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台州通禾流体控制股份有限公司

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TONHEFLOW®

CATALOGUE

2023通禾选型手册



台州通禾流体控制股份有限公司

Taizhou Tonhe Flow Control Co.,Ltd.



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通禾企业 文化

企业使命：通禾，让流体控制更智能可靠。

发展愿景：打造全球知名的电动阀品牌，缔造人们向往的企业大家庭。

通禾价值观：诚信共赢，服务客户，服务社会。

质量方针：精益求精，追求卓越。

管理理念：标准化、人性化、科学化。

品牌定位：做好中国电动球阀。



公司大事记

2022--获得省级专精新企业
2022--在欧盟成功注册“TONHEFLOW”和“TONHE”商标
2021--2020-在美国成功注册“TONHEFLOW”和“TONHE”商标
2021--研发Lora 4G NB 无线电动阀
2021--获得国家级高新企业
2021--研发A350 系列执行器
2020--在苏州设立研发中心
2020--新办公楼投入使用
2019--扩大生产规模，迁入自有厂房
2019--研发A150系列调节型电动执行器
2018--“通禾”商标注册
2017--扩大生产规模，迁入新厂房
2017--研发A150 系列电动执行器
2016--获得浙江省高成长科技型中小企业
2016--研发A20系列调节型电动球阀
2015--“TH, TONHEFLOW”通过商标注册
2015--获得浙江省科技型中小企业证书
2014--获得台州市高新技术企业证书
2014--研发家庭防漏水控制器
2013--公司通过SGS ISO 9001: 2008管理体系审核
2012--研发智能定时控制电动球阀
2011--电动球阀通过欧盟CE认证
2009--研发A20、A100系列开关型电动球阀
2009--台州通禾公司成立
2008--研发A10系列电动阀

2022 - Awarded provincial professional boutique enterprise
2022 - Succesfully registered "TONHEFLOW" & "TONHE" trademarks in EU
2021 - Succesfully registered "TONHEFLOW" & "TONHE" trademarks in USA
2021 - R&D Lora 4G NB wireless electric valve
2021 - Adwarded National High-tech Enterprise
2021 - R&D A350 series electric actuators
2020 - Set up R&D center in Suzhou
2020 - Moved into New office
2019 -Expanded the production scale and moved into the self-owned plant
2019 -R&D A150 series proportional electric actuators
2018 - Registered "通禾"trademark
2017 - Expanded the production scale and moved into a new plant
2017 - R & D A150 series electric actuators
2016 - Got high growth and technology small and medium-sized enterprises in Zhejiang
2016 - R & D A20 Series proportional motorized valve
2015 - "TH, TONHEFLOW" is registered with the trademark
2015 - Got Zhejiang Province science and technology SME certificate
2014 - Got Taizhou high-tech enterprise certificate
2014 - R & D home water leaking detection controller
2013 - Passed the SGS ISO 9001: 2008 management system audit
2012 - R & D smart timer control electric ball valve
2011 - electric ball valve approved the European Union CE certification
2009 - R & D A20, A100 series electric shut off ball valve
2009 - Taizhou Tonhe company was established
2008 - R & D A10 series electric valve



台州通禾流体控制股份有限公司于2008年开始专业从事电动球阀、电动执行器、无线防漏水报警控制系统、智能化流体控制的开发、设计、制造、销售及技术服务，是一家中小型科技创新企业。通禾主要生产1/4"至2"开关型电动球阀、调节型电动球阀、智能定时阀、家庭用水防泄漏监测系统等系列产品。其中多个产品系列已顺利通过NSF61-G、CE、ROHS等国际认证。电动球阀产品结构紧凑、外型美观，具有智能控制、低工作电流、高密封性等特点，广泛应用于气泵储气缸自动排水、自动浇灌、水处理、高效节水、工业自控等小型设备，产品应用前景广阔，社会效益明显。

通禾公司发展迅速，一直坚持“诚信共赢，服务客户，服务社会”的核心理念，以“创造业内优秀的产品”为己任，前后已申请实用新型专利十多项。2019年通过了SGS公司的ISO9001：2015质量管理体系，前后被认定为台州市市级高新技术企业、浙江省科技型中小企业、浙江省高成长科技型中小企业，2021年认定为国家级高新技术企业，2022年认定为省级专精特新企业，并获得多项荣誉称号。通禾产品生产采用机械化流水线操作，力求以卓越稳定的质量满足客户需求。通禾产品远销世界各地，主要为欧美国家，一直深得客户信赖和好评。

通禾把人才视为企业的最大财富，致力于缔造员工向往的企业，注重优秀人才的引进、培养和人才资源开发，以稳定的人才梯队实现企业的可持续发展，每年选拔一批有潜力的员工前往培训、学习，以实现员工与企业的共同成长，让企业成为所有员工共有的精神家园。“雄关漫道真如铁，而今漫步从头越”，在新的历史时期、新的历史机遇面前，“为了遇见明天更好的你”，通禾公司上下必然会用心工作，矢志不渝、坚忍不拔，不断超越自我，追求卓越。通禾真诚地希望能与广大新老客户、优秀人才抓住最好的历史机遇，并与来自五湖四海的客户建立长期的合作关系，共同成长、共创佳绩、共享发展，互惠互利，实现双赢。

