A TYPE
position indicator ☐
manual override ☐

B TYPE
position indicator ☑
manual override ☑

C TYPE
position indicator ☑
manual override ☐

TFA20 Series 2 way Brass Electric Ball Valve
TFA20系列两通黄铜电动球阀(Low Voltage)

Nice appearance/Small size
Large output torque/Sealed without dripping

COMPOSITIONS组成

NO.	Name	Material	Specification	Quantity
1	Actuator	PPO		1
2	Body & Cover	Brass		1
3	O-ring	FKM		2
4	Sealing	PTFE		2
5	Ball	stainless steel	304	1
6	Stem	Brass		2
7	O-ring	FKM		2

Energy saving/environmental protection/comfort/health

TFA20 Series 2 way Brass Eletric Ball VIve
TFA20系列两通黄铜电动球阀(AC110-230V)

Nice appearance/Small size
Large output torque/Sealed without dripping

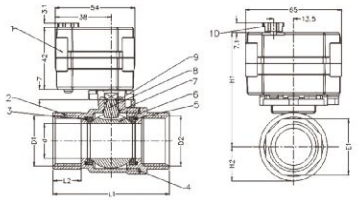
COMPOSITIONS组成

No.	Name	Material	Specification	Quantity
1	Actuator	PPO		1
2	Body & Cover	Brass		1
3	O-ring	FKM		2
4	Sealing	PTFE		2
5	Ball	Stainless Steel	304	1
6	Stem	Brass		1
7	O-ring	FKM		2

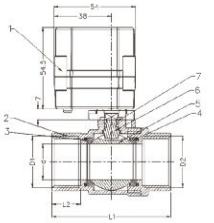
Energy saving/environmental protection/comfort/health

2-Way Brass Electric Ball Valve
110-230V

Assemble Diagram 组装图



DESCRIPTION	D1/D2	d	L1	L2	E1	H1	H2
TF8(1/4")Electric valve	1/4"	8	49	12	20.5	58.5	12
TF10(3/8")Electric valve	3/8"	10	49	12	20.5	68.5	12
TF15(1/2")Electric valve	1/2"	15	56	13	25	71	16
TF20(3/4")Electric valve	3/4"	20	66	15	31	74	19
TF25(1")Electric valve	1"	24	71	15	38	76	22
TF32(1 1/4")Electric valve	1 1/4"	29	79	20	46	78	25



DESCRIPTION	D1/D2	d	L1	L2	E1	H1	H2
TF8(1/4")Electric valve	1/4"	8	49	12	20.5	80.5	12
TF10(3/8")Electric valve	3/8"	10	49	12	20.5	80.5	12
TF15(1/2")Electric valve	1/2"	15	56	13	25	84	16
TF20(3/4")Electric valve	3/4"	20	66	15	31	87	19
TF25(1")Electric valve	1"	24	71	15	38	89	22
TF32(1 1/4")Electric valve	11/4"	29	79	20	46	91	25

Technical Parameters 技术参数

Product size口径	NPT/BSP 1/4" 3/8" 1/2" 3/4" 1" 1 1/4" (Optional)
Maximum working pressure最大工作压力	1.0 MPa
Circulation medium介质	Fluid, air
Working voltage额定电压	DC5V、DC12V、DC24V、AC/DC9-24V (Optional)
Wiring diagram接线图	CR201、CR202、CR301、CR302、CR303、CR304、CR305、CR306、CR501、CR5O2、CR701、CR702、CR703、CR705、CR706 (Optional)

Working current 工作电流	≤500mA
Open/close time开关时间	≤5S
Life time寿命	100000 times(testing pressure is 0.4MPa,medium is water)
Valve body material阀材质	Brass
Actuator material执行器材质	Engineering Plastics

Sealing material密封材料	FKM &PTFE
Actuator rotation执行器旋转角度	90°
Torque force扭力	2 Nm
Cable length线长	0.5m,1.5m (Optional)
Environment temperature 环境温度	-15°C ~ 50°C

Liquid temperature液体温度	2°C~ 90°C
Manual override手动功能	Yes No(Optional)
Open/close indicator开关指示	Yes No(Optional)
Protection class 保护等级	IP67

Product size口径	NPT/BSP 1/4" 3/8" 1/2" 3/4" 1" 1 1/4" (Optional)
Maximum pressure最大工作压力	1.0 MPa
Circulation medium介质	Fluid, air
Working voltage额定电压	AC/DC110-230V
Wiring diagram接线图	CR202、CR303、CR305、CR306、CR401、CR502 CR703、CR704、CR705、CR706 (Optional)

