# Taizhou Tonhe Flow Control Co., Ltd

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# **A150 Series**

A150 torque 15NM, with manual override,

Actuator model: turn on off type, proportional type, timer control type (optional)

Valve body model:

1.DN15-50	2.DN15-32	3.DN32-50 F03	4.DN15-25	5.DN15-32 3pcs	6.DN20-32 health grade	
		DIE				
Pressure≤1.0MPa	Pressure≤1.0MPa	Pressure≤1.0MPa	Pressure≤1.5MPa	Pressure≤3MPa	Pressure≤1.0MPa	
2 way	3 way	2 way	3 way	2 way	2 way	
PVC	PVC	SS304 SS316	SS304 SS316	SS304 SS316	SS304 SS316	

## Technical Parameters 开关型技术参数

Connection standard 连接标准	ISO5211 F03、F05			
Output axis specification 输出轴规格	Female octagonal 9*9 or 11*11			
Maximum working pressure 最大介质压力	1.5MPa			
Rated voltage 额定电压	DC12V; DC24V; AC24V; DC12-24V (Optional)			
Wiring diagram 接线图	CR201;CR202;CR301;CR303;CR306;CR501;CR502;CR702;CR703;C R706 (Optional)			
Life time 寿命	70000 times (testing pressure is 0.4MPa, medium is water)			
Actuator material 执行器材质	Engineering Plastics PPO			
Torque force 扭力	15 N.m			
Cable Length 线长	0.5m;1.5m (Optional)			
Environment temperature 环境温度	-15℃~60℃			
Liquid temperature 液体温度	2℃~90℃			
Manual operation 手动操作	Yes			
Open/close indicator 开关指示	Yes			
Protection class 防护等级	IP67			

