



Multi-turn Electric Actuator Specifications

Part Number:	AE115B510	AE220B510	AE024B510
Power:	115vAC, (1) phase, 60 Hz	220vAC, (1) phase, 60Hz	12 or 24vDC
Torque:	325 in-lbs.(27.1 ft-lbs.) (36.72 Nm)	325 in-lbs.(27.1 ft-lbs.) (36.72 Nm)	325 in-lbs.(27.1 ft-lbs.) (36.72 Nm)@ 24vDC
Operating Temperature:	Standard ambient temperature, -40°F to 140°F (-40°C to 60°C)		
Weight: (without mounting kit)	17.48 lbs. (7.93 kg)	17.48 lbs. (7.93 kg)	17.48 lbs. (7.93 kg)
Maximum Turns:	1-20	1-20	1-20
<p>Note: Number of turns required varies with the choke orifice size and trim style. 1.00" needle style trim = 8.75 turns; 1.00" cage style trim = 7.43 turns; 1.50" needle style trim = 10.5 turns; 1.50" cage style trim = 10.5 turns; 1.88" needle style trim = 13.13 turns; 1.88" cage style trim = 12.68 turns, 2.81" cage style trim = 14.88 turns. Choke operating torque required (all models) is equal to (worse case when closing stem) 1.8 ft.-lbs. or 21.6 in.-lbs. per 1,000 psig of pressure downstream of the orifice, P_2. i.e. at $P_2 = 15,000$ psig, $T_{REQ'D.} = (P_2 / 1,000) * 21.6 = 324$ in.-lbs.</p>			
Current at Locked Rotor:	1.2 amps.	0.7 amps.	17 or 8.5 amps.
Current at Rated Torque:	0.75 amps.	0.5 amps	5.2 or 2.6 amps.
Duty Cycle: at 75°F (23.9°C)	100%	100%	100%
Speed:	7.5 rpm	7.5 rpm	7.5 rpm
Manual Override Type:	Standard: Declutchable - pulling knob will declutch motor and gear train allowing output shaft to be rotated manually via an 11/16" (17.46 mm) open end wrench; upon releasing knob, unit will reengage automatically upon application of power in either direction.		
Enclosure:	Housing: Polyester coated high strength aluminum casting, stainless steel output shaft, (2) ½"-14NPT female conduit connections; NEMA 4 and 7, weatherproof and explosion proof, CSA combination hazardous and non-hazardous enclosure for indoor or outdoor protection in locations classified Class I and II, Groups C, D, E, F, and G as defined in the National Electrical Code, plus protects against wind-blown dust, wind-blown rain, splashing water, and hose directed water.		
Brake:	Electrical/mechanical motor brake has holding force equal to the rated output torque. Brakes are not normally supplied on DC models.		
Heater and Thermostat:	Unit switches on at temperatures below 70°F (21.1°C) and uses 25 watts. (optional 10w heater). To reduce battery drain, a desiccant pack is normally furnished with DC units which are to be operated using solar power.		
Command Signal (input)	0-5vDC, 0-10vDC, 1-5vDC, 4-20mA (digital slave port is optional)		
Position Feedback Signal (output)	Standard: 4-20mA (with its own separate zero and span adjustment)		
Fail Position Options:	(Available only with 1-5vDC or 4-20mA command signal) Fail open, closed, or in place: easily configured with on-board jumpers on standard controller.		
Motor Controller:	Standard: Supplied with true deadband adjustment, non-interactive zero and span adjustment, 0.2-5.0 amps. adjustable current sensing trip acts as torque limiter in either direction of rotation (reset remotely, by onboard switch, or by reversing direction), low standby current, usually 27mA (board and feedback unit) when actuator is not in operation.		
Travel Limits Switches:	Standard: (2) independent SPDT travel limit switches per unit (open & close) rated at 11 amps., complete with separate micro adjustment cams		
Local Position Indication:	Standard: stainless steel position indicator (in 64ths) remains on the choke at all times		

For additional information, contact Lancaster Flow Automation, LLC at (713) 983-9444. Specifications are subject to change without notice.