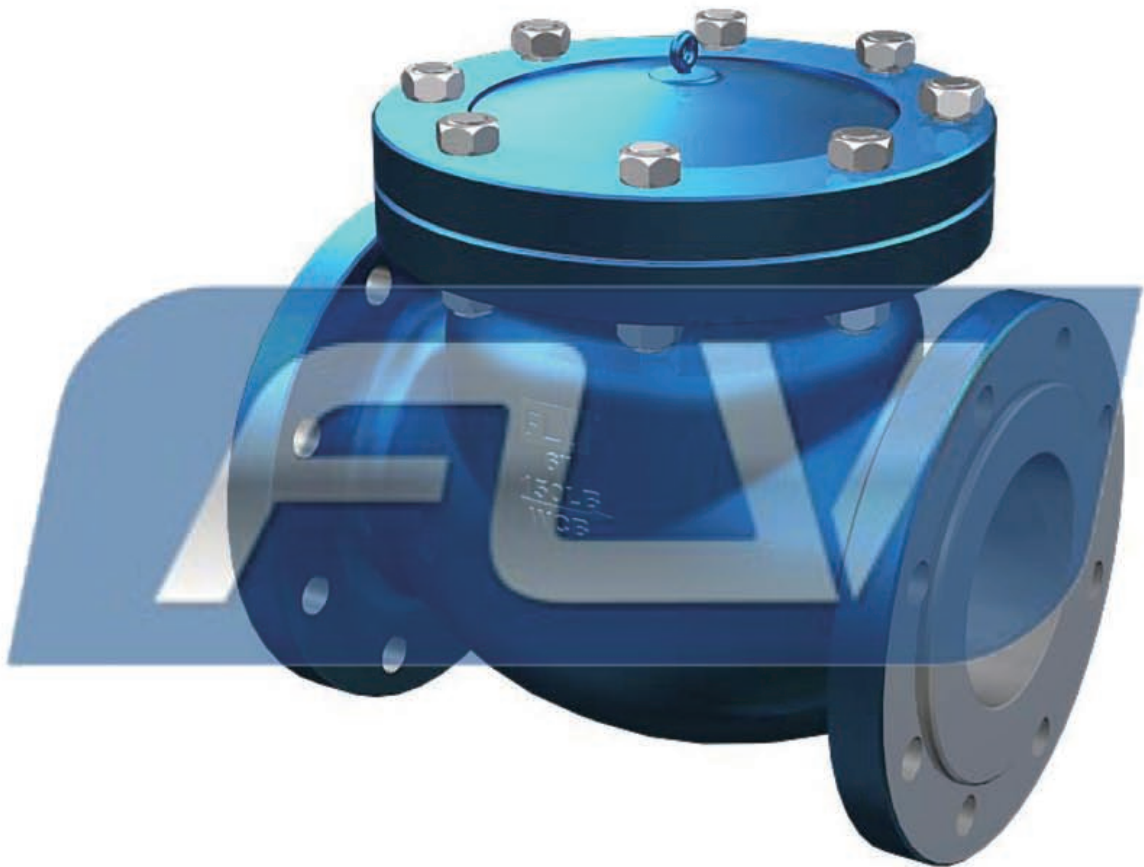




Operational Manual

Type of product: Swing Check Valve



1. Main application and using range

1. 1 Application

Such valve is mainly used as cut the medium from one direction on the industrial pipeline for petroleum, gas and chemicals.

1. 2 Range of application

Temperature (°C)	Medium	Nominal pressure (LB)
<input checked="" type="checkbox"/> -29~425 <input type="checkbox"/> -29~595 <input type="checkbox"/> -46~345 <input type="checkbox"/> -196~600 <input type="checkbox"/> others	<input type="checkbox"/> without corrosive <input checked="" type="checkbox"/> with corrosive <input type="checkbox"/> others	<input type="checkbox"/> 150 <input type="checkbox"/> 300 <input type="checkbox"/> 400 <input type="checkbox"/> 600 <input checked="" type="checkbox"/> 900

