

Building connections that last™



Sharpe® Series SEA

Electric Actuator Datasheet



SEA Electric Actuator

Enclosure:

- IP 67: Waterproof and dust-proof enclosure
- NEMA 4X: Waterproof and dust-proof enclosure
- Material: Dry powder coating aluminum alloy

Motor:

- Standard extended duty cycle induction motor F insulation class for all models
- Built-in thermal protection (275°F) prevents motor burning out
- Standard Unit is 120 VAC
- Standard motors are 30% duty rated

Position Indicator:

- All models except SEA-1 have continuous mechanical position indicator on the top of the actuator cover

Manual Override:

- Non-clutch design, the manual operation can be operated without any lever, clutch or brake upon power outage
- When electric motor is operating, manual hand-wheel will not rotate for safety purposes

Gear Train:

- High alloy steel gear trains provide self-locking function to avoid valve back drive
- Gear trains have been already lubricated sufficiently with anti-high temperature lubricant at the factory

Working Conditions:

- Ambient temperature: -22°F to 149°F
- Humidity: 30% to 95%

Various Options:

- Space heater
- Additional limit switches (2 units)
- Potentiometer unit (1K Ohm or 5K Ohm)
- Local control unit (local/remote, on/off)
- Conduit entrance (½" PS, ¾" PF, ½" NPT)
- Torque switches (2 units)
- Current position transmitter (output 4-20mA)
- Modulating controller (4-20mA, 1-5 VDC, 2-10 VDC)
- Various voltages
- Nylon enclosure material
- Thermostat
- 75% duty rating

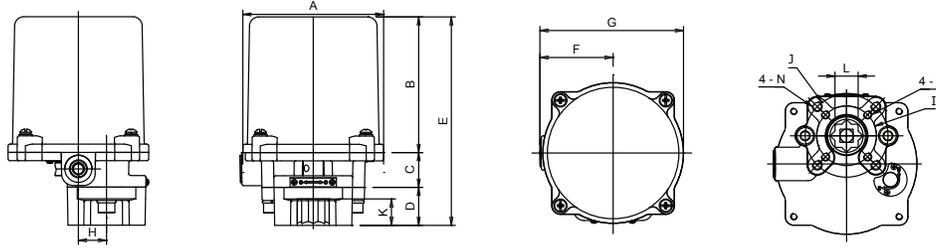
Certifications:

- CE
- CSA (Conforming to the test standard for outdoor use)



Electric Actuator Sharpe® Series SEA

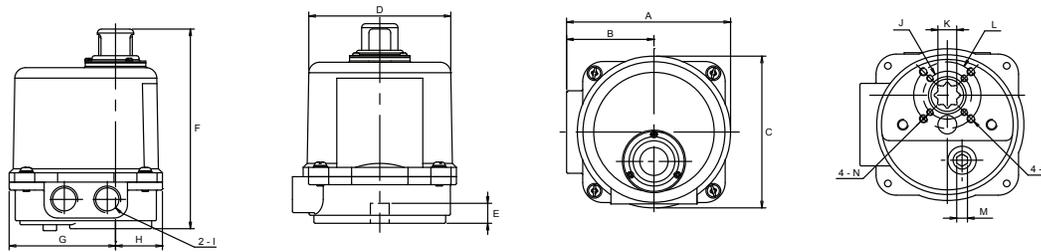
Dimensions



SEA1

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Flange Type
in	3.35	3.23	0.83	0.90	4.96	1.73	3.42	0.67	1.42	1.97	0.63	0.55	M5 x 0.8	M6 x 1.0	F03 or F05
mm	85	82	21	23	126	44	87	17	36	50	16	14	M5 x 0.8	M6 x 1.0	F05

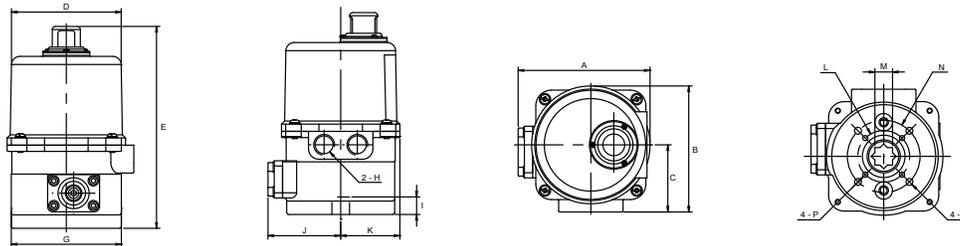
*The dimensions are bases on 110/220v AC actuator, for 24v AC type: B=ll3mm(4.45 in); E=157mm (6.18 in).



