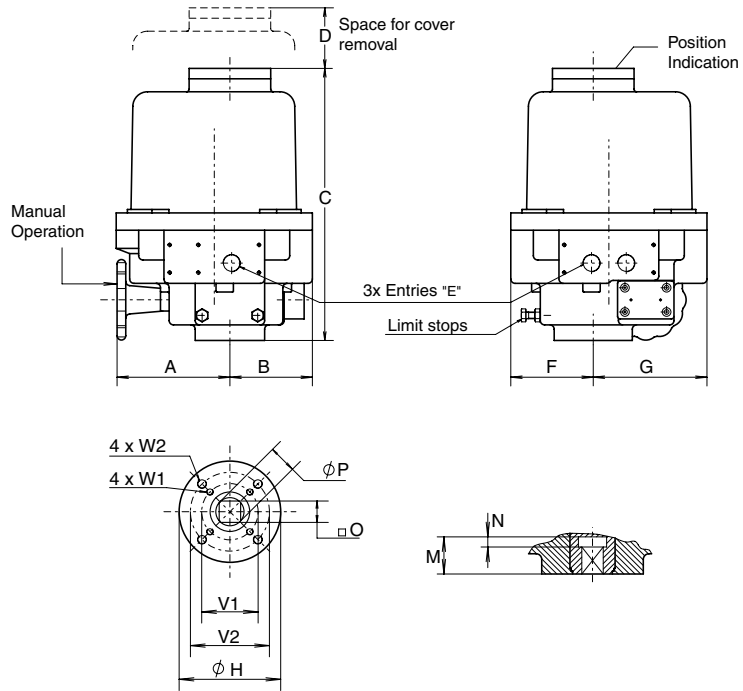


# Data sheet

Sheet No.: A5.105 Rev. B  
Date: January 2012

## DIMENSIONS AND TECHNICAL DETAILS - ELECTRIC ACTUATOR

EL Exd



Dim in inches	EL35 & 55	EL100	EL150	EL200	EL350	EL500	EL800
A	5.12	5.31	5.31	7.28	7.28	7.68	7.68
B	2.36	3.94	3.94	4.29	4.29	5.04	5.04
C	10.83	11.42	11.50	12.40	12.40	14.96	14.96
D	5.71	6.50	6.50	6.50	6.50	6.50	7.48
3x E	1/2"NPT	1/2"NPT	1/2"NPT	3/4"NPT	3/4"NPT	3/4"NPT	3/4"NPT
F	2.76	3.03	3.03	3.78	3.78	4.84	4.84
G	3.74	4.72	4.72	5.53	5.53	6.54	6.54
H	3.54	3.54	3.54	4.92	4.92	5.91	5.91
M	1.08	1.30	1.30	1.30	1.30	1.77	1.77
N	0.35	0.35	0.35	0.35	0.35	-	-
O max.	0.556	0.752	0.752	0.752	0.752	1.068	1.068
O min.	0.551	0.748	0.748	0.748	0.748	1.063	1.063
P	0.709	0.984	0.984	0.984	0.984	1.417	1.417
V1	1.969	1.969	1.969	2.756	2.756	4.016	4.921
V2	2.756	2.756	2.756	4.016	4.016	-	-
W1	1/4-20 x .47	1/4-20 x .47	1/4-20 x .47	5/16-18 x .59	5/16-18 x .59	3/8-16 x .71	1/2-13 x .79
W2	5/16-18 x .59	5/16-18 x .59	5/16-18 x .59	3/8-16 x .71	3/8-16 x .71	-	-

### Description

Type EL actuators use worm and wormwheel reduction gearing to provide tight positioning control and the self locking feature necessary for controlling larger valves, particularly butterfly types.

The explosionproof housing consists of two aluminum castings, this contains the drive motor and worm gear assembly, together with the anti-condensation heater and main terminal strip.

EL actuators take the full range of control options, they have handwheel geared manual overrides, mechanical end position stops and torque switches on all the larger sizes. Visual position indication is by a window in the top cover.

### General Specification

Nominal Rotation	: 90° - factory set to ±3°	Stall protection	: By motor thermostat (all sizes)
	: Adjustable by limit switches 10° to 320°		: By thermostat and by torque switches (EL 100-800)
Explosion proof	: II 2 G EEx d IIB T4, suitable for ATEX Zones 1, 2 (gas)	Identification	: Ex: EL 200 Exd
Certificatenr.	: KEMA 03ATEX2156X		
Enclosure	: IP67 (Optional: IP68)		
Temperature	: -20°C to +70°C		
Connections	: By 12 and/or 16 point internal terminal strip		
Finish	: Two component polyurethane coating		
Life	: 50,000 operations minimum		
Heather	: 10 Watt		
Motor voltages and types			
- DC	: 24VDC		
- AC Single phase	: 24VAC 50/60Hz		
	: 110-130VAC 50/60Hz		
	: 220-280VAC 50/60Hz		
- AC Three phase	: 380-460VAC 50/60Hz		

### Minimum customer switch or contactor rating 16Amp.

Performance		EL35	EL55	EL100	EL150	EL200	EL350	EL500	EL800
Torque (lb-in)	Break	310	487	885	1328	1770	3098	4425	7081
	Run	112	177	310	469	620	1089	1549	2478
Speed (Sec.)	50Hz	6	6	7.5	9	13.5	22	25.5	25.5
	110V AC	1.1	-	2.9	2.9	2.9	2.9	2.9	4.5
Current (A) (Max.)	230V AC	-	0.6	1.7	1.7	1.7	1.7	1.7	2.3
	24V DC	-	5	8	8	8	8	8	-
Power (W)	110V AC	100	-	225	225	225	225	225	315
	230V AC	-	72	200	200	200	200	200	305
	24V DC	-	45	118	118	118	118	118	-
Switches-Indication		4x16A	4x16A	4x16A	4x16A	4x16A	4x16A	4x16A	4x16A
Torque SPDT at 110/240VAC		-	-	2x16A	2x16A	2x16A	2x16A	2x16A	2x16A
Weight (lb.)		16	16	27	27	41	44	61	69
Duty rating		30%	30%	30%	30%	30%	30%	30%	30%

**EL-O-MATIC**

www.El-O-matic.com

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