Taizhou Tonhe Flow Control Co., Ltd. is specialized in the development, design, manufacture, sales and technical service of electric ball valve, electric actuator, wireless leak alarm control system and intelligent fluid control. It is a small and medium-sized scientific and technological innovation enterprise. We mainly produce motorized shut off ball valve from 1/4" to 2", proportional electric ball valve, intelligent timer controlled valve, household water leakage detection system and other products. Some valves approved NSF61-G, CE, ROHS and other international certification. The motorized valve has compact structure, beautiful appearance, with intelligent control, low working current, high sealing and other features. Which are widely used in air pump tank automatic drainage, automatic watering, water treatment, energy saving, industrial automation and other small equipment .They have broad application prospects, obvious social and economic benefits.

Tonhe grown rapidly,adhering to the core concept of "Integrity & Win-win , serve customers,serve the society", to "create the industry's outstanding products" as its own responsibility, has applied for more than 10 utility model patents along the history. In 2019 passed ISO 9001:2015 quality management certification system. It has been recognized as a municipal high-tech enterprise in Taizhou,a small and medium-sized technology-based enterprise which is high-growth in Zhejiang Province.In 2021 recognized as a national high-tech Enterprise and a provincial specialized emerging enterprise in 2022, and received many ofhonorary titles.We focus on product research & development and scientific & technological innovation, cooperate with professional research unit design institute development for a long time, so as to make products get improve, innovation and achieve excellence continuously . Till now we have applied for 8 patents of utility model.

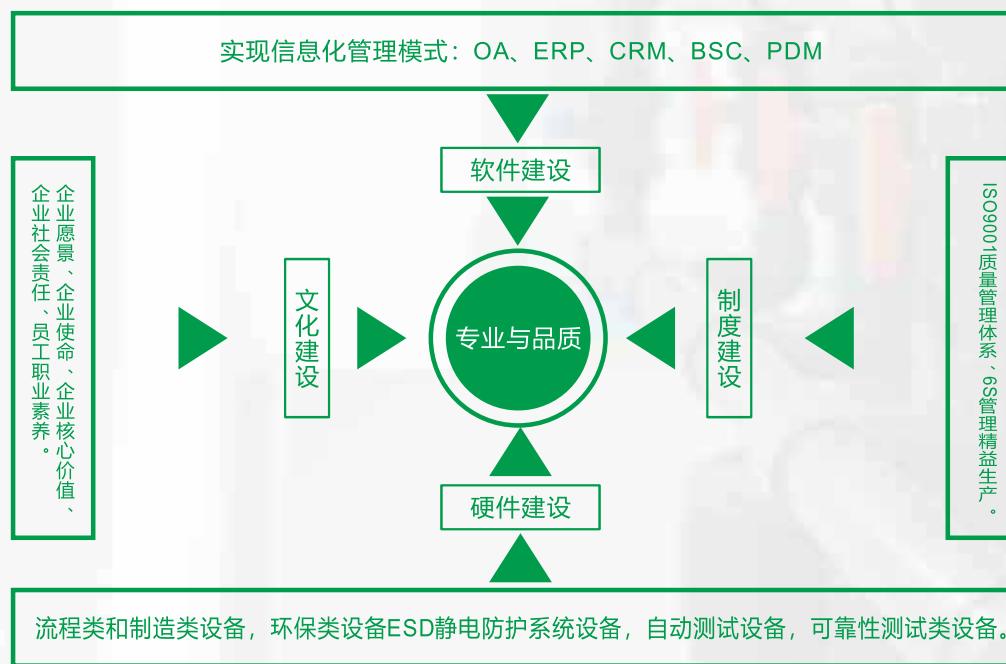
Our product production using mechanized pipeline operation, and strive to excellent quality and stability to meet customer needs. Our products are exported to many places of the world, mainly in Europe & America, and deeply won the customer's trust and praise.

Tonhe take talent as the greatest wealth of enterprises, is committed to creating employees yearning for enterprises, pay attention to the introduction of talents, training and human resources development, to stabilize the talent so as to achieve sustainable development of enterprises. All of our TONHE employees are abound to work hard, and constantly go beyond ourselves. Tonhe sincerely hope to establish long-term cooperative relations with all of old and new customers, grow up together ,share development and benefit , mutual reciprocity and mutual benefit, to achieve a win-win situation.

认证资质



通禾质量保证体系架构



A20型号执行器型号识别

A20 actuator model



电动阀命名规则

Naming scheme for electric ball valve

A100 T 32 S 2 C

执行器型号
Actuator model
A20
A100
A150
B150
E20(电池款 Battery power)

控制类型
Control type
T:开关型 (on/off type)
M:调节型 (Modulating type)
S:定时开关型 (Timer drain type)
L:LoRa无线型 (Lora wireless control)

阀体尺寸
Valve size
DN8 ,DN10 ,DN15
DN20 DN25 ,DN32
DN40,DN50

手动和指示
Manual override & Indicator
A:不带手动 不带指示窗口
A:No indicator &manual override

B:带手动 带指示窗口
B:With indicator &manual override

C:不带手动 带指示窗口
C:Indicator only

阀体通道
valve body channel
2通道 (2 way)
3通道 (3 way)