SEA3

Unit	A	B	C	D	E	F	G	H	I	J	K Max	L	M	N	P	Flange Type
in	4.80	2.56	4.49	4.17	0.59	5.9	3.11	1.38	½ PS	1.42	0.551	1.97	0.2	M5 x 0.8	M6 x 1.0	F03 or F05
mm	122	65	114	106	15	150	79	35	½ PS	36	14	50	8	M5 x 0.8	M6 x 1.0	F05

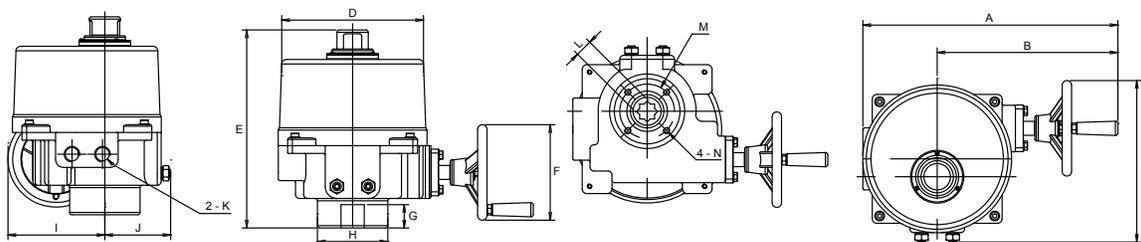
*Option: 1) K=llmm[0.43 in] 2) K=9mm[0.35 in] • With modulation card F=183mm[7.2 in] • No mechanical stops.



SEA4

Unit	A	B	C	D	E	G	H	I	J	K	L	M	N	P	Q	Flange Type
in	5.0	4.8	2.56	4.02	7.71	4.17	½ PS	0.79	2.76	2.24	1.97	0.669	2.76	M6 x 1.0	M8 x 1.25	F05 or F07
mm	127	122	65	102	196	106	½ PS	20	70	57	50	17	70	M6 x 1.0	M8 x 1.25	F07

*With modulation card E=229mm[9.01 in] • No mechanical stops.



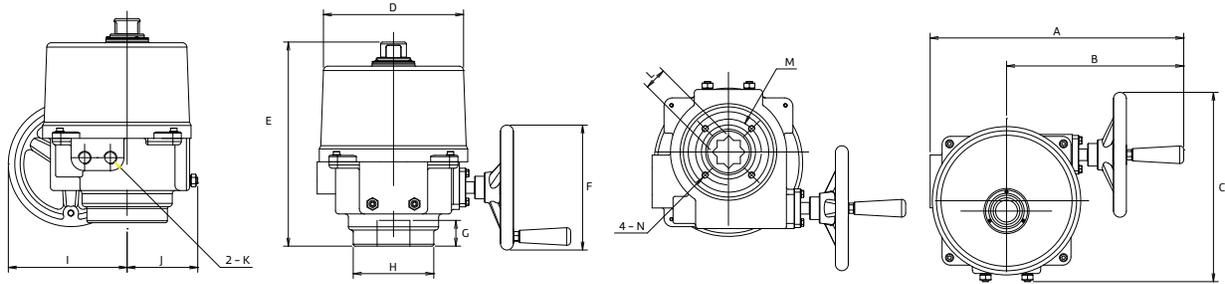
SEA 8 and SEA 13

Unit	A	B	C	D	E	F	G	H	I	J	K	L Max	M	N	Flange Type
in	12.83	9.09	8.15	7.13	10.04	4.76	1.18	3.54	4.88	3.31	½ PS	0.867	2.76	M8 x 1.25	F07
mm	85	231	207	181	255	121	30	90	124	84	½ PS	22	70	M8 x 1.25	F07

*With DC motor E=289mm[11.38 in] (applv, to DC model or 75% duty cycle) • With torque switch A=361mm[14.21 in].

