

Electric Actuators



SHARPE[®]

VALVES • AUTOMATION & CONTROLS • ENGINEERING

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

Position Indicator:

- All models have continuous mechanism 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 with high temperature grease at the factory

Working Conditions:

- Ambient temperature: -22°F to 149°F with heater and thermostate
- 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 (1/2" PS, 3/4" PF, 1/2" NPT)
- Torque switches (2 units)
- Current position transmitter (output 4-20mA)
- Modulating controller
- Various voltages
- Nylon enclosure material
- Thermostat

Certifications:

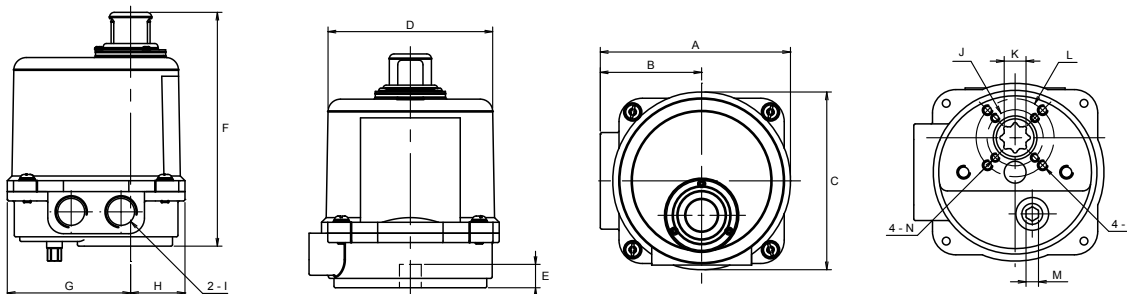
- CE
- CSA (Conforming to the test standard for outdoor use)

Model	Power (watts)	Max Torque (In/lb)	Speed (Sec/90°)	Weight (lb)	Manual Override	Mounting Flange
SEA 3	10W	310	12	4.4	Lever	F03 / F05
SEA 4	10W	443	20	6.6	Lever	F05 / F07
SEA 8	40W	797	12	24.2	Hand-wheel	F07
SEA 13	40W	1328	15	24.2	Hand-wheel	F07
SEA 35	120W	3540	16	44	Hand-wheel	F10
SEA 44	120W	4425	22	44	Hand-wheel	F10
SEA 57	120W	5750	28	44	Hand-wheel	F10
SEA 88	180W	8850	46	71	Hand-wheel	F12 / F14
SEA 132	220W	13275	46	71	Hand-wheel	F12 / F14
SEA 177	180W	17700	58	132	Hand-wheel	F16
SEA 221	220W	22125	58	132	Hand-wheel	F16
SEA 265	250W	26550	58	135	Hand-wheel	F16
SEA 310	300W	31000	58	135	Hand-wheel	F16

Model	Power (watts)	Max Torque (In/lb)	Motor 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	1100	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

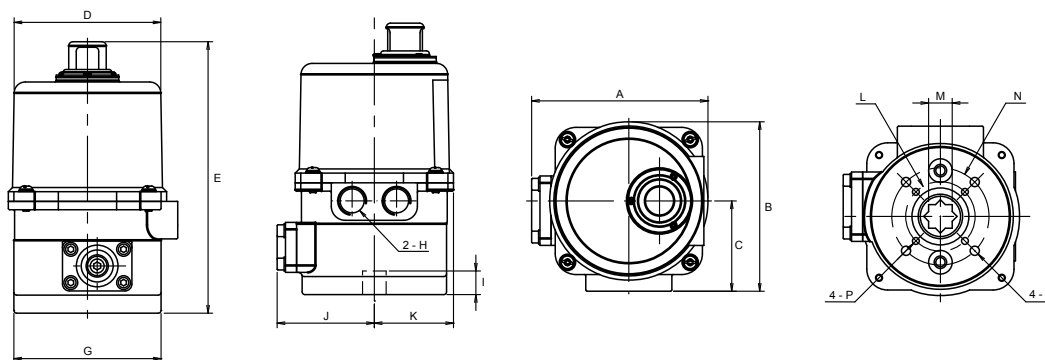
SEA Electric Actuator Dimensions

SEA 3



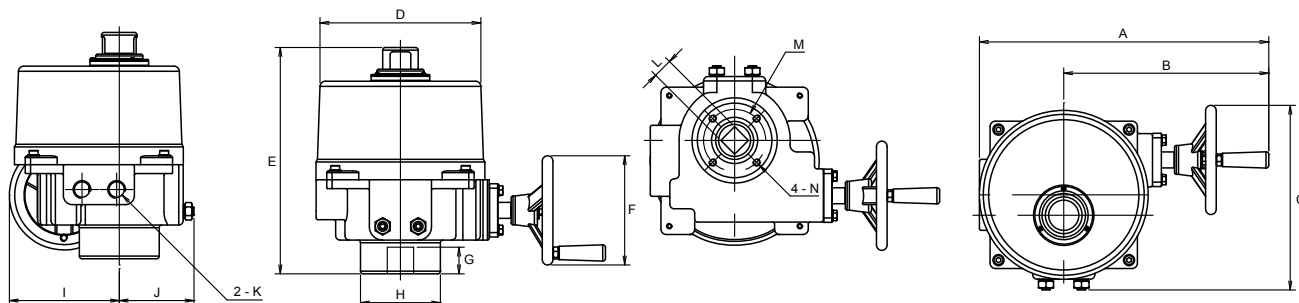
Unit	A	B	C	D	E	F	G	H	I	J	K _{Max}	L	M	N	P	Flange Type
in	4.80	2.56	4.49	4.17	0.59	5.9	3.11	1.38	1/2 PS	1.42	0.551	1.97	0.2	M5*0.8	M6*1.0	F03 or F05
mm	122	65	144	106	15	150	79	35	1/2 PS	36	14	50	8	M5*0.8	M6*1.0	

