

电动执行机构与阀体的安装 Installation of electronic executive body and body of valve

电动执行机构与阀体的安装(图5)

1.手动转动阀门，检查无异常情况，并使阀门处于全闭位置。
Rotate the valve manually, and make sure have unusual situation to check and make the valve in a completely closing position.

2.将支架固定在阀门上。
Fix the support on valve

3.将联轴器的一端套在阀门芯轴上
Suit at the valve core axle one end of shaft coupling.

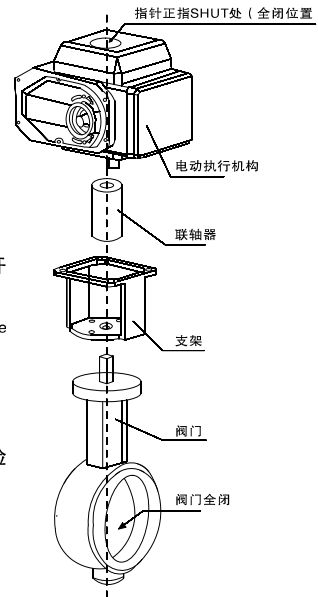
4.用手柄驱动电动执行机构至全闭位置（指针正指shut处零开度刻度线处），将输出轴插入联轴器四方孔内。
Urge electronic executive body to close position (indicator mean with handle shut zero turn on one degree of scale marks)all,insert the output shaft the shaft coupling all sides in the hole.

5.坚固支架与电动执行机构和阀体间的连接螺栓。
Connection bolt among firm support and electronic executive body and body of valve

6.用手柄转动执行机构，确认运行平稳、无偏心、无歪斜，检查阀门在执行机构开度计指示范围能否实现全闭和全开
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.

注意：用力不可过猛，否则会导致执行机构超程运行而造成损坏。

Attention:It exerts oneself to be can't too quickly,otherwise,it will lead to the fact executive body exceed body Cheng run and cause the damage.



(图5) 电动阀门安装示意图
(5Fig.) electronic valve install sketch map

特别提示 Special suggestion

对于自备支架、联轴器的用户，请注意：

For the users who providing the support,shaft coupling by oneself,please note:
● 支架、联轴器应由专业机械技术人员设计加工并应符合 (图6)的标注要求。

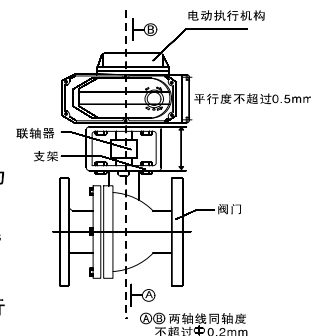
Support,shaft coupling should be designed by the professional mechanical technical staff to process the requirement of marking that should also accord With(Fig.6).

● 联轴器两端轴孔的加工应保证必要的精度，尽可能消除传动间隙，以免阀门工作中出现回差

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.

● 应严格保证联轴器两端轴孔的位置度，否则有可能超出执行机构设计的工作范围，导致因执行机构行程无法调整而使阀门不能正常工作。

Should guarantee position degree of the both ends shaft hole of the shaft coupling strictly,otherwiseprobably 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.



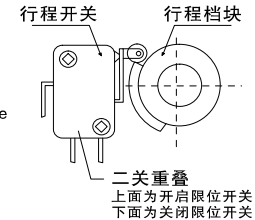
(图6)

开关角度的调整 Adjustment of the light angle

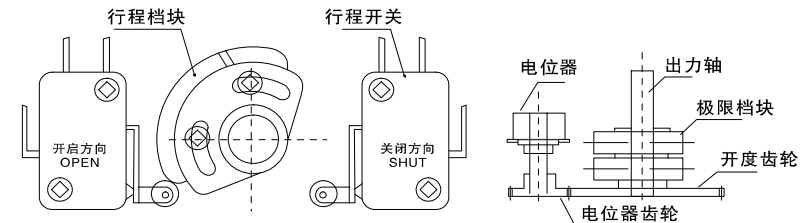
1.电气限位的调整

Adjustment of the limited location of electric

松开行程挡块的螺钉，用螺丝刀轻敲行程挡块，即可调整行程挡块的角度，从而改变电气限位的开闭角度。最后，切实紧固好行程挡块的螺钉。5、10的行程挡块和行程开关布局图。
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.