Electric Actuator Sharpe® Series SEA

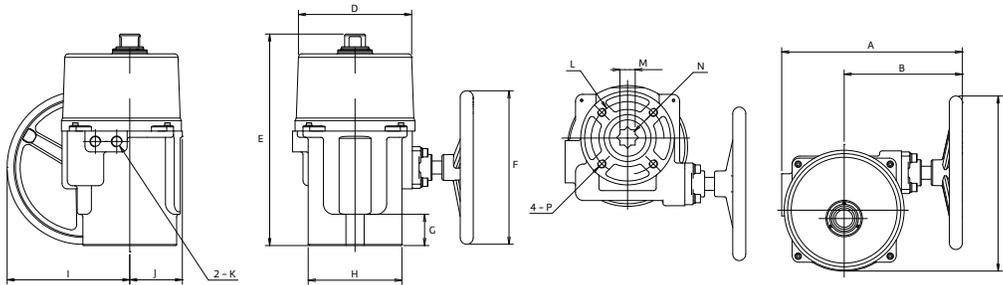
Dimensions (Cont.)



SEA 35, SEA 44 & SEA 57

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Flange Type
in	15.51	10.82	11.50	8.54	12.48	7.52	1.57	4.97	7.24	4.33	½ PS	1.42	4.01	M10* 1.5	F10
mm	394	275	292	217	317	191	40	125	184	110	½ PS	36	102	M10* 1.5	

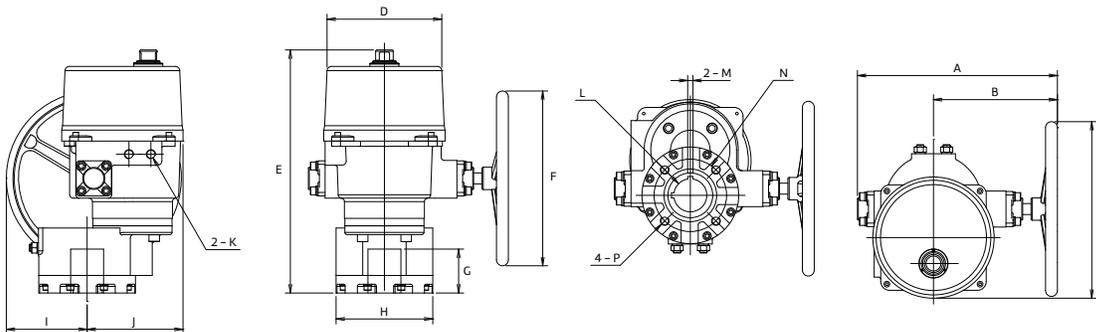
*With torque switch A=460mm[18.11 in].



SEA 88 & SEA 132

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Flange Type
in	13.66	8.94	13.23	8.54	15.98	11.61	2.36	7.09	9.25	3.98	½ PS	4.92	1.38	1.38	M12* 1.75	F12 or F14
mm	347	227	336	217	406	295	60	180	235	101	½ PS	125	35	35	M12* 1.75	

*With torque switch A=435mm[17.13 in] • With Flange type F14: L=140mm[5.51 in] & P=M16*2.0.



SEA 177, SEA 221, SEA 265 & SEA 310

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Flange Type
in	17.91	11.10	15.83	10.27	21.81	15.67	3.94	8.66	7.24	8.58	½ PS	2.95	0.47	6.50	M20*2.5	F16
mm	455	282	402	261	554	398	100	220	184	218	½ PS	75	12	165	M20*2.5	

