

# GENERAL KNOWLEDGE



### **General Instruction for Electric actuator**

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

## Wiring project

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-openning the tope 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 maching.

# 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, 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 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.

### 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 effective. 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.

WRA-6310A-220 Pessure: b-seto/ten/ femp: 5-set: Par San San Sanget/seto setor setores

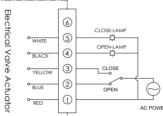


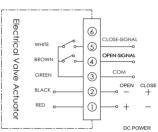


### **Electrical Valve Actuator**



#### Wiring connection





#### **Specifications Characteristics**

							DC POWER				
Series	ST-05B		ST-10B		ST-	20B	ST-40B		ST-60B		
Power voltage	DC24V	AC110V AC220V	DC24V	AC110V AC220V	DC24V	AC110V AC220V	DC24V	AC110V AC220V	DC24V	AC110V AC220V	
Acting range		0~3	60°		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( $M\Omega$ )	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			Т	emperatur	e: -25~+55	°C ; Humidi	ty: 10~90%	6RH			
Defend level					I	P-67					
Body material					Aluminiur	n die-castin	g				
Install direction		360 degrees omni-directional									
Electriad connection	Each one or M18*1.5 water-proof cable connectors										
Weight	2.8	lkg	4.4	łkg	9.5kg		10kg		10kg		

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# Installation

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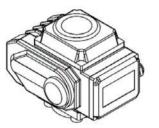
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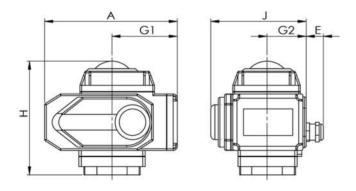
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- When using line-pipe, operator should adopt waterproof measure.

 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.	А	E	G1	G2	Н	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

### Maintanence

- Because use of the molybdenum disulfide lithium-based grease, so that no need to add oil.

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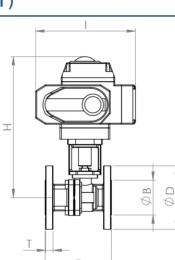


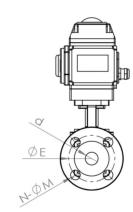


#### Motorize Flange Ball Valve ( ANSI-150LB )



### Dimensions (mm)





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

Body Dimension	d	В	D	E	F	Н	I	М	Ν	Т	Actuator Suggest
1/2"	15	35	89	60.5	108	241	160	16	4 Holes	12.1	ST05
3/4"	20	43	98	70	117	249	160	16	4 Holes	12.1	ST05
1"	25	51	108	79.5	127	246.5	160	16	4 Holes	12.1	ST05
1-1/4"	32	64	117	89.5	140	251	196	16	4 Holes	12.7	ST05
1-1/2"	40	73	127	98.5	165	295.5	196	16	4 Holes	14.3	ST10
2"	50	92	152	120.5	178	305.5	196	19	4 Holes	15.9	ST10
2-1/2"	65	105	178	139.5	190	381.5	256	19	4 Holes	17.5	ST20
3"	80	127	190	152.5	203	392.5	256	19	4 Holes	19.1	ST20
4"	100	157	229	190.5	229	414.5	256	19	8 Holes	23.9	ST40
5"	125	186	254	216	356	457	256	22	8 Holes	25.4	ST60
6"	150	216	279	241.5	394	509.5	256	22	8 Holes	28.6	ST100

## **Specifications Characteristics**

Model	1F Series ( 150LB )
moder	IF Series ( ISULB )
Medium Temp.	-20°C - 150°C
ENV Temp.	-20°C - 60°C
Pressure	0 - 10 Kgf/cm2
Function	Switch control, Proportional control
Actuator Mat.	Aluminium alloy die-casting, Protect level IP67
Valve body Mat.	Stainless steel SUS304 ; SUS316
Valve seat Mat.	PTFE
Valve stem Mat.	Stainless steel SUS304 ; SUS316
Flange Spec.	ANSI B16.5





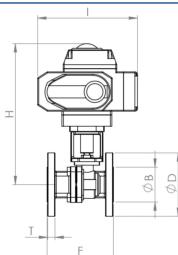
#### Motorize Flange Ball Valve ( ANSI-300LB )

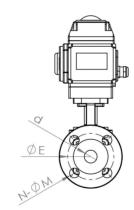


## Dimensions (mm)



Model	1F Series ( 300LB )
Medium Temp.	-20°C - 150°C
ENV Temp.	-20°C - 60°C
Pressure	0 -20 Kgf/cm2
Function	Switch control, Proportional control
Actuator Mat.	Aluminium alloy die-casting, Protect level IP67
Valve body Mat.	Stainless steel SUS304 ; SUS316
Valve seat Mat.	PTFE
Valve stem Mat.	Stainless steel SUS304 ; SUS316
Flange Spec.	ANSI B16.5





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

Body Dimension	d	В	D	E	F	Н	I	М	N	Т	Actuator Suggest
1/2"	15	35	95	66.5	140	244	160	16	4 Holes	14.3	ST05
3/4"	20	43	117	82.5	152	258.5	160	19	4 Holes	15.9	ST05
1"	25	51	124	89	165	254.5	160	19	4 Holes	17.5	ST05
1-1/2"	40	73	156	114.5	190	310	196	22	4 Holes	20.7	ST10
2"	50	92	165	127	216	312	196	19	8 Holes	22.3	ST10
2-1/2"	65	105	190	149	241	387.5	256	22	8 Holes	25.4	ST20
3"	80	127	210	168	283	403	256	22	8 Holes	28.6	ST20
4"	100	157	254	200	305	427.5	256	22	8 Holes	31.8	ST40
5"	125	186	279	235	381	469.5	256	22	8 Holes	35	ST60
6"	150	216	318	270	403	529.5	256	22	12 Holes	36.6	ST100





#### How to select model