2. Applicable standard

- API
- ASME/ANSI
- MSS
- BS
- ISO
- others

3. Specification

Specification						
Nominal pressure CLASS	<input type="checkbox"/> 150 <input type="checkbox"/> 300 <input type="checkbox"/> 400 <input type="checkbox"/> 600 <input checked="" type="checkbox"/> 900 <input type="checkbox"/> 1500 <input type="checkbox"/> 2500 <input type="checkbox"/> others					
Applicable medium	<input checked="" type="checkbox"/> water <input checked="" type="checkbox"/> steam <input checked="" type="checkbox"/> oil <input type="checkbox"/> gas <input checked="" type="checkbox"/> liquid <input checked="" type="checkbox"/> others					
Applicable temperature (°C)	<input checked="" type="checkbox"/> -29~425 <input type="checkbox"/> -29~595 <input type="checkbox"/> -46~345 <input type="checkbox"/> -196~600 <input type="checkbox"/> others					
Test pressure (MPa)	Shell	22.5	Test medium	Water	Test temperature (°C)	Normal
	Seat	16.5		Water		
	Low pressure seat test by air			Air		

4. Main characteristics of design:

4. 1 disc: swing type lift type double disc type damp type others

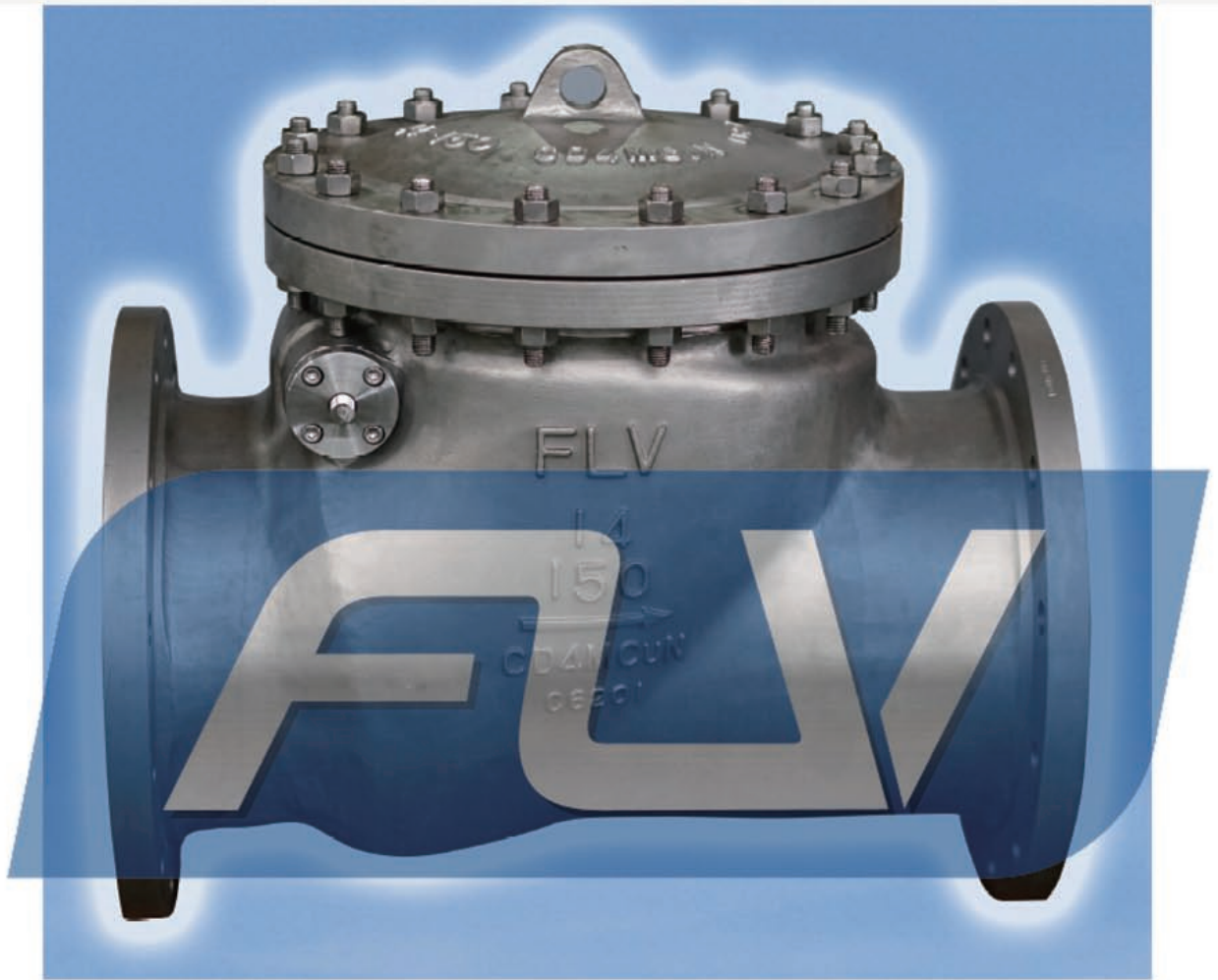
4. 2 seat: overlay on body weled threaded

