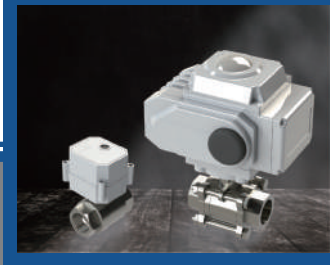




TXMC



GENERAL KNOWLEDGE

General Instruction for Electric actuator

For your own safety, please read the instruction below before you inquiring / using our products.

Wiring

ST Series. When use DC24V power. No need to partition anode and cathode.

- Wiring project should carry on by the qualified electric engineer according to the electrical facility technique standard.
- It forbids to do wiring project in rainy day or in high humidity.
- Please confirm wiring connection drawing correct connection.
- This device have special cable, no need interior wiring.
- No-opening the top cover (already have cables).
- When electrifying, absolutely forbid to connect the opening and closing switch at the same time.
- When using line-pipe,operator should adopt waterproof measure.
- When there's water hammer phenomenon, please aware of valve switching time adjustment and choose the suitable product.
- Operator should make sure that the electric appliance of this valve is higher than line pipe, in order to prevent water from the inflowing electric appliance along line which leads to damaging of machine.

Operating

Manual operating

- Uninstall manual insert hole cover. Below having lever shaft hexagonal hole (subtense 4mm).
- Insert socket head wrench to hexagon, "close" is clockwise, "open" is counter-clockwise.
- When electrifying,manual operation is forbidden. When manual operation,must confirm the display on opening meter. To avoid malfunction, when full open and full off, DO NOT use hexagon wrenches to turn forcefully.



Electromotion operation

- Before electromotion operation, please use the manual operation method, to confirm the opening meter and valve are in the same position, and make sure the wire connection is correct, then do the electro-motion operation .
- When full open, red LED is on, when full off,green LED is on.

Maintenance

- Because use of the molybdenum disulfide lithium-based grease so no need to add oil.
- Work after a long stop,please confirm if the core deflecting and torsion happen,and if it has good slippage.

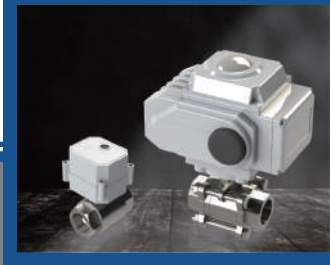
Noted items of indoor installation

- The common product,be installed in the room full of explosive air unless explosion-proof product.
- If installed at certain place having water or splashed material, operator is supposed to install the protection cover additionally for covering complete-machine safely.

Noted items of out door installation

- Please installing protection cover above complete-machine additionally in order to avoid rain of sunshine (The shining of sunshine outdoor would lead to high-temperature which accelerates ageing of components,even losing effective. The rain would accelerate ageing of rubber-pad, moreover, the product will be damaged if failing in water proof conduction).
- Operator should save necessary space needed by manual wire-in operation in advance.



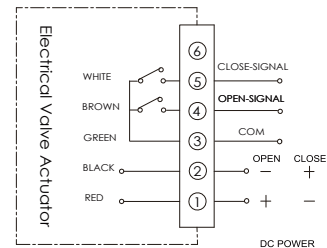
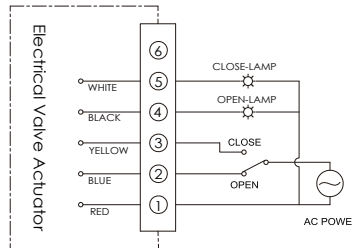