SEA 4



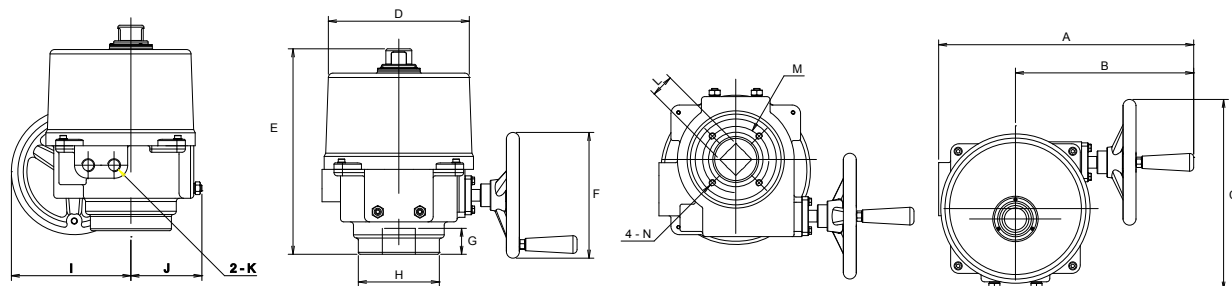
Unit	A	B	C	D	E	G	H	I	J	K	L	M	N	P	Q	Flange Type
in	4.49	4.8	2.56	4.17	7.71	4.17	1/2 PS	0.67	2.24	2.24	1.97	0.669	2.76	M6*1.0	M8*1.25	F05 or F07
mm	114	122	65	106	196	106	1/2 PS	17	57	57	50	17	70	M6*1.0	M8*1.25	

SEA 8 & SEA 13



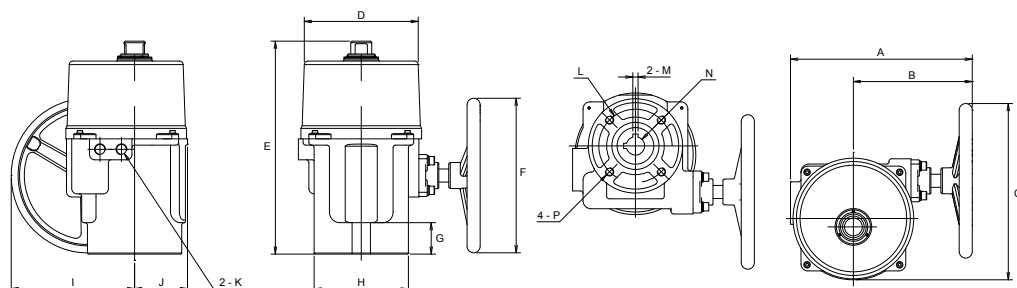
Unit	A	B	C	D	E	F	G	H	I	J	K	L _{Max}	M	N	Flange Type
in	12.83	9.09	8.19	7.13	10.04	4.84	1.18	3.54	4.88	3.31	1/2 PS	0.867	2.76	M8*1.25	F07
mm	326	231	208	181	255	123	30	90	124	84	1/2 PS	22	70	M8*1.25	F07

SEA 35, SEA 44 & SEA 57



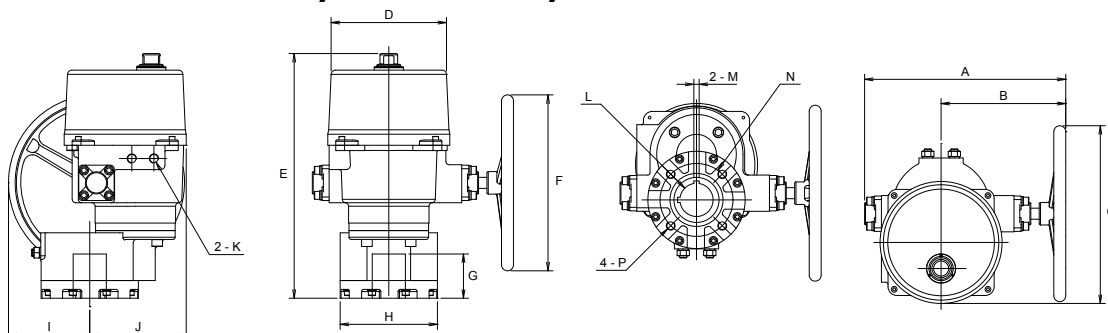
Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Flange Type
in	153.66	107.25	114.66	84.63	123.63	75.66	15.6	48.75	71.76	42.9	.5 PS	13.65	39.78	M10*1.5	F10
mm	394	275	294	217	317	194	40	125	184	110		35	102	M10*1.5	

