

# DIMENSIONS AND TECHNICAL DETAILS - ELECTRIC ACTUATOR - EL

**Description**  
 Type EL electric actuators use worm and wormwheel reduction gearing to provide tight positioning control and the self locking feature necessary for controlling larger valves, in particular butterfly valves. The housing consists of an aluminium base casting and a steel cover, this contains the drive motor and worm gear assembly, together with the anti-condensation heater and main terminal block.

EL actuators take the full range of control options, they have handwheel geared manual overrides, mechanical end position stops and position indication by a raised dome in the top cover.

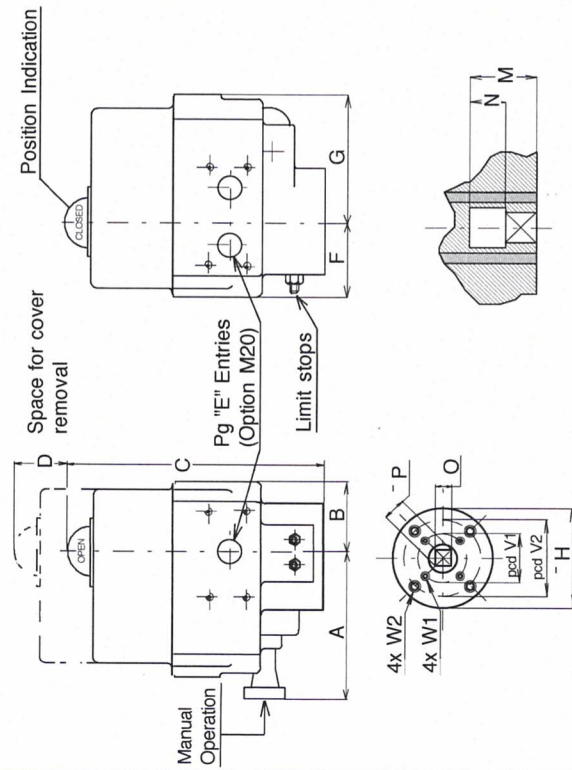
**General Specification**

- Nominal Rotation : 90° - factory set to ±3°
- Enclosure : Adjustable by limit switches: 10° to 320°
- Temperature range : IP65 (IP67 optional)
- Electrical connection : -20° to +70°C
- Finish : By 12 and/or 16 point terminal block
- Life : Two part polyurethane all steel parts zinc plated
- Limitswitches : 50,000 cycles minimum
- Torque switches : 4x SPDT V3 micro switches
- Stall protection : 2x SPDT V3 micro switches (Not on EL-20 & EL-35)
- Heater : By thermostat in motor windings
- Voltages : 10 Watt
- Single phase : 24VDC or 24VAC
- Three phase : 110-130V 50Hz or 60Hz
- Other voltages : 220-240V 50Hz or 240-280V 60Hz
- Minimum customer switch or contactor rating 16Amp. : 380-415V 50Hz or 415-460V 60Hz
- Fastenings : On request

**Materials**

- Housing : Aluminium alloy
- Cover : Steel
- Drivesleeve : Bronze (Cast Iron)
- Fastenings : Stainless steel

Performance	EL20	EL35/55	EL100	EL150	EL200	EL350	EL500	EL800
Torque (Nm)	Break	20	35/55	100	150	200	350	800
	Run	7	20	35	53	70	123	280
Speed (Sec.)	50Hz	7	6	7	9	13	23	25.5
	220V AC	0.7	-0.6	1.7	1.7	1.7	1.7	2.3
Current (A)	220V AC	1.5	1.6/-	2.9	2.9	2.9	2.9	4.5
	110V AC	5	-/5	8	8	8	8	12
Power (W)	220V AC	80	72	200	200	200	200	305
	Switches-Indication	4x16A	4x16A	4x16A	4x16A	4x16A	4x16A	4x16A
Torque SPDT at 110/240VAC		-	-	2x16A	2x16A	2x16A	2x16A	2x16A
	Weight (Kg.)	3	6	11	11	16.5	17	25.5
Duty rating	30%	30%	30%	30%	30%	30%	30%	30%



DIM. mm	EL20	EL35/55	EL100	EL150	EL200	EL350	EL500	EL800
A	115	120/130	135	135	170	170	195	195
B	45	60	82	82	109	109	128	128
C	196	255	292	292	315	315	318	356
D	110	145	165	165	165	165	165	190
E	3x13.5	3x13.5	3x13.5	3x13.5	3x21	3x21	3x21	3x21
F	50	70	77	77	96	96	123	123
G	80	95	120	120	140.5	140.5	166	166
H	65	90	90	90	125	125	150	150
M	27.5	27.5	33	33	33	33	48	48
N	11	9	9	9	9	9	-	-
O max.	11.11	14.11	19.11	19.11	19.11	19.11	27.13	27.13
O min.	11.00	14.00	19.00	19.00	19.00	19.00	27.00	27.00
P	14	18	25	25	25	25	36	36
V1	50	50	50	50	70	70	102	125
V2	-	70	70	70	102	102	-	-
W1	M6x9	M6x12	M6x12	M6x12	M8x15	M8x15	M10x18	M12x20
W2	-	M8x15	M8x15	M8x15	M10x18	M10x18	-	-

Subject to change without notice

**VALVE AUTOMATION SYSTEMS**



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 Date: July '96  
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