

Series 10 Electric Actuator with Type-57



Specifications

Torque: 1320-26,040 in./lbs.
Voltage: 120 VAC 1Ph 50/60 Hz
Amp Draw: 1.65 – 4.10
Conduit Entry: Two (2) 3/4" FNPT
Max Ambient Temperature: 150° F
Limit Switches: Four (4) single pole,
double throw (4-SPDT)
10 amp rated
Torque Switches: Two (2) single pole,
double throw (4-SPDT)
10 Amp rated
Cycle Time per 90°: 21– 31 seconds

Standard Features

- **Motor:** Reversing, squirrel cage induction motor, 115 VAC 50/60 Hz, single phase
- **Overload protection:** Integral thermal overload protection for motor windings with automatic reset
- **Gear train:** Permanently lubricated
- **Conduit:** Two 3/4" FNPT conduit entries to eliminate cross feed between control and power signals
- **Dec clutchable manual override:** Lockable declutching lever with handwheel
- **Limit switches:** Standard end of travel limit switches can be used for light indication (not to be use with PLC for position confirmation)
- **Auxiliary [Additional] limit switches:** Each electric actuator is provided as a standard with Two SPDT auxiliary limit switches
- **Torque Switches:** Two SPDT torque switches
- **Mechanical Stops:** Two plus/minus 10 percent mechanical travel stops
- **Enclosure:** Weatherproof rated Type 4X & 6
- **AWWA C542:** Conforms to AWWA C542
- **Self-Locking:** Self-locking worm gear design eliminates the need for a mechanical brake
- **Space Heater:** A space heater is provided as standard equipment
- **Output torque:** Series 10 electric actuators have an output torque range from 1,320 in./lbs. to 26,040 in./lbs.
- **Corrosion resistant mounting:** Mounting is with stainless steel bracket, stainless steel coupling, and stainless steel hardware
- Captivated SS hexhead slotted cover screws

