# **EXCPC**\*

# 2 Position 2 Way Solenoid Valves





# General Information About Solenoid Valve

Inner structure and categories of two way solenoid valves



#### Direct acting solenoid valves

Including normal close style (N.C.) and normal open style(N.O.). The N.C. style solenoid valve stay close at power off condition. When poweron, the coil yields electricity-magnetic force, which exceed the spring force and hence pulls active armature approaching to static armature, the valve becomes open; when power off, the electricity-magnetic force disappear and the active armature go back to its original place by the spring force, the valve close. The N.O. style is just opposite. These valve are normally simple structure, dependable action, fast response, high, frequency and with ≤6mm small orifice size(N.O. style ≤4mm).

### Diaphragm pilot solenoid valves

This style valve makes main valve and pilot valve together, when power on, the coil yields electricity-magnetic force pulls active armature approaching to static armature, the pilot valve open and control the main valve to open; when power off, the electricitymagnetic force disappear and with the gravity and spring force, the active armature close the pilot valve, which control the main valve to close. The N.O. style is just opposite. These valve are normally with bigger orifice size and ≤10Bar working pressure and with zero differential working pressure.

#### Piston pilot solenoid valves

Similar with piston pilot solenoid valves, but supports for higher pressure and temperature, with ≥1 Bar differential working pressure.

### Seal Features 👽

Material Medium Applicability	NBR	HNBR	EPDM	VMQ	FKM	PTFE	PU
Highest working temperature	80°C	120℃	120°C	180°C	120°C	200°C	80°C
Lowest working temperature	-5°C	-10℃	-20°C	-40°C	-20℃	-50°C	-20°C
Anti-burning	×	×	×	Δ	0	0	Δ
Steam	×	Δ	0	0	Δ	0	×
Oil	0	0	×	Δ	0	0	0
O <sub>3</sub>	Δ	0	0	0	0	0	0
Chemical	Δ	0	0	0	0	0	0
Acid	Δ	0	0	Δ	0	0	×
Alkality	0	0	0	Δ	0	0	×
Water	0	0	0	0	0	0	0
Wearing	0	0	0	×	0	0	0
Anti distortion	0	0	0	0	0	×	×
Tension	0	0	0	×	0	×	0

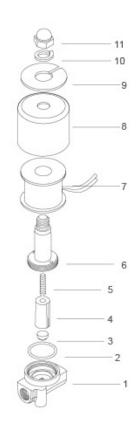
Description of the symbol: ♥ Very good ○ Good △ Normal level × Not OK



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# General Information About Solenoid Valve





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Valve body

O-ring

Seal pad

Pilot

Spring

Armature

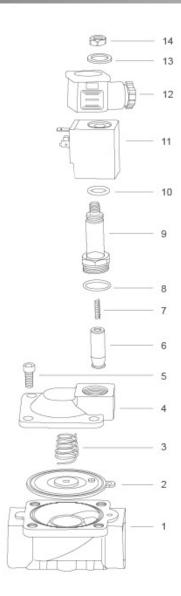
Coil

Steel washer

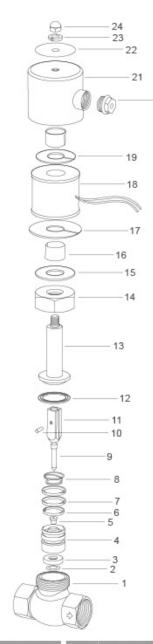
Washer

Spring washer

Nut







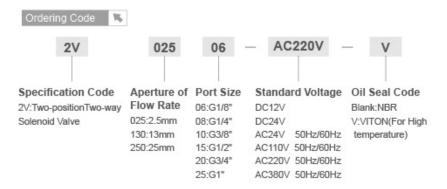
No	Designation
1	Valve body
2	Diaphragm
3	Diaphragm spring
4	Valve cover
5	Hexagon screw
6	Pilot units
7	Plunger Spring
8	O-ring
9	Plunger tube assembly
10	O-ring
11	Coil
12	Connector
13	Gasket
14	Lock Nut

