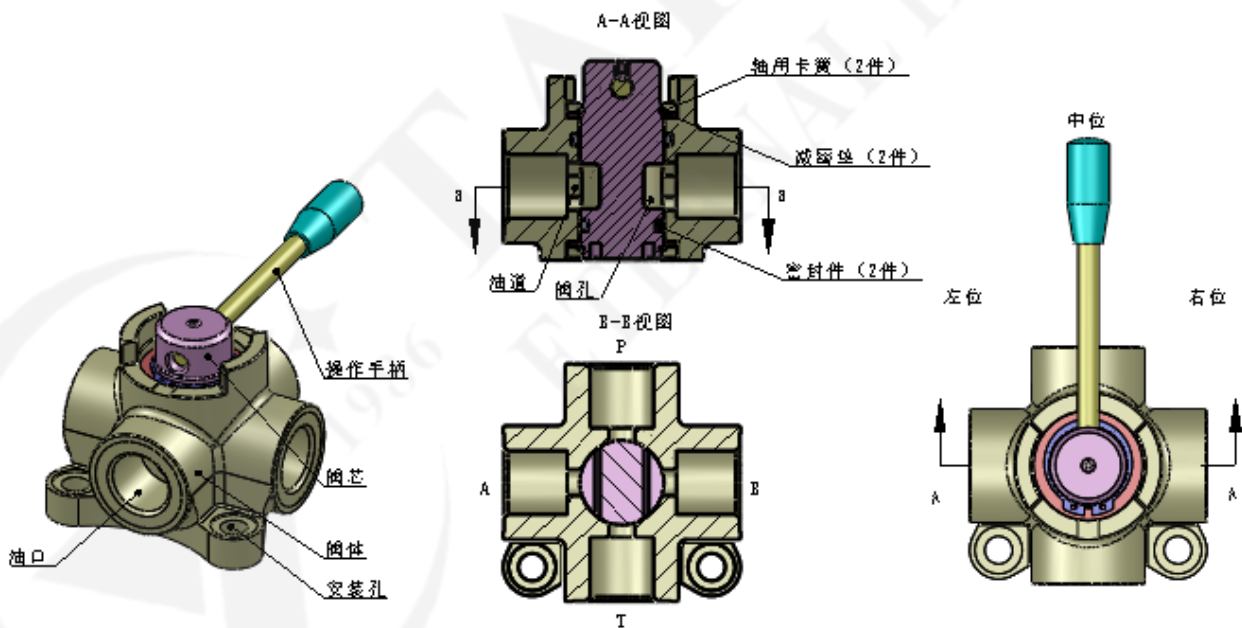


Rotary valve instruction manual

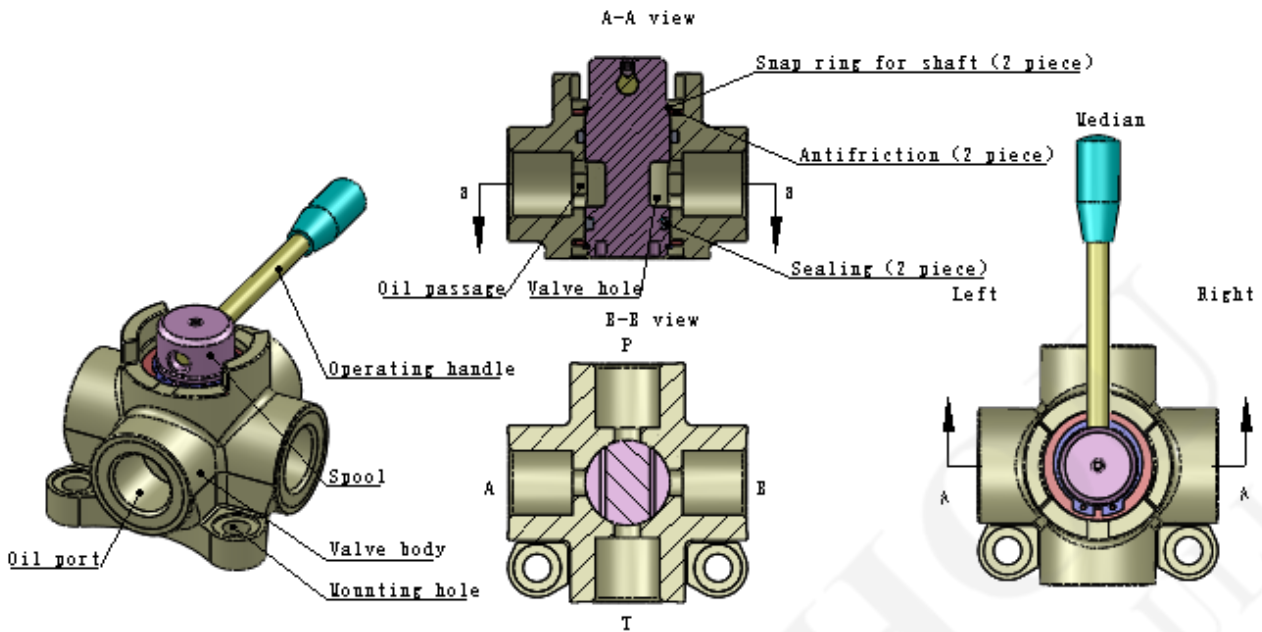
1. Introduction

SV series rotary valves include SV24 (two-position four-way), SV33 (three-position three-way), SV34 (three-position four-way), and SV28 (two-position eight-way), SV36 (three-position six-way), SV38 (three-position eight-way) and other related derivatives. The rotary valve controls the action of the actuator in the hydraulic system by connecting and cutting off the oil circuit to achieve the functions of expansion and contraction or forward and reverse rotation of the actuator as well as pressure retention and decompression of the system. It can replace the slide valve type reversing valve in many occasions. The main features of this product are high flow, high pressure, low leakage, manual control, simple operation and wide range of applications.

2. the main structure and the role of each part



SV34-G1-0转阀机能示例



SV34-G1-O Example of rotary valve function

As shown in the figure, the rotary valve mainly consists of the following parts: 1 valve body 2 spool 3 seal 4 operating handle 5 wear reducing pad 6 spring for shaft

The valve body is the main part of the rotary valve, consisting of valve hole, oil port, mounting hole, etc. The valve spool is installed in the valve hole of the valve body, and the valve body and spool are axially positioned through the wear reducing pads at both ends and the shaft with the spring, and the spool can be rotated in the valve hole by wrenching the operating handle, and the operating handle can be set in the left, middle, right or other positions to realize the passage and disconnection of different oil ports, so that the actuator can complete different functions. The valve body bore and spool are sealed by the gap to control the opening and closing of each port, and the seals at both ends of the spool play the role of preventing the oil from leaking out. The spool is made into different structures, so that the rotary valve can achieve the same function as the slide valve, such as O type, M type, Y type, K type and other functions.