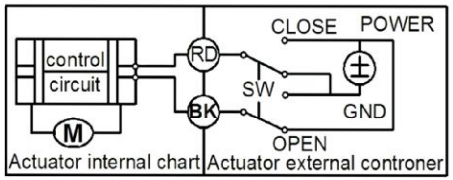
Working current工作电流	≤500mA
Open/close time开关时间	≤5S
Life time寿命	100000 times (testing pressure is 0.4MPa,medium is water)
Valve body material阀材质	Brass
Actuator material执行器材质	Engineering Plastics

Sealing material密封材料	FKM& PTFE
Actuator rotation执行器旋转角度	90°
Torque force扭力	2 Nm
Cable length线长	0.5m,1.5m (Optional)
Environment temperature环境温度	-15°C~50°C

Liquid temperature液体温度	2°C~90°C
Manual override手动功能	No
Open/close indicator开关指示	Yes
Protection class保护等级	IP67

CR201接线图

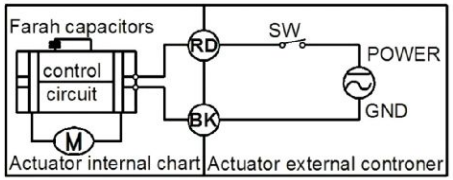
CR201 WIRING DIAGRAM (2 WIRES CONTROL)



- **VALVE OPEN:** Black wire connect to Positive and Red wire connect to Negative, valve Open.
- **VALVE CLOSE:** Black wire connects to Negative and Red wire connects to Positive, valve Close.
- **Remark:** When valve fully open/close, power supply to motor will be cutoff automatically by limit switch inside.
  - Suitable Working Voltage: DC5V/DC12V/DC24V.

CR202接线图

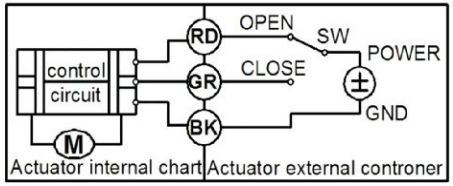
CR202 WIRING DIAGRAM (2 WIRES CONTROL- SPRING RETURN IN CASE OF THE POWER IS FAILURE)



- **VALVE OPEN:** Black wire connect to Negative and Red wire connect to Positive, valve Open.
- **VALVE CLOSE:** When Red wire disconnects to power/power failure, valve Close.
- **Remark:** When VALVE fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: AC/DC9-24V, AC/DC110V-230V.

CR301接线图

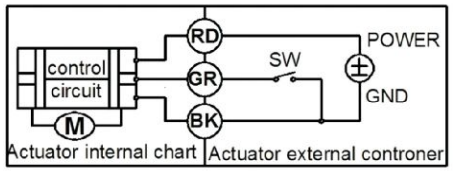
CR301 WRING IAGRAM(3 WIRE CNTROL)



- **VALVE OPEN:** Black wire connect to Negative and Red wire connect to Positive, valve Open.
- **VALVE CLOSE:** Black wire connects to Negative and Green wire connects to Positive, valve Close.
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: DC5V, DC12V, DC24V.

CR302接线图

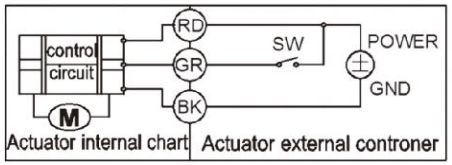
CR302 WIRING DIAGRAM (3 WIRES CONTROL)



- **VALVE OPEN:** Black wire connect to Negative and Red wire connect to Positive, meanwhile Green wire connects to Negative, valve Open.
- **VALVE CLOSE:** Black wire connect to Negative and Red wire connect to Positive, meanwhile Green wire disconnected, valve Close.
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: DC9-24V.

CR303接线图

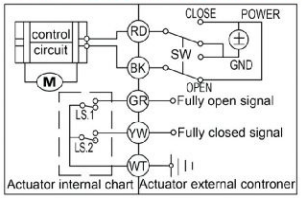
CR303 WIRING DIAGRAM (3 WIRES CONTROL)



- **VALVE OPEN:** Black wire connect to Negative and Red wire connect to Positive, meanwhile Green wire connects to Positive, valve Open.
- **VALVE CLOSE:** Black wire connect to Negative and Red wire connect to Positive, meanwhile Green wire disconnected, valve Close.
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: AC/DC9-24V, AC110-230V.

CR501接线图

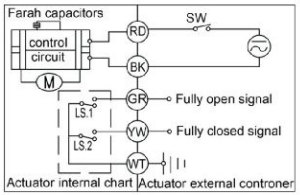
CR501 WIRING DIAGRAM (WITH FEEDBACK SIGNAL)



- **VALVE OPEN:** Black wire connect to Positive and Red wire connect to negative, valve Open.
- **VALVE CLOSE:** Black wire connects to negative and Red wire connects to Positive, valve Close.
  When valve fully open, White and Blue wire get through
  When valve fully close, White and Yellow wire get through
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: DC5V, DC12V, DC24V.

