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**ELA -  
Electromechanical  
Linear Actuator**

# Electromechanical Linear Actuators ELA

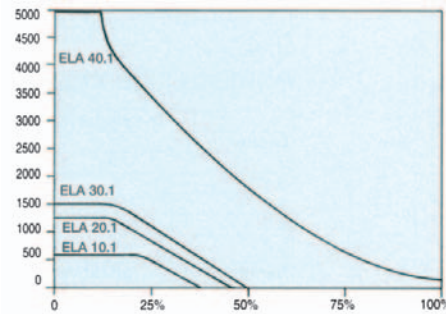
Electromechanical Linear Actuators (ELA) consist of trapezoidal or ball screws driven by an electric motor through worm gearing completely enclosed by an aluminium housing.

It is possible to install ELA's in any position and the thrust and guide mechanism is designed for both compressive and tensile loading. Other distinguishing features include robust construction and reliability giving ELA's a wide range of applications.

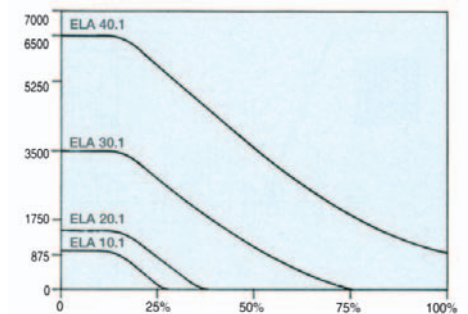


Duty cycle diagrams, ELA with trapezoidal spindle with three-phase motor:

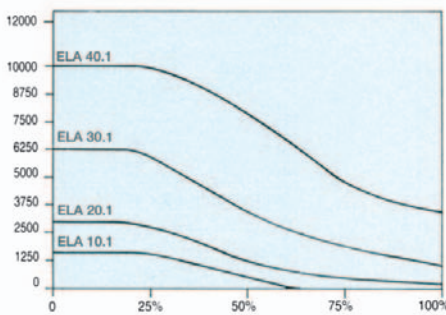
Reduction ratio H Fdyn (N)/duty ratio in % referring to 10 minutes



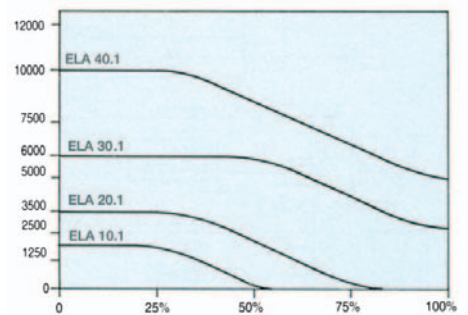
Reduction ratio V Fdyn (N)/duty ratio in % referring to 10 minutes



Reduction ratio N Fdyn (N)/duty ratio in % referring to 10 minutes



Reduction ratio L Fdyn (N)/duty ratio in % referring to 10 minutes



Selection table, series ELA, trapezoidal spindle Tr:

Trapezoidal spindle	Three-phase motor				A.C. motor				D.C. motor				
	10.1	20.1	30.1	40.1	10.1	20.1	30.1	40.1	10.1	20.1	30.1	40.1	
Size													
Max. axial force	F stat [N]	2500	4500	8000	13000	2500	4500	8000	13000	2500	4500	8000	13000
Spindle		12x3	16x4	22x5	22x5	12x3	16x4	22x5	22x5	12x3	16x4	22x5	22x5
Approx. weight	[kg]	6	10	15	20	6	10	15	20	6	10	15	20
<b>Ratio H</b>		4:1	4:1	2,78:1	6,75:1	4:1	4:1	2,78:1	6,75:1	4:1	4:1	2,78:1	6,75:1
Max. tension/compr. force	F [N] dyn.	550	1250	1500	5000	550	1200	1100	3500	700	1200	1100	3500
Lifting speed	v [mm/sec]	35	46,6	84	34,5	35	46,6	84	34,5	35	46,6	84	34,5
Motor power	P [Watt]	90	120	250 <sup>1)</sup>	550	90	120	250 <sup>1)</sup>	550	70	150	300 <sup>1)</sup>	500
<b>Ratio V</b>		6,5:1	6,5:1	5:1	10:1	6,5:1	6,5:1	5:1	10:1	6,5:1	6,5:1	5:1	10:1
Max. tension/compr. force	F [N] dyn.	900	1650	3500	6500	900	1600	2500	5300	1100	1600	2500	5300
Lifting speed	v [mm/sec]	22	31	46,6	23,3	22	31	46,6	23,3	22	31	46,6	23,3
Motor power	P [Watt]	90	120	250	550	90	120	250	550	70	150	300	500
<b>Ratio N</b>		15:1	15:1	10:1	20:1	15:1	15:1	10:1	20:1	15:1	15:1	10:1	20:1
Max. tension/compr. force	F [N] dyn.	1600	2750	6000	10000	1600	2300	4500	8500	1350	2300	4500	8500
Lifting speed	v [mm/sec]	9	13	23,3	11,5	9	13	23,3	11,5	10	13	23,3	11,5
Motor power	P [Watt]	90	120	250	550	90	120	250	550	70	150	300	500
<b>Ratio L</b>		25:1	25:1	20:1	25:1	25:1	25:1	20:1	25:1	25:1	25:1	20:1	25:1
Max. tension/compr. force	F [N] dyn.	2000	3500	6000	10000	2000	3500	6000	10000	2000	3500	6000	10000
Lifting speed	v [mm/sec]	5,5	7,5	11,7	9	5,5	7,5	11,7	9	5,5	7,5	11,7	9
Motor power	P [Watt]	90	120	250	550	90	120	250	550	70	150	300	500

<sup>1)</sup> Braking motor









