



Linear Valve Electric Actuator

www.sunyeh.com

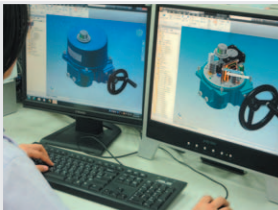


Company Profile

Sun Yeh Electrical Ind. Co., Ltd. was founded in 1986. We always strive for technical excellence, innovation and the highest quality standards in everything we do. Sun Yeh is committed to providing the product conforming to market demands and the first class support.

We continue to expand our product ranges to include quarter-turn actuator, spring return fail-safe actuator, linear actuator, explosion-proof actuator and have won patent in several countries. Sun Yeh offers various products which are widely applied to the control on industry, water treatment, air conditioning, chemical engineering, food industry and etc.

Sun Yeh electric valve actuators are built in high quality and have been certified with CE, CSA, CCC, ATEX, IECEx, CQST approvals. Sun Yeh has successfully passed ISO 9001, ISO14001, OHSAS 18001, AEO.





Perfect solution

is the only goal for Sun Yeh.

Product Overview

The linear valve electric actuators provide with thrust ranges from 250 to 2,000 kgf (551~4,409 lbs). All models are equipped with modulating controllers and suitable for globe valves, gate valves and linear travel devices. It can be applied to HVAC and industrial use, especially for the steam and high temperature employments.

Product Features

- Self-locking drive system.
- DC motor equipped.
- External stem position indicator.
- Low-power consumption.
- NEMA 4X, 5 and dry powder coated aluminum alloy enclosure.
- Manual operation can be applied in case of power outage.
- Built-in thermal protection prevents motor burnout.



• RoHS Compliance



Enclosure

- Ingress protection : IP67, NEMA 4X, 5 (Waterproof and dustproof enclosure, intended for outdoor usage)
- Material : Dry powder coated aluminum alloy.

Motor

- All models are equipped with DC motor to achieve low power consumption, high duty cycle and efficiency.
(Max 1500 starts per hour)

Position Indicator

- All models are equipped with continuous mechanical position indicator. The external visual position indicator makes the position readable easily and instantly.

Modulating Controller

- A modulating control unit will follow input signal for positioning and output signal for indicator.
 - Input signal : 4 ~ 20mA, 1-5V, 2-10V.
 - Output signal : 4 ~ 20mA, 2-10V.

Over-thrust Protection

- If the thrust output of the drive is overrated of the rated, the actuator will shut off to prevent overload.

Adjustable Stroke

- Allow users to adjust actuator's stroke to match valve stem. (Refer to the specifications of stroke ranges at page 5)

Service Condition

- Ambient temperature : -30°C ~ +65°C / -22°F ~ +149°F
- Relative humidity : 30% ~ 95%

Certifications

- CE • RoHS
- CSA • Reach



Model	Thrust		Weight		Nominal Motor Power	Mounting Flange	Max Stroke	
	kgf	in-lbs	kg	in-lbs	w	ISO 5210	mm	inch
L250	250	551	8.5	18.74	8	F07	50	1.97
L500	500	1102	8.5	18.74	8	F07	50	1.97
L1000	1000	2204	27	59.52	25	F10	100	3.94
L2000	2000	4409	27	59.52	35	F10	100	3.94

- The motor power and speed data are based on 110V AC 60Hz.

