

---

## Pneumatic Actuators



EL-O-Matic Pneumatic actuators are powerful and compact double rack and pinion units for use with ball, butterfly and plug valves and any device requiring accurate and dependable quarter turn rotary motion.

The use of high grade steel and aluminum components together with EL-O-Matic's patented 3 point piston support provides a tough reliable unit for the automation of today's high performance industrial valves. Modern synthetic bearings ensure no metallic contact between moving components.

Spring return actuators incorporate the multiple spring concept for maximum flexibility, they are also "field reverseable". Safety features include an anti-blow out spindle and a spring retaining system which ensures no spring tension on disassembly.

A wide range of control options are available to cover each and every industrial application.

The choice of actuator depends primarily on the valves' torque requirement, and with EL-O-Matic you have the widest range possible, 18 basic model sizes covering a torque range from 12 to 4000 Nm.

**'E' Series** actuators incorporate a body of cast aluminum and have pistons where the rack teeth are precision machined onto the aluminum casting. Spring return versions have a maximum of 6 springs, 3 in each end cap assembled as a concentric stack.

**'P' Series** actuators cover the large end of the torque range. These all incorporate a body of cast aluminium and have steel for the rack on pinion drive. Spring return versions have a maximum of 14 springs 7 in each end cap assembled within a hexagon pattern.

All actuators have mounting flanges and drives to ISO 5211. Mounting kits can be provided for most of the worlds quarter turn valves.

EL-O-Matic actuators comply fully with all the relevant industry standards. Control interfaces for solenoid valves, switch boxes and positioners satisfy the NAMUR standard (VDI/VDE 3845).

## Options

- Double Acting Actuator
- Single Acting Actuator
- Actuator with steel housing
- Actuator with 180° rotation
- Three position Actuator
- Limit stops in the end caps
- Actuator with + 3° or - 3° extra travel



## Specifications

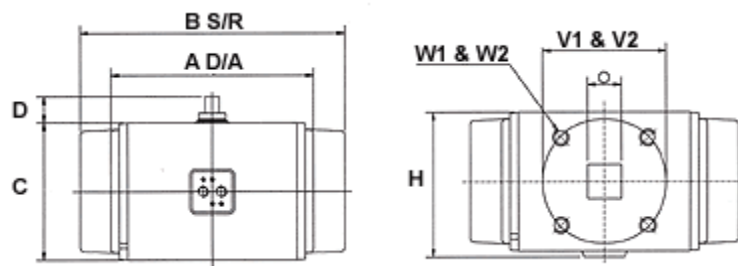
Pressure	:	Upto 8 bar	
Temperature	:	-20° to 80° C	
Media	:	Air (dry or lubricated)	
	:	Non-corrosive gas or light hydraulic oil	
Construction	:	Suitable for indoor or outdoor installation	
Material	:	Housing - Aluminium Alloy	
Drive Shaft	:	Carbon Steel	
Finish	:	Yellow Colour Powder Coated	
Rotation (Standard)	:	Counter clockwise to open with port 'A' pressurised	
	:	Spring return Actuators air fail to close clockwise	
Movement(Standard)	:	91.5° from -0.5° to 91° counter-clockwise	
Lubrication	:	Factory lubricated for the normal life of Actuators	
Life	:	5,00,000 operations minimum	



## ACTUATOR TORQUE - AT 6 BAR

MODEL	DA TORQUE (Nm)	SR TORQUE (NMM)			
		AIR STROKE		SPRING STROKE	
		START	END	START	END
E12	14.6	10.3	7.5	7.2	4.6
E25	27	13	4	21	13
E40	51	25	8	40	25
E100	115	58	21	88	55
E200	251	125	41	196	123
E350	436	206	63	347	223
E600	741	364	114	584	367
E950	1107	554	174	869	538
E1600	1829	907	305	1421	897
E3200	3496	1570	410	2980	1810
P60	69	42	22	44	25
P150	174	109	65	102	59
P280	329	195	76	236	120
P500	581	382	102	448	179
P750	864	582	217	605	253
P1100	1274	834	429	791	396
P2500	2922	1633	947	1849	1160
P4000	4954	2778	1620	3120	1958

## ACTUATOR DIMENSIONS (mm )



Model	A	B	C	D	H	O	V1	V2	W1	W2
E12	103	118	60	20	60	9	42	-	M6x8	-
E25	135	178	81	20	83	11	50	-	M6x9	-
E40	147	204	95	20	97	14	50	70	M6x9	M8x10
E100	176	267	118	20	117	19	50	70	M6x9	M8x10
E200	237	360	143	20	137	22	70	102	M8x10	M10x12
E350	305	387	181	20	182	27	70	102	M8x10	M10x12
E600	387	477	220	30	217	27	102	125	M10x12	M12x15
E950	424	517	259	30	242	36	102	140	M10x12	M16x20
E1600	516	570	297	30	275	46	165	-	M20x25	-
E3200	540	642	356	30	326	55	165	254	M20x35x4	M16x25x8
P60	155	184	101	20	110	14	50	70	M6x9	M8x10
P150	186	217	135	20	144	19	70	102	M8x10	M10x12
P280	232	312	160	20	173	22	70	102	M8x10	M10x12
P500	271	352	190	30	206	27	102	125	M10x12	M12x15
P750	285	388	234	30	255	27	102	125	M10x12	M12x15
P1100	340	478	247	30	261	36	140	-	M16x20	-
P2500	380	568	360	30	360	46	165	-	M20x25	-
P4000	498	835	380	30	390	55	254	-	M16 x 20 x 8	-