20/40/50/60/100/200的行程挡块和行程开关布局图
20/40/50/60/100/200 of the travel block lumps and travel switch overall arrangement picture



2.电位器的调整（开度型、智能型）

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

a.电位器的电阻值为1KΩ、5KΩ。

The resistance value of the potentiometer is 1KΩ、5KΩ

b.用手柄转动阀门到全闭位置。

Rotate the valve and reach to close the position completely with the handle.

c.松开电位器，转动电位器齿轮，用万能表测量4-5接线端子间的电阻值，使4-5间的电阻值到5Ω以下，紧固电位器固定螺钉。（如果是智能型的七线接插件连接时请测量对RV和RS两插孔的电阻值）

Unclamp the potentiometer,rotate the gear wheel of thepotentiometer,measure the resistance value among4-5wiring sons of end with the universal meter, enable the resistance value of 4-5 under 5Ω ,fasten the potentiometer fixed screw. (if please measure the resistance value to RVand RS two jack when being that intelligent Line seven connects the plug-in package connection)

注：手动操作时，不能过分超出全开，全关的极限位置，转角过大，会导致其部件的损坏。
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.机械限位的调整

Adjustment of the mechanism spacing

a.用手柄转动到全开位置

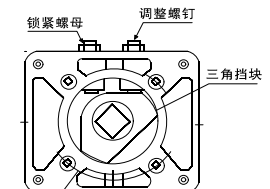
Rotate to completely opening position with the handle

b.松开锁紧螺母，旋转调整螺钉，使之与机械挡块接触，然后，反方向旋转螺钉半圈，锁紧螺母。

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.同样方法，可进行全闭位置的机械挡块的调整。

The same method,can close the adjustment of blocking one of machinery of the position completely.



调节型 (P型) 整机性能指标

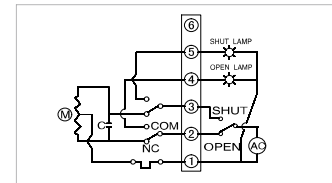
Regulating type(E type)complete machine performance index

性能 type Performance	05P	10P	20P	40P
输出力矩 Export torque	50N·M	100N·M	200N·M	400N·M
90° 动作时间 90° motion time	20S	30S/60S	30S/60S	30S/60S
回转角度范围 Turn around angle scope	0 ~ 90°	0 ~ 90°	0 ~ 90°	0 ~ 90°
电机功率 Machine power	15W	25W	45W	60W
整机重量 Machine weight	2kg	3kg	8kg	8.5kg
电源 Power source	AC220V、AC110V、AC380V、AC24V、DC24V			
输入信号 Monconducting resistance	4 ~ 20mADC、1~ 5VDC、0~10V			
输出信号 Output signal	4 ~ 20mADC、0~10V			
基本误差 Basically erro	不超过 ± 0.5% no exceed ± 0.5%			
回差 Lack of	小于0.3%			
死区 Dying area	0.1% ~ 1.6%可调 0.1% ~ 1.6% tunable			
阻尼特性 Damping feature	0次			
机构重复性误差 Organization' s repeated error	0%			

性能 type Performance	60P	100P	200P
输出力矩 Export torque	600N·M	1000N·M	2000N·M
90° 动作时间 90° motion time	45 S	50S	100S
回转角度范围 Turn around angle scope	0 ~ 90°	0 ~ 90°	0 ~ 90°
电机功率 Machine power	90W	120W	120W
整机重量 Machine weight	9.0kg	17kg	18kg
电源 Power source	AC220V、AC110V、AC380V、AC24V、DC24V		
输入信号 Monconducting resistance	4 ~ 20mADC、1~ 5VDC、0~10V		
输出信号 Output signal	4 ~ 20mADC、0~10V		
基本误差 Basically erro	不超过 ± 0.5% no exceed ± 0.5%		
回差 Lack of	小于0.3%		
死区 Dying area	0.1% ~ 1.6%可调 0.1% ~ 1.6% tunable		
阻尼特性 Damping feature	0次		
机构重复性误差 Organization' s repeated error	0%		

