



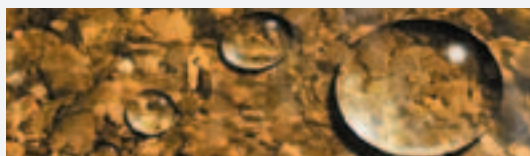
Sun Yeh Electrical Ind. Co., Ltd.

2013

www.sun-yeh.com



Compact
Electric Actuator
T Series





Company Profile

Sun Yeh Electrical Ind. Co., Ltd. was founded in 1986. We have adhered to the highest principle of understanding customer's demand in depth, and continuing to develop quarter-turn actuator, spring return actuator and linear actuator. It has won the new type patent in Taiwan, U.S.A., Japan and China. Sun Yeh offers various products which are widely applied to the control on industry, water treatment, air conditioning, chemical engineering, food industry and so on.

Sun Yeh electric actuators are built on high quality, all products have been certified with approval of CE and CSA. As well as the ISO 9001, ISO 14001, OHSAS 18001, REACH and RoHS certificates. "Perfect Solution" is the only goal for Sun Yeh.

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Introduction

Sun Yeh Compact Actuators T Series provide with torque of 6 N·m and 15 N·m. This compact actuator designs for a small space and applies to small valve and damper applications.

Features

- Compact size can install in small space.
- Comply to : NEMA 4X dry-powder coated aluminum alloy cover (Optional).
- Manual operation can be applied in case of electric failure.
- Built-in thermal protection prevents motor burning out.
- Simple design, easy operation.





General Information and Options

Standard

Models	T6				T15			
Torque Max.	6 N·m (53 lb·in)				15 N·m (132 lb·in)			
Power Supply	110V AC	220V AC	24V AC/DC	12V DC	110V AC	220V AC	24V AC/DC	12V DC
Weight	1.5 kgs (3.3 lb)							
Mounting Flange	ISO 5211 F03/F05							
Manual Override	√							
Duty Cycle	30%							
Control	ON-OFF							
Top Cover	Plastic							
Environmental Rating	MEMA 5, IP67							
Ambient Temperature	-10°C ~ +65°C (14°F ~ 149°F)							
Conduit Entrance	1/4" PF (Max. Internal Diameter : 8mm)							

Option

Top Cover/ Environmental Rating	Aluminum Alloy, Electrostatic Paint / NEMA 4X, IP67, -30°C ~ +65°C (-22°F ~ 149°F)
Mounting Flange	ISO 5211 F04
Conduit Entrance (1-PG11 cable gland with wires 1m long)	  <p>Note : The cable gland and cable only suit for indoor use. For outdoor using please replace suitable cable gland and cable.</p>

Motor data

110V AC, 1-Phase	Model	Speed(90°)		Motor Power(W)	Current			
		60Hz	50Hz		Run(60Hz/50Hz)		Start	Lock
	T6	8s	11s	5	0.3A	0.4A	0.4A	0.3A
	T15	19s	22s	5	0.3A	0.4A	0.4A	0.3A

220V AC, 1-Phase	Model	Speed(90°)		Motor Power(W)	Current			
		60Hz	50Hz		Run(60Hz/50Hz)		Start	Lock
	T6	8s	11s	5	0.2A	0.3A	0.3A	0.3A
	T15	19s	22s	5	0.2A	0.3A	0.3A	0.3A

