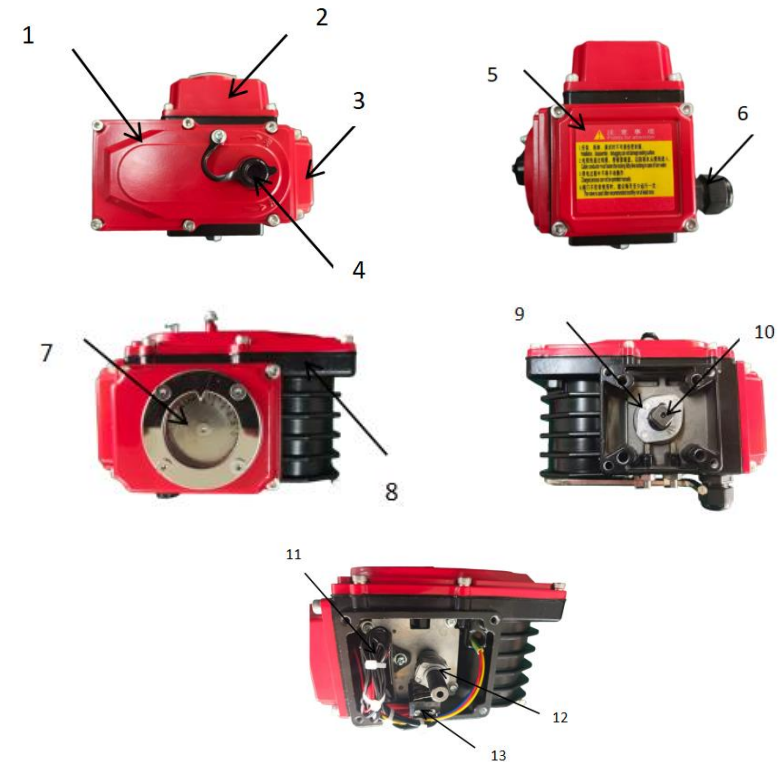


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The name of every parts	1
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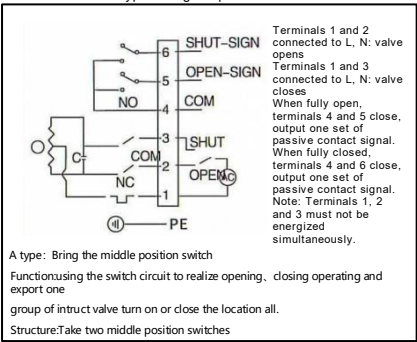
The name of every parts



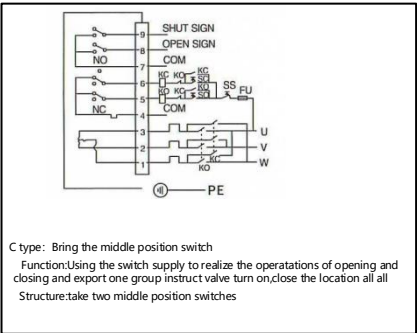
1	Top cover	7	Needle	13	sensitive switch
2	Needle cover	8	Case	14	
3	Side cover	9	Limit block	15	
4	Manual handle hole	10	Output shaft	16	
5	Nameplate	11	Capacitor	17	
6	Cable entry	12	Travel block	18	

Wiring map

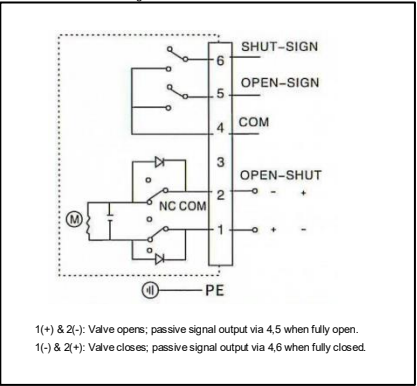
(1)Type A passive contact type (S) wiring diagram (AC220V)
Passive contact type wiring map



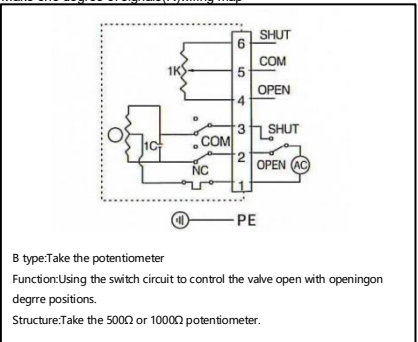
(3)AC380V passive contact type (S)wiring map



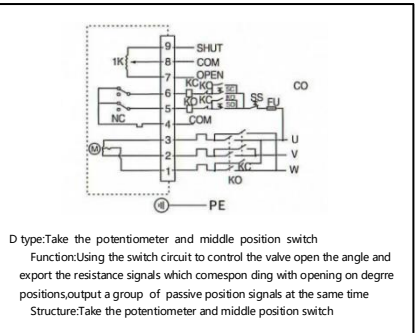
(5) Type E DC Circuit Diagram (DC24V/DC220V)
Direct circuit diagram