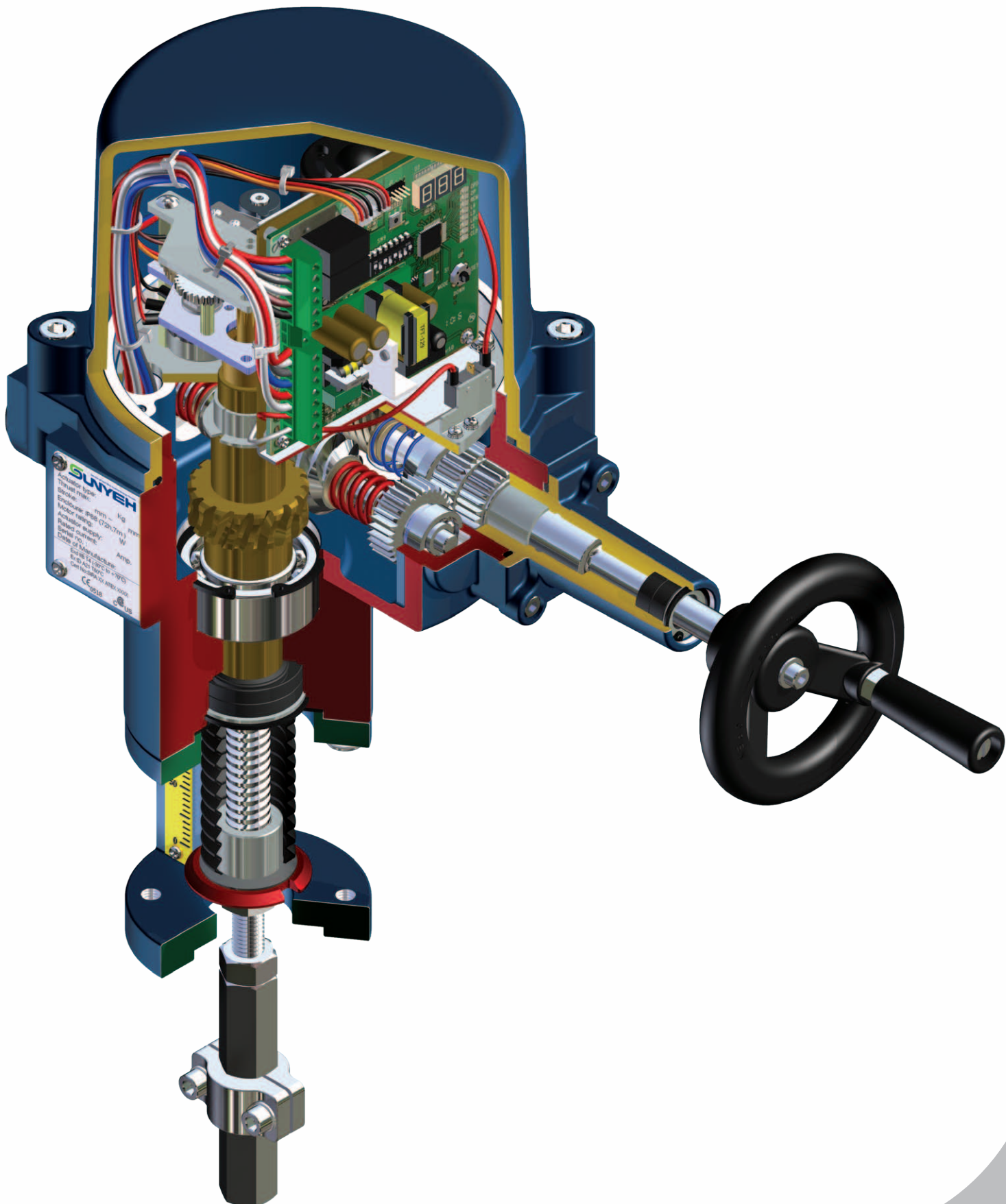
CAUTION : Do not conduct the stroke or thrust test before mounting with the valve or setting the thrust limit.

Important Notices and Maintenance

Instructions for Hand-wheel:

Press the hand wheel toward the actuator to engage the drive and enable manual operation. Pull the hand-wheel out after manual operation to electrical operation. If the hand wheel is not pulled out completely, the electrical operation will not be enabled.

- Make sure that the supply voltage is correct.
- Turn power off before servicing or for maintenance purpose.
- Use proper sealant to seal the conduit connection after wiring procedure to prevent dust or water from entering the actuator.
- The electric actuators should be installed in between 0 to 180 degree. Do not mount the assembly with the actuator top below a horizontal position.
- Not intended for vacuum spaces.
- The actuator should be stored in clean, dry area and with an outer box to protect against excessive temperature differentials or vibration and prevent from affecting the function of the product.
- 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 actuator.
- When more than one actuator needs to be operated simultaneously, please connect with the individual wire install extra relays.
- Running time and rest time should be based on the standard of 1500 starts per hour or the motor may overheat and stop running.
- The warranty period is one year from original ship date.



Enclosures

• Hazardous Area Enclosures

ATEX-European Hazardous Area Directive

Directive Code	Enclosure Code	Standard Temperature
ATEX II 2 GD	Ex d IIB T4 Gb	-30°C ~ +70°C (-22°F ~ +158°F)
ATEX II 2 GD	Ex tb IIIC T130°C Db	-30°C ~ +70°C (-22°F ~ +158°F)

IECEx-International Hazardous Area

Enclosure Code	Standard Temperature
Ex d IIB T4 Gb	-30°C ~ +70°C (-22°F ~ +158°F)
Ex tb IIIC T130°C Db	-30°C ~ +70°C (-22°F ~ +158°F)

Anti-condensation Heater

- A space heater can increase the internal temperature and keep the inside of actuator dry from freezing lubricant and moisture causing actuator failure under low temperature or high humidity.
 - Heater is not recommended if the ambient temperature is above 35°C (95°F).
 - When the temperature varies much from day to night or between summer and winter, heater and thermostat (25±5°C / 77±41°F) are recommended.



