TONHEFLOW

A20-T Series 2 way Brass Electric Ball Valve A20-T系列两通黄铜电动球阀







T20-B2-C

T20-B2-A

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 CR502 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 | 70000 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 N.m | | | | | |
| 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 | | | | | |
| | | | | | | |

Assemble Diagram 组装图



| - | | | | | | 1.1 | 400 | 15 |
|---|---|---|---|---|-----|------|-----|-----------|
| 6 | 0 | m | n | 2 | no | nts | 2H | BV |
| | U | | μ | o | 116 | 1113 | 20 | JJX |

| 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 |

| DESCRIPTION | D1/D2 | d | L1 | L2 | E1 | H1 | H2 |
|---------------------------|--------|----|----|----|------|----|----|
| T8(1/4")Electric valve | 1/4" | 8 | 49 | 12 | 20.5 | 68 | 12 |
| T10(3/8")Electric valve | 3/8" | 10 | 49 | 12 | 20.5 | 68 | 12 |
| T15(1/2")Electric valve | 1/2" | 15 | 56 | 12 | 25 | 71 | 16 |
| T20(3/4")Electric valve | 3/4" | 20 | 66 | 15 | 31 | 74 | 19 |
| T25(1")Electric valve | 1" | 24 | 71 | 15 | 38 | 76 | 22 |
| T32(1 1/4")Electric valve | 1 1/4" | 25 | 79 | 18 | 46 | 78 | 25 |
| T32(1 1/4"Electric valve | 1 1/4' | 29 | 80 | 15 | 46 | 93 | 27 |

A20-T Series 2 way Brass Electric Ball Valve(AC110-230V) A20-T系列两通黄铜电动球阀

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 | 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 | 70000 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 N.m | | | | | |
| | Cable length 线长 | 0.5m,1.5m (Optional) | | | | | |
| | Environment temperature 环境温度 | -15℃~50℃ | | | | | |
| | Liquid temperature 液体温度 | 2℃~90℃ | | | | | |
| | Manual override 手动功能 | Yes No (Optional) | | | | | |
| | Open/close indicator 开关指示 | Yes | | | | | |
| | Protection class 保护等级 | IP67 | | | | | |



T20-B2-C

Assemble Diagram 组装图



Components 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 |

| DESCRIPTION | D1/D2 | d | L1 | L2 | E1 | H1 | H2 |
|---------------------------|--------|----|----|----|------|------|----|
| T8(1/4")Electric valve | 1/4" | 8 | 49 | 12 | 20.5 | 80.5 | 12 |
| T10(3/8")Electric valve | 3/8" | 10 | 49 | 12 | 20.5 | 80.5 | 12 |
| T15(1/2")Electric valve | 1/2" | 15 | 56 | 12 | 25 | 84 | 16 |
| T20(3/4")Electric valve | 3/4" | 20 | 66 | 15 | 31 | 87 | 19 |
| T25(1")Electric valve | 1" | 24 | 71 | 15 | 38 | 89 | 22 |
| T32(1 1/4")Electric valve | 1 1/4" | 25 | 79 | 18 | 46 | 91 | 25 |
| T32(11/4*)Electric valve | 1 1/4" | 29 | 80 | 15 | 46 | 105 | 27 |

本手册内容仅供参考,不作为使用时的判定依据,详细技术参数及印刷板图请登录我司网站查询:www.china-tonhe.com

POWER

GND

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Wiring Diagram

CR201 Wiring Diagram (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: DC5V,DC12V,DC24V
- Exceeding the working voltage is forbidden



CR301 Wiring Diagram (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: DC5V,DC12V,DC24V,AC/DC9-24V
- * Exceeding the working voltage is forbidden



CR303 Wiring Diagram (3 wires control)

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

 $\cdot \text{SW}$ OPEN, the valve CLOSED, the actuator automatically power off after in place

Suitable Working Voltage: AC/DC9-24V,AC110-230V
Exceeding the working voltage is forbidden



CR202 Wiring Diagram (2 wires control – Capacitors return in case of the power is failure)

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: AC/DC9-24V AC110-230V
Exceeding the working voltage is forbidden



CR302 Wiring Diagram (3 wires control)

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

 $\cdot \text{SW OPEN},$ the valve CLOSED, the actuator automatically power off after in place

Suitable Working Voltage: DC9-24V

Exceeding the working voltage is forbidden



CR304 Wiring Diagram (3 wires control)

RD & GR connected with positive, and the BK connected with negative When RD & SW connected, the valve closed, the actuator automatically power off after in place, remains fully closed position When GR & SW connected, the valve open, the actuator automatically power off after in place, remains fully open position * Suitable Working Voltage: DC5V,DC12V, DC9-24V