PRODUCT/ MOTORIZE BALL VAVLE

Electrical Valve Actuator



Wiring connection



Specifications Characteristics

| Series | ST-05B | | ST-10B | | ST-20B | | ST-40B | | ST-60B | |
|--------------------------------------|--------------------------------------------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|
| | DC24V | AC110V AC220V | DC24V | AC110V AC220V | DC24V | AC110V AC220V | DC24V | AC110V AC220V | DC24V | AC110V AC220V |
| Acting range | 0 ~ 360° | | | | 0 ~ 90° | | 0 ~ 90° | | 0 ~ 90° | |
| Output torque | 50Nm | | 100Nm | | 200Nm | | 400Nm | | 600Nm | |
| Acting time | 7Sec | 20Sec | 10Sec | 30Sec | 12Sec | 30~60Sec | 15Sec | 30~60Sec | 20Sec | 45~60Sec |
| Rating electricity | 0.5A | 0.48A 0.24A | 0.85A | 0.7A 0.32A | 1.2A | 1.6A 0.88A | 2.5A | 2.2A 1A | 2.5A | 2.2A 1A |
| Motor power | 10W | 15W | 20W | 25W | 40W | 40W | 70W | 90W | 90W | 90W |
| Insulation resistance(MΩ) | 100/250 VDC | 100/500 VDC | 100/250 VDC | 100/500 VDC | 100/250 VDC | 100/500 VDC | 100/250 VDC | 100/500 VDC | 100/250 VDC | 100/500 VDC |
| Voltage resistance rating (1 Minute) | 500VAC | 1500VAC | 500VAC | 1500VAC | 500VAC | 1500VAC | 500VAC | 1500VAC | 500VAC | 1500VAC |
| Use of the environment | Temperature: -25~+55°C ; Humidity: 10~90%RH | | | | | | | | | |
| Defend level | IP-67 | | | | | | | | | |
| Body material | Aluminium die-casting | | | | | | | | | |
| Install direction | 360 degrees omni-directional | | | | | | | | | |
| Electriad connection | Each one or M18*1.5 water-proof cable connectors | | | | | | | | | |
| Weight | 2.8kg | | 4.4kg | | 9.5kg | | 10kg | | 10kg | |

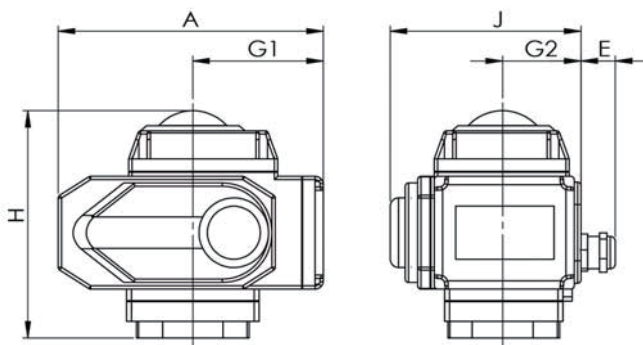
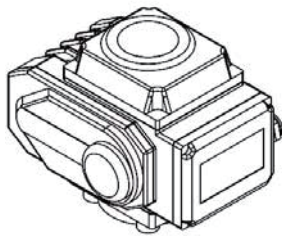


PRODUCT/ MOTORIZE BALL VAVLE

Installation

- When use DC24V power.no need to partition Anode and cathode.
- Wiring project should carry on by the qualified electric engineer according to the electrical facility technique standard.
- It forbids to do wiring project in rainy day or in high humidity.
- Please confirm wiring connection drawing correct connection.
- This device have special cable, no need interior wiring.
- No-opening the top cover (Already have cables).
- When electrifying,absolutely forbid to connect the opening and closing switch at the same time.
- When using line-pipe,operator shouldadopt waterproof measure.
- Operator should make sure that the electric appliance of this valve is higher than line pipe, in order to prevent water from inflowing electric appliance along line which leads to damaging of maching.