4. 3 end connection : flanged type weled type wafer type lug type others

4. 4 middle flange connection: flanged type

4. 5 The valve has a simple construction and easy for production, can close automatically and with reliable sealing.

5. Schematic



				<input type="checkbox"/> others
2	Bonnet	<input type="checkbox"/> A105 <input checked="" type="checkbox"/> A 216 WCB <input type="checkbox"/> A 352 LCB <input type="checkbox"/> others	<input type="checkbox"/> A 217 WC6 <input type="checkbox"/> A 217 WC9 <input type="checkbox"/> others	<input type="checkbox"/> A 182 F304 <input type="checkbox"/> A 744 CF8 <input type="checkbox"/> A 744 CF8M <input type="checkbox"/> A 744 CF3 <input type="checkbox"/> A 744 CF3M <input type="checkbox"/> others
3	Disc	<input checked="" type="checkbox"/> F53+STL <input type="checkbox"/> 1025+517 <input type="checkbox"/> A 216 WCB+13Cr <input type="checkbox"/> A 216 WCB+STL <input type="checkbox"/> others	<input type="checkbox"/> A 217 WC6+STL <input type="checkbox"/> A 217 WC9+STL <input type="checkbox"/> others	<input type="checkbox"/> A 182 F304 <input type="checkbox"/> A 182 F316+STL <input type="checkbox"/> A 744 CF8 <input type="checkbox"/> A 744 CF8M <input type="checkbox"/> A 276 420 <input type="checkbox"/> others
4	Seat	<input type="checkbox"/> A 216 WCB+13Cr <input checked="" type="checkbox"/> F53+STL <input type="checkbox"/> 1025+507Mo <input type="checkbox"/> others	<input type="checkbox"/> A 182 F22+STL <input type="checkbox"/> A 182 F11+STL <input type="checkbox"/> others	<input type="checkbox"/> A 582 416 <input type="checkbox"/> 13Cr <input type="checkbox"/> A 182 F304 <input type="checkbox"/> A 182 F304+STL <input type="checkbox"/> others
5	Bolt/nut	<input checked="" type="checkbox"/> A 193 B7M/A 194 2HM <input type="checkbox"/> A 193 B8/A 194-8 <input type="checkbox"/> A 193 B16/A 194-7 <input type="checkbox"/> others		

7. Installation and usage

7. 1 Installation

7. 1. 1 The installation position of the valve shall be convenient for operation and maintenance.

7. 1. 2 Before the installation of the valve, the following items must be checked whether they are in accordance with the usage condition: valve model number, performance specification, technical requirement, nameplate and marking, installation direction, etc. Especially, the installation direction must be correct.

7. 1. 3 Before the installation, the dirt and rust in the cavity and on the sealing face shall be removed.

7. 2 Usage

7. 2. 1 The direction of the valve should be correct, and the open/close of disc should be flexible. It is not permitted to use it over the temperature and pressure limitation. For high temperature application, the bolts should be tightened periodically to prevent it from leaking. Less heat grad is necessary. For low temperature application, the impact overload stress concentration is not permitted.

7. 2. 2 To check whether the damp capability is according to the using condition, and can adjust in using period.