(2)Type B Opening Signal (R) Wiring Diagram (AC220V)
Make one degree of signals(R)wiring map



(4)AC380V turns on one degree of signal types(R)wiring map



plication selecting type of the electrical machine institution

1.General valve

Type	Rated Output Torque N·m	Related valve		
		Soft-seated ball valve PN1.6 MPa	Concentric resilient-seated butterfly valve PN1.0 MPa	Ventilation butterfly valve, PN < 0.1 MPa
05	50	DN15-32	DN50-80	DN50-125
10	100	DN40-50	DN100	DN150-200
16	160	DN50-65	DN125-150	DN250-300
25	250	DN65-80	DN150-200	DN300-450
40	400	DN80	DN200	DN450-500
60	600	DN100	DN250-300	DN500-600
100	1000	DN125-150	DN300-400	DN700-900
200	2000	DN150-200	DN400-500	DN900-1200

Note:the above is disposed and is only for reference,it is subject to that the valve manufacturer offers the data to be concrete

2. Other types valve

Because of valve being various in style,the asme kind of type the same kind of valve because differentproducer production technology,quality level,structural form of specification, valve body material, etc. different their torsion index have noting in common with each other,while using actually,often because such factors as the pressure fluctuates,medium type,on-the-spot environment,performance characteristics cause the valve to open the torsion to change greatly.So,in order to guarantee it is reliable that theelectronic executive body works steadily,must leave me abundantly on the selecting type abundantly.To serial electronic executive bodies,our company demands to keep coefficient and is at least 1.3 times at the time of the selecting type.

Electric Actuator Rated Output Torque (Nm)
: ≥ 1.3
Valve Pressurized (PN) Test Torque (Nm)

3. The selecting type example

There is a D73-25P DN65 metal hard sealed butterfly's valve,25kgf/cm².The torsion tested under the pressure is 93Nm. ask which kind of electronic executive body of specification is mixed?

Solve:According to keep coefficient 1.3 consideration,whom the valve need open torsion:93Nm×1.3=120.9Nm According to the serial parameter forms of properties of product,check so that is 100Nm,200Nm respectively that 10,20 type amount export the torsion,though 10 type amount outputs the test torsion that the torsion is greater than thisvalve,because has not considered keeping coefficient,so can't select for use,should be elected using 20 typely.

Instructions for use

1、 The requirement of installation environment

- This product can be installed indoors,can also install outdoors.
- This product belongs to the non-anti-blast products,please pay attention to avoiding the flammable,explosive environment
- In ther environment where have the rainwater、 faw materials such splash thing and that shoot directly of sunshine for a long time need to install the protective equipment for protecting whole Electric execute institution.
- Please reserve wiring,manual operation,etc,and maintain and use the space.
- Peripheral ambient temperature-30is-in+60°C range.

2、 Requirement for the medium temperature

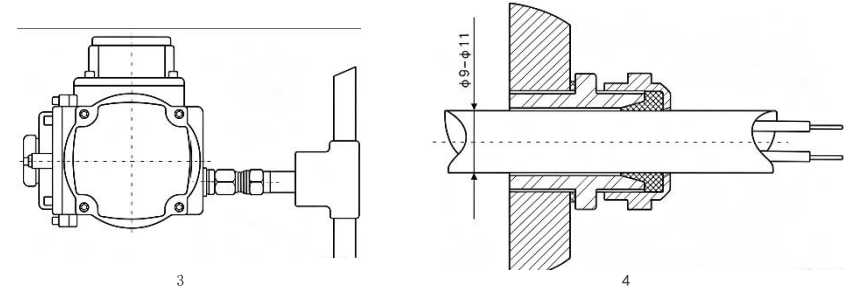
- While using with the valve together,the job medium emperature is passed to the executive body,the temperature of executive body will rise
- When the job medium is at a high temperature,the support connected with valve plays a eole in reducing the heat-conduction
- Please select the standard support for use when the job medium temperature is under 60°C.
- More than 60°C of job medium temperature please select the high-temperature support for use.

3、 The requirement of the electric wire tube、 cabie installon-the-spot.

When being in charge of electric wire,please install according to the picture(3).

- ① A cable that the electric wire external diameter is $\phi 9$ - $\phi 11$.
- ② Fully adopt the waterproof countemeasure
- ③ The executive body should be higher than the electric wire to manage,the drops of water are unlikely to flow into to hold the organization in order to guarantee its security in making the electric wire in charge of.

