太航德克森
TAIHANG DIRKSEN

Z41H/Z41X/Z44H/Z45X /Z41F46/Z41PFA/Z64/Z94 系列

闸阀使用说明书

Series Z41H/Z41X/Z44H/Z45X/Z 41F46/Z41PFA/Z64/Z94 Gate Valve Manual

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1. 范围

本说明书包括了公称通径 DN15~DN600mm(1/2”~24”),公称压力 PN1.6MPa~16MPa(ANSI CLASS150~900)螺纹端、法兰端、对焊端和承插焊端连接的手动、气动、电动操作的闸阀。

1.Introduction

This specification includes manual, pneumatic and electrically operated gate valves with nominal diameters DN15~DN600 (1/2 "~24") and nominal pressures PN1.6MPa~16MPa(ANSI Class150-900) with the connection types of thread, flange, butt welded and socket welded.

2. 用途

2.1 本闸阀适用于管线流体的截断和开启。

2.2 根据介质选用阀门的材质。

2.2.1 碳钢阀门适用于水、蒸汽、油品等介质。

2.2.2 不锈钢阀门适用于腐蚀性介质。

2.3 适用温度：

2.3.1 普通碳钢阀门适用温度为-29℃~+425℃。

2.3.2 合金钢（如铬钼钢、铬钼钒钢等）阀门适用温度≤550℃。

2.3.3 不锈钢阀门适用温度为-196℃~+200℃。

2.Use

2.1 The gate valve is suitable for cutting off and opening pipeline fluid.

2.2 Choose the material of the valve according to the medium.

2.2.1 Carbon steel valve is suitable for water, steam, oil and other media.

2.2.2 Stainless steel valves are suitable for corrosive media.

2.3 Applicable temperature:

2.3.1 The applicable temperature of ordinary carbon steel valve is -29℃ ~+425℃.

2.3.2 Alloy steel (such as chromium molybdenum steel, chromium molybdenum vanadium steel, etc.) valve applicable temperature ≤550℃.

2.3.3 The applicable temperature of stainless steel valve is -196 ℃ ~+200℃.

3. 结构

3.Structure

3.1 闸阀基本结构见图 1

3.1 The basic structure of gate valve is shown in Fig. 1

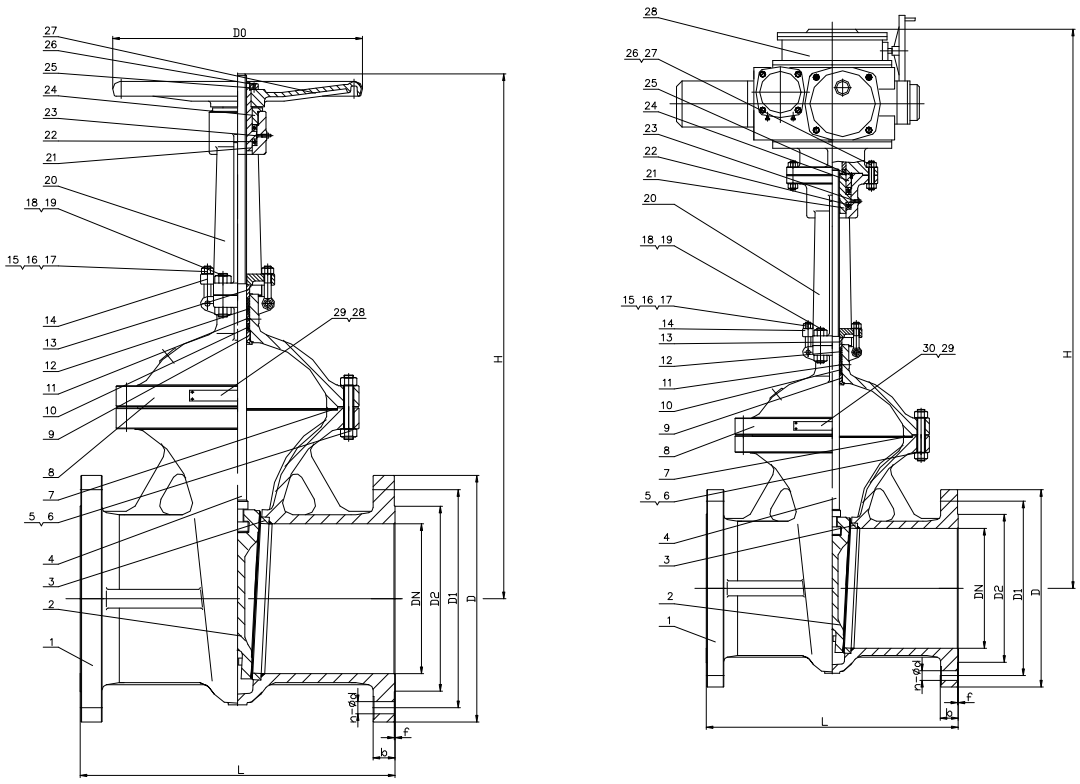

图 1 手动、电动法兰连接闸阀

Fig. 1 Connecting gate valve with manual and electric flanges

3.2 易损件中的垫片、填料分别采用柔性石墨+304（或镍丝）和柔性石墨,或聚四氟乙烯等，密封性能可靠。

3.2 The gaskets and packings in the wearing parts are respectively made of flexible graphite +304 (or nickel wire) and flexible graphite, or polytetrafluoroethylene, etc., with reliable sealing performance.