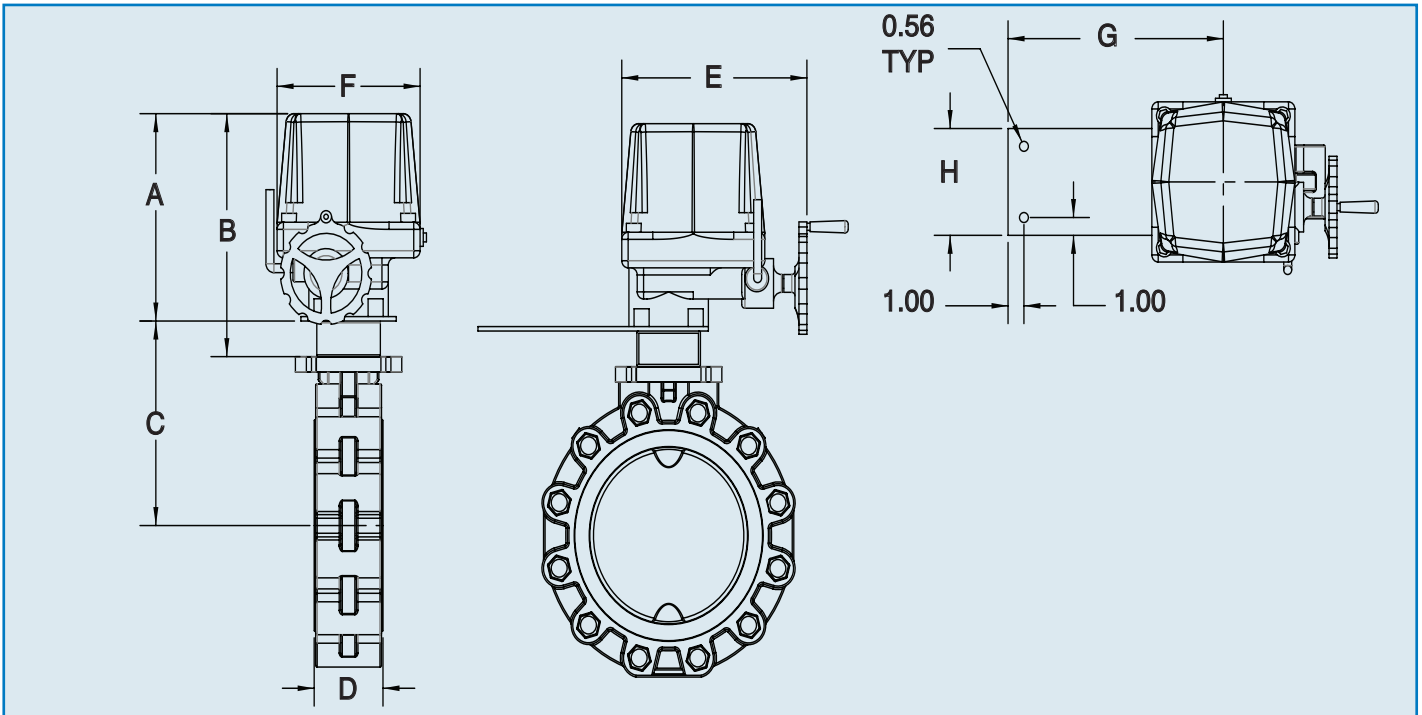
Sample Specifications

All Series 10 electric actuators shall have a thermally protected, bi-directional (reversing type), squirrel cage induction motor with a permanently lubricated gear train. Actuator shall have self-locking worm gearing encompassed in a die cast aluminum housing anodized inside and outside, with an external polyester powder coat finish, rated Type 4X & 6. Each actuator shall have a lockable manual override, visual position indication, two auxiliary limit switches, two torque switches and a space heater, as supplied by Asahi/America, Inc.

Options

- Positioner: 4-20 mA or 0-10 VDC input
- 4-20 mA transmitter
- Two-wire control
- Voltages: 230/1, 380/3, 460/3, 24 VDC
- ModBus
- ATEX enclosure
- Local remote station

Series 10 Electric Actuator with Type-57



Dimensions (in.)

SIZE	MODEL NUMBER	A	B	C	D	E	F	G	H
1-1/2	10-15	10.49	12.49	5.74	1.54	10.75	9.02	12.0	6.0
2	10-15	10.49	12.49	6.13	1.65	10.75	9.02	12.0	6.0
2-1/2	10-15	10.49	12.49	6.53	1.81	10.75	9.02	12.0	6.0
3	10-15	10.49	12.49	7.12	1.81	10.75	9.02	12.0	6.0
4	10-15	10.49	12.49	7.71	2.20	10.75	9.02	12.0	6.0
5	10-15	10.49	12.49	8.30	2.60	10.75	9.02	12.0	6.0
6	10-15	10.49	12.49	8.89	2.80	10.75	9.02	12.0	6.0
8	10-30	11.65	13.65	10.11	3.43	11.93	10.20	12.0	6.0
10	10-50	11.65	13.65	11.49	4.33	11.93	10.20	12.0	6.0
12	10-50	11.65	15.65	15.73	5.05	11.93	10.20	12.0	7.0
14	10-80	12.65	16.65	16.80	5.08	13.58	11.69	12.0	7.0
16	10-120	12.65	16.65	17.54	6.65	13.58	11.69	12.0	7.0
18	10-120	12.65	16.65	18.57	7.05	13.58	11.69	16.0	7.0
20	10-120	12.65	16.65	19.75	7.48	13.58	12.56	16.0	7.0
24	10-300	21.82	25.82	22.31	8.23	13.58	12.56	16.0	7.0