Designation	No	Designation
Valve body	13	Static armature
Washer	14	Nut
Seal pad	15	Gasket
Valve core	16	Bushing
Seal	17	Steel plate
Gasket	18	Coil
Guide ring	19	Steel plate
Spring	20	Nut
Valve needle	21	Steel cover
Pin	22	Min plate
Armature	23	Spring washer
Seal ring	24	Nut
	Valve body Washer Seal pad Valve core Seal Gasket Guide ring Spring Valve needle Pin Armature	Valve body         13           Washer         14           Seal pad         15           Valve core         16           Seal         17           Gasket         18           Guide ring         19           Spring         20           Valve needle         21           Pin         22           Armature         23

# 2V Series 2/2 Solenoid Valve







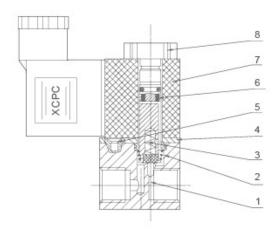
Graphic Symbol



Specification \*\*\*

Model	2V025-06	2V025-08	2V130-10	2V130-15	2V250-20	2V250-25
Working Medium			Air,Wa	ater,Oil		
Motion Pattern	Direct Drive Type			Guide	Туре	
Type			Normal C	lose Type		
Aperture of Flow Rate(mm)	2	.5	1	3	2	5
CV Value	0.	23	6	2	2	3
Port Size	G1/8"	G1/4"	G3/8"	G1/2"	G3/4"	G1"
Operation Fluid Viscosity			20 CST	(Below)		
Working-pressure	Air,Water,Oi	I 0~0.8MPa		Air,Water,Oil	0.05~0.7MPa	
Max. Pressure Resistance	12kgf/cm <sup>2</sup>		10.5kgf/cm <sup>2</sup>			
Operating Temperature Range			-10~-	-80℃		
Voltage Range		±10%				
Protect Class			IP	65		
Power Consumption			AC:7VA860	Hz PC:6W		
Insulation			FC	Class		
Material of Body	Aluminun	n or Brass		Bra	ass	
Material of Oil Seal	NBR or	VITON		NE	BR	
Shortest Excitation Time			0.05 S	econd		

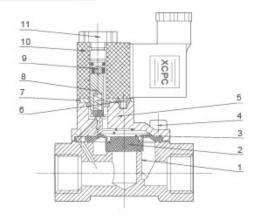
# Internal structure



No	Name	
1	Body Of Valve	
2	Spring	
3	Assembly Of Iron Core	
4	Assembly Of Iron Core	
5	Cruciform Slot Screw	
6	Platen	
7	Coil	
8	Nut	

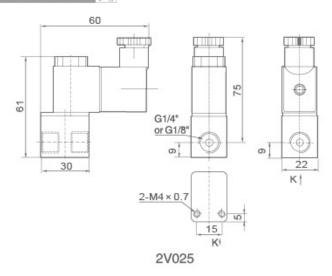
# 2V Series 2/2 Solenoid Valve

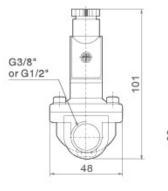
### Internal structure

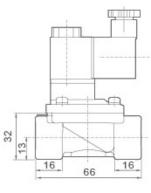


No		
1	Body Of Valve	
2	Diaphragm	
3	Spring	
4	Socket Hexagon Screws	
5	Cover board	
6	Cruciform Slot Screw	
7	Platen	
8	Assembly Of Iron Core	
9	Assembly Of Iron Core	
10	Coil	
11	Nut	

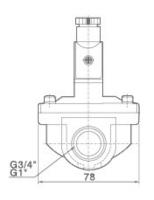
## Overall Dimensions /

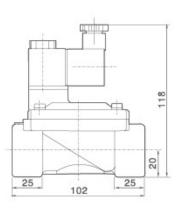






2V130





2V250