Heater Thermostat

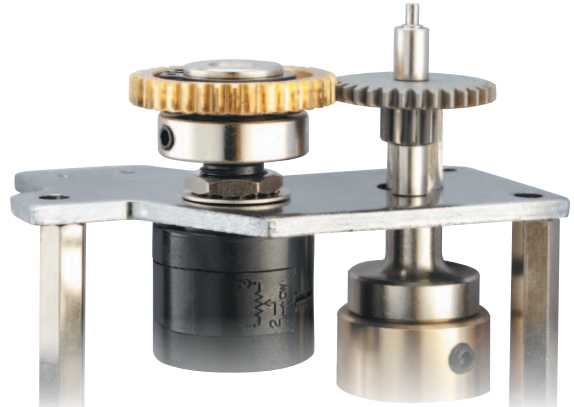
- This option can switch the anti-condensation heater off when the temperature inside the actuator is over (25±5°C / 77±41°F).





Potentiometer Unit

- The option should be ordered with ON / OFF actuators to provide feedback signal to position indicator. Two different resistance values, 1K and 5K ohm are available for selection.



Slow-Speed Operation

- Besides standard speed operation, for slower speed, please contact sales person for slower speed.

ON-OFF Controller

- An external switch is applied to provide either two-position or floating control to the actuator.

Fieldbus Connectivity

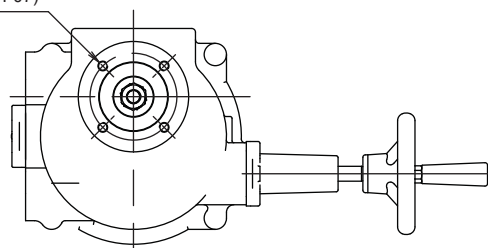
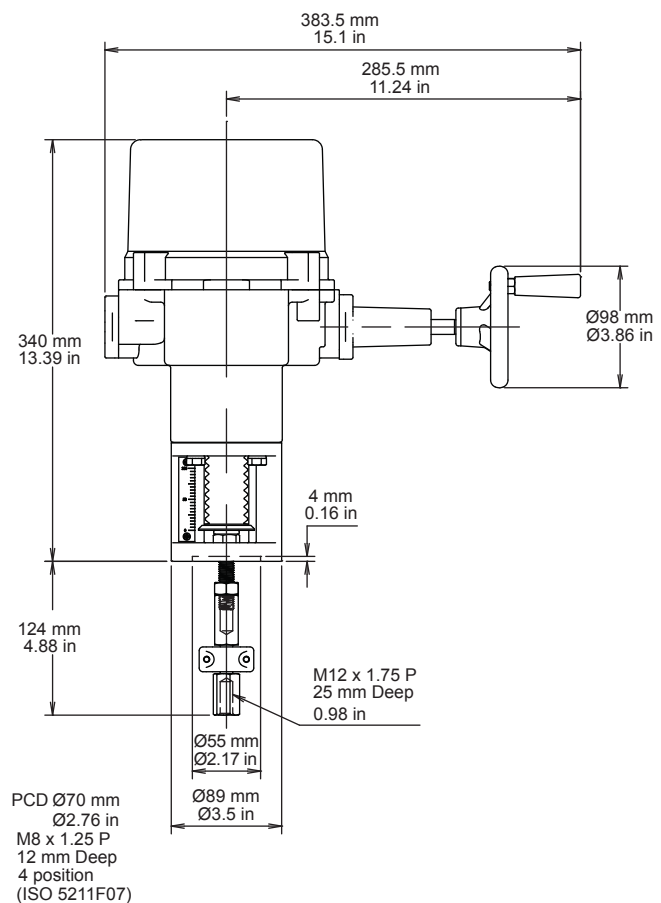
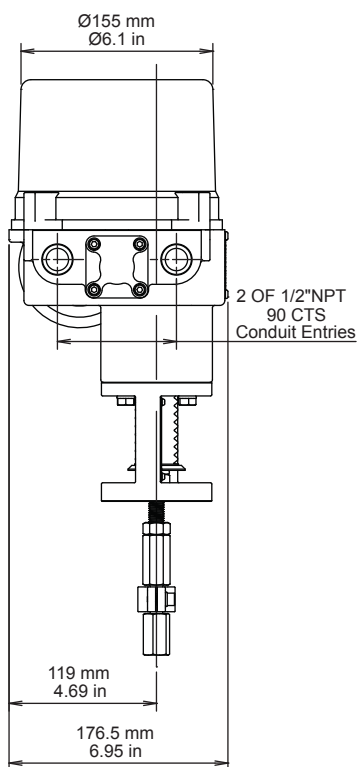
- Modbus