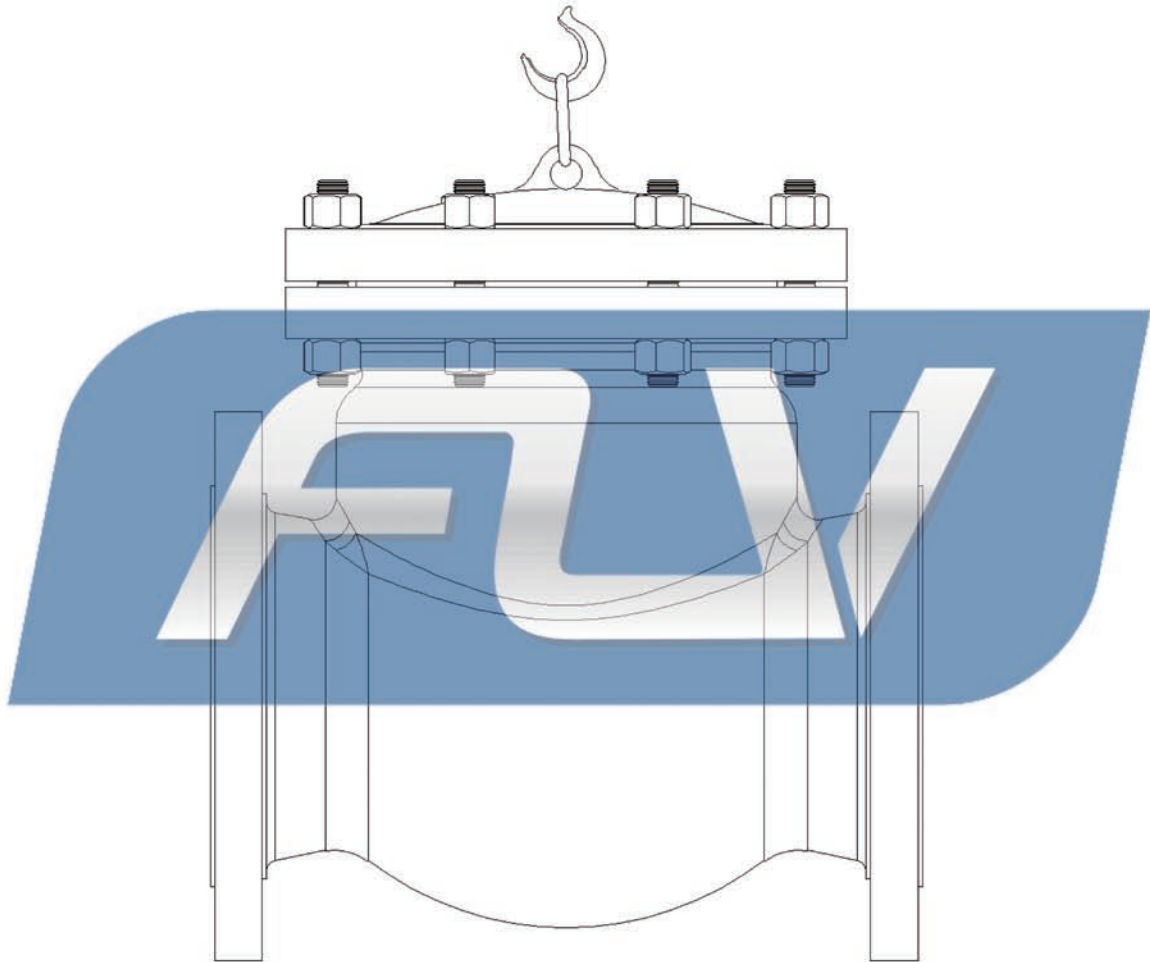
8. Maintenance and storage

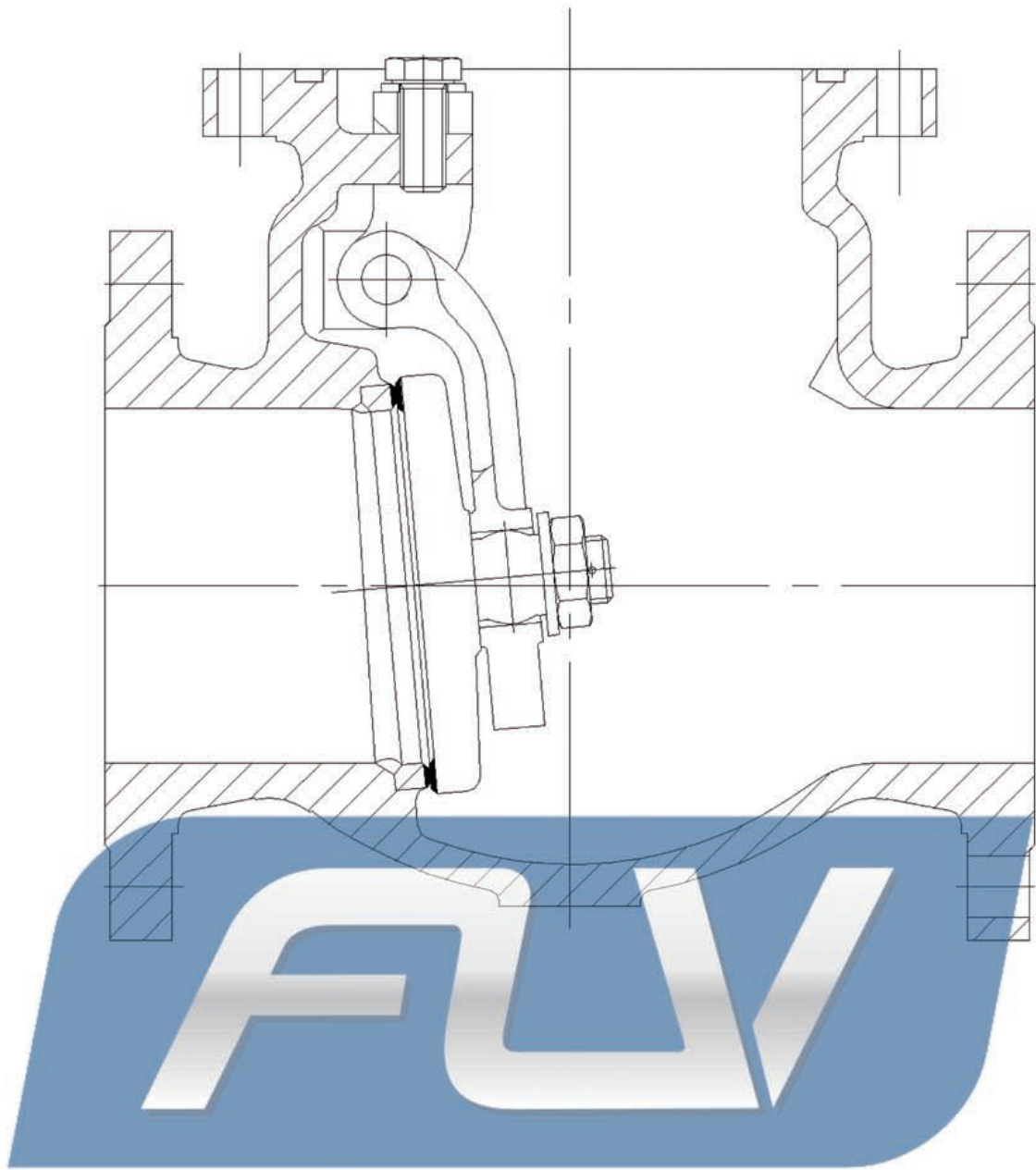