SEA Technical Information

Model	Power (Watts)	Max Toque (In / Lb)	Speed (Sec / 90°)	Weight (Lb)	Manual Override	Mounting Flange
SEA 1	5W	132	19	3.3	Lever	F03 / F05
SEA 3	10W	310	12	4.4	Lever	F03 / F05
SEA 4	10w	443	20	6.6	Lever	F05 / F07
SEA 8	40W	797	15	24.2	Hand-wheel	F07
SEA 13	40W	1328	22	24.2	Hand-wheel	F07
SEA 35	80W	3540	16	44	Hand-wheel	F 10
SEA 44	80W	4425	22	44	Hand-wheel	F 10
SEA 57	80W	5750	28	44	Hand-wheel	F 10
SEA 88	120W	8850	46	71	Hand-wheel	F12 / F14
SEA 132	120W	13275	46	71	Hand-wheel	F12 / F14
SEA 177	180W	17700	58	157	Hand-wheel	F 16
SEA 221	180W	22125	58	157	Hand-wheel	F 16
SEA 265	180W	26550	58	159	Hand-wheel	F 16
SEA 310	220W	31000	58	159	Hand-wheel	F 16

How to Order Series SEA

Fig: SEA3 – 2
Description: SEA3 – 24V

SEA Series	Options
SEA 1	1 220V*
SEA 3	2 24 VAC*
SEA 4	3 12 VDC*
SEA 8	4 24 VDC*
SEA 13	AS Auxiliary Switches
SEA 35	FP Feedback Potentiometer*
SEA 44	CR Control Relays*
SEA 57	HT Heater & Thermostat
SEA 88	PP Proportional Positioner*
SEA 132	FT Feedback Transmitter*
SEA 177*	TR Timers*
SEA 221*	TS Torque Sensor*
SEA 265*	
SEA 310*	

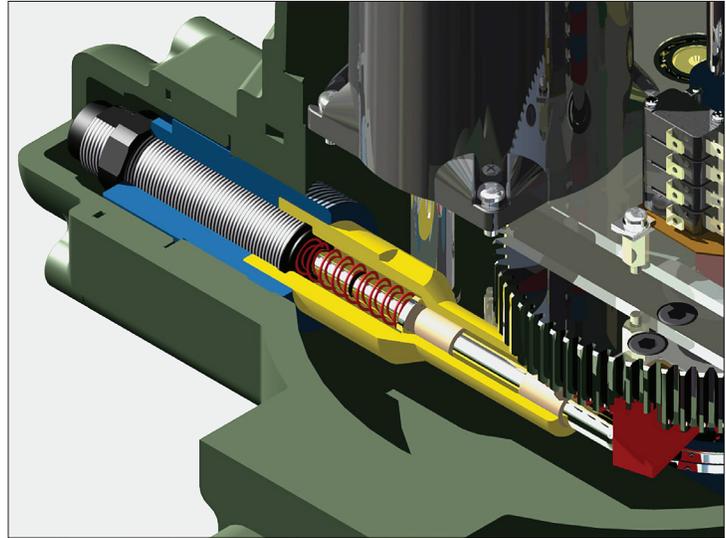
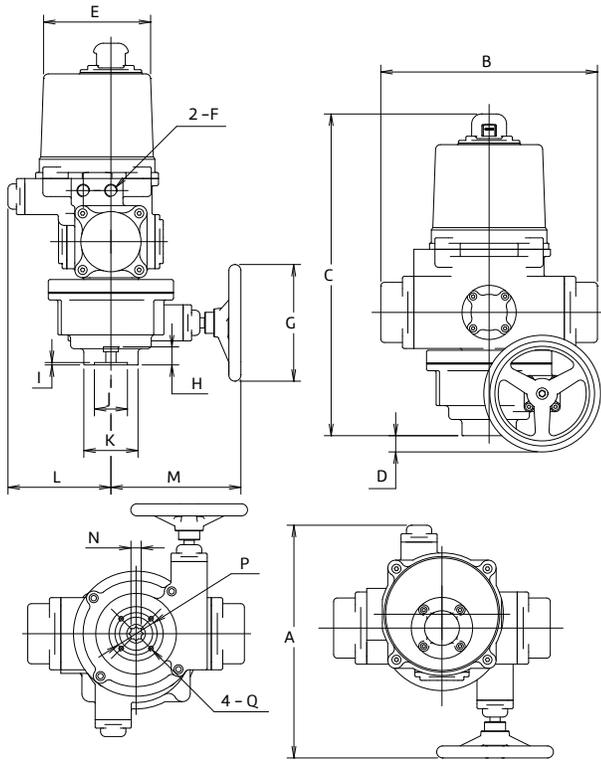
*POA

