

Application

The Series 70 industrial grade electric actuator is for on/off or modulating control in a compact and low profile housing to minimize space requirements.

PERFORMANCE

Output Torque	See Motor Charts
Voltages	See Motor Charts
Ambient Temperature	-20°F to 150°F (-29°C to 65°C)
Motor Insulation	120/220 VAC: Class F, 311°F (155°C) Thermal trip at 275°F (135°C) 24V: Class B, slow blow fuse 5A@250VAC
Continuous Duty	Will operate continuously at a max. ambient temperature of 104°F (40°C)
Intermittent Duty (25%)	One motor-on period followed by three motor-off periods
Manual Operation	Pull to engage, push to disengage
Enclosure	Designed to meet NEMA 4, 4X, and IP65 specifications
Certifications	UL, CSA, and CE approve (most models)

CONSTRUCTION

Housing	ASTM B85 pressure die cast aluminum Polyester powder coated
Exposed Fasteners	Stainless steel
Travel Stops	Externally adjustable at both 0 and 90 degrees
Conduit Entries	S70-003 to -006: 2 x 1/2"NPT S70-008 to -180: 2 x 3/4"NPT
Worm Gearing	Worm: Chromoly, self-locking Worm gear: Aluminum bronze
Spur Gearing	AGMA class 9, nitride hardened alloy steel
Bearings	Indicator shaft and motor gear: Permanently sealed ball bearing Worm shaft: Sintered bronze bushing with heavy duty thrust bearing
Lubrication	High temperature synthetic grease
Motor	120/220 VAC: Single phase, reversible, permanent split capacitor induction motor 24V: Permanent magnet-brush DC motor
Capacitor	120/220 VAC: Metalized polyester
Heater	5 watt PTC style
Terminal Strip	Switch plate: 12-22 AWG (2.0 - 0.65mm) Servo: 14-24 AWG (1.63 - 0.51mm)
Limit Switches	SPDT: 120VAC – 10A – 1/3 HP 220VAC – 10A – 1/2 HP 250VDC – 1/4A 12VDC – 2A

TORQUE AND MOTOR DATA

		S70-003	S70-006	S70-008	S70-012	S70-020	S70-030	S70-050	S70-065	S70-130	S70-180
Torque	lb-in	300	600	800	1200	2000	3000	5000	6500	13000	18000
	Nm	34	68	90	136	226	339	565	734	1469	2034
Actuator Weight	lbs	11	11	25	25	25	45	45	45	118	118
	kg	5	5	11	11	11	20	20	20	54	54

MANUAL OVERRIDE

		S70-003	S70-006	S70-008	S70-012	S70-020	S70-030	S70-050	S70-065	S70-130	S70-180
Handwheel Dia.	in	3.5	3.5	8	8	8	12	12	12	12	12
	mm	89	89	203	203	203	300	300	300	300	300
Gear Ratio		30:1	30:1	30:1	30:1	30:1	30:1	30:1	30:1	90:1	90:1
Rim Pull	lbs	16	32	18	28	46	37	62	80	80	80
	kg	7.2	14.5	8.2	12.7	20.8	16.8	28.1	36.3	36.3	36.3

SPEED AND AMPS

Travel Time 60HZ (sec)	Voltage	Current Draw in Amps																	
		FLA	LRA	FLA	LRA	FLA	LRA	FLA	LRA	FLA	LRA	FLA	LRA	FLA	LRA	FLA	LRA	FLA	LRA
30	120VAC	.60	1.00	.80	1.00	.60	2.10	.78	2.10	1.00	2.10	1.20	3.00	1.60	3.00	2.30	3.10	-	-
110	120VAC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	3.10
30	220VAC	.60	.75	.65	.75	.38	.90	.45	.90	.50	.81	.75	1.20	.90	1.40	1.10	1.40	-	-
110	220VAC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.30	2.70
60	24VAC	-	-	1.80	-	-	-	-	-	2.00	-	-	-	4.00	-	-	-	-	-
40	24VDC	-	-	1.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60	24VDC	-	-	-	-	-	-	-	-	2.00	-	-	-	4.00	-	-	-	-	-

