User manual for Solenoid-Operated Directional Control Valve

1. Hydraulic oil

- Type

Petroleum based hydraulic oil	The equivalent of ISO VG32 46 68
Synthetic hydraulic oil	Phosphate ester polyol ester
Flame retardant hydraulic oil	Water ethylene glycol

- Viscosity and temperature

Viscosity: 150 ~ 400cSt

Temperature: -15 ~ 70°C

- Cleanliness

In order to extend the service life of hydraulic components, the cleanliness of the oil should be kept within NAS 1638-12 level, and a pipeline oil filter with a filtration clarity of 25μm or more should be used.

2. Coil voltage

A110	AC110V 60Hz, AC100V 50Hz
A220	AC220V 60Hz, AC200V 50Hz
D12	DC12V
D24	DC24V

- DIN connector is compliant with ISO4400 international standard (Fluid power systems and components -Three-pin electrical plug connectors with earth contact -Characteristics and requirements)

- AC coil is workable for frequency 50-60Hz.

1. If there is no spark between the relay contacts, and it can be operated with a micro relay.
2. The impulse voltage value is about 10% of the usual value.
3. Short reset time after power failure
4. High reliability, long lifespan and low switching noise.

3. Safety Information

- Prohibit the use of power sources that exceed voltage standards for solenoid operated directional control valves.
- Check the voltage used for the electromagnet carefully.
- When using AC220V, please pay attention to safety.
- Connect a suitable grounding wire at the designated grounding terminal.
- Don't use the solenoid operated directional control valve beyond its maximum switching frequency state.
- It is prohibited to use solenoid operated directional control valves in flammable and explosive environments.

- It is not allowed to use objects to push the solenoid core in order to avoid getting stuck.
- It should be avoided to connect T port of the valve to the pipelines that may have impact force, and the end of the return pipe must be immersed in oil.
- The installation direction of solenoid operated directional control valve is not limited, but if without springs, it should be installed horizontally.

4. Maintenance

- Regular inspection: Visual inspection to check for oil leakage, abnormal noise etc. Check if there is any looseness in the valve body and connecting parts. Check if the power wiring is loose.
- Regular cleaning: After a period of use, dirt may accumulate inside and affect the sealing performance. According to usage, clean the outer and inner of valves regularly.
- Regular tightening: During the use of valves, the connection parts may become loose. Check and tighten them regularly.
- Check the oil condition: Regularly check the use of oil and replace contaminated ones in a timely manner.