阀体材质
Valve material
B:黄铜 (Brass)
S:不锈钢 (Stainless steel)
P:PVC (PVC or plastic)
N:黄铜镀镍 (Nickel plated brass)

手动功能使用说明:

1. 手动功能只能在阀门电源断电的情况下使用。
2. 提起手动旋钮, 确定旋转方向, 尖头 "O" 方向为开阀, 尖头 "S" 方向关阀, 观察指示标到位后, 需停止转动。
3. 手动操作后必需按下手轮, 否则会损坏齿轮。

Manual operation instruction:

- 1.The manual function can only use in the power failure situation
- 2.Lift the manual knob and confirm the direction of rotation. The valve is opened in the direction of "O" and closed in the direction of "S". Stop rotating after observing the indication mark in place.
- 3.Press the handwheel after manual operation, otherwise the gear will be damaged.



手动使用示意图
Manual operation instruction

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.tonheflow.com

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



T20-B2-A



T20-B2-B

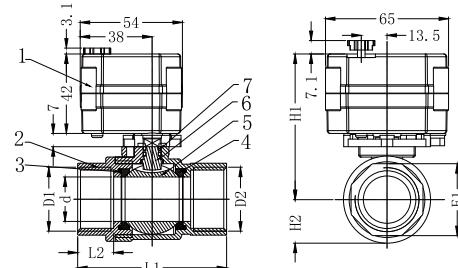


T20-B2-C

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
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	PPO
Sealing material 密封材料	FKM&PTFE
Actuator rotation 执行器旋转角度	90°
Torque force 扭力	3 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



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±0.3	L1±1	L2±1	E1±0.5	H1±1	H2
8-B2-B	1/4"	8	50	12	20.5	67.5	12
10-B2-B	3/8"	10	50	12	20.5	67.5	12
15-B2-B	1/2"	15	57	12	25	71	16
20-B2-B	3/4"	20	65.5	15	31	74.5/76	19
25-B2-B	1"	23.5	71.5	16	38	76.5	22
32-B2-B	1 1/4"	25	80	18	46	78	25
32-B2-B	1 1/4"	29	80	15	46	93	27

A20-T Series 2 way Brass Electric Ball Valve(AC/DC110-230V) A20-T系列两通黄铜电动球阀

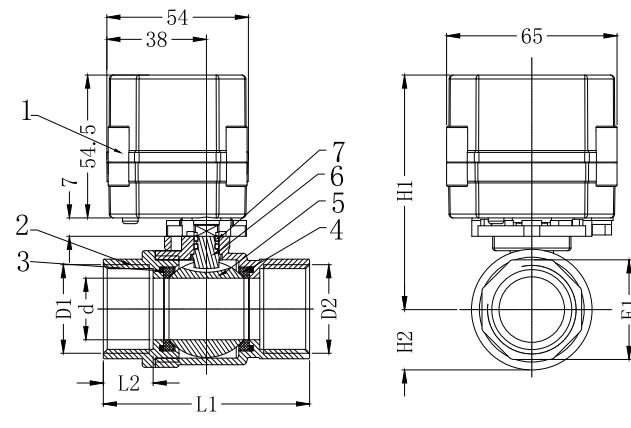
Technical Parameters 技术参数:

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	PPO
Sealing material 密封材料	FKM & PTFE
Actuator rotation 执行器旋转角度	90°
Torque force 扭力	3 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
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	SS304		1
6	Stem	Brass		1
7	O-ring	FKM		2

DESCRIPTION	D1/D2	d±0.3	L1±1	L2±1	E1±0.5	H1±1	H2
8-B2-C	1/4"	8	50	12	20.5	80	12
10-B2-C	3/8"	10	50	12	20.5	80	12
15-B2-C	1/2"	15	57	12	25	83.5	16
20-B2-C	3/4"	20	65.5	15	31	87/88.5	19
25-B2-C	1"	23.5	71.5	16	38	89	22
32-B2-C	1 1/4"	25	80	18	46	90.5	25
32-B2-C	1 1/4"	29	80	15	46	105.5	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.tonheflow.com

A20-T Series 2 way SS304 Electric Ball Valve A20-T系列两通不锈钢电动球阀



T25-S2-A



T25-S2-B

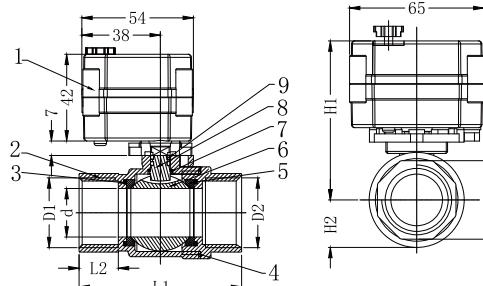


T25-S2-C

Technical Parameters 技术参数:

Valve size 口径	NPT/BSP 1/4" 3/8" 1/2" 3/4" 1" (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	SS304 SS316
Actuator material 执行器材质	PPO
Sealing material 密封材料	FKM & PTFE
Actuator rotation 执行器旋转角度	90°
Torque force 扭力	3 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