SEA 88 & SEA 132

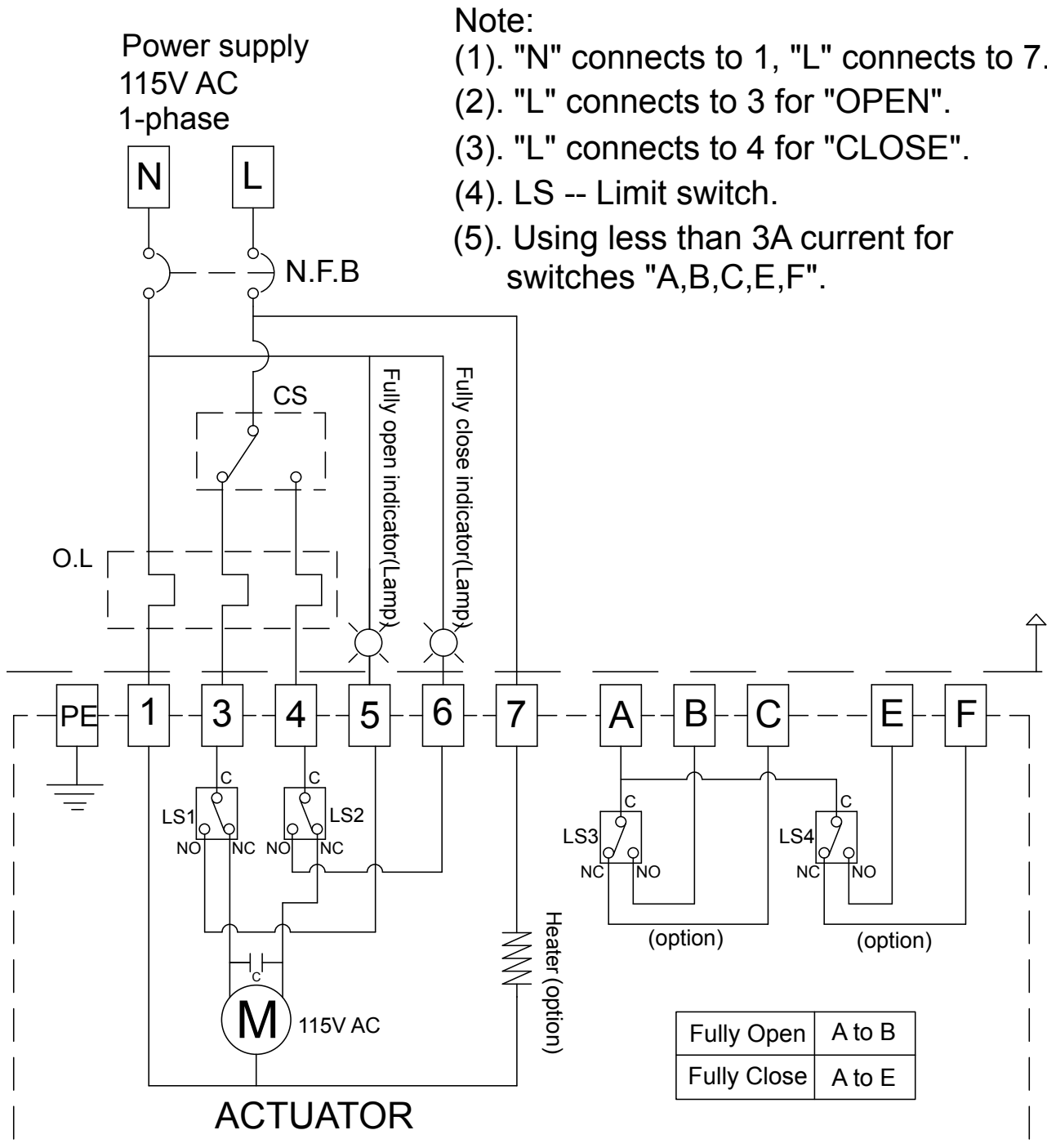


Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Flange Type
in	135.33	88.53	131.04	84.63	158.34	115.05	23.4	70.2	91.65	39.39	1/2 PS	48.75	3.9	13.65	M12*1.75	F12 or F14
mm	347	227	336	217	406	295	60	180	235	101		125	10	35	M16*2.0	