8. 1 Maintenance

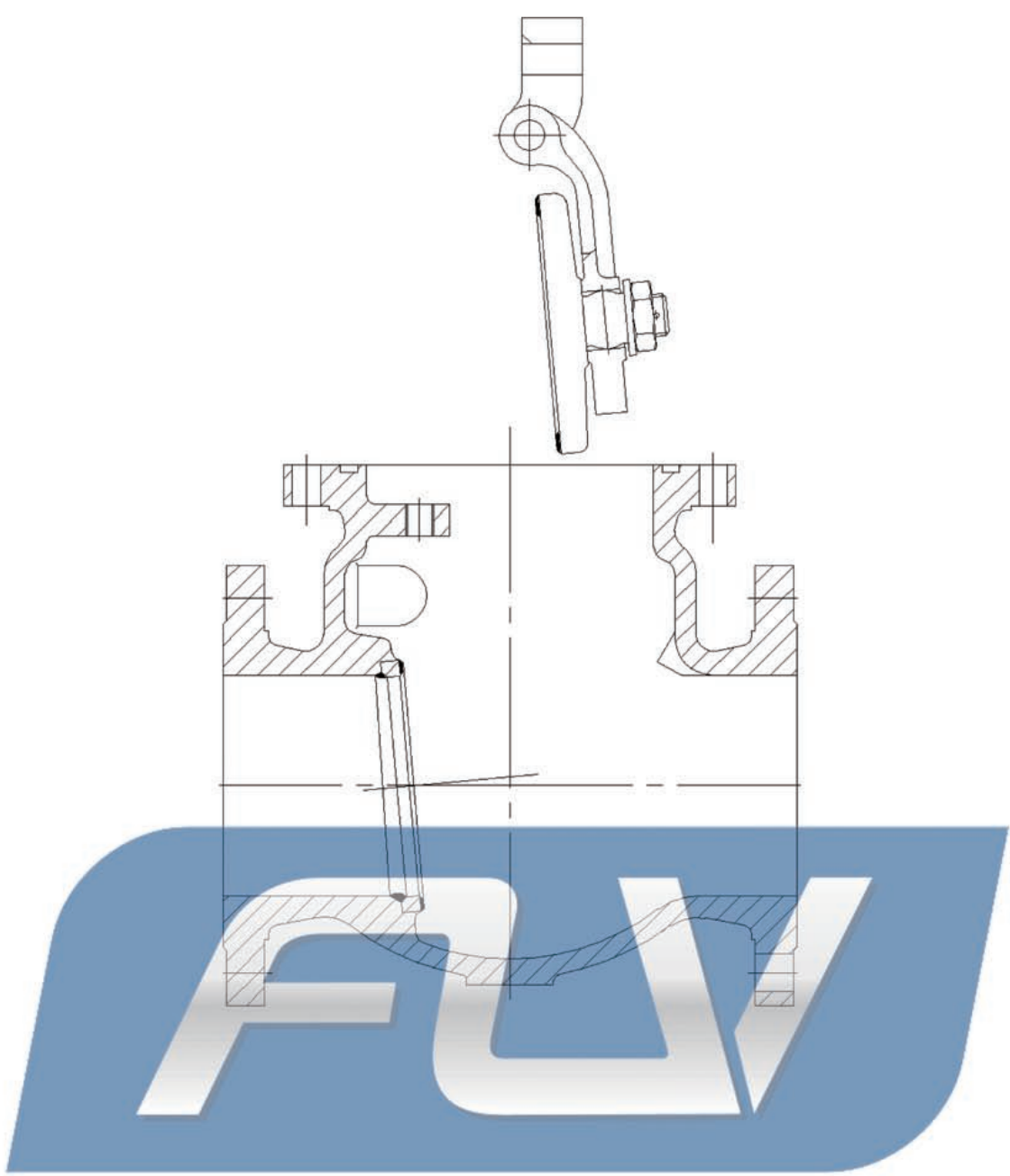
8. 1. 1 The valve in operation should be checked and maintained periodically to prevent it from rust and jamming.

