SLP 2/2 WAY SOLENOID VALVE SERIES

A: Product Applications.

SLP 2/2 way series solenoid valves are commonly used actuators in automation control systems, which are widely used for automatic closing and opening of all kinds of fluids such as, water, hot water, gas, liquid, light oil, etc in pipework systems.

B: Operating Principles.

SLP 2/2 way series solenoid valves include normally closed type and normally open type.

For SLP 2/2 way series solenoid valves with orifice below Ø6mm, the operation is direct-acting type.

For SLP 2/2 way series solenoid valves with orifice above Ø10mm, the operation is pilot-operated type.

SLP direct-acting/normally closed/small orifice type valves close when de-energized. When the coil is energized, the armature will open against the spring force, the valve will then open and the media will flow. When the coil is de-energized, the armature will close under the force from the spring, the valve will then close and the flow of media will be stopped. SLP valves' operation is simple, and the action is reliable. Direct acting valves will operate with zero line pressure and even in very low vacuums. Please consult our technical department for advice on specific pressure/vacuum applications.

SLP pilot-operated/normally closed/large orifice type valves design is based on the combination of pilot valve and diaphragm operation. Normally closed type valves close when de-energized. When the coil is energized, the armature will open the pilot port, the differential pressure created allows the diaphragm to open and the media to flow. When the coil is de-energized, the armature will close under the force from the spring closing the pilot port and allowing the force from the main spring on the diaphragm to close the valve. The flow of the media will then be stopped.

SLP normally open type valves operating principle is the opposite to normally closed type.

ZS 2/2 WAY ZERO PRESSURE DIFFERENTIAL SOLENOID VALVE SERIES

A: Product Applications.

ZS 2/2 way series solenoid valves are commonly used actuators in automation control systems, which are widely used for automatic closing and opening of all kinds of fluids such as, water, hot water, gas, liquid, light oil, etc in pipework systems.

B: Operating Principles.

ZS 2/2 way series valves are Zero Pressure Differential/Direct acting series solenoid valves include normally closed type and normally open type.

For ZS 2/2 way series solenoid valves with orifice below Ø10mm, the operation is direct-acting type.

For ZS 2/2 way series solenoid valves with orifice above Ø15mm, the operation is sub-step direct-acting type.

ZS direct-acting/normally closed/small orifice type valves close when de-energized. When the coil is energized, the armature will open against the spring force, the valve will then open and the media will flow. When the coil is de-energized, the armature will close under the force from the spring, the valve will then close and the flow of media will be stopped. ZS valves' operation is simple, and the action is reliable. Direct acting valves will operate with zero line pressure and even in very low vacuums. Please consult our technical department for advice on specific pressure/vacuum applications.

ZS sub-step direct-acting/normally closed/large orifice type valves design is based on the combination of pilot valve and diaphragm operation. Normally closed type valves close when de-energized. When the coil is energized, the armature will open the pilot port, the differential pressure created allows the diaphragm to open and the media to flow. When the coil is de-energized, the armature will close under the force from the spring closing the pilot port and allowing the force from the main spring on the diaphragm to close the valve. The flow of the media will then be stopped.

ZS normally open type valves operating principle is the opposite to normally closed type.

THP 2/2 WAY STEAM, WATER, LIQUID, GAS, VALVE SERIES

A: Product Applications.

THP 2/2 way series solenoid valves are commonly used actuators in automation control systems, which are widely used for automatic closing and opening of all kinds of fluids such as, water, hot water, steam, gas, liquid, light oil, etc in pipework systems.

B：Operating Principles.

THP 2/2 way series solenoid valves include normally closed type and normally open type.

For THP 2/2 way series solenoid valves with orifice below Ø6mm, the operation is direct-acting type.

For THP 2/2 way series solenoid valves with orifice above Ø10mm, the operation is pilot-operated type.

THP direct-acting/normally closed/small orifice type valves close when de-energized. When the coil is energized, the armature will open against the spring force, the valve will then open and the media will flow. When the coil is de-energized, the armature will close under the force from the spring, the valve will then close and the flow of media will be stopped. THP valves' operation is simple, and the action is reliable. Direct acting valves will operate with zero line pressure and even in very low vacuums. Please consult our technical department for advice on specific pressure/vacuum applications.

THP pilot-operated/normally closed/large orifice type valves design is based on the combination of pilot valve and main piston operation. Normally closed type valves close when de-energized. When the coil is energized, the armature will open the pilot port, the differential pressure created allows the piston to open and the media to flow. When the coil is de-energized, the armature will close under the force from the spring closing the pilot port and allowing the force from the main spring on the piston to close the valve. The flow of the media will then be stopped.

THP normally open type valves operating principle is the opposite to normally closed type.

Seal Materials

Material / Medium / Suitability	NBR	EPDM	Silicon	Viton	PTFE
Highest Working Temperature	80°C	120°C	180°C	120°C	175°C
Lowest Working Temperature	-5°C	-20°C	-40°C	-20°C	-50°C
Steam	x	v	g	n	g
Oil	v	x	n	v	v
General Chemical Resistance	n	v	v	v	v
General Acid Resistance	n	v	n	v	v
General Alkality Resistance	g	v	n	v	v
Water	g	v	g	g	v

Key: v-very good g-good n-normal x-not suitable

Part Numbers

How to construct a part number

Valve Series	Port Size	Seal Material	Voltage	Orifice Size	Body Material	Control Style	Coil Type
SLP	06:1/8"	Blank:NBR	E1:AC110V	1L:1.0	Blank:Brass		Blank: DIN Connector
ZS	08:1/4"	V:VITON	E2:AC230V	1.5L:1.5	S1:SS316	Blank: Normal Close	F: Flying Leads
THP	10:3/8"	E:EPDM	E3:AC380V	2.5L:2.5	S2:SS304	H:Normal Open	
	15:1/2"	G:Silicon Rubber	E4:DC24V	3L:3.0			
	20:3/4"	T:Teflon	E5:DC12V	4L:4.0			
	25:1"		E6:AC36V	5L:5.0			
	35:1.1/4"		E7:AC24V	6L:6.0			
	40:1.1/2"		E8:DC110V	10L:10.0			
	50:2"		E9:DC48V	10.5L:10.5			
	F:Flange		E10:DC36V	13L:13			
				15L:15			
				20L:20 Cancel if same as port size			
				25L:25Cancel if same as port size			
				35L:35Cancel if same as port size			
				40L:40Cancel if same as port size			
				50L:50Cancel if same as port size			
				65L:65			
				80L:80			
				100L:100			