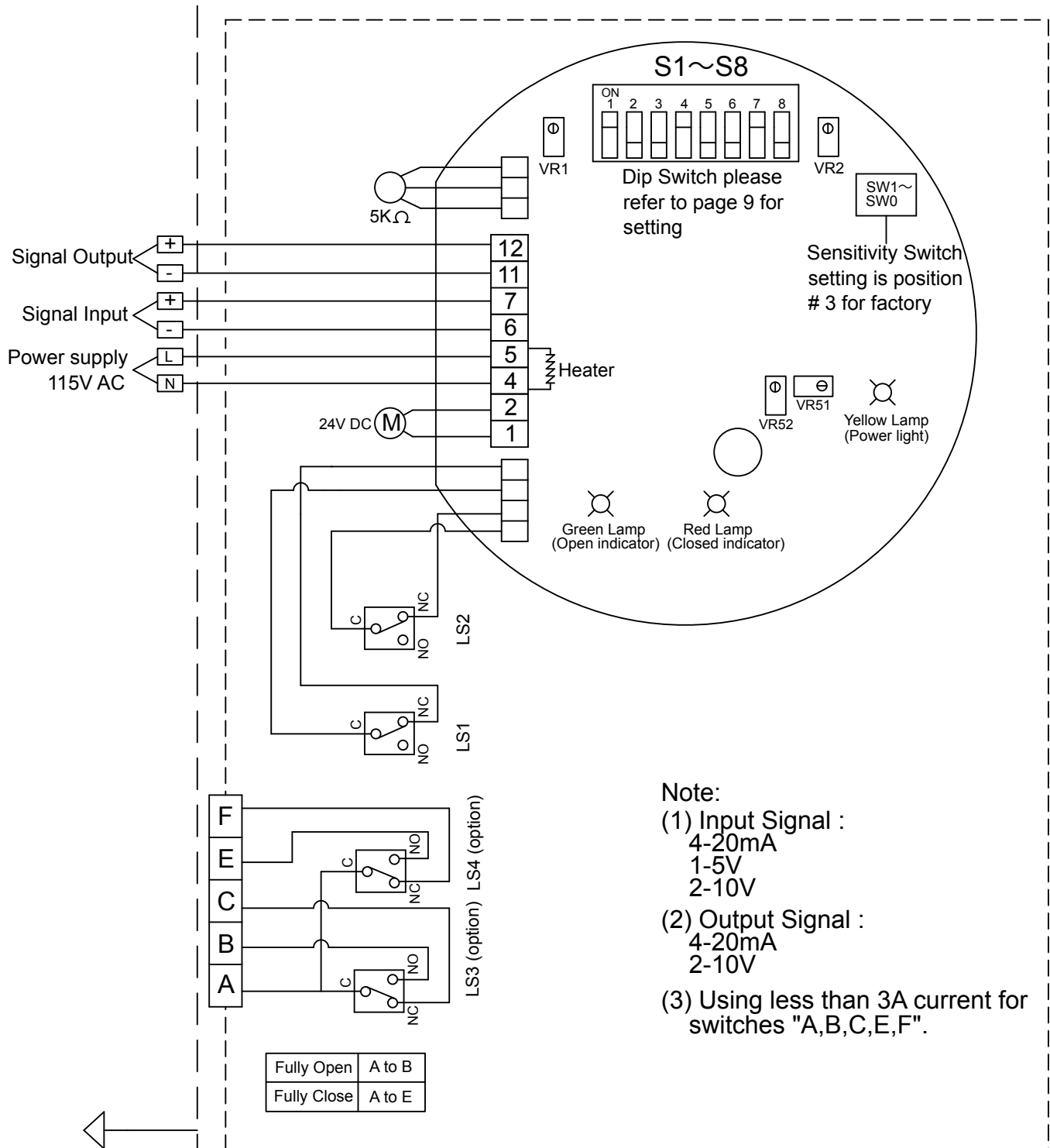
SEA 177, SEA 221, SEA 265 & SEA310



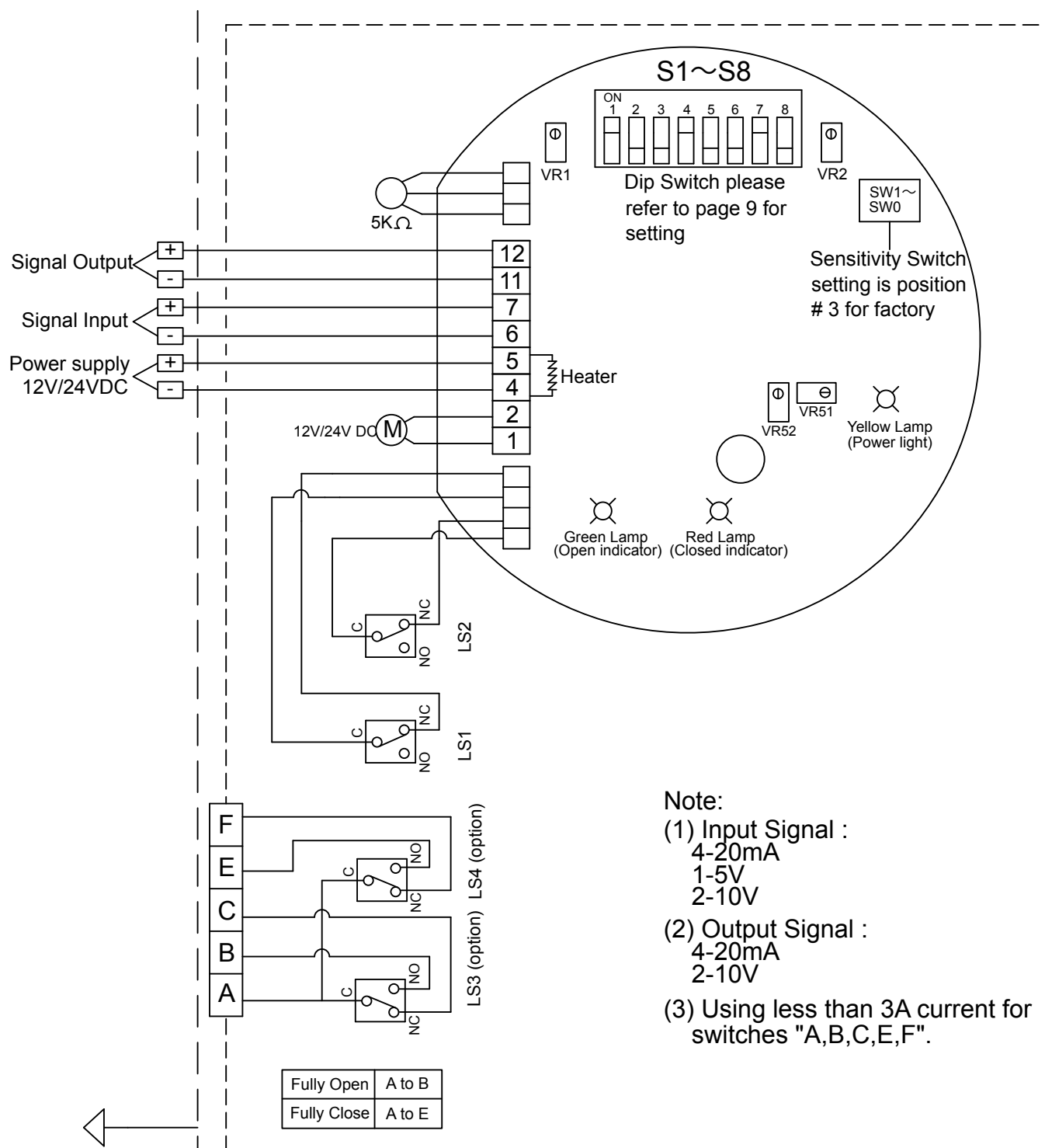
Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Flange Type
in	177.45	109.98	156.78	101.79	216.06	155.22	39	85.8	71.76	85.02	1/2 PS	29.25	4.68	64.35	M20*2.5	F16
mm	455	282	402	261	554	398	100	220	184	218		75	12	165	M20*2.5	