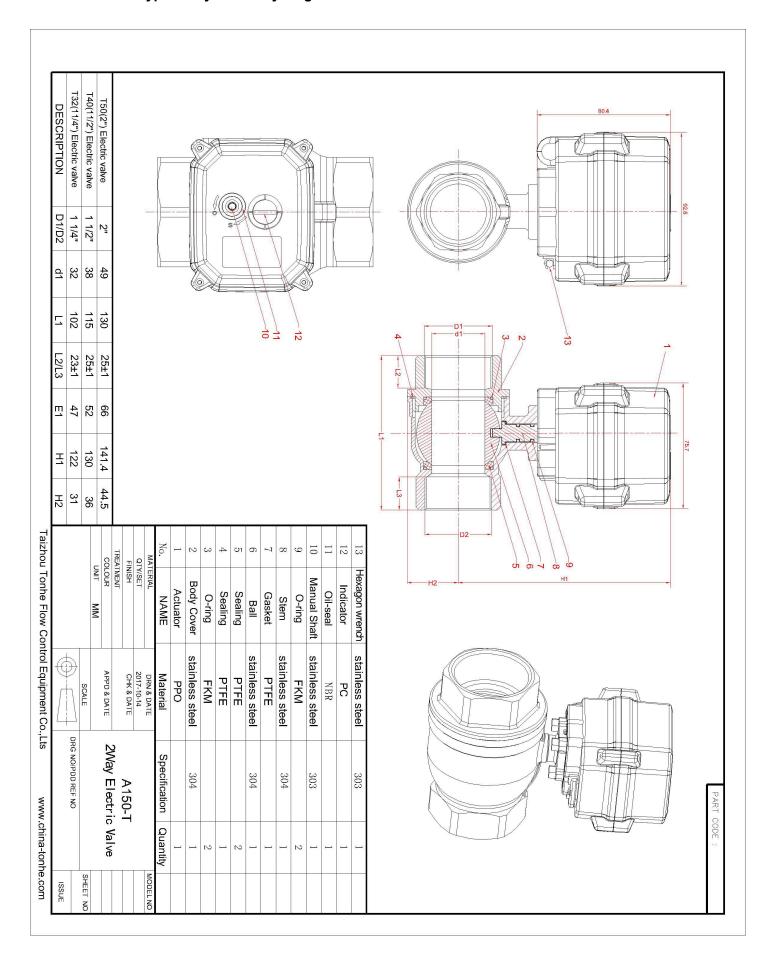
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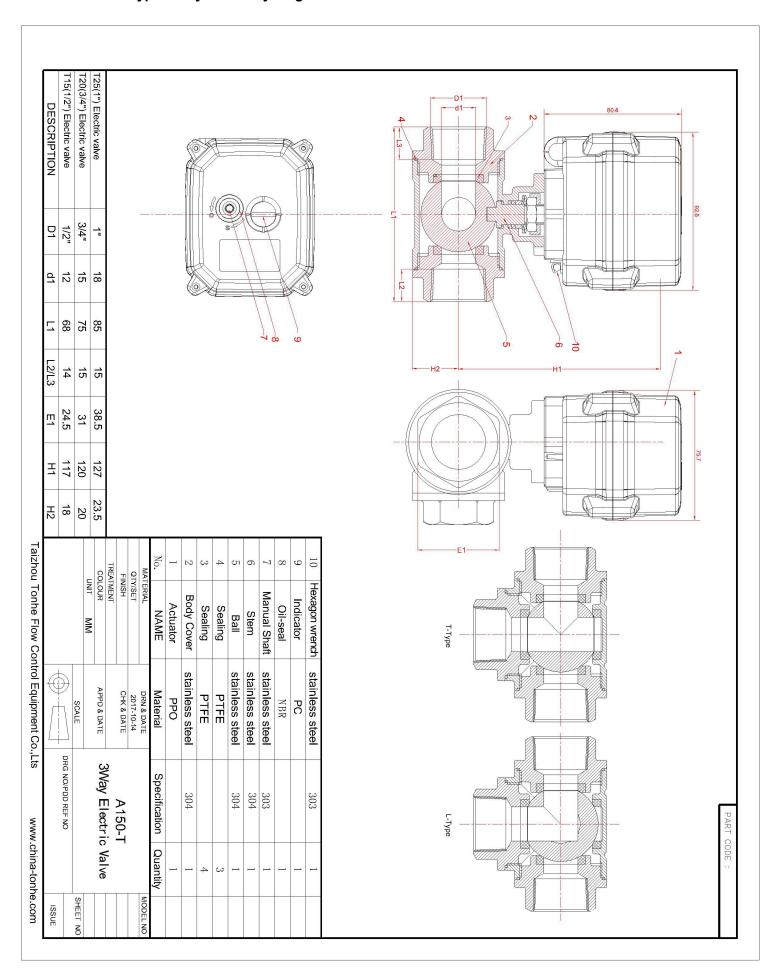
Company quality management	ISO 9001:2015
system 公司认证	100 9001.2010

## model specification and main performance parameters (Testing pressure is 0.4MPa, Medium is water)

Wiring diagram	otation	Open/ close time	Rated current (A)			Power(W)	Number of manual
			AC 24V	DC 12V	DC 24V	- FOWEI(W)	turns
201/501			1				
202/502			<0.78	<1	<0.5		
301/702	90°	≤11	<0.3	<0.4	<0.2		8
303/703			<0.3	<0.42	<0.2		
306/706			<0.78	<1	<0.5		

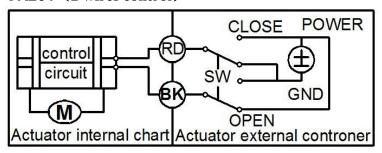
## A150 turn on/off type 2 way assembly diagram