Components 组成

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

DESCRIPTION	D1/D2	d±0.3	L1±1	L2±1	E1±0.5	H1±1	H2
8-S2-B	1/4"	10	51	12	21	70	14
10-S2-B	3/8"	10	51	12	21	70	14
15-S2-B	1/2"	15	62	14	25	72	17
20-S2-B	3/4"	20	72	17	31	75.5	20
25-S2-B	1"	25	79	18	38	78.5	24.5

A20-T Series 2 way SS304 Electric Ball Valve(AC/DC110-230V) A20-T系列两通不锈钢电动球阀

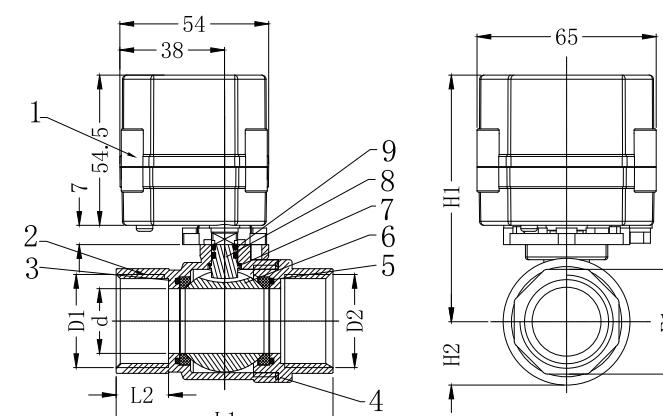
Technical Parameters 技术参数:

Valve size 口径	NPT/BSP 1/4" 3/8" 1/2" 3/4" 1" (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	SS304 SS316
Actuator material 执行器材质	PPO
Sealing material 密封材料	FKM & PTFE
Actuator rotation 执行器旋转角度	90°
Torque force 扭力	3 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
Protection class 保护等级	IP67



T20-S2-C

Assemble Diagram 组装图



Components 组成

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

DESCRIPTION	D1/D2	d±0.3	L1±1	L2±1	E1±0.5	H1±1	H2
8-S2-C	1/4"	10	51	12	21	82.5	14
10-S2-C	3/8"	10	51	12	21	82.5	14
15-S2-C	1/2"	15	62	14	25	84.5	17
20-S2-C	3/4"	20	72	17	31	88	20
25-S2-C	1"	25	79	18	38	91	24.5

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A20-T Series 2 way UPVC Electric Ball Valve A20-T系列两通UPVC电动球阀



T25-P2-A



T25-P2-B

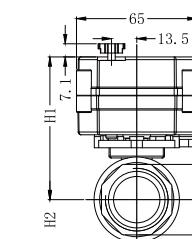
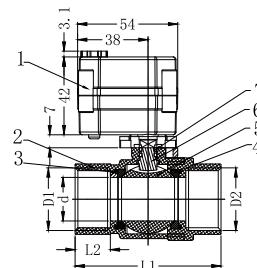


T25-P2-C

Technical Parameters 技术参数:

Product size 口径	NPT/BSP/No Thread Glued Type 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	≤7S
Life time 寿命	70000 times (testing pressure is 0.4MPa,medium is water)
Valve body material 阀材质	UPVC
Actuator material 执行器材质	PPO
Sealing material 密封材料	EPDM & PTFE
Actuator rotation 执行器旋转角度	90°
Torque force 扭力	3 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~55°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



Components 组成

No.	Name	Material	Quantity
1	Actuator	PPO	1
2	Body & Cover	UPVC	1
3	O-ring	EPDM	2
4	Sealing	PTFE	2
5	Ball	UPVC	1
6	Stem	UPVC+SS304	1
7	O-ring	EPDM	1

DESCRIPTION	D1/D2	d±0.3	L1±1	L2±1	E1±0.5	H1±1	H2
15-P2-B	1/2"	14	60	12	29.5	76.3	19.5
20-P2-B	3/4"	17	73	17	37	78	22
25-P2-B	1"	23	80	18	43.5	83	26.5
32-P2-B	1 1/4"	26	94.5	23	50	82	28

A20-T Series 2 way UPVC Electric Ball Valve(AC/DC110-230V) A20-T系列两通UPVC电动球阀

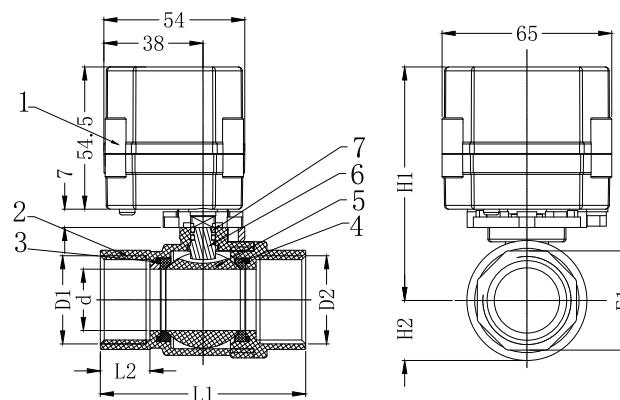
Technical Parameters 技术参数:

Product size 口径	NPT/BSP/No Thread Glued Type 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	≤7S
Life time 寿命	70000 times (testing pressure is 0.4MPa,medium is water)
Valve body material 阀材质	PVC
Actuator material 执行器材质	PPO
Sealing material 密封材料	EPDM & PTFE
Actuator rotation 执行器旋转角度	90°
Torque force 扭力	3 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~55°C
Manual override 手动功能	Yes No (Optional)
Open/close indicator 开关指示	Yes
Protection class 保护等级	IP67



T25-P2-C

Assemble Diagram 组装图



DESCRIPTION	D1/D2	d±0.3	L1±1	L2±1	E1±0.5	H1±1	H2
15-P2-C	1/2"	14	60	12	29.5	88.8	19.5
20-P2-C	3/4"	17	73	17	37	90.5	22
25-P2-C	1"	23	80	18	43.5	95.5	26.5
32-P2-C	1 1/4"	26	94.5	23	50	94.5	28

Components 组成

No.	Name	Material	Quantity
1	Actuator	PPO	1
2	Body & Cover	UPVC	1
3	O-ring	EPDM	2
4	Sealing	PTFE	2
5	Ball	UPVC	1
6	Stem	UPVC+SS304	1
7	O-ring	FPM	1

A20-T Series 2 Way SS304 Tri-clamp Electric Ball Valve A20-T系列两通快装电动球阀

Technical Parameters 技术参数:

Valve size 口径	DN10 DN25 (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/DC9-24V AC/DC110-230V (Optional)
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	SS304 SS316
Actuator material 执行器材质	PPO
Sealing material 密封材料	FKM & PTFE
Actuator rotation 执行器旋转角度	90°
Torque force 扭力	3 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
Protection class 保护等级	IP67



A20-S2-C

A20-T Series 3 Way Vertical Brass Electric ball valve A20-T系列立式三通黄铜电动球阀

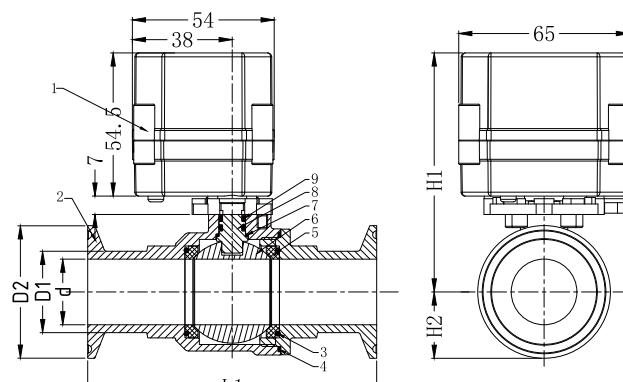
Technical Parameters 技术参数:

Valve size 口径	NPT/BSP 1/2" 3/4" 1" (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 AC/DC110-230V(Optional)
Wiring diagram 接线图	CR201 CR202 CR301 CR302 CR303 CR304 CR305 CR306 CR401 CR501 CR502 CR701 CR702 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	PPO
Sealing material 密封材料	FKM & PTFE
Actuator rotation 执行器旋转角度	90°
Torque force 扭力	3N.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



T25-B3-C

Assemble Diagram 组装图

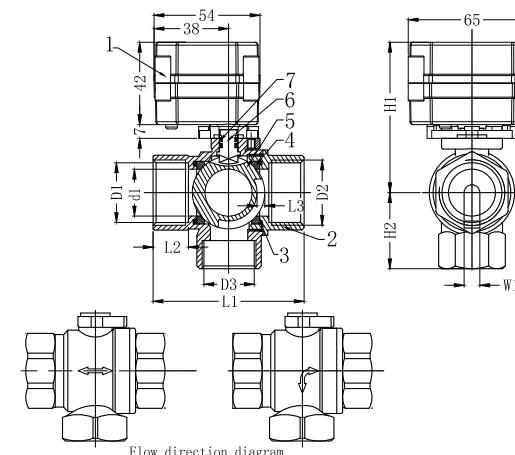


Components 组成

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

DESCRIPTION	d±0.2	D1±0.2	D2±0.2	L±1	H1±1	H2
10-S2-C	9.5	12.7	25.4	75	83	13.75
25-S2-C	25	31	50.5	110	91	25.25

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/D3	d1±0.3	W1±0.2	L1±1	L2±1	L3±0.2	H1±1	H2
15-B3-C	1/2"	15	8	58	13	3	72	29.5
20-B3-C	3/4"	15	7	66	16	3	70.5	32.5
25-B3-C	1"	24	8	75	17	4	77	40

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A20-T Series 3 Way Horizontal Brass Electric Ball Valve A20-T系列卧式三通黄铜电动球阀

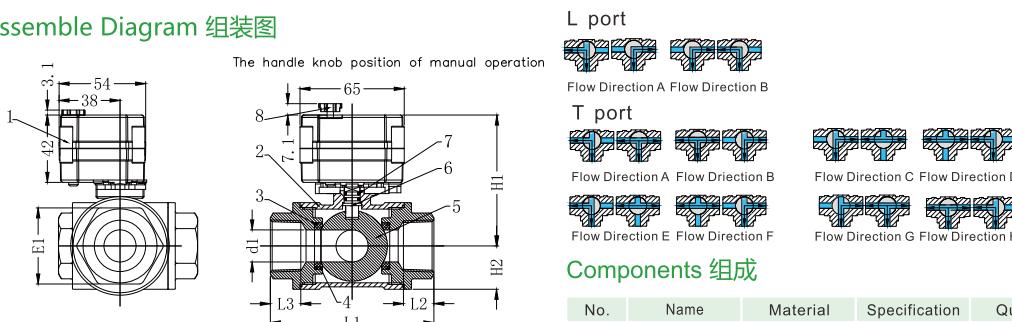
Technical Parameters 技术参数:

Valve size 口径	NPT/BSP 1/4" 3/8" 1/2" 3/4" 1" (Optional)
Maximum working pressure 最大工作压力	1.0MPa
Circulation medium 介质	Fluid, air
Rated voltage 额定电压	DC5V DC12V DC24V AC/DC9-24V AC/DC110-230V (Optional)
Wiring diagram 接线图	CR201 CR202 CR301 CR302 CR303 CR304 CR305 CR306 CR401 CR501 CR502 CR701 CR702 CR703 CR704 CR705 CR706 (Optional)
Working current 工作电流	≤500mA
Open/close time 开关时间	≤7S
Life time 工作寿命	70000 times (testing pressure is 0.4MPa, medium is water)
Valve body material 阀材质	Brass
Actuator material 执行器材质	PPO
Sealing material 密封材质	FKM & PTFE
Actuator rotation 执行器旋转角度	90°
Torque force 扭力	4N.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



T20-B3-B

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		4
4	Sealing	PTFE		4
5	Ball	Stainless Steel	304	1
6	Stem	Brass		1
7	O-ring	FKM		2

DESCRIPTION	D1/D2	d1±0.3	L1±1	L2/L3±1	E1±0.5	H1±1	H2
8-B3-B	1/4"	6	51	11	20	65.5	11
10-B3-B	3/8"	6	51	11	20	65.5	11
15-B3-B	1/2"	12	70	17	27	72	17
20-B3-B	3/4"	15	75	17	31	76	20.5
25-B3-B	1"	18	85	17	38	78	22.5

A20-M Series 2 Way SS304 Modulating Ball Valve A20-M系列两通不锈钢比例调节阀

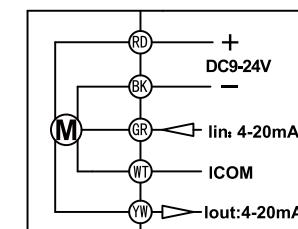
Technical Parameters 技术参数:

Valve size 口径	NPT/BSP 1/4" 3/8" 1/2" 3/4" 1" (Optional)
Maximum working pressure 最大工作压力	1.0MPa
Circulation medium 介质	Fluid, air
Rated voltage 额定电压	DC9-24V DC9-45V
Input signal 输入信号	4-20mA 0-5V 0-10V (Optional)
Output signal 输出信号	PWM 4-20mA(Optional)
Working current 工作电流	≤500mA
Open/close time 开关时间	≤7S
Life time 工作寿命	70000 times (testing pressure is 0.4MPa, medium is water)
Valve body material 阀材质	SS304 SS316
Actuator material 执行器材质	PPO
Sealing material 密封材质	FKM & PTFE
Ball type 阀球类型	Full port or V型(Optional)
Torque force 扭力	3 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	No
Open/close indicator 开关指示	Yes No (Optional)
Protection class 保护等级	IP67



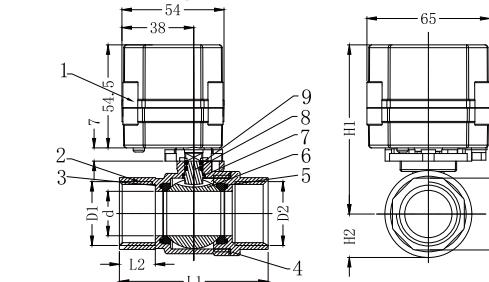
M15-S2-C

Wiring Diagram 接线图



1. RD (red cable) connects DC9-24V positive pole
2. BK (black cable) connects DC9 ~ 24V-negative pole
3. GR (green cable) connects position input /control current +/ control voltage +4-20mA
4. WT (white cable) connects common signal input and output signal's negative
5. YW (yellow cable) connects position feedback positive, output 4-20mA as feedback signal

Assemble Diagram 组装图



DESCRIPTION	D1/D2	d±0.5	L1±1	L2±1	E1±0.5	H1±1	H2
8-S2-C	1/4"	10	51	12	21	82.5	14
10-S2-C	3/8"	10	51	12	21	82.5	14
15-S2-C	1/2"	15	62	14	25	84.5	17
20-S2-C	3/4"	20	72	17	31	88	20
25-S2-C	1"	25	79	18	38	91	24.5

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A20-T Series 3 Way SS304 Electric Ball Valve

A20-T系列三通不锈钢电动球阀

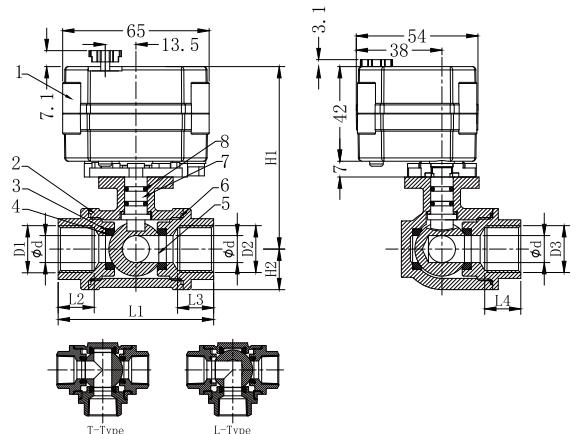
Technical Parameters 技术参数:

Valve size 口径	NPT/BSP 1/2" 1/4" 3/8"(Optional)
Maximum working pressure 最大工作压力	1.0Mpa
Circulation medium 介质	Fluid, air
Rated voltage 额定电压	DC12V DC24V AC24V DC12-24V AC110-230V (Optional)
Wiring diagram 接线图	CR201 CR202 CR301 CR302 CR303 CR305 CR306 CR501 CR502 CR701 CR702 CR703 CR705 CR706 (Optional)
Working current 工作电流	≤500mA
Open/close time 开关时间	≤7S
Life time 寿命	70000 times (testing pressure is 0.4MPa, medium is water)
Valve body material 阀体材质	SS304 SS316 (Optional)
Actuator material 执行器材质	PPO
Sealing material 密封材料	FKM & PTFE
Actuator rotation 执行器旋转角度	90°
Torque force 扭力	3 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 operation 手动操作	Yes No (Optional)
Open/close indicator 开关指示	Yes No (Optional)
Protection class 防护等级	IP67



A20-T

Assemble Diagram 组装图



Components 组成

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

L port



Flow Direction A Flow Direction B

T port



Flow Direction A Flow Direction B

Flow Direction C Flow Direction D



Flow Direction E Flow Direction F



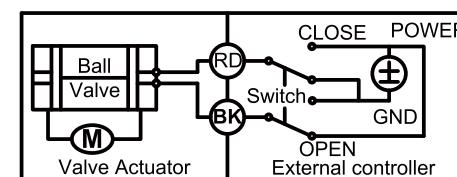
Flow Direction G Flow Direction H

DESCRIPTION	D1/D2/D3	d±0.2	L1±0.5	L2/L3/L4±0.5	H1±0.5	H2
15-S3-B	1/2"	6	69	14	81	18
10-S3-B	3/8"	6	52	11	71	14
8-S3-B	1/4"	12	52	11	71	14

Wiring Diagram

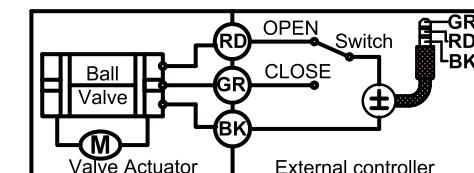
■ CR201 Wiring Diagram (2 wires control)

- 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



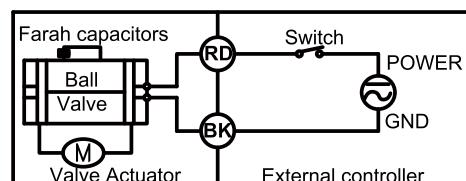
■ CR304 Wiring Diagram (3 wires control)

- 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



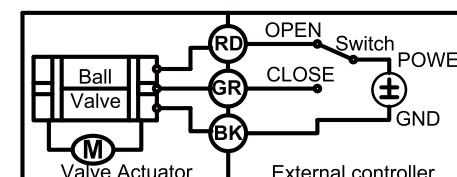
■ CR202 Wiring Diagram (2 wires control – Capacitors return in case of the power is failure)

- 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 AC/DC110-230V
- Exceeding the working voltage is forbidden



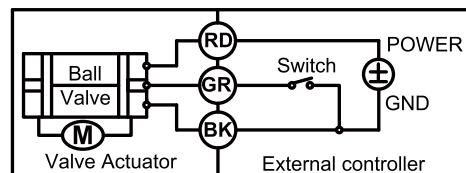
■ CR301 Wiring Diagram (3 wires control)

- 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
- Exceeding the working voltage is forbidden



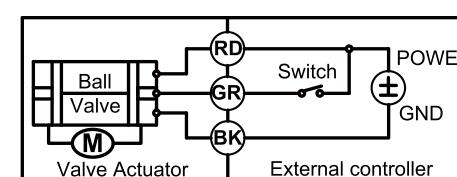
■ CR302 Wiring Diagram (3 wires control)

- RD connect with positive, the BK & GR connect with negative
- SW CLOSED, the valve OPEN, the actuator automatically power off after in place
- SW OPEN, the valve CLOSED, the actuator automatically power off after in place
- Suitable Working Voltage: DC9-24V
- Exceeding the working voltage is forbidden



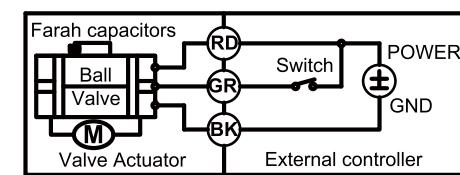
■ CR303 Wiring Diagram (3 wires control)

- RD& GR connect with positive, the BK connect with negative
- SW CLOSED, the valve OPEN, the actuator automatically power off after in place
- SW OPEN, the valve CLOSED, the actuator automatically power off after in place
- Suitable Working Voltage: DC12V,DC24V,AC/DC9-24V,AC/DC110-230V,AC/DC29V
- Exceeding the working voltage is forbidden