Conduit Network Communication

- Standard : 1 / 2" NPT
- Optional : 3 / 4" NPT, M20

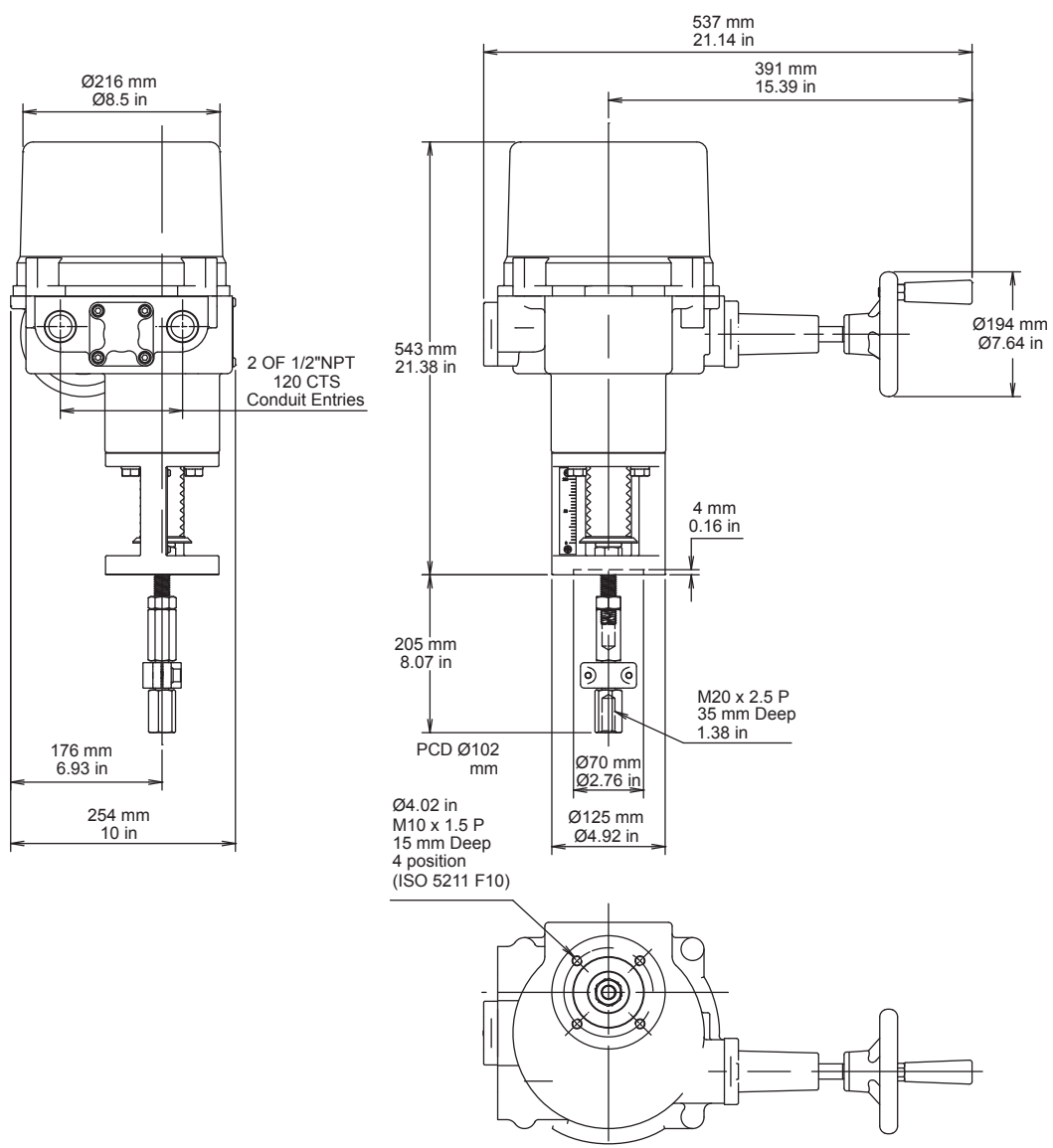


L250, 500





L1000, 2000





SUN YEH ELECTRICAL IND. CO., LTD.

No. 68, Ln. 854, Sec. 1, Shatian Rd., Shejiau Vil., Dadu Dist.,
Taichung City 43244, Taiwan (R.O.C.)

TEL : 886-4-2698-5666 FAX : 886-4-2698-3668

E-mail : service@sunyeh.com