SEA 3 & SEA 4 - AC MODULATING







Note:

(1) Input Signal :

4-20mA

1-5V

2-10V

(2) Output Signal :

4-20mA

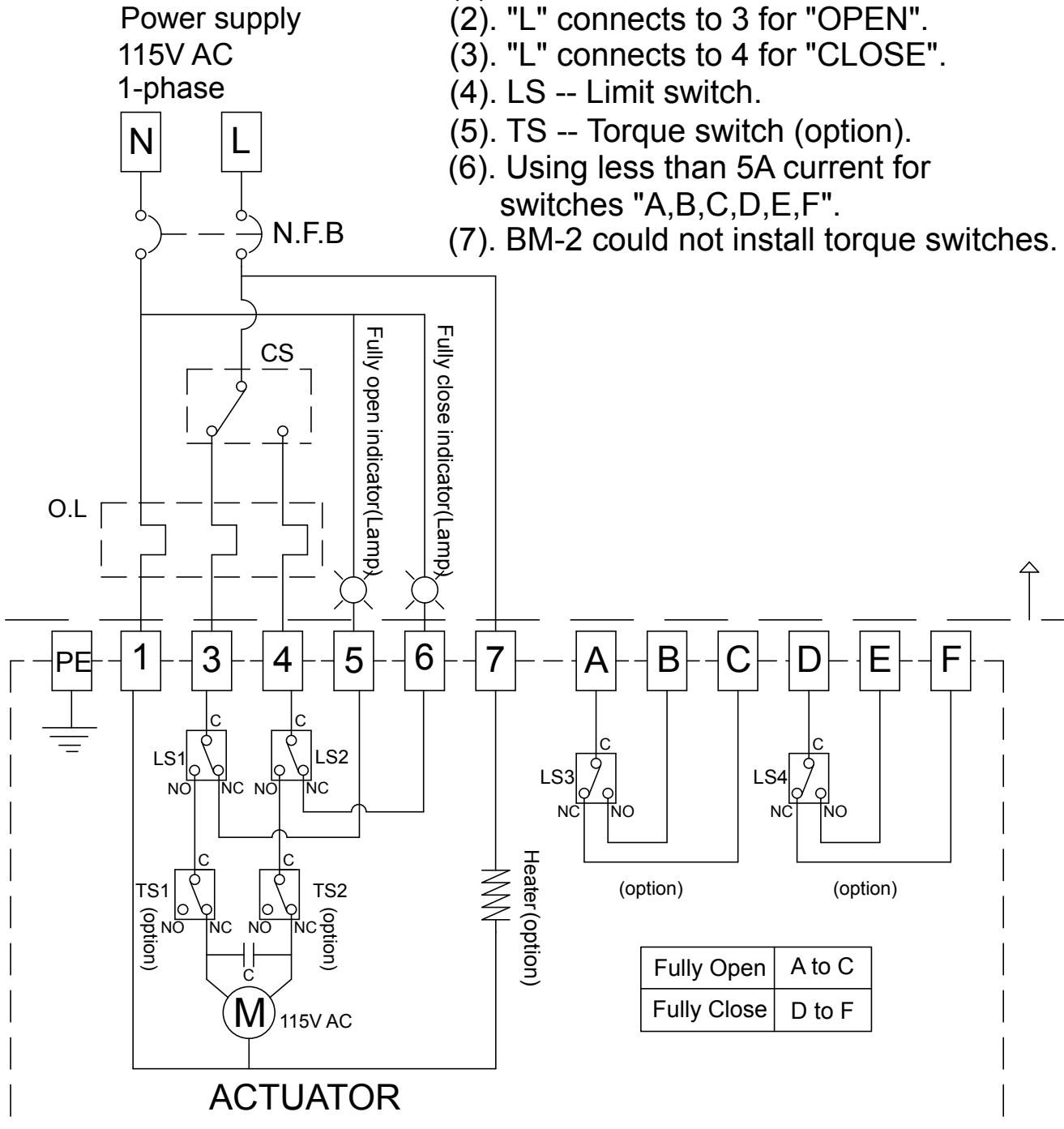
2-10V

(3) Using less than 3A current for switches "A,B,C,E,F".