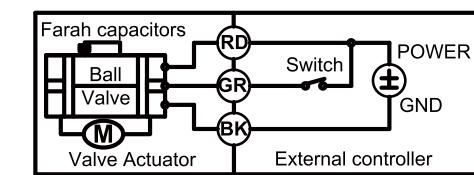
■ CR305 Wiring Diagram (3 wires control – Capacitors return incase of the power is failure)

- 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 CLOSED, the actuator automatically power off after in place
- Suitable Working Voltage: AC/DC9-24V,AC/DC110-230V
- Exceeding the working voltage is forbidden



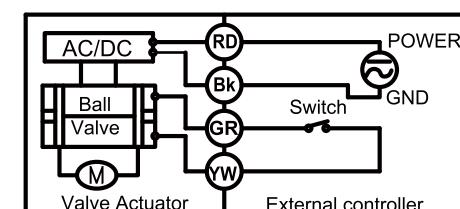
■ CR306 Wiring Diagram (3 wires control – Capacitors return in case of the power is failure)

- 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 off after in place
- Suitable Working Voltage: AC/DC9-24V,AC/DC110-230V
- Exceeding the working voltage is forbidden



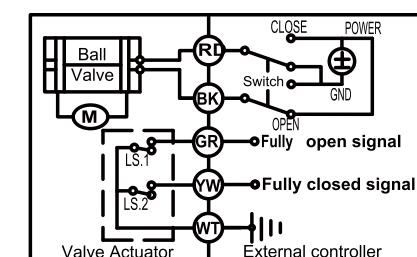
■ CR401 Wiring Diagram (4 wires control)

- 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 parallel , must put the same color control wiring together, otherwise the valve could not working normally



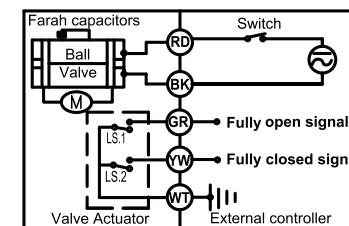
■ CR501 Wiring Diagram (5 wires control with feedback signal)

- 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



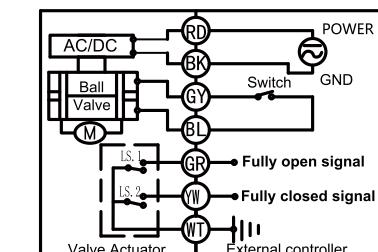
■ CR502 Wiring Diagram (5 wires control - Capacitors return in case of the power is failure & feedback signal)

- 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
- 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



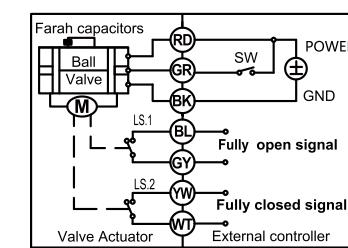
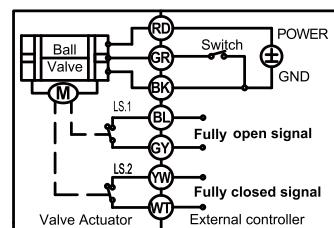
■ CR704 Wiring Diagram (7 wires control with feedback signal)

- 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



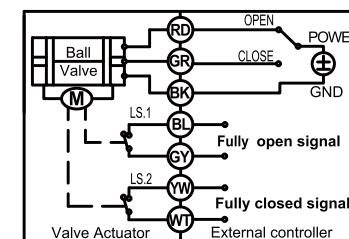
■ CR701 Wiring Diagram (7 wires control with feedback signal)

- 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



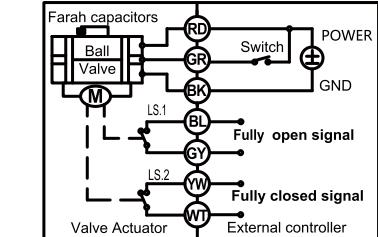
■ CR702 Wiring Diagram (7 wires control with feedback signal)

- 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
- 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



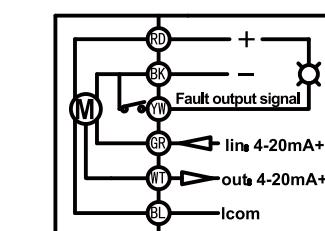
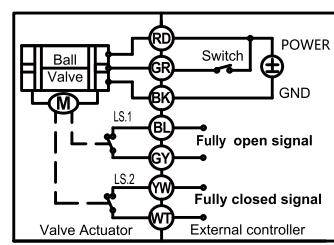
■ CR706 Wiring Diagram (7 wires control - Capacitors return in case of the power is failure & feedback signal)

- 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,AC/DC110-230V
- Exceeding the working voltage is forbidden



■ 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: DC12V,DC24V,AC/DC9-24V,AC110-230V
- Exceeding the working voltage is forbidden



■ A150 SERIES MODULATING VALVE WIRE DIAGRAM

- 1, 红线接正级, 黑线接负极。
- 2, 绿线接4-20mA/0-10V/0-5V信号输入正极, 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 input 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 .