Dimensions (mm)



| Code No. | A | E | G1 | G2 | H | J |
|----------|-----|----|-----|----|-----|-----|
| ST05 | 160 | 24 | 78 | 50 | 151 | 114 |
| ST10 | 196 | 24 | 99 | 50 | 170 | 122 |
| ST20 | 256 | 24 | 135 | 65 | 208 | 156 |
| ST40 | 256 | 24 | 135 | 65 | 208 | 156 |
| ST60 | 256 | 24 | 135 | 65 | 208 | 156 |

Maintenance

- Because use of the molybdenum disulfide lithium-based grease, so that no need to add oil.
- Work after a long stop, please confirm if he core-deflecting and torsion happen, and if it has good slippage.

Noted items of indoor installation

- The common product,be installed in the room full of explosive air unless explosion-proof product.
- If installed at certain place having water or splashed material, operator is supposed to install the protection cover additionally forcovering complete-machine safely.
- Operator should save necessary space needed by manual wire-in operation in advance.

Noted items of outdoor installation

- Please installing protection cover above complete-machine additionally in order to avoid rain of sunshine (The shining of sunshine outdoor would lead to high-temperature which accelerates ageing of components,even losing effec-tiven, The rain would accelerate aging of rubber-pad,moreover, the product will be damaged if failing in water proof conduction).
- Operator should save necessary space needed by manual wire-in operation in advance.

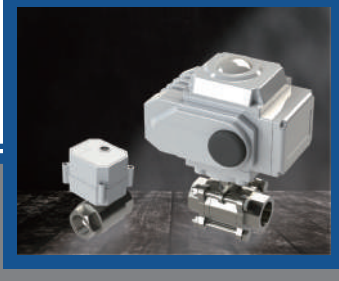
Operating

Manual operating

- Uninstall manual insert hole cover. Below having lever shaft hexangular hole (subtense 4mm).
- Insert socket head wrench to hexagon, "close" is clockwise, "open" is counter-clockwise.
- When electrifying,manual operation is forbidden, when manual operation,must confirm the display on opening meter. To avoid malfunction,when full open and full off, don't use hexagon wrenches to turn forcefully.

Electromotion operation

- Before electromotion operation, please use the manual operation method,to confirm the opening meter and valve are in the same position,and make sure the wire connection is correct, then do the electro-motion operation.
- When full open,red LED is on , when full off,green LED is on.



PRODUCT/ MOTORIZE BALL VALVE

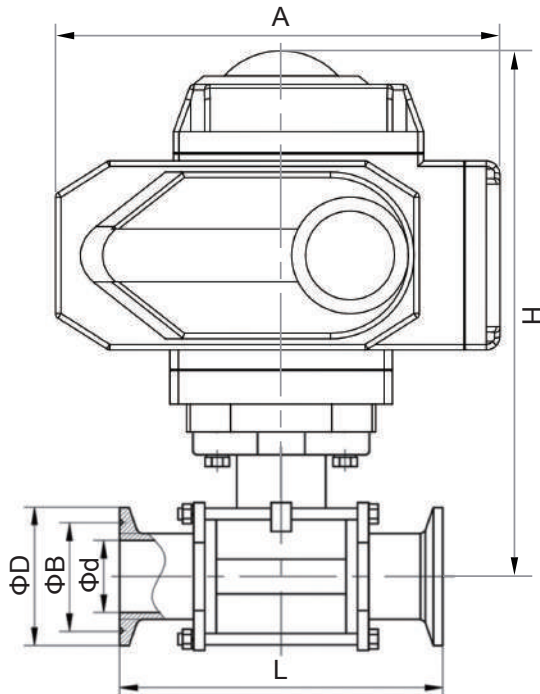
Motorize 3-PC T-Clamp Sanitary Ball Valve