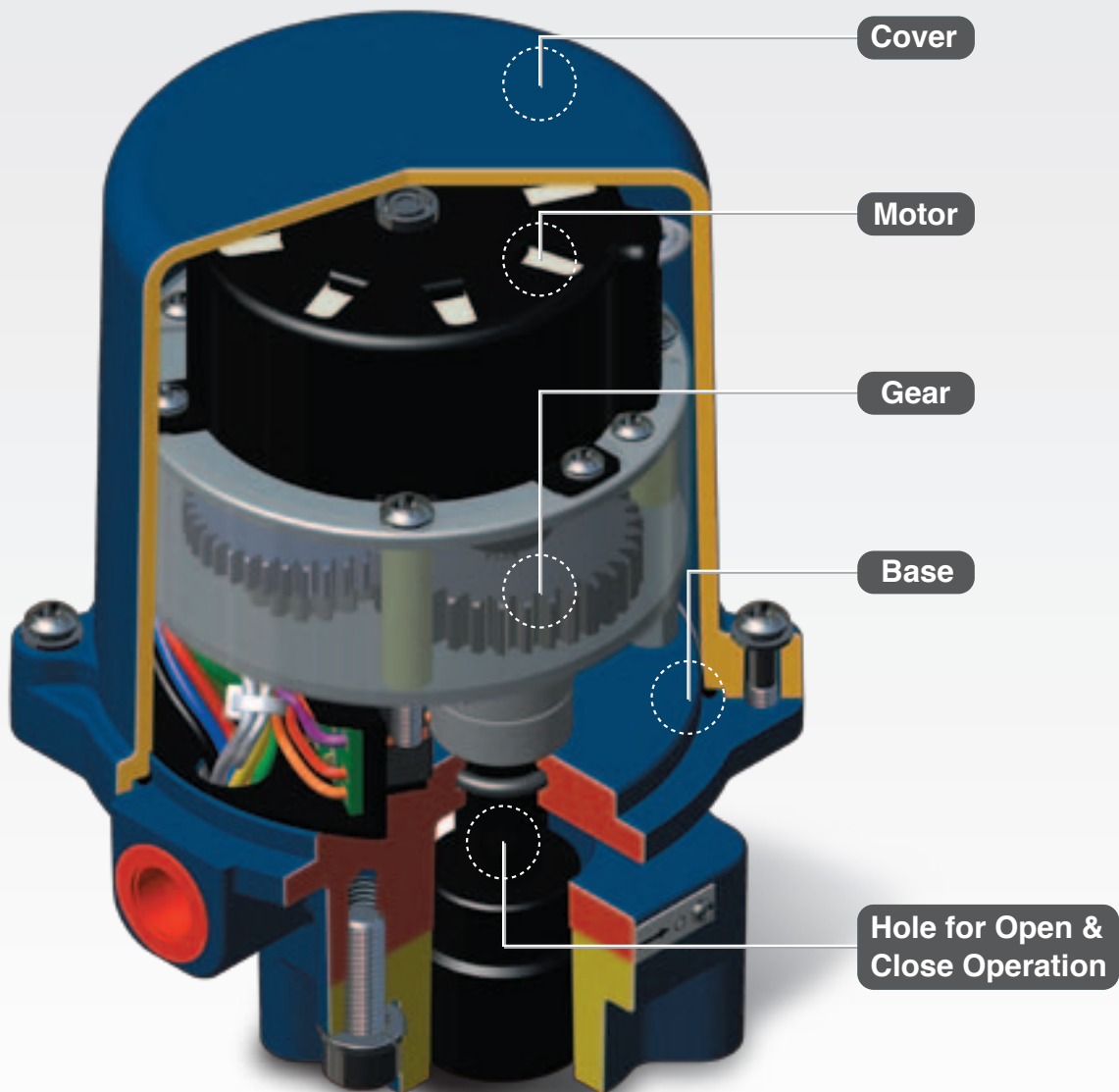
24V AC	Model	Speed(90°)		Motor Power(W)	Current			
		60Hz	50Hz		Run(60Hz/50Hz)		Start	Lock
	T6	8s	11s	5	1.1A	1.5A	1.5A	1.5A
	T15	19s	22s	5	1.1A	1.5A	1.5A	1.5A

24V DC	Model	Speed(90°)	Motor Power(W)	Current		
				Run	Start	Lock
	T6	7s	5	0.32A	2.3A	3.1A
	T15	16s	5	0.28A	2.04A	3.1A

12V DC	Model	Speed(90°)	Motor Power(W)	Current		
				Run	Start	Lock
	T6	8s	5	0.41A	2.92A	4.1A
	T15	18s	5	0.34A	2.66A	4.1A

