EPVX2 High Pressure Proportional Valve Instruction



2.Production I	Details
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Please use the thread on the front of the main body to connect the F.G. terminal for grounding. Otherwise, the action may be abnormal due to noise interference.

Model	Code	EPVX2				
Min. supply	pressure	0.5MPa, or+0.2MPa above set pressure				
Max. supply	/ pressure	5MPa 0.01~3.0MPa				
Setting pres	ssure range					
Dowor	Voltage	DC24V±10%				
Power	Current	Static≤0.1A; max.≤0.3A				
land Circuit	Voltage type	DC 0 ~ 5V,DC 0 ~ 10V				
Input Signal	Current type	DC 4 ~ 20mA,DC 0 ~ 20mA				
Input	Voltage type	6.6kΩ or less				
Impedance	Current type	250Ω(at room temperature)				
	Analoge	DC1~5V(load impedance1k Ω or more)				
	output	DC4~20mA(load impedance250 Ω or less				
	Switching	NPN-OC output:30mA				
	output	PNP-OCoutput:30mA				
Line	arity	±1%FS or less				
Hysteresis	accuracy	1%FS or less				
Repeat	tability	±1%FS or less				
Temperature behaviour		±1%FS or less				
Pressure	accurary	±2%FS or less				
Ur	nit	MPa:bar:psi				
Working	medium	air. O2. N2. Ar				
Ambient and	l Fluid temp.	0 ~ 50°C				
Woi	aht	F00a				

Note: 1.When the fluid is oxygen, the max supply pressure should be less than 1Mpa. 2. This product is suitable for blowing, and when used for other application, it does not control pressure well.

4.Dimension









L type bracket





 ${\bf B}$ type flat bracket









5.Description of product Using



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 (Φ)

Soloct E01...E05

6.Wiring Method







S+

S-

power







7.Setting method



6. Set the pressure P-1 by using 🔽 🔺 key 7. Press S to save data 8. Set the pressure P-2 by using 🔽 🔺 key 9. Press S to save data

Note 1: F-1 is adjustable in a range from 0% to 90% of rated value.

Note 2: F-2 is adjustable in a range from 10% to 100% of the rated value.

Note 3: (F-2) - (F-1) ≥ 10 % F.S.

Note 4:P-1 < P-2, Window comparator mode.

Note 5:P-1 ≥P-2, Hysteresis mode.

Note 6:P-1 = P-2 = 0,Out of range mode



Setting of preset pressure



	1. Unlock keys and press S key	2. Set the minimum pressure P-1 b y using 💌 🔺				
	3. Press S key to save data	4. Set the maximum pressure P-2 by using 💌 🔺				
	5. Press S key to save data	6. Set the maximum pressure P-3 b y using 💌 🔺				
	7. Press S key to save data	8. Set the maximum pressure P-4 b y using 💌 🔺				
9. Press S key to save data/return to pressure display						



After the power on , unlock and press 5 button 2s to enter Function Setting, press V Or A Select F01~F05								~F05			
Press F01 Unit setting											
Select F01, Press	Select F01, Press button, Enter unit settinng										
Press : TA! Char	nge un	iits, c ho	ose bai	r、 MPa、	psi, After selectin	g, press	🗊 butto	on to S	ave and	return FC)1
F02 Input signal adjustment settings											
Select F02, Press S button, Enter the input signal adjustment settings											
Press: TA: Select adjustment mode, M-1 is zero point adjustment, M-2 is stroke adjustment.											
M-1 is used to adjust the input signal deviation, and M-2 mode is used to adjust input stroke.											
F03 Error setting	F03 Error setting Select F03, Press 🛐 button, Enter error settings										
Press : Change the value, choose SL0~9, 10 parameters . After selecting press button Save and return F03								03			
SL Value	0	1	2	3	4 (default value)	5	6	7	8	9	
Error Valve Kpa	0	±2.5	±5	±7.5	±10	±12.5	±15	±20	±40	±100	
Normally, there is no need to adjust the error parameters. Adjustment is only required when the output pressure fluctuates violently.								lently.			
F04 Zero Clear se	etting										
Select F04, Press S button, Enter the zero setting, the interface displays OCL											
Press : Tal: button together, Until the display shows that CLR is completed, the machine automatically returns to the working							working				
interface. The zeroing range is ±5% F.S. The zeroing function uses the initial pressure value correction in different atmospheric pressure areas.											
F05 Initialize settings											
Select F05, Press S button, to Initialize setting and INI will be displayed.											
Press:	Press: Dial button together, Until DON is displayed, the machine automatically returns to the working interface							terface			