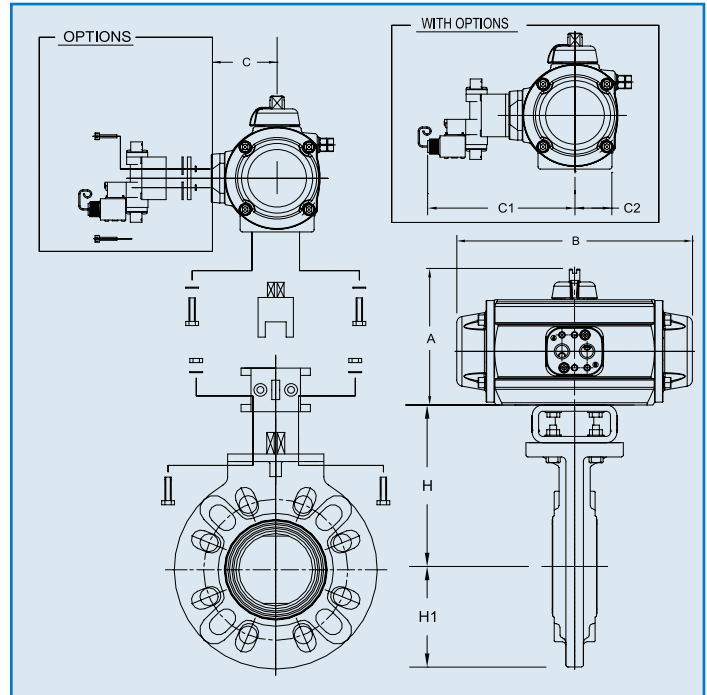
Engineering Data

Model	Torque (in./lbs.)	120/1 VAC		230/1 VAC		380/3 VAC		460/3 VAC		24 VDC		Cycle Time per 90 Degrees (Seconds)*	Weight
		Amp Draw	Duty Cycle	Amp Draw	Duty Cycle	Amp Draw	Duty Cycle	Amp Draw	Duty Cycle	Amp Draw	Duty Cycle		
10-15	1320	1.65	70	0.88	70	0.31	70	0.30	70	2.20	70	21	37
10-20	1740	1.67	70	0.89	70	0.31	70	0.30	70	2.50	70	21	37
10-30	2580	1.85	70	0.92	70	0.35	70	0.34	70	2.90	70	26	49
10-50	4320	3.60	70	1.55	70	0.59	70	0.58	70	N/A	N/A	26	51
10-60	5220	3.65	70	1.60	70	0.60	70	0.59	70	N/A	N/A	26	51
10-80	6960	4.10	70	2.15	70	0.85	70	0.79	70	N/A	N/A	31	64
10-120	10,440	4.20	70	2.35	70	0.87	70	0.81	70	N/A	N/A	31	64
10-200	17,400	4.10	70	2.15	70	0.85	70	0.79	70	N/A	N/A	93	166
10-300	26,040	4.20	70	2.35	70	0.87	70	0.81	70	N/A	N/A	93	166

Pneumatically Actuated Butterfly Valves

Standard Features (Sizes 1-1/2" – 24")

- Recommended air supply pressure: 80psi (filtered air)
maximum air supply pressure 120psi
- Double piston, double rack and pinion design (polyamid-nylon 66)
- Air-to-air (double acting) or air-to-spring (spring return fail safe) models
- Position indication through highly visible indicator knob
- Manual override easily employed by inserting wrench onto flats of stem. A declutchable gear operator is required on air-to-air sizes 8" and above and on all air-to-spring sizes
- Actuator shaft 303 stainless steel or cataphoresis coated steel
- Air-to-air actuators up to 6" and air-to-spring actuators up to 4" have PAG (polyamide glass-filled) plastic bodies. Larger sizes feature aluminum bodies with cataphoresis and Rilsan coating inside and outside
- Preloaded spring cartridges allow for safe removal of end caps
- ISO and NAMUR mounting dimensions allow for valve accessory mounting
- All models are corrosion resistant to handle the most aggressive applications



Options

- Solenoids in various Type enclosure ratings and voltages are supplied with muffler speed control and push button override
- Double limit switches in Type 4 and 7 enclosures
- Positioner for modulating service: 4–20 mA or 3–15psi control signal (requiring no solenoid)
- 316 stainless steel actuator body
- Bus systems

Dimensions (Sizes 1-1/2" – 24")

NOMINAL SIZE		Model No. Air-Air	Modes No. Air-Spring			A		B		C		C1		C2	
INCHES	mm			H	H1	A-A	A-S	A-A	A-S	A-A	A-S	A-A	A-S	A-A	A-S
1-1/2	40	BP79PN	CP79PSN	5.51	2.95	4.00	4.84	6.22	9.05	1.73	2.17	5.66	5.89	1.41	1.85
2	50	BP79PN	CP79PSN	5.75	3.25	4.00	4.84	6.22	9.05	1.73	2.17	5.66	5.89	1.41	1.85
2-1/2	65	BP79PN	CP79PSN	6.18	3.66	4.00	4.84	6.22	9.05	1.73	2.17	5.66	5.89	1.41	1.85
3	80	CP79PN	DP79PSN	6.46	3.94	4.84	5.76	9.05	12.32	2.17	2.64	5.89	6.48	1.85	2.36
4	100	CP79PN	DP79PSN	7.16	4.53	4.84	5.76	9.05	12.32	2.17	2.64	5.89	6.48	1.85	2.36
5	125	CP79PN	E79PASN	8.46	5.00	4.84	7.90	9.05	16.83	2.17	3.70	5.89	7.55	1.85	3.27
6	150	DP79PN	E79PASN	8.97	5.63	5.76	7.90	12.32	16.83	2.64	3.70	6.48	7.55	2.36	3.27
8	200	E79PAN	F79PSN	11.27	6.69	7.90	10.71	16.83	23.54	3.70	3.70	7.55	7.55	3.27	3.27
10	250	E79PAN	F79PSN	12.46	7.99	7.90	10.71	16.83	23.54	3.70	4.72	7.55	8.57	4.18	4.18
12	300	F79PN	G79PSN	14.69	9.53	10.71	12.32	17.48	27.32	4.72	5.20	8.57	9.17	4.82	4.82
14	350	G79PN	M79PSN	14.81	10.24	12.32	16.85	20.63	29.23	5.32	8.50	9.17	12.35	4.82	7.35
16	400	G79PN	M79PSN	16.78	11.81	12.32	16.85	20.63	29.23	5.32	8.50	9.17	12.35	4.82	7.35
18	450	G79PN	M79PSN	17.57	12.40	12.32	16.85	20.63	29.23	5.32	8.50	9.17	12.35	4.82	7.35
20	500	G79PN	M79PSN	18.75	13.78	12.32	16.85	20.63	29.23	5.32	8.50	9.17	12.35	4.82	7.35
24	600	G79PN	M79PSN	21.31	16.02	12.32	16.85	20.63	29.23	5.32	8.50	9.17	12.35	4.82	7.35