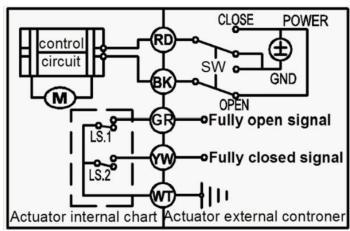
## Wiring diagram Turn on/off type

### CR201 (2 wires control)



- ·RD connect with positive, the BK connect with negative, the valve closed, the actuator automatically power off after in place, the valve remains fully closed position.
- ·BK connect with positive, the RD connect with negative, the valve open, the actuator automatically power off after in place, the valve remains fully open position .
- \* Suitable Working Voltage: DC12V, DC24V
- \* Exceeding the working voltage is forbidden

### CR501 (5 wires control, with feedback wire)



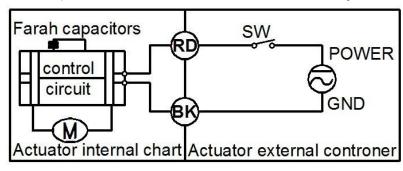
- 1. RD connect with positive, the BK connect with negative, the valve closed, the actuator automatically power off after in place .
- 2 BK connect with positive, the RD connect with negative, the valve open, the actuator automatically power off after in place .
- GR & WT are connect when the valve open fully, YW & WT are connect when the valve closed fully

Suitable Working Voltage: **DC12V**, **DC24V** Exceeding the working voltage is forbidden

#### Feedback wire capacity:

1. Voltage: DC0-35v; 2. Maximum current: 0.4A

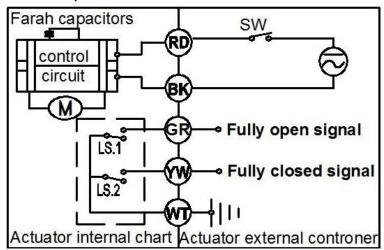
## CR202 (2 wires control--- Reset function, Normally closed or normally open)



- ·When SW is closed, the valve open. the actuator automatically power off after in place
- ·When SW is open, the valve closed, the actuator automatically power off after in place
- \* Suitable Working Voltage: AC24V, DC12-24V
- \* Exceeding the working voltage is forbidden

Please Note A150 CR202 must need charge time >1 minute for every time use

### CR502 (5 wires control, Reset function, With feedback signal)



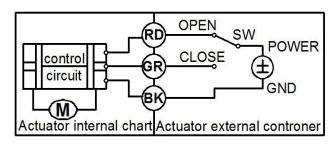
- ·When SW is closed, the valve open, the actuator automatically power off after in place
- ·When SW is open, the valve closed, the actuator automatically power off after in place
- \* GR & WT are connect when the valve open fully, YW & WT are connect when the valve closed fully
- \* Suitable Working Voltage: AC24V, DC12-24V
- \* Exceeding the working voltage is forbidden

#### Feedback wire capacity:

1. Voltage: DC0-35v; 2. Maximum current: 0.4A

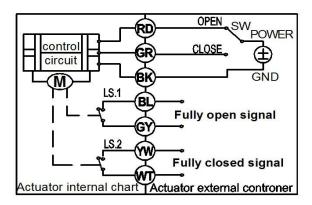
Please Note A150 CR202 must need charge time >1 minute for every time use

### CR301 (3 wires control)



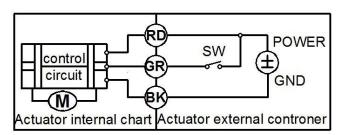
- ·RD & GR connect with positive, BK connect with negative
- ·When OPEN( RD) & SW connected , the valve open, the actuator automatically power off after in place , valve remains fully open position
- ·When CLOSE(GR) & SW connected, the valve closed, the actuator automatically power off after in place, valve remains fully closed position.
- \* Suitable Working Voltage: DC12V, DC24V, AC24v, DC12v-24v
- \* Exceeding the working voltage is forbidden