Run : Full Load Ampere

Lock : Locked Rotor Ampere

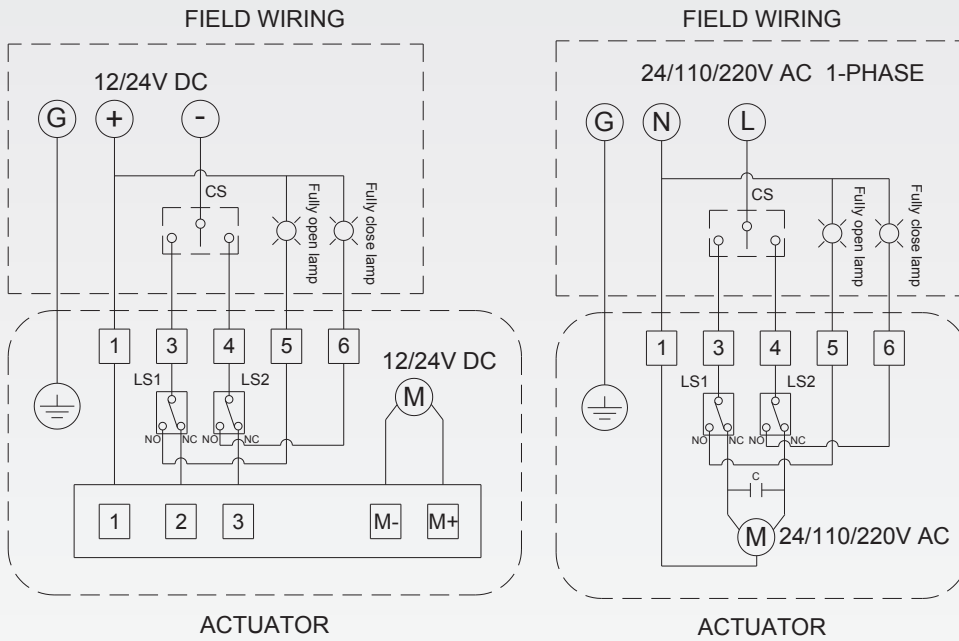


Important Notices and Maintenance

- Check for correct voltage prior to wiring.
- Turn power off before servicing or for maintenance purpose.
- Use sealant to seal conduit connections after wiring to prevent dusting or water contamination.
- The angle of electrical actuator installation must be between 0~180 degree. Do not install upside down or below the horizontal.
- When more than one electric actuator needed to operate simultaneously, please connect with individual cables to avoid parallel connection.
- Not intended for vacuum spaces and avoid installing near explosive atmospheres.
- Actuator should be placed at clean and dry place for storage, and protected with outer carton from being affected by great temperature difference or serious vibration.
- To avoid functional failure caused by statics, do not touch any components on the PCB with metal tools or bare hands.
- Please connect the ground wire to PE inside the electric actuator.
- The warranty period is one year.



Wiring Diagram

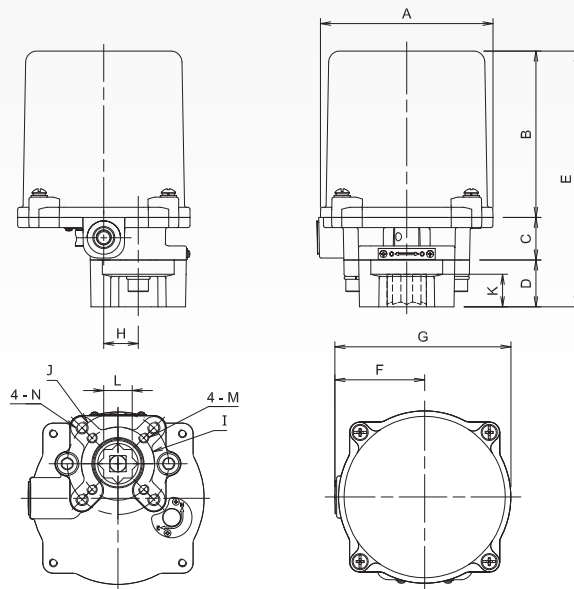


● Use proper wire size and fuse to prevent actuator failure. The data is provided below to assist on the selection of the proper wire and fuse.