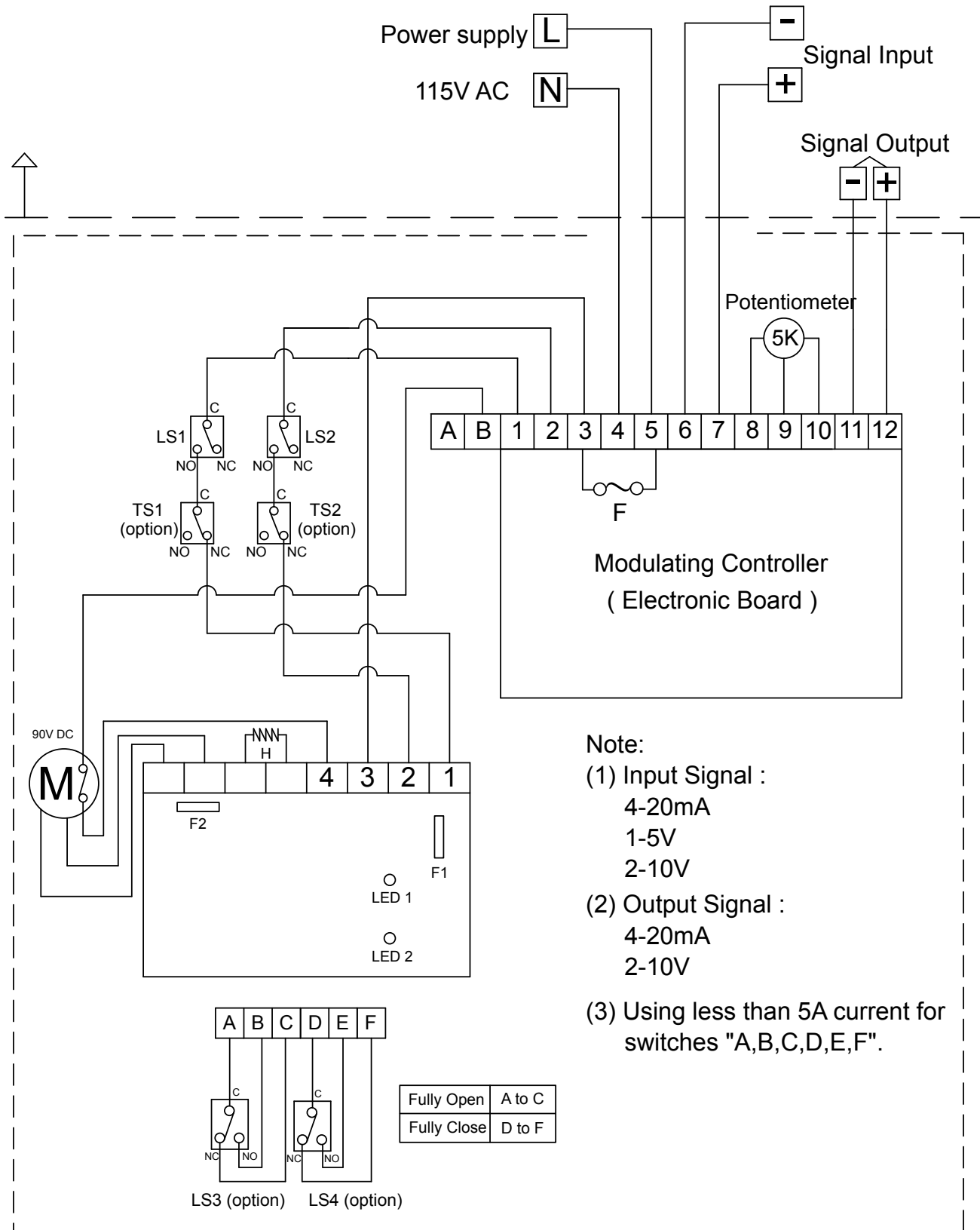
SEA 8 - SEA 310 - 115VAC ON / OFF

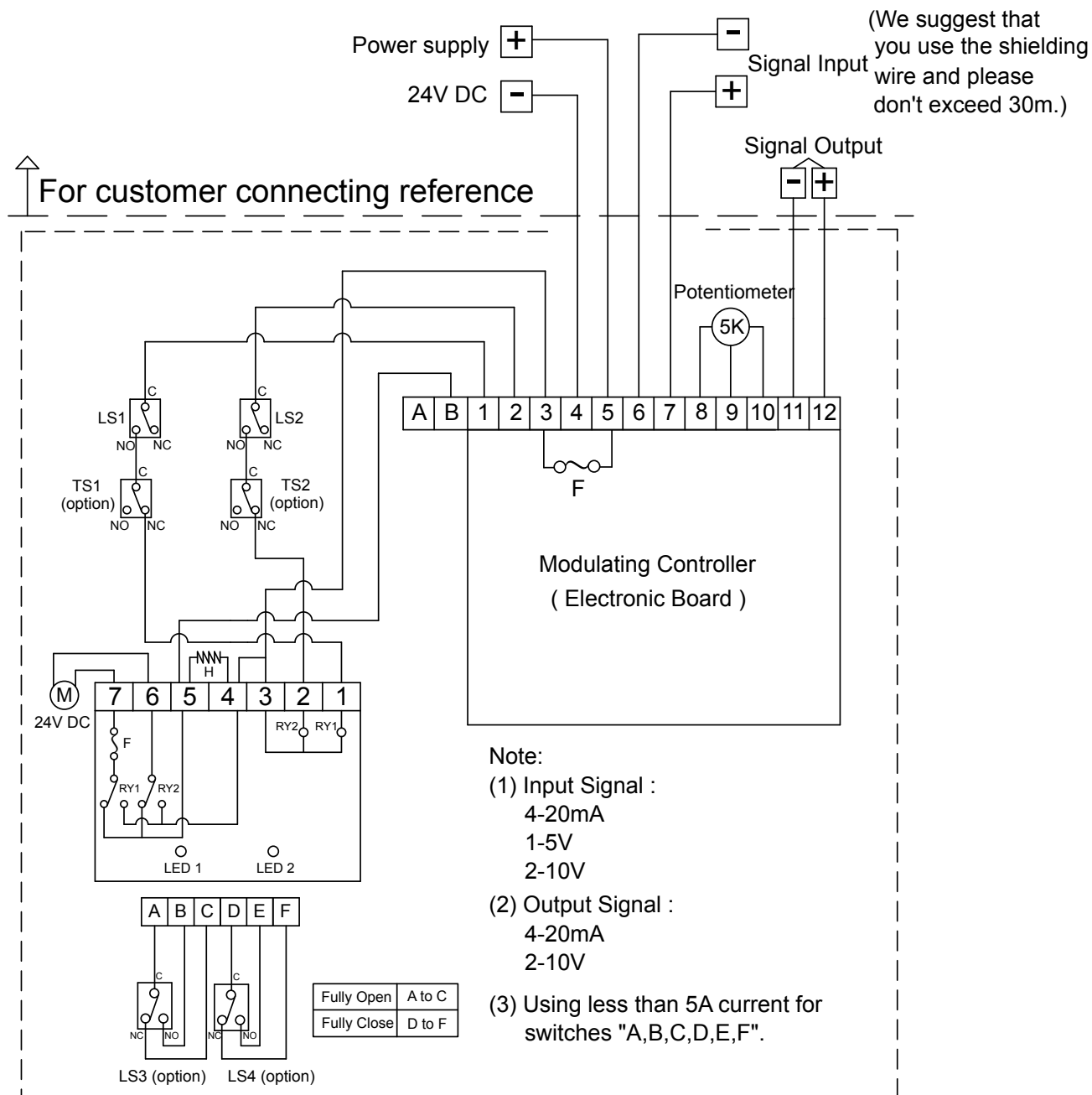
Note:

