexagonal part on the valve body. Do not directly apply force to the handle or stem to prevent damage.
4. Installation direction and position: The valve can be installed in any direction, but it is recommended to consider the operating space of the handle and the possible maintenance needs of the valve in the future. The flow direction of the medium is generally unrestricted, but some products may have flow direction markings. Please pay attention during installation.
5. Final inspection: After installation, check whether the valve and pipeline connection are tight, and confirm that the handle can smoothly rotate to the fully open or fully closed position.

Usage and Operation

1. Opening and closing operation: Slowly rotate the valve stem 90 degrees through the handle to achieve opening or closing. When fully open, the handle is parallel to the flow direction of the pipeline, and when fully closed, it is perpendicular. The force should be uniform during operation, and it should not be forcefully twisted when encountering abnormal resistance.
2. Status confirmation: After the valve is fully opened or closed, do not continue to increase the torque rotation to avoid damaging the valve stem or internal sealing components.
3. Daily use: This valve is mainly used to cut off or connect media, and should not be used for precise flow regulation. When in the open state for a long time, it is recommended to operate it regularly once or twice to maintain its flexibility.

maintenance

1. Regular inspection: Regularly observe whether there are any leakage marks on the outside and connections of the valve, check whether the handle is firm, and whether there is any looseness.
2. Leakage treatment: If there is a slight leakage at the threaded connection, further tightening can be attempted after the system is depressurized. If the valve leaks at its own sealing point, it usually needs to be replaced.
3. Operation and maintenance: If you feel a significant increase in valve operating torque, you can add a small amount of suitable sealing grease to lubricate the valve stem thread. If the valve cannot be fully closed or has internal leakage, it usually indicates that the internal sealing components (such as the valve seat) have worn out, and it is recommended to replace the valve as a whole.
4. Disassembly and replacement: Before disassembling the valve, please ensure that the pipeline has been completely depressurized and cooled. After unscrewing the old valve, the residue of the old sealing material on the pipeline thread should be cleaned before installing the new valve.
5. Storage: When the valve is in standby, it should be stored in a dry room, kept fully open or fully closed,

to prevent foreign objects from entering the port, and to prevent collision with threads and sealing surfaces.

非常感谢您的阅读！

Thank you very much for reading!

开维喜阀门集团有限公司

地址：浙江省温州市永嘉县瓯北街道三桥工业区林下路 1 号

电话：+86 18967796135

网址： <https://www.kaiweixi.com>

E-mail: yannie@kaiweixi.com

Kaiweixi Valve Group Co., Ltd

Address: No.1 Linxia Road, Sanqiao Industrial Zone, Oubei Street, Yongjia County, Wenzhou City,
Zhejiang Province

Phone: +86 18967796135

URL: <https://www.kaiweixi.com>

E-mail: yannie@kaiweixi.com