接线图

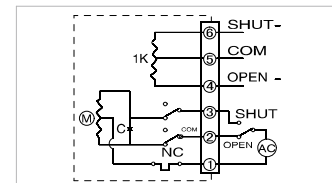
Wiring diagram



1 开关型
Switch type

ZY-开关型 (标准型) 线路图
ZY-switch type (standard) circuit diagram
电源: AC220V、AC110V、AC24V

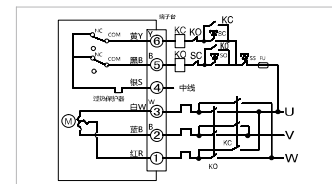
极限位置开关 (标准型) 功能全开、全闭极限位置开关操作。
Limit location switch (standard) function: Fully open, fully close



3 开度R型
shutter meter R type

ZY-开度信号型 (R) 线路图
ZY-shutter meter signal(R) circuitry chart
电源: AC220V、AC110V、AC24V

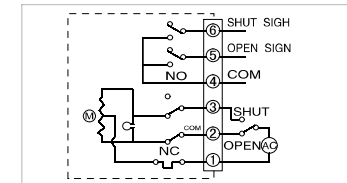
带电位器一功能: 通过开关电路控制阀门开度与电位器阻值对应。结构一: 500Ω或1000Ω电位器。
With potentiometer-function: via the switch circuit to control the open angle of the valve to match the resistance range of the potentiometer. Structure--with 500Ω or 1000Ω potentiometer



5 三相交流开关型
Three phase AC switch type

AC380V标准线路图
AC380V standard circuitry chart
电源: AC380V

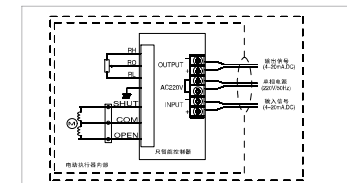
极限位置开关 (标准型) 功能全开、全闭极限位置开关操作。
Limit location on-off (standard) standard-sized sheet, shut completely limit location on-off handle



2 无源触点S型
Passive contact type

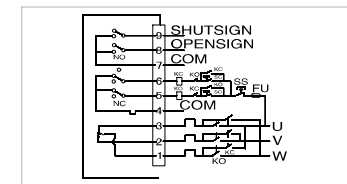
ZY-无源触点型 (S) 线路图
ZY-passive contact (S) circuitry chart
电源: AC220V、AC110V、AC24V

带中间位置开关功能, 通过开关电路实现中间位置限制或接受无源程序开关实现阀门开和关。结构一: 带有两个中间位置开关。
With the on-off function in the middle location, through the on-off circuit to restrict the middle location or accept the passive program switch to realize the open and close of the valve. Structure--with two middle switches.



4 整体调节型
integration regulating type

智能调节型接线示意图
Connection wiring diagram of intelligent regulating type electric actuator
电源: AC220V
带控制模块 (智能型或电子式) 功能: 调节作用, 输入4~200mA或1~5VDC, 输出4~20mA, 带控制模块和1KΩ (或是5KΩ) 电位器。
With control mould (intelligent or electronic) Function: regulating, input 4~200mA or 1~5VDC, output 4~20mA, with control mould and 1KΩ or 5KΩ potentiometer.