- (1). "N" connects to 1, "L" connects to 7.
- (2). "L" connects to 3 for "OPEN".
- (3). "L" connects to 4 for "CLOSE".
- (4). LS -- Limit switch.
- (5). TS -- Torque switch (option).
- (6). Using less than 5A current for switches "A,B,C,D,E,F".
- (7). BM-2 could not install torque switches.



SEA 8 - SEA 310 - AC MODULATING





Ordering Information



SEA Series	Options
SEA3	1 = 220V
SEA4	2 = 24V
SEA8	3 = 12 VDC
SEA13	4 = 24 VDC
SEA 35	AS = Auxiliary Switches
SEA 44	FP = Feedback Potentiometer
SEA 57	CR = Control Relays
SEA 88	HT = Heater & Thermostat
SEA 132	BD = Breather & Drain
SEA 177	PP = Proportional Positioner
SEA 221	FT = Feedback Transmitter
SEA 265	SC = Speed Control
SEA 310	TR = Timers
	TS = Torque Sensor

SEA3 2

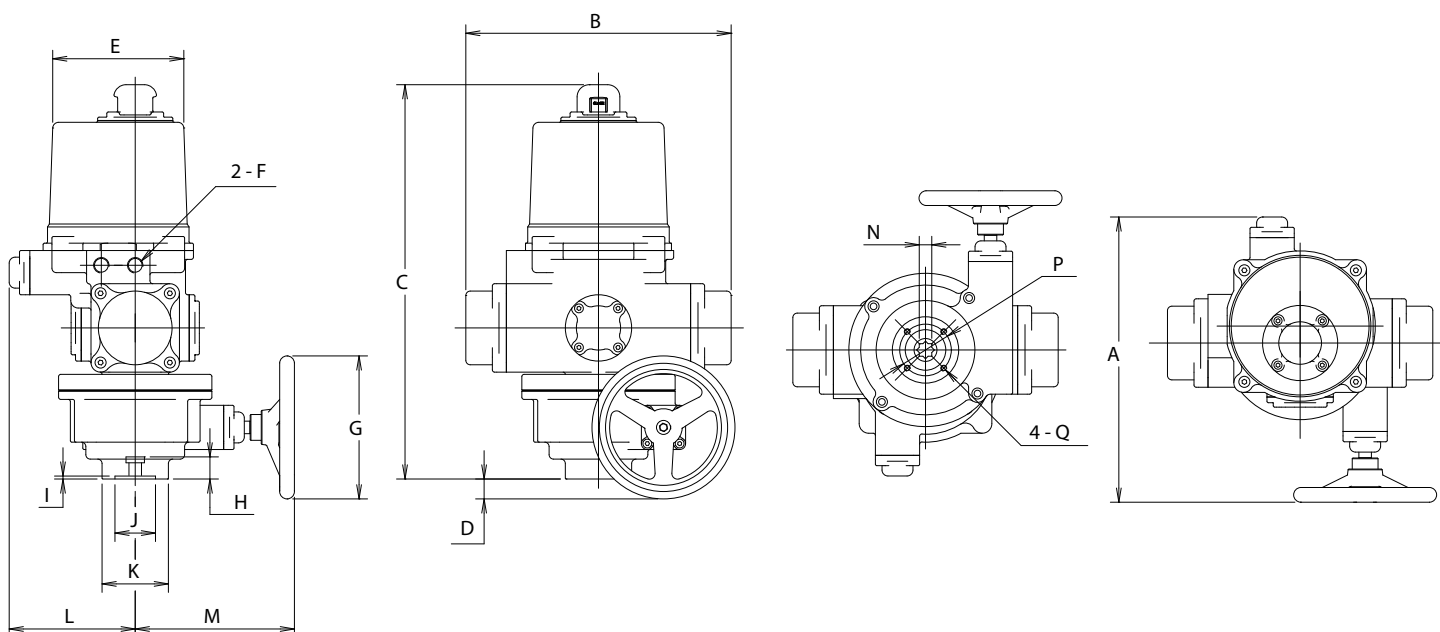
SEA Spring Return Actuator



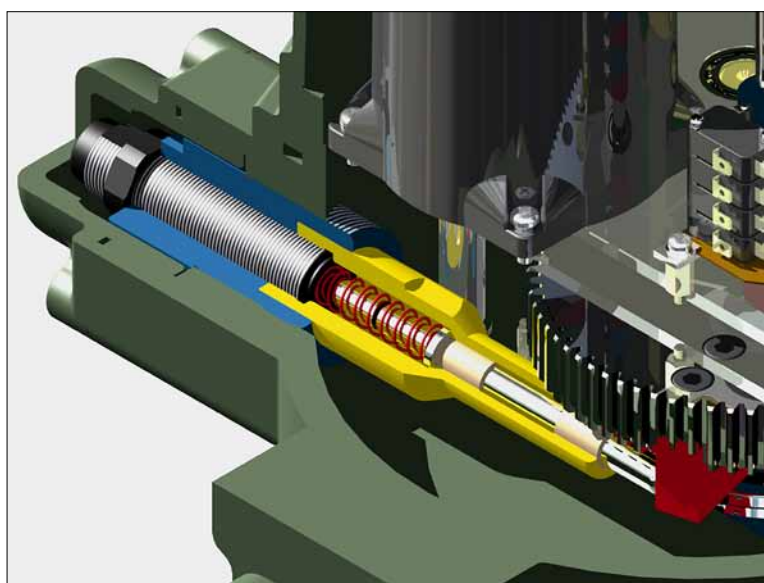
- Spring return models are designed to provide a fail-safe position in the event of a power loss of supply voltage a mechanical spring set is utilized to position the valve or damper to either the fully open or fully closed position without any external power source.
- A mechanical buffer system is employed 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 is available.
- A clutchless, leverless manual over-ride provides full - time manual capabilities.
- Patented in taiwan, USA, Japan and China
- 50% duty rated
- Temperature range: -30F TO 149F with use of heater and thermostat
- Powder coated aluminum alloy enclosure
- Nema 4
- Gear train comes lubricated for life from factory
- Visual indicator
- Voltage options include: 24VAC, 24VDC, 440 VAC

Model	Power (watts)	Max Torque (In/lb)	Motor 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	1100	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

SEA Spring Return Actuator Dimensions



Model	Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	