Instructions for use



Acable theat the electric wire s external diameter is $\phi 9$ - $\phi 11$

Forbid use with line lock diameter incompatible without exception,otherwise water can lock and enter

executive body to damage all internal parts from line

Signal line should use the shielding line in principle.should separate from line of motive force.

4、 Requirement for the power

Use the type of the power to offer the corresponding power supply live according to the ordered model.

The on-site power supply and voltage shall meet the following requirements:

AC200V $\pm 10\%$ 50/60Hz

AC110V $\pm 10\%$ 50/60Hz

AC380V $\pm 10\%$ 50/60Hz

24V $\pm 5\%$

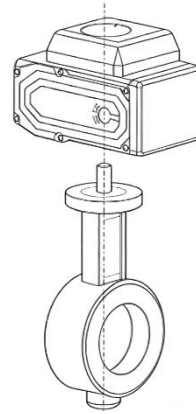
5、 Selection of fuses for disconnect switches:

Model	voltage Ampere	AC220V	AC110V	AC380V	DC24V
05		2A	3A	1A	5A
16		3A	5A	2A	7A
25、 40、 60		5A	7A	3A	15A
100、 200		7A	10A	5A	20A

Installation of electronic executive body and body of valve

Installation of Electric Actuator and Valve Body (Figure 5)

1. Rotate the valve manually, and make sure have unusual situation to check and make the valve in a completely closing position.
 2. Fix the support on valve
 3. Suit at the valve core axle one end of shaft coupling.
 4. Urge electronic executive body to close position (indicator mean with handle shut zero turn on one degree of scale marks) all, insert the output shaft the shaft coupling all sides in the hole.
 5. Connection bolt among firm support and electronic executive body and body of valve
 6. Rotate the executive body with the handle, partial, does not have And crooked that confirm operating steadily, not having, check valve turn on degree count, instruct the range will you please realize, close and turn on all all in executive body
- Attention: It exerts oneself to be can't too quickly, otherwise, it will lead to the fact executive body exceed Cheng run and cause the damage.

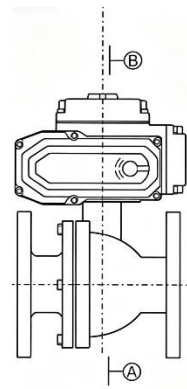


(5 Fig) electronic valve install sketch

Special suggestion

For the users who providing the support, shaft coupling by oneself, please note:

- Support, shaft coupling should be designed by the professional mechanical technical staff to process the requirement of marking that should also accord with (Fig. 6)
- The processing of the both ends shaft hole of the shaft coupling should guarantee the essential precision, dispel the interval of transmission as much as possible, in case that the difference that the appearance goes back in the valve work
- Should guarantee position degree of the both ends shaft hole of the shaft coupling strictly; otherwise probably beyond the scope of job which the executive body designs, lead to the fact that makes the valve unable to work normally because the journey of executive body is unable to adjust.



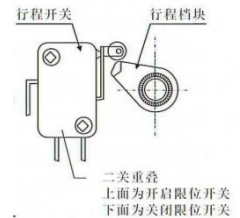
(6)

Adjustment of the light angle

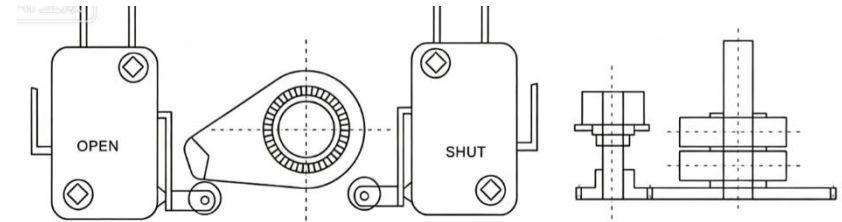
Adjustment of the light angle

1、 Adjustment of the limited location of electric

Unclamp the screw that the journey blocked one, rap the journey and block One with the screwdriver, i.e., the adjustable journey blocks the angle of one, thus change the holding and closing the angle of the location of electric limit. Finally, fasten the screw that the good journey blocked one conscientiously. Layout Drawing of Travel Stops and Limit Switches for 05 and 16.



25/40/60/100/200 of the travel block lumps and travel switch overall arrangement picture

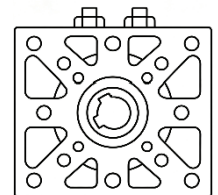


2、 Adjustment (turn on one degree of types, intelligent) of the potentiometer

- a、 The resistance value of the potentiometer is 1K Ω 、 5K Ω
 - b、 Rotate the valve and reach to close the position completely with the handle.
 - c、 Unclamp the potentiometer, rotate the gear wheel of the potentiometer, measure the resistance value among 4-5 wiring sons of end with the universal meter, enable the resistance value of 4-5 under 5 Ω , fasten the potentiometer fixed screw. (if please measure the resistance value to RV and RS two jack when being that intelligent line seven connects the plug-in package connection.
- Note: At the time of manual operation can't go beyond and is open excessively completely, the terminal position that is closed completely, the corner is too big, will cause its part's damage.