#### CR702 (7 wires control)



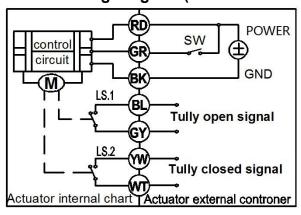
- 1.RD & GR connect with positive, the BK connect with negative
- 2. When RD & SW connected, the valve open, the actuator automatically power off after the valve fully open.
- 3. When GR & SW connected, the valve closed, the actuator automatically power off after the valve fully closed,.
- 4. BL & GY connect with the valve's fully open signal wiring
- 5. YW & WT connect with the valve's fully closed signal wiring
- \* Suitable Working Voltage: DC12V, DC24V,AC24v,DC12v-24v
- \* Exceeding the working voltage is forbidden
- Feedback wire capacity:
  - 1. Voltage: DC0-35v; 2. Maximum current: 0.4A

## CR3 03 Wiring Diagram (3 wires control)



- · RD connect with positive, GR connect with SW & positive
- BK connect with negative
- When the SW of GR closed, the valve OPEN, the actuator automatically power off after in place, remains fully closed position
- When the SW of GR open, the valve CLOSED, the actuator automatically power off after in place, remains fully open position.
- \* Suitable Working Voltage: DC12V, DC24V, AC24v, DC12-24v
- \* Exceeding the working voltage is forbidden

## CR7 03 Wiring Diagram (7 wires control with feedback signal)

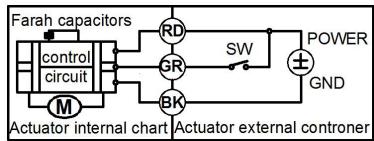


- ·RD& GR connect with positive, the BK connect with negative.
- ·SW CLOSED, the valve OPEN, the actuator automatically power off after in place
- ·SW OPEN, the valve CLOSED, the actuator automatically power off after in place.
- ·BL & GY connect with the valve's fully open signal wiring
- ·YW & WT connect with the valve's fully closed signal wiring.
- \* Suitable Working Voltage: DC12V, DC24V, AC24V, DC12-24V
- \* Exceeding the working voltage is forbidden

#### Feedback wire capacity:

1. maximum voltage DC36V, AC220V; 2. maximum current 0.4 A.

## CR3 06 Wiring Diagram ( 3 wires control – Power reset funtion)



#### 1)Power off(failure), valve close

- ·RD& GR connect with positive, the BK connect with negative
- ·SW CLOSED, the valve close, the actuator automatically power off after in place
- ·SW OPEN, the valve open, the actuator automatically power off after in place.

### Power off, valve close itself.

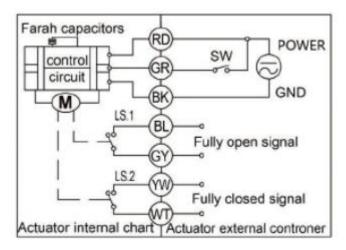
## 2)Power off(failure), valve open

- ·RD& GR connect with positive, the BK connect with negative
- ·SW CLOSED, the valve open, the actuator automatically power off after in place
- ·SW OPEN, the valve close, the actuator automatically power off after in place.

#### Power off, valve open itself.

- \* Suitable Working Voltage: AC24V, DC12V-24V
- \* Exceeding the working voltage is forbidden

#### CR706 (7 wires control)



## 1)Power off(failure), valve close

- ·RD& GR connect with positive, the BK connect with negative
- ·SW CLOSED, the valve close, the actuator automatically power off after in place
- ·SW OPEN, the valve open, the actuator automatically power off after in place.

## Power off, valve close itself.

## 2)Power off(failure), valve open

- ·RD& GR connect with positive, the BK connect with negative
- ·SW CLOSED, the valve open, the actuator automatically power off after in place
- ·SW OPEN, the valve close, the actuator automatically power off after in place.

## Power off, valve open itself.

- ·BL & GY connect with the valve's fully open signal wiring
- ·YW & WT connect with the valve's fully closed signal wiring.
- \* Suitable Working Voltage: AC24V, DC12V-24V
- \* Exceeding the working voltage is forbidden