For example, the SV34-G1-O rotary valve shown above has ports P, T, A, and B with connection size G1. When the operating handle is pushed to the left position, port P leads to port B and port A leads to port T. When the operating handle is pushed to the right position, port P leads to port A and port B leads to port T. When the operating handle is pushed to the middle position, ports P, T, A, and B are different.

3.the use and safety precautions

- 1、 The normal use of the rotary valve, according to the functional requirements of the selection of the rotary valve corresponding to the functional model, not allowed to exceed the maximum pressure value corresponding to each model.
- 2、 Ensure that the rotary valve is firmly installed and each oil port is properly and firmly connected.
- 3、 When working, push the operating handle smoothly to the use position.

4.maintenance and repair

The spool must not have dust and dirt around the two ends of the valve, and the user can add a protective cover if needed.

Strictly observe the safety precautions for use.

The working medium is strictly alcohol, water, glycerin, sesame oil, etc. as working medium.

The working fluid must be filtered and cleaned by 120-160 mesh oil filter.

Installation should be lightly held and placed, no collision phenomenon.

When not in use, the non-painted surface is coated with a layer of industrial petroleum jelly to prevent rusting.

Seals at both ends of the rotary valve are prone to wear and aging due to long-term use and should be checked and replaced regularly.

5. rotary valve failure and troubleshooting

(1). Oil leakage at both ends of the spool

Reason: Both ends of the seal wear aging

Solution: Replace the seals

(2). Large axial movement of the spool.

Reason: Both ends of the wear pad Moshun.

Solution: Replace the grinding pad.

(3). Spool rotation inflexible, stuck

Cause 1: Damage to the seal

Solution: Replace the seals

Reason 2: Foreign matter stuck in the valve hole and spool with surface

Solution: a, disassembly and cleaning, reassembly, such as surface strains serious need to replace parts; b, replace the oil, improve the oil cleanliness.