Wire Gage	Max Current	Fuse
24(0.205mm ²)	3A	2A

TERMINALS:
 N connects to 1.
 L connects to 3 for OPEN.
 L connects to 4 for CLOSE.
 LS - Limit switch.
 CS - Control switch or relay.

Outline Dimensions



Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Flange Type
T6, T15	ø85	82	21	23	126	44	87	17	ø36	ø50	16	14	M5 x 0.8	M6 x 1.0	F03 / F05

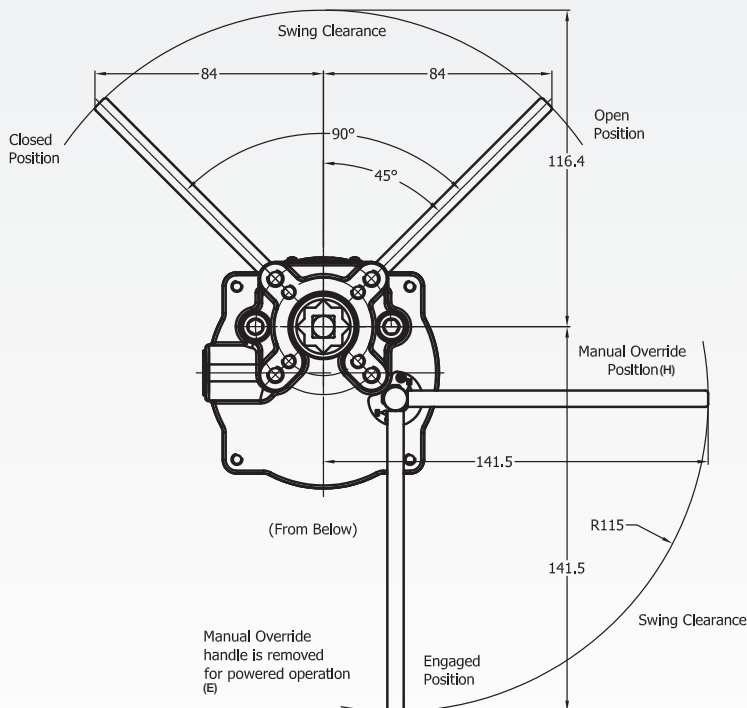
Note : The dimension is based on 110/220V AC actuator, for 24V AC/DC and 12V DC types the "B" will be 113mm and "E" will be 157mm

Installation

- Remove actuator cover. **CAUTION** : Be sure power is off at the main power box.
- Wire actuator using the wiring diagram inside cover.
- Turn on power to actuator. **CAUTION** : Use extreme caution as there are live circuits that could cause electrical shock or death.
- Replace cover and secure cover screw. Fit securing bolts/studs and tighten down to the required torque.

Thread Size	Torque (N·m)
M4	1.3

Steps of Manual Operation



- Using attached tool to switch the actuator from electrical operation (E) to manual operation (H).
 - Utilizing manual override to operate open or close.
- Note : After using the manual override for positioning, switch it back to electrical operation (E) to allow the actuator function again under power.

Receiving/Inspection

Carefully inspect for shipping damage. Damage to the shipping carton is usually a good indication that it has received rough handling. Report all damage immediately to the freight carrier and your seller.

After unpacking the product and information packet, please take care to save the shipping carton and any packing material in case of product return or replacement. Verify that the item on the packing list or bill of lading is the same as your own documentation. If there is any discrepancy, please contact with the seller.

Storage

If the actuator cannot be installed immediately, store it in a dry place, it must be protected from excess moisture, dust, and weather until you are ready to connect cables.

If the actuator has to be installed but cannot be cabled, please don't remove the plastic transit cable entry plugs. When the actuator has to be cabled, it is recommended to replace to suitable water-proof plugs with IP protection.



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