SEA Spring Return Electric Actuator



- Spring return models are designed to provide a fail-safe position in the event of a power loss of supply voltage a mechanical spring set is utilized to position the valve or damper to either the fully open or fully closed position without any external power source.
- A mechanical buffer system is employed at the end of the spring stroke to reduce the dynamic effect of the springs returning to the fail safe position.
- Standard unit fails clockwise, counter-clockwise rotation failure is available.
- A clutch-less, lever-less manual over-ride provides full-time manual capabilities.
- Patented in Taiwan, USA, Japan and China.
- 50% duty rated
- Temperature range: -22° F to +149° F with use of heater and thermostat
- Powder coated aluminum alloy enclosure
- Nema 4X, IP67
- Gear train comes lubricated for life from factory
- Visual indicator
- Voltage options include: 24VAC, 24VDC, 110/220V 1 phase, 220/380/440V 3 phase

SEA Spring Return Electric Actuator Dimensions



Spring Buffer System

Model	Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	Flange Type
SEA-4-SR-MO	in	15.09	14.04	20.87	1.38	6.94	½" NPT	7.57	1.17	0.16	2.15	3.51	6.67	8.42	0.66	2.73	M8 x 1.25	F07
	mm	387	360	535	35	178		194	30	4	55	90	171	216	17	70		
SEA-11-SR-MO	in	18.84	18.02	25.12	2.70	10.43	½" NPT	11.61	1.61	0.20	2.73	4.88	9.63	9.33	0.86	3.98	M10 x 1.5	F10
	mm	483	462	638	68	265		295	41	5	70	125	247	237	22	102		
SEA-17-SR-MO	in	22.97	23.40	28.50	4.30	12.00	½" NPT	15.70	1.76	0.20	3.32	5.85	11.90	11.08	1.05	4.88	M12 x 1.75	F12
	mm	589	600	732	109	305		398	45	5	85	150	305	284	27	125		
SEA-23-SR-MO	in	22.97	23.40	28.50	4.30	12.00	½" NPT	15.70	1.76	0.20	3.32	5.85	11.90	11.08	1.05	4.88	M12 x 1.75	F12
	mm	589	600	732	109	305		398	45	5	85	150	305	284	27	125		

*With DC power supply C=572mm[22.52 in].

Model	Power (Watts)	Max Torque (in / Lb)	Speed (Sec / 90°)	Speed Spring	Mounting Flange
SEA-4-SR-MO*	1.5A Run / 2.8A Lock	440	7-9 Seconds	3 Seconds	F07
SEA-11-SR-MO*	3.8A Run / 11A Lock	1150	7-9 Seconds	8 Seconds	F10
SEA-17-SR-MO*	3.8A Run / 11.5A Lock	1770	11-13 Seconds	12 Seconds	F12
SEA-23-SR-MO*	3.8A Run / 11.5A Lock	2300	14-17 Seconds	12 Seconds	F12

*POA

About ASC Engineered Solutions

ASC Engineered Solutions is defined by quality—in its products, services and support. With more than 1,400 employees, the company's portfolio of precision-engineered piping support, valves and connections provides products to more than 4,000 customers across industries, such as mechanical, industrial, fire protection, oil and gas, and commercial and residential construction. Its portfolio of leading brands includes ABZ Valve®, AFCON®, Anvil®, Anvil EPS, Anvil Services, Basic-PSA, Beck®, Catawissa, Cooplet®, FlexHead®, FPPI®, Gruklok®, J.B. Smith, Merit®, North Alabama Pipe, Quadrant®, SCI®, Sharpe®, SlideLOK®, SPF® and SprinkFLEX®. With headquarters in Commerce, CA, and Exeter, NH, ASC also has ISO 9001:2015 certified production facilities in PA, TN, IL, TX, AL, LA, KS, and RI.



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