



# **LINEAR** ELECTRIC VALVE ACTUATORS





#### **Company Profile**

Sun Yeh Electrical Ind. Co., Ltd. was established in 1986 and it is committed to continuous technical innovation, the most advanced product quality management, organizational excellence, and outstanding customer satisfaction.

Our sustainable development drives the product line extension to include quarter-turn actuators, spring return fail-safe actuators, linear actuators, and explosion-proof actuators. Sun Yeh offers various products that can be widely applied to the control of industrial processes, fluid control, water treatment, HVAC, chemical engineering, food processing, etc.

Sun Yeh is dedicated to providing you with high-quality products, which have been certified with CE, CSA, TS, SIL, CCC, ATEX, IECEx, and CNEx approvals, as well as meet RoHS, REACH and China RoHS environmental regulations, in addition to ISO 9001, ISO 14001, ISO 45001, and AEO.





#### **Product Overview**

Linear electric valve actuators provide thrust ranges from 250 to 2,000 kgf (550 to 4410 lbf). All models are equipped with modulating controllers and suitable for globe valves, gate valves and linear travel devices. They can be applied to HVAC and industrial processes, especially for steam and high temperature employments.

#### **Product Features**

- Self-locking drive system.
- DC motor equipped.
- External stem position indicator.
- Low-power consumption.
- Manual operation can be applied upon loss of power supply.
- Built-in motor thermal protection.



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#### Enclosure

• Dry-powder coated aluminum alloy enclosure conforms to C3 according to ISO 12944-6, NEMA 4X, 5 & IP67 outdoor use.

SERIES

#### Motor

- Low power consumption DC motor achieves high duty rating and operational efficiency.
- Class F insulation.

# **Duty Cycle**

• 75% duty cycle.

### **Position Indicator**

 All models are equipped with continuous mechanical position indicator to provide valve position indication.

# **Modulating Control**

• All models come standard with modulating control to provide throttling or modulating control of valves in addition to open / close valves.

· Analog signal input: 4-20mA, 1-5V and 2-10V.

· Analog signal output: 4-20mA and 2-10V.

# Adjustable Stroke

• To enable the stroke of the actuator adjustable to match the stroke of the valve.

### **Service Condition**

- Ambient temperature: -30°C to +65°C (-22°F to +149°F)
- Relative humidity: 30% to 95% without condensation.

#### Certifications

- CE
- CSA
- RoHS
- REACH



# **Technical Data**

Model -	Thrust			Weight		Nominal Motor Power	Mounting Flange	Max S	Stroke
	kgf	lbf	N	kg	lb	Watt	ISO 5210	mm	inch
L-250	250	550	2450	9.5	21	15	F07	50	2
L-500	500	1100	4900	9.5	21	15	F07	50	2
L-1000	1000	2205	9805	31	68	25	F10	100	4
L-2000	2000	4410	19615	31	68	35	F10	100	4

SERIES

• Motor power is based on 110VAC at 60Hz.





#### **Enclosures**

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

SERIES

IECEx International Certification					
Enclosure Code	Standard Temperature				
Ex db IIB T4 Gb	-30°C to +70°C (-22°F to +158°F)				
Ex tb IIIC T130°C Db	-30°C to +70°C (-22°F to +158°F)				

- TS Taiwan Hazardous Area Certification
- CNEx China Hazardous Area Certification

#### Anti-condensation Heater

- A heater can increase internal temperatures and keep the inside of the actuator dry to avoid freezing of the lubricant and moisture causing actuator failure under low temperatures or high humidity.
  - · A heater is not recommended if the ambient temperature is over 35°C / 95°F.
  - · When temperatures vary significantly from day to night or between summer and winter, a heater thermostat (25±5°C / 77 ±9°F) is recommended.



24V AC / DC

110V AC

#### Heater Thermostat

• This option can switch the anti-condensation heater off when the temperature inside the actuator is over 25±5°C / 77 ±9°F.



### **Potentiometer Unit**

 Recommended to use with an On / Off actuator to output signal for position indication. Two resistors, 1K ohm or 5K ohm are available for selection.



#### On / Off Controller

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

#### **Communication Protocols**

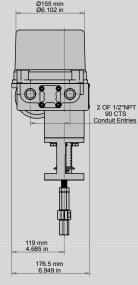
• Modbus RTU RS485

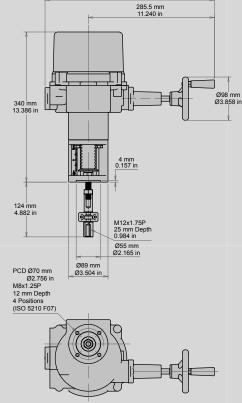
#### **Conduit Entries**

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













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