3、 Adjustment of the mechanism spacing

- a、 Rotate to completely opening position with the handle.
- b、 Unclamp the locknut, rotate and adjust the screw, enable it and machinery block one and keep in touch, then, rotate semi circle of screw, the locknut in the opposite direction
- c、 The same method, can close the adjustment of blocking one of machinery of the position completely.



Commissioning Instructions for Model 100 - 200

一、 Adjustment of Travel Limit (Figure 12, Figure 13)

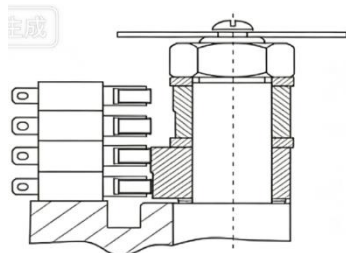
Turn the handwheel to move the actuator to the fully closed position of the valve. Then use a spanner to loosen the lock nut of the limit cam. Rotate the limit cam and adjust it to the position where it just depresses the close limit switch (CLS), then tighten the lock nut of the limit cam. This sets the travel limit position of the actuator at full closure. The fully open position shall be set in the same manner.

二、 Adjustment of Mechanical Limit

Loosen the lock nut of the mechanical limit screw. Manually move the actuator to the fully closed position, then rotate the limit nut. Stop rotating once it contacts the sector gear. Back it out by two turns, and finally tighten the lock nut. This sets the mechanical limit position of the actuator at full closure. The fully open position can be set in the same way, as shown in Figure 14.

三、 . Adjustment of Potentiometer (Figure 15)

The potentiometer serves for feedback signal output inside the actuator and has three output terminals. Terminal ② connects to the wiper of the potentiometer. Terminal ① connects to the end where the resistance between itself and the wiper continuously decreases when the actuator opens. Terminal ③ connects to the end where the resistance between itself and the wiper continuously decreases when the actuator closes. (Note: The potentiometer shall not have zero resistance or sudden resistance jump.) Turn the valve to the fully open position using the handwheel, confirmed by actuation of the limit switch. Measure with a multimeter and adjust the resistance between terminal ② and terminal ① to 35Ω–60Ω. If



12

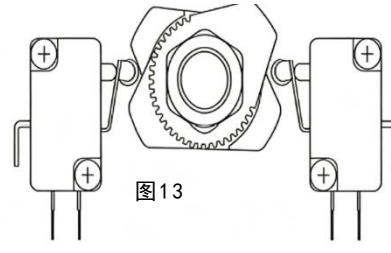


图 13

13

Note: This mainly specifies that adjusting the cam up, down, left and right reverses the opening/closing angle of the valve.

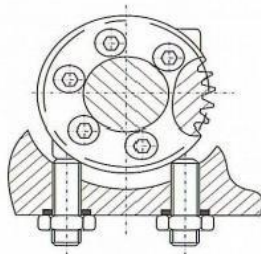
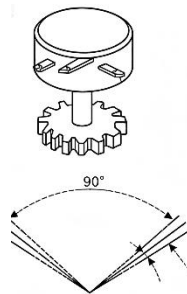


图 14



15

Use and safeguard

1. Maintenance

① Because of using advance molybdenum base lubricating grease which having long performance life and have good resist presure,so does not need to hand over item by item and refuel.

② When the movements of the valve are very rare,please drive the executive body regularly,to check it whehter have the unusual or not.

2.Trouble and countermeasure

Trouble phenomenon	Reason	Countermeasure
The electrical machinery is not started	Have not connected the power	Connect to the power
	Break,connect is independent from terminal	Repair the break line,the correct connection fastens the terminals
	The power is queer in voltage or the voltage is loo low	Check the voltage whether is normal
	Overheated protecting device operation (whether ambient temperature is too high whether the valve is seized)	Lower ambient temperature,check the opening and closing of valve is normal by manual means
	The movements of the terminal switch are bad	Change the switch
	it is bad to start the electric capacity of sport	Contact manufacturer to change the electric capacity
Indicator light does not light up	The bulb is out of order	Change the bulb
	Terminal switch movements are bad	Change the switch
	The bad adjustment of the block	Change again
At the operating limit position, the motor fails to stop rotating.	Terminal switch movements are bad	Change the switch
	DC24V,AC380V main power source phase list connect inside out	Adjust the phase list
	The wiring wrong of limit switch connect to the control circuit	Adjust the wiring