8.Product Notes

Operating Environment

∧Warning

1. Do not use the product in an environment with corrosive gases, chemicals, seawater or in a place where the above substances are attached

▲ Notice

1. In a location where water, steam, dust, etc. are applied to the main unit, water or dust may enter the main unit from the EXH port or the solenoid valve EXH port, causing a malfunction. 2. Do not use in locations subject to vibration or impact. Please use a protective cover to block sunlight exposure. 4. If there is a heat source nearby, please shield the radiant heat 5. Please take appropriate protective measures in places where water droplets, oil, welding slag, etc. may adhere.

Using a fluid supply ∆Warning

1. The fluid used is compressed air, nitrogen, oxygen, and argon. 2. When the compressed air contains synthetic oil (containing chemicals, organic solvents), salt, corrosive gases and other components, it may cause malfunction, so please be sure to avoid it. 3. When the fluid is oxygen, there are significant risks that are difficult to consider under normal circumstances. However, it is possible to manage and control the risks of failure disasters and economic losses.

Therefore, please receive support from experts with safety qualifications and have personnel with sufficient knowledge and experience perform the operation

4. Oxygen is a gas that supports combustion. Frictional heat, static discharge, etc. may cause fire and burn the metal box sealing material. Therefore, please install a suitable filter to prevent the intrusion of metal chips and dust.

5. For situations where accidents may occur, please consider fire and explosion, design a circuit to terminate the oxygen supply, and implement safety measures

6. This product has 3 exhaust ports. Please arrange the pipes appropriately according to the specific conditions of the oxygen exhaust location

▲ Notice

1. Please install an air filter on the supply side close to this product. The filter accuracy should be less than 5 µm

2. Compressed air containing a large amount of condensed water may cause malfunction of this product or other pneumatic components. Please install an aftercooler, air dryer, condensed water collector, etc. as a countermeasure.

3. If there is a lot of carbon powder generated by the air compressor, it will adhere to the inside of this product and cause malfunction.

Precautions for use

▲ Notice

1. If the supply side of this product is connected to a lubricator, it may cause malfunction, so do not use it. 2. When this product is in control mode, if the power is cut off due to a power outage, the pressure during control will continue to flow out, so please be careful when using it. 3. If the supply pressure of this product is cut off while it is powered on, the built-in solenoid valve will continue to operate and make a popping sound. This will have a significant impact on the life of the solenoid valve, so when switching the supply pressure, the power supply of this product must be cut off.

4. Please do not block the three exhaust ports of this product 5. This product does not have a shutoff valve function. When supplying pressure without power, the output pressure may rise to a level equivalent to the supply pressure after being left for a period of time. In addition, due to the structure of this product, a small amount of air will be consumed at the exhaust port when the pressure is output. Therefore, please cut off the supply pressure when you stop using it. 6. The product has been adjusted according to the specifications when it leaves the factory. Please avoid any

purposeless disassembly or removal of parts, which may cause malfunctions. 7. The optional cable plug is a 4-core wire. If the monitor output (analog output, switch output) is not used, it may

cause malfunction, so do not let the monitor output line (black) come into contact with other lines.8. The right-angle cable can be led out in only one direction, so be careful not to rotate it.

9.To avoid malfunctions caused by point noise, take the following measures.

1) Add a line filter to the AC power line to remove power supply noise.

2) Strong electric fields such as motors and power linesshould b e separated from this product and its wiring asmuch as possible, and the product should be set up so that it is not affected by external interference such as electrical noise or static electricity. 3) For inductive loads (solenoid valves, relavs, etc.),

counter measures against load over voltage must be taken.