CR502接线图

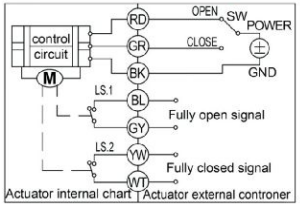
CR502 WIRING DIAGRAM (WITH FEEDBACK SIGNAL)



- **VALVE OPEN:** Black wire connects to Negative and Red wire connect to Positive, valve Open.
- **VALVE CLOSE:** When black or Red wire disconnect to power/power failure, valve Close automatically.
  When valve fully open, White and Blue wire get through
  When valve fully close, White and Yellow wire get through
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: AC/DC9-24V, AC/DC110V-230V.

CR702接线图

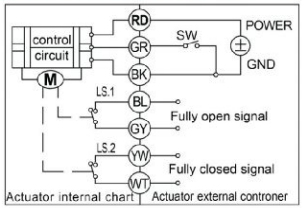
CR702 WIRING DIAGRAM(7 WIRES CONTROL WITH FEEDBACK SIGNAL)



- **VALVE OPEN:** Black wire connects to Negative and Red wire connect to Positive, valve Open.
- **VALVE CLOSE:** Black wire connects to Negative and Green wire connects to positive, valve Close.
  When valve fully open, Blue and Gray wire get through
  When valve fully close, White and Yellow wire get through
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  -Suitable Working Voltage: DC5V, DC12V, DC24V.

CR701接线图

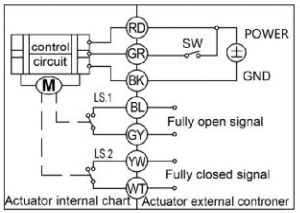
CR701 WIRING DIAGRAM(7 WIRES CONTROL WITH FEEDBACK SIGNAL)



- **VALVE OPEN:** Black wire connects to Negative and Red wire connects to Positive, meanwhile Green wire connects to Negative, valve open.
- **VALVE CLOSE:** Black wire connects to Negative and Red wire connects to Positive, meanwhile Green wire disconnected, valve Close.
  When valve fully open, Blue and Gray wire get through
  When valve fully close, White and Yellow wire get through
- **Remark:** When VALVE fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: DC9-24V.

CR703接线图

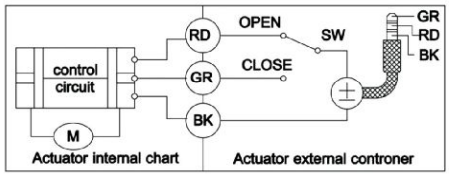
CR703 WIRING DIAGRAM (7 WIRES CONTROL WITH FEEDBACK SIGNAL)



- **VALVE OPEN:** Black wire connect to Negative and Red wire connect to Positive, meanwhile Green wire connects to Positive, valve Open.
- **VALVE CLOSE:** Black wire connect to Negative and Red wire connect to Positive, meanwhile Green wire disconnected, valve Close.
  When valve fully open, Blue and Gray wire get through
  When valve fully close, White and Yellow wire get through
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: AC/DC9-24V, AC110-230V.

CR304接线图

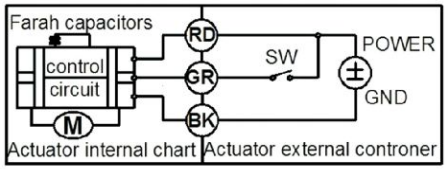
CR304 WIRING DIAGRAM(3 WIRES CONTROL)



- **VALVE OPEN:** Black wire connect to Negative and Red wire connect to Positive, valve Open.
- **VALVE CLOSE:** Black wire connects to Negative and Green wire connects to Positive, valve Close.
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: DC5V, DC12V, DC24V.

CR305接线图

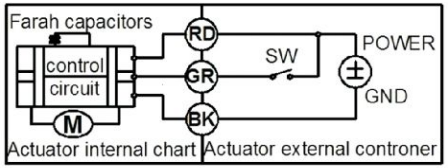
CR305 WIRING DIAGRAM (3 WIRES CONTROL - SPRING RETURN IN CASE OF THE POWER IS FAILURE)



- **VALVE OPEN:** Black wire connect to Negative and Red wire connect to Positive, meanwhile Green wire connects to Positive, valve Open.
- **VALVE CLOSE:** Black wire connect to Negative and Red wire connect to Positive, meanwhile Green wire disconnected, valve Close.
- **Power failure:** The Valve CLOSE automatically if power failure.
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: AC/DC9-24V, AC/DC110V-230V.