Exceeding the working voltage is forbidden







 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

When external power off, the valve CLOSED, the actuator automatically power off after in place

Suitable Working Voltage: AC/DC9-24V,AC110-230V

* Exceeding the working voltage is forbidden

CR306 Wiring Diagram (3 wires control – Capacitors return in case of the power is failure)

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 When external power off, the valve OPEN, the actuator automatically power when external power off, the valve OPEN, the actuator automatically power

off after in place

Suitable Working Voltage: AC/DC9-24V,AC110-230V
Exceeding the working voltage is forbidden



CR401 Wiring Diagram (4 wires control)

.RD & BK are connected to the power, GR & YW are connected to the controlled wiring

.When the SW is closed , the valve open

When the SW is OPEN, the valve CLOSED Suitable Working Voltage:AC/DC110V-230V

Exceeding the working voltage is forbidden

The control wiring with power DC5V , when multiple motorized valves are working in paralled , must put the same color control wiring together, otherwise the valve could working normally

CR501 Wiring Diagram (5 wires control with feedback signal)

.RD connect with positive, the BK connect with negative, the valve closed, the actuator automatically power off after in place .BK connect with positive, the RD connect with negative, the valve open, the actuator automatically power off after in place .GR & WT connect with the valve's fully open signal wiring .YW & WT connect with the valve's fully closed signal wiring Suitable Working Voltage:DC5V,DC12V,DC24V Exceeding the working voltage is forbidden



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CR502 Wiring Diagram (5 wires control -Capacitors return in case of the power is failure & 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

POWER

GND

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Fully open signa

Fully closed signal

External controller

.GR & WT connect with the valve's fully open signal wiring

.YW & WT connect with the valve's fully closed signal wiring

Suitable Working Voltage: AC/DC9-24V, AC/DC110V-230V

* Exceeding the working voltage is forbidden

LS.1

Valve Actuator



CR701 Wiring Diagram (7 wires control with feedback signal)

RD connect with positive .GR connect with SW and negative wiring .BK connect with negative wiring .When SW close. the valve OPEN, and keeping fully open When SW open. the valve CLOSED, and keeping fully closed 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: DC9-24V . Exceeding the working voltage is forbidden · Feedback with load ability: 1) The Max. off voltage: DC36V AC220V

(2) The Max. off current: ≤0.4A

CR702 Wiring Diagram (7 wires control with feedback signal)

.RD & GR connect with positive, the BK connect with negative .When RD & SW connected, the valve OPEN, the actuator automatically power off after the valve fully open

When GR & SW connected, the valve CLOSED, the actuator automatically power off after the valve fully closed

.BL & GY connect with the valve's fully open signal wiring

.YW & WT connect with the valve's fully closed signal wiring

Switch (1)

Fully open signal

Fully closed signa

External control

GND

- Suitable Working Voltage: DC5V,DC12V,DC24V
- * Exceeding the working voltage is forbidden
- · Feedback with load ability:
- (1) The Max. off voltage: DC36V AC220V
- (2) The Max. off current: ≤0.4A

LS.1

Ball Valve

Valve Actuator



CR703 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: AC/DC9-24V,AC110-230V . Exceeding the working voltage is forbidden

CR704 Wiring Diagram

(7 wires control with feedback signal)

·RD & BK are connected to the power, BL & GY are connected to the controlled wiring

When the SW is closed , the valve open When the SW is open , the valve closed GR & WT connect with the valve's fully OPEN signal wiring YW & WT connect with the valve's fully CLOSED signal wiring Suitable Working Voltage: AC/DC110V-230V Exceeding the working voltage is forbidden





CR705 Wiring Diagram (7 wires control - Capacitors) return in case of the power is failure & 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 When external power off, 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: AC/DC9-24V,AC110-230V
- . Exceeding the working voltage is forbidden

CR706 Wiring Diagram (7 wires control -Capacitors return in case of the power is failure & 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 When external power off, the valve open, 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: AC/DC9-24V,AC110-230V . Exceeding the working voltage is forbidden





A150 SERIES MODULATING VALVE WIRE DIAGRAM

红线接正级,黑线接负极。

2,绿线接4-20mA/0-10V/0-5V信号输出正极,蓝色接信号输入负极。黄线接错误 输出。

3, 黄线是错误输出信号,错误时黄线和红线断开; 白线是4-20mA输出。

1, RD connect +, BK-.

2,GR connect output signal +(4-20mA, 0-5V, 0-10V) ,BL connect input signal-. 3,YW connect err output signal.YW & RD are disconnected when there is err. WT connect 4-20mA output