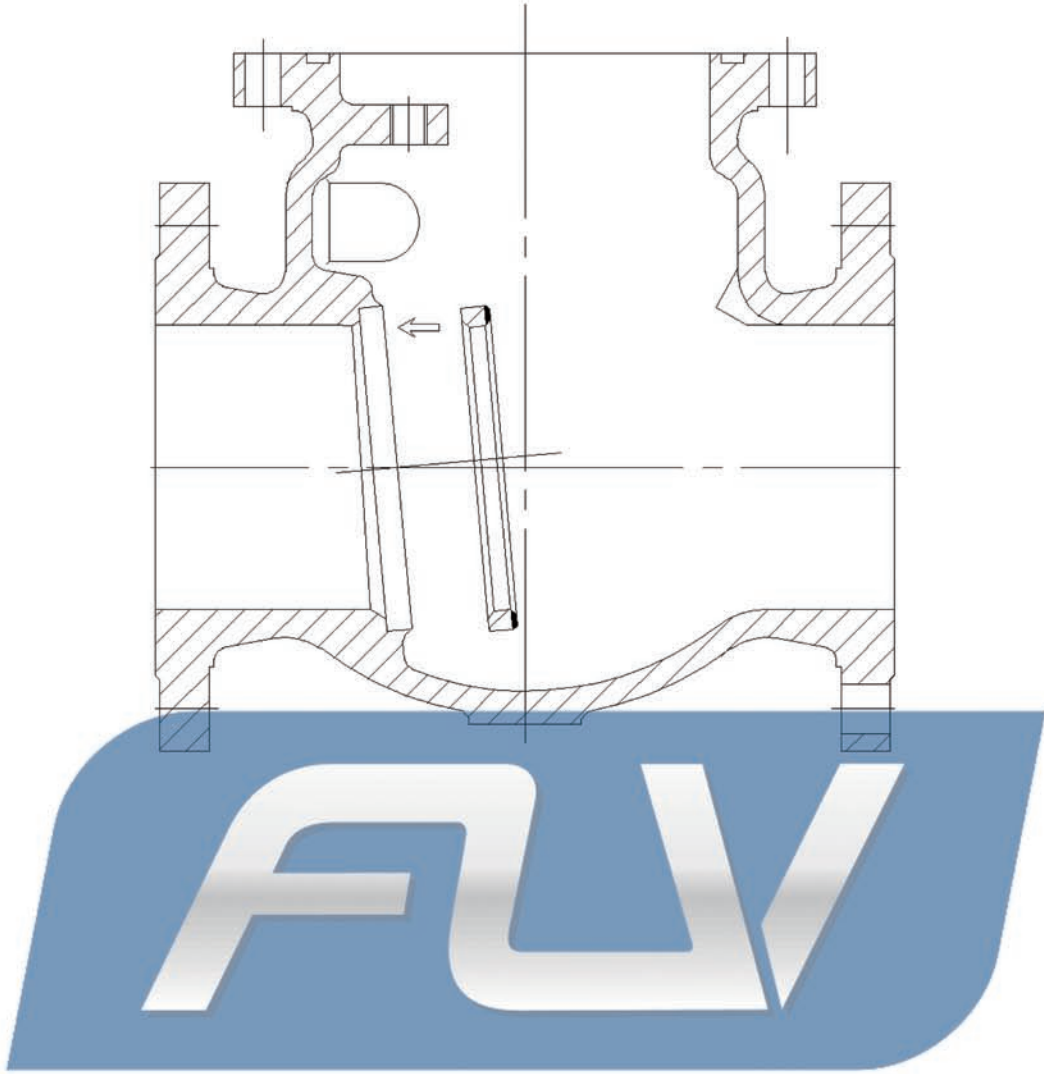
8. 1. 2 If leakage is found from the middle flange, please check the bolts are tightened or not, tighten them if not.

8. 1. 3 If internal leakage at the sealing faces is found,pls check whether there is dirt on the sealing face or that is damaged,repair it if necessary.
8. 1. 4When due time for maintenance of valve, all parts should be cleaned again to remove the dirt and rust. And also to replace the damaged gasket and sealing rings, to lap and adjust the sealing faces.The repaired valves can be used only after there without any problems.
8. 2 Storage
 8. 2. 1 The valve should be stored in dried house. Stacked or stored in open air is forbidden.
 8. 2. 2 The stored valve should have end covers for protection. The naked position of the stem should be protected by oil paper, preventing from damaging.
 8. 2. 3 For long time stored valve, it should be maintained periodically: to clean the dirt and rust,re-coat the anti-rust oil/grease, to check the flexibility of operation with no jamming.









2.0 SAFETY TIPS AND WARNINGS

1. Read completely and understand all instructions provided prior or beginning installation or maintenance.
2. Before installation confirm that valve is suitable for the intended service.
3. Make sure that line is depressurized and drains are open/monitored during installation
4. Before working on valve being in service make sure that service media has been flushed and line is safe. Make sure that all applicable MSDS sheets are available. Follow all safety related procedures.
5. Before disassembly valve shall be cycled several times to assure there is no pressure trapped in body cavity.
6. During assembly make sure that all threaded connections are safe and have proper engagement.
7. During the pressure test of reassembled valve follow all safety precautions to avoid possible injury. (Use of proper test equipment, correct parts assemblies, follow test procedures)
8. While line is under pressure DO NOT remove packing gland or any other valve parts.