SEA-4-SR-MO	in	15.09	14.04	20.87	1.05	6.94	1/2"	7.57	1.17	0.16	2.15	3.51	6.67	8.42	0.66	2.73	M8 *	F07
	mm	387	360	535	27	178	NPT	194	30	4	55	90	171	216	17	70	1.25	
SEA-11-SR-MO	in	18.84	18.02	25.08	2.26	10.22	1/2"	11.54	1.52	0.20	2.73	4.88	9.63	9.20	0.86	3.98	M10 *	F10
	mm	483	462	643	58	262	NPT	296	39	5	70	125	247	236	22	102	1.5	
SEA-17-SR-MO	in	22.97	23.40	28.78	3.90	11.86	1/2"	15.60	1.76	0.20	3.32	5.85	11.90	11.08	1.05	4.88	M12 *	F12
	mm	589	600	738	100	304	NPT	400	45	5	85	150	305	284	27	125	1.75	
SEA-23-SR-MO	in	22.97	23.40	28.78	3.90	11.86	1/2"	15.60	1.76	0.20	3.32	5.85	11.90	11.08	1.05	4.88	M12 *	F12
	mm	589	600	738	100	304	NPT	400	45	5	85	150	305	284	27	125	1.75	



SPRING BUFFER SYSTEM



Series 50M76 Ball Valves
Threaded Full Port
316 Stainless Steel
1/4" - 3"



**Series N66
3-Piece Ball Valve**
Tube Full Port
316 Stainless Steel
1/2" - 2"



**150#, 300#, 600#
Flanged Ball Valves**
Full & Reduced Port
Carbon Steel, 316 Stainless & Alloy 20
1/2" - 12"



**Series 39034 & 39036
3-Piece Ball Valves**
Threaded & Socket Weld Full Port
Carbon Steel & 316 Stainless Steel
1/4" - 4"



High Performance Ball Valves
Available in a wide range of materials
Pressures up to 6000 lb.



3-Way & 4-Way Ball Valves
Threaded, Flanged or Clamp Ends
316 Stainless Steel
1/2" - 8"



Series 10 Ball Valves
Threaded Brass Full Port
600 wog 1/4" - 4"
Oval Handle Optional



**Automated
Ball Valve Packages**



Seal Weld Valves
Standard & Full Port
Carbon Steel & 316 Stainless Steel
2000, 3000, & 6000 psi



200# Gate, Globe, Check
Threaded & Socket Weld
316 Stainless Steel
Gate, Globe 1/2" - 2"
Check 1/4" - 3"



150#, 300#, 600#
Cast Steel & Stainless Steel
Up to 36"



800#/1500# Gate, Globe, Check
Threaded & Socket Weld
Forged Carbon & Stainless Steel
1/4" - 2"

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