6 三相交流无源触点型
Three phase AC passive connect type

AC380V无源触点型 (S) 线路图
AC380V passive contact (S) circuitry chart
电源: AC380V

特征: 通过外部电路控制, 实现控制电路换相, 使阀门电动执行器开、关、同时输出一组无源触点信号。
Feature: Through controlling the exterior circuit to realize the circuit commutation and make the electric actuator open and close, meanwhile, export a group passive contact signal

使用要求

Instructions for use

1. 安装环境要求

The requirement of installation environment

- 本产品既可在室内安装，也可在室外安装。
This product can be installed indoors, can also install outdoors.
- 本产品属非防爆产品，请注意避免易燃、易爆环境。
This product belongs to the non-anti-blast products, please pay attention to avoiding the flammable, explosive environment
- 在长期有雨水、原料等飞溅物和阳光直射的环境，需要安装保护整台电动执行机构的防护装备。
In the environment where have the rainwater, raw 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.
- 请预留接线、手动操作等维修用空间。
Please reserve wiring, manual operation, etc. and maintain and use the space.
- 周边环境温度-30℃~+60℃范围内
Peripheral ambient temperature -30 is-in +60℃ range.

2. 工作介质温度的要求

Requirement for the job medium temperature

- 与阀门配套使用时，工作介质温度传到执行机构上面，执行机构温度会升高。
While using with the valve together, the job medium temperature is passed to the executive body, the temperature of executive body will rise
- 工作介质是高温时，与阀门连接的支架起减少热传导的作用。
When the job medium is at a high temperature, the support connected with valve plays a role in reducing the heat-conduction.
- 工作介质温度60℃以下时请选用标准支架。
Please select the standard support for use when the job medium temperature is under 60℃.
- 工作介质温度60℃以上时请选用高温支架。
More than 60℃ of job medium temperature please select the high-temperature support for use.

3. 现场电线管、电缆线安装要求

The requirement of the electric wire tube, cable install on-the-spot

用电线管时，请按图(3)安装

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

- ① 电线管外径是Φ9-Φ11的电缆。
A cable that the electric wire's external diameter is Φ9-Φ11.
- ② 要充分采取防水对策。
Fully adopt the waterproof countermeasure
- ③ 执行机构应高于电线管，使电线管内水珠不至流进机构以确保其安全。
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 change of.

使用要求

Instructions for use

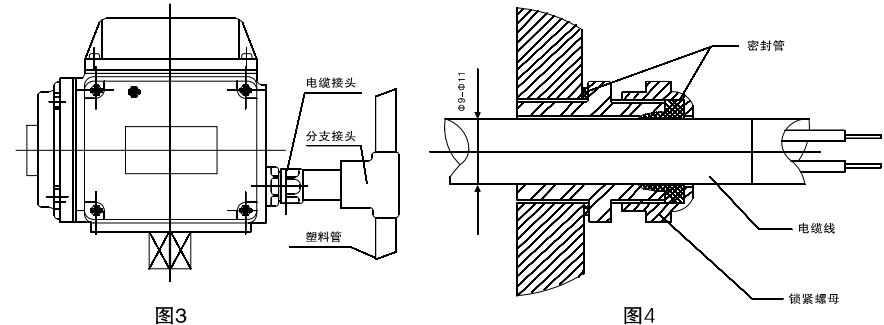


图3

图4

用电缆时，其外径是Φ9-Φ11的电缆

A cable that the electric wire's external diameter is Φ9-Φ11.

如图(4)一律不准使用与线锁直径不相适应的电缆，否则水可以从线锁进入执行机构内损坏所有内部零件。

Forbid use with line lock diameter incompatible cable without exception, otherwise water can lock and enter executive body to damage all internal parts from line

信号线原则上要使用屏蔽线，应当与动力线分开配线。

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

4. 电源的要求

Requirement for the power

根据所订购机型使用电源的类型提供相应的现场供电。

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

对于现场的供电电源、电压应符合以下要求：

AC200V ± 10% 50/60HZ

AC110V ± 10% 50/60HZ

AC380V ± 10% 50/60HZ

24V ± 5%

5. 断路器保险丝的选用：

Exertion of the switch fuse of the broken circuit

安培	AC220V	AC110V	AC380V	DC24V
05	2A	3A	1A	5A
10	3A	5A	2A	7A
20、40、60	5A	7A	3A	15A
100、200	7A	10A	5A	20A