CR306接线图

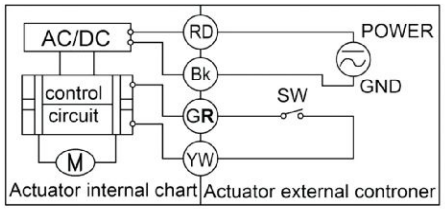
CR306 WIRING DIAGRAM (3 WIRES CONTROL - SPRING RETURN IN CASE OF THE POWER IS FAILURE)



- **VALVE OPEN:** Black wire connect to Negative and Red wire connect to Positive, meanwhile Green wire connects to Positive, valve Open.
- **VALVE CLOSE:** Black wire connect to Negative and Red wire connect to Positive, meanwhile Green wire disconnected, valve Close.
- **Power failure:** The Valve OPEN automatically if power failure.
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: AC/DC9-24V, AC/DC110V-230V.

CR401接线图

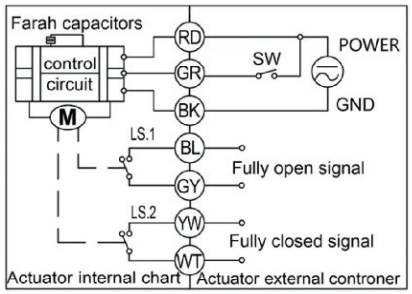
CR401 WIRING DIAGRAM (4 WIRES CONTROL)



- **VALVE OPEN:** Black wire connect to Negative and Red wire connect to Positive, meanwhile, White and Yellow wire connected, valve Open.
- **VALVE CLOSE:** Black wire connect to Negative and Red wire connect to Positive, meanwhile, White and Yellow wire disconnected, valve Close.
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: AC/DC110V-230V.

CR705接线图

CR705 WIRING DIAGRAM (7WIRES CONTROL - SPRING RETURN IN CASE OF THE POWER IS FAILURE)

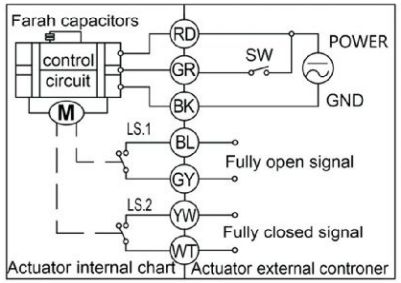


- **VALVE OPEN:** Black wire connect to Negative and Red wire connect toPositive, meanwhile Green wire connects to Positive, valve Open.
- **VALVE CLOSE:** Black wire connect to Negative and Red wire connect to Positive, meanwhile Green wire disconnected, valve Close.
- **Power failure:** The Valve CLOSE automatically if power failure.

  When valve fully open, Blue and Gray wire get through
  When valve fully close, White and Yellow wire get through
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: AC/DC9-24V, AC/DC110V-230V.

CR706接线图

CR706 WIRING DIAGRAM (7 WIRES CONTROL - SPRING RETURN INC CASE OF THE POWER IS FAILURE)

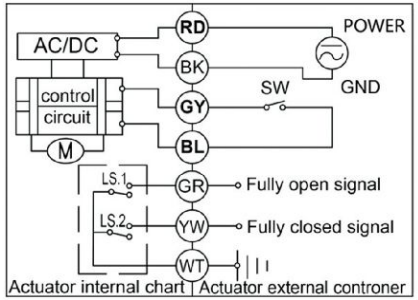


- **VALVE OPEN:** Black wire connect to Negative and Red wire connect to Positive, meanwhile Green wire connects to Positive, valve Open.
- **VALVE CLOSE:** Black wire connect to Negative and Red wire connect toPositive, meanwhile Green wire disconnected, valve Close.
- **Power failure:** The Valve OPEN automatically if power failure.

  When valve fully open, Blue and Gray wire get through
  When valve fully close, White and Yellow wire get through
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: AC/DC9-24V, AC/DC110V-230V.

CR704接线图

CR704 WIRING DIAGRAM(7 WIRES CONTROL WITH FEEDBACK SIGNAL)



- **VALVE OPEN:** Black wire connects to Negative and Red wire connect to Positive, meanwhile, White and Yellow wire connected, valve Open.
- **VALVE CLOSE :** Black wire connect to Negative and Red wire connect to Positive, meanwhile White and Yellow wire disconnected valve Close.

  When valve fully open, White and Green wire get through
  When valve fully close, White and Yellow wire get through
- **Remark:** When valve fully open/close, power supply to motor will be cut off automatically by limit switch inside.
  - Suitable Working Voltage: AC/DC110V-230V.