Specifications Characteristics

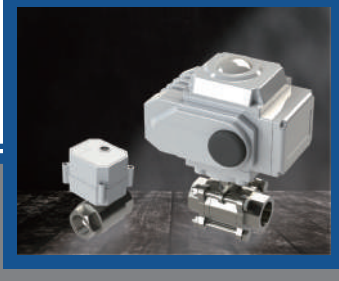
| Model | 2C-S Series |
|-----------------|-------------------------------------------|
| Medium Temp. | -20°C - 150°C |
| ENV Temp. | -20°C - 60°C |
| Pressure | 0 - 1.5 Mpa |
| Function | Switch control, Proportional control |
| Actuator Mat. | Al alloy die casting, Protect level IP-67 |
| Valve body Mat. | Stainless steel 316 |
| Valve seat Mat. | PTFE |
| Valve rod Mat. | Stainless steel 316 |
| Valve cap Mat. | Stainless steel 316 |

Dimensions (mm)



| Model | d | A | B | D | H | L | Actuator Suggest |
|--------|------|-----|------|------|-------|-----|------------------|
| 1/2" | 9.5 | 160 | 20.3 | 25.4 | 187.5 | 89 | ST05 |
| 3/4" | 15.9 | 160 | 20.3 | 25.4 | 195 | 101 | ST05 |
| 1" | 22.2 | 160 | 43.5 | 50.5 | 203 | 114 | ST05 |
| 1-1/2" | 34.9 | 160 | 56.5 | 50.5 | 220.3 | 140 | ST05 |
| 2" | 47.6 | 196 | 70.5 | 64 | 248.5 | 156 | ST10 |
| 2-1/2" | 60.3 | 256 | 65 | 77.5 | 309 | 197 | ST20 |
| 3" | 73 | 256 | 83.5 | 91 | 316 | 229 | ST20 |
| 4" | 97.6 | 256 | 110 | 119 | 331.5 | 241 | ST40 |

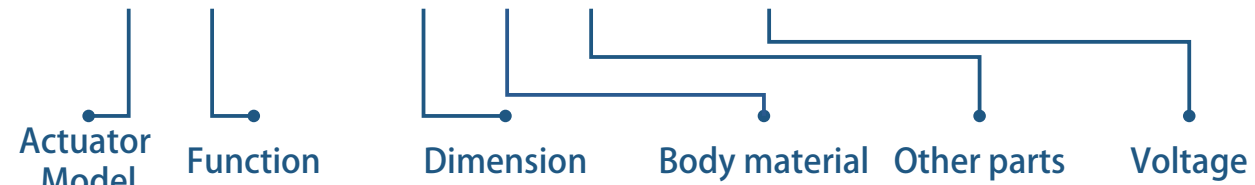
* Actuators above the valve are divided into High torque and Low torque, size are different.
Actual actuator dimension based on the real product.



PRODUCT/ MOTORIZE BALL VAVLE

How to select model

ST 20 B - 2CS 80 S X - AC220V



| Model | Function | | Dimension | | Material | | Material | | Voltage |
|-------|-------------------|------|-----------|------|----------|------|-------------|------|---------|
| | Function | Code | Dimension | Code | Material | Code | Material | Code | |
| 05 | Switch Type | B | 1/2" | 15 | CF8M | S | TFM4215 | X | AC110V |
| 10 | Proportional Type | A | 3/4" | 20 | CF8M | S | V-Port ball | V | AC220V |
| 20 | | | 1" | 25 | | | | | DC24V |
| 40 | | | 1-1/4" | 32 | | | | | |
| | | | 1-1/2" | 40 | | | | | |
| | | | 2" | 50 | | | | | |
| | | | 2-1/2" | 65 | | | | | |
| | | | 3" | 80 | | | | | |
| | | | 4" | 100 | | | | | |

* Actuator Proportional type
Input / Output signal
4 - 20 mA.DC in factory setting.

If you have different request,
welcome to discuss with us.

* Gasket in the valve is **PTFE** in the factory setting.
Suggest working temperature:
-5°C ~ 150°C

TFM4215 is the special PTFE for **high temperature**.
Suggest working temperature:
-5°C ~ 200°C

Full-flow ball valve (**Right**)
Unable to precisely control the flow.

V- port ball valve (**Left**)
Available to precisely control the flow.
Recommend to C/W proportional actuator.

