

# Servo Electric Actuator Specification Sheet

SPECIFICATION	SYMBOL	UNITS	SEA10 .xxx (A or B)	Sea 15 .xxx	SEA21 .xxx (A or B)	SEA31 .xxx (A or B)	SEA41 .xxx (A or B)
<b>Typical Applications</b>			<b>A: Body Coupled B: Load Frame</b>	<b>Aero Loaders</b>	<b>A: NVH 4 Post B: Load Frame</b>	<b>A: 4 Post Durability B: Load Frame</b>	<b>A: 4 Post Durability B: Load Frame</b>
.xxx = <b>A</b> Stroke Max working stroke, peak-peak	S	mm (in)	330 (12.99)	400 (15.75)	170 (6.75)    254 (10.24)	170 (6.75)    254 (10.0)	170 (6.75)    254 (10.0)
.xxx = <b>B</b> Stroke Max working stroke, peak-peak	S	mm (in)	200 (7.87)    290 (11.42)	400 (15.75)	200 (7.87)    290 (11.42)	200 (7.87)    290 (11.42)	200 (7.87)    290 (11.42)
Motor Dynamic Peak Force Motor Peak Force	Fpk,mot	N (lbF)	10,360 (2,329)	15,520 (3,489)	20,700 (4,654)	31,020 (6,974)	41,400 (9,307)
Motor Continuous Dynamic Force** Motor Continuous or rms Force	Fn,mot	N (lbF)	3,860 (868)	5,790 (1302)	A: 8,100 (1,821) B: 7,720 (1,736)	16,200 (3,642)	
Static Load Support Max Air Spring Capacity at Prated	Fpk,air	N (lbf)	A: 5720 (1,286) B: 4,192 (942)	5,472 (1,230)	11,210 (2,520)		
Total Peak Force Fpk,mot + Fpk,air	Fpk,tot		A: 16,080 (3,615) B: 14,552 (3271)	20,992 (4,719)	31,910 (7,174)	42,260 (9,276)	
Total Continuous Force Fn,mot + Fpk,air	Fcont,tot	N (lbF)	A: 9,580 (2,154) B: 8,052 (1810)	11,262 (2,532)	19,310 (4,341)	27,410 (6,162)	27,320 (4,320)
Velocity max at Fn,mot	Vmax, fn	m/s (in/s)	