4. 操作

4.Operation

手动阀门用手转动手轮，顺时针方向旋转，闸板下降，阀门关闭。逆时针方向旋转，闸板上升，阀门开启。电动阀门由电动装置驱动，使阀杆上升、下降，从而带动闸板上、下运动，开启、关闭阀门。

Manual valve turn the hand wheel by hand, turn clockwise, the gate drops,

and the valve closes. Turn counterclockwise, the disc rises and the valve opens. The electric valve is driven by the electric device, so that the valve stem rises and falls, thereby driving the upward and downward movement of the disc, opening and closing the valve.

5. 保管、保养、安装和使用

5. Storage, maintenance, installation and use

5.1 阀门应存放在干燥，通风的室内，阀门通道两端应堵塞。

5.2 长期存放的阀门应定期检查，清除污物。应特别注意密封面的清洁，防密封面的损坏。

5.3 安装前应仔细核对阀门标志是否与使用要求相符。

5.4 安装前应检查阀门内腔和密封面，如有污垢，应使用清洁布擦拭干净。

5.5 安装前检查填料是否压紧，应确保填料的密封性，同时不应妨碍阀杆的转动。

5.6 安装后系统或管路试压时，阀门应处于全开位置。

5.7 使用中，应将闸板全开或关闭，不应将闸板部分开启做调节流量用。

5.8 使用时，应定期给阀杆梯形螺纹注入润滑剂。

5.9 手动阀门，在开启或关闭操作时，应使用手轮开、关，不得借助辅助杠杆或其它工具。

5.10 使用后应定期检查阀门的内漏和外漏情况。检查阀门密封面的密封性；阀杆与填料的磨损状况以及中口垫片长期使用的失效，若损坏失效，

应及时修理或更换。

5.11 电动、气动阀门的传动装置，其保管、保养、安装和使用，请见“阀门电动装置使用说明书”等相关说明。

5.1 The valve should be stored in a dry, ventilated room, and both ends of the valve channel should be blocked.

5.2 Long-term stored valves should be checked regularly to remove dirt. Special attention should be paid to the cleaning of the sealing cover and the damage of the sealing cover.

5.3 Before installation, carefully check whether the valve mark is consistent with the use requirements.

5.4 Before installation, check the valve cavity and sealing surface. If there is dirt, wipe it with a clean cloth.

5.5 Check whether the packing is compressed before installation. Ensure the tightness of the packing and do not hinder the rotation of the valve stem.

5.6 When testing the system or pipeline pressure after installation, the valve should be in the fully open position.

5.7 In use, the disc should be fully opened or closed, and the disc should not be partially opened for flow regulation.

5.8 Lubricant should be injected regularly into the trapezoidal thread of the valve stem when in use.

5.9 Manual valves, when opening or closing operation, should use the hand wheel to open and close, do not use auxiliary levers or other tools.

5.10 The internal and external leakage of the valve should be checked regularly after use. Check the tightness of valve sealing surface; The wear condition of the valve stem and packing and the failure of the middle gasket for a long time should be repaired or replaced in time if it is damaged and fails.

5.11 For the transmission device of electric and pneumatic valves, please refer to the "Valve electric Device Operation Manual" and other relevant instructions for its storage, maintenance, installation and use.

6. 可能发生的故障、原因及消除方法 见表 1

6. The possible faults, causes and elimination methods are shown in Table 1

表 1　可能发生的故障、原因及消除方法

Table 1 Possible faults, causes and elimination methods

可能发生的故障 Possible faults	发生故障的原因 Cause of the fault	消除方法 Elimination method
填料渗漏 Packing leakage	1.填料压盖未压紧 2.填料因使用过久或保存不妥而失效 1.Packing gland is not pressed tightly 2.The filler fails due to too long use or improper preservation	1.均匀地拧紧螺母，将填料压紧 2.更换填料 1. Tighten the nut evenly and press the packing tightly 2. Replace the filler
密封面间渗漏 Leakage between sealing surfaces	1.密封面有污杂物附着 2.密封面损坏 1.The sealing surface is attached with dirt and debris 2. Sealing surface is damaged	1.将污杂物清除干净 2.重新研磨修整或更换 1. Remove the debris 2. Regrind, trim or replace
阀体与阀盖连接处渗漏 The connection between the valve body and the valve cover is leaking	1.连接螺栓紧固不均匀 2.法兰密封面损坏 3.垫片破裂或失效 1.The bolts are not evenly secured 2.Flange sealing surface is damaged	1.均匀拧紧 2.重新修整 3.更换新垫片 1. Tighten evenly 2. Refinish 3. Replace the gasket

	3.The gasket is broken or invalid	
手轮转动不灵活或闸板不能启闭 Handwheel rotation is not flexible or The gate cannot be opened or closed	1.填料压得太紧 2.填料压板，压套装置歪斜 3.阀杆螺母有损坏 4.阀杆螺母的螺纹严重磨损或断裂 5.阀杆弯曲 1.The filler is pressed too tightly 2.Packing press plate, press sleeve device skew 3.The valve stem nut is damaged 4.The thread of the valve stem nut is seriously worn or broken 5.The stem is bent	1.适当旋松填料压板上的螺母 2.校正填料压板 3.拆开修整螺纹和清除污杂物 4.更换阀杆螺母 5.矫正阀杆或更换 1.Loosen the nut on the packing plate properly 2.Correct packing platen 3.Disassemble and trim threads and remove debris 4.Replace the valve stem nut 5.Correct the stem or replace it
电动装置和气动装置故障 Electrical and pneumatic devices are faulty	见“阀门电动装置说明书” See "Valve Electric Device manual"	

7. 保修

制造厂对阀门投入使用一年内负责保修。在保修期内，因产品质量原因均可免费修理或更换零件。

7. Warranty

The manufacturer is responsible for the warranty of the valve within one year after it is put into use. During the warranty period, due to product quality reasons can be free repair or replacement parts.

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