



**SMART LINEAR
ACTUATORS.**

MERLA SMART LINEAR ACTUATORS

MERLA-L Series Smart Linear Electric Actuator is a new generation of linear actuators. It uses a modular design with rich scalability features for various control valves and similar products.

MERLA-L Series Smart Linear Electric Actuator meets international standards and is designed with the aim of high reliability and long service life - trying to minimise maintenance requirements.

Merla implementers guarantee safe and reliable services under various extreme environmental conditions.

FEATURES

- Corrosion level: Epoxy powder coating. NEMA 4X corrosion protection
- Ingress protection: IP67 (IP68 is optional)
- Motor specification: Class F, with thermal protector up to 135°C
- Force range: 3000 - 30000 N
- Max stroke: 100 mm
- Running speeds: 1.5 mm/s
- Electrical interface: IP67, Optional: IP68
- On/off type signal:
- Input: AC 110/220 Input
- Signal Feedback: Integrated fault contacts, Close the valve contact, Open the valve contact
- Handwheel operated manually
- Forced Switch/Limit Switch
- Space heater with thermostat to prevent overheating
- Provide a wide range of voltage
- Strong structure, accurate positioning, reliable performance.

Model	Thrust	Speed	Max travel	Power	Rated current (A)	Weight
	N	mm/S	mm	W	220V/50HZ/1P H	Kg
MERLA-L-30	3000	1.5	25	30	0.31	17.5
MERLA-L-50	5000	1.5	40	45	0.42	19
MERLA-L-80	8000	1.5	60	60	0.62	19.5
MERLA-L-100	10000	1.5	100	60	0.68	33
MERLA-L-160	16000	1.5	100	90	0.85	33
MERLA-L-200	20000	1.5	100	90	0.87	33
MERLA-L-250	25000	1.5	100	120	1.22	33
MERLA-L-300	30000	1.5	100	120	1.28	33



Standard Specification

Shell	Enclosure: IP67, NEMA4, Exd II CT5	
Power	Standard: 220VAC/1ph	
	Optional: 110VAC/1ph, 380V/440V/3ph,50/60Hz, +10% 24VDC/110VDC/220VDC	
Motor	Asynchronous motor	
Limit switch	2xOpen/ Close, SPDT,250VAC 10A	
Auxiliary limit switch	2xOpen/ Close, SPDT,250VAC 10A	
Torque switch	Close/Open, each 1, SPDT,250VAC 10A	Except MERLA-L-20/30/50/80
Fail safe/Operating temperature	Internal-placed thermal protection, Open 115°C +5°C/ Close 97°C + 5°C	
Indicator	Continuous position indicator	
Manual operation	Declutching mechanism, operate by handwheel	
Self-locking device	Self-locking by worm and worm gear	
Space heater	30W (110V/220VAC)	
Conduit entry	2 x PF 3/4"	
Ambient temperature	-30°C ~ +70°C	
Lubrication	Grease moly (EP type)	
Material	Steel, Aluminum alloy, Aluminum bronze, Polycarbonate	
Ambient humidity	Max 90 % RH	Non- condensing
Anti - vibration	X Y Z 10g,0.2 ~34 Hz, 30 minutes	
External coating	Dry powder, Epoxy polyester, high anti - corrosion	

Options

- Explosion-proof actuator (Exd II CT5)
- Potentiometer unit (1K-10K)
- Proportion control unit (control signal 4-20mA DC/1-5V/1-10V)
- Local control units (local control open/stop/close optional switch, local/remote switch)
- Direct current motor(24VDC)
- Water-proof actuator (IP68,10M,250HR)
- Reverse electromagnetic control and transmission integrated motor starter
- Torque switch (SPDT× 2 250VAC 10A)
- Electric current position sensor (output 4-20mA DC)
- High temperature resistance actuator (-10°~+100°)
- Low temperature resistance actuator (-40°~+70°)
- Bus Control Unit





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For sales Inquires:

☎ US & Global: +1 (832) 477-3592

☎ US & Global: +1 (281) 931-6900

✉ Email: sales@merla.com

For engineering and technical related questions:

☎ US & Global: +1 (832) 477-3592

☎ US & Global: +1 (281) 931-6900

✉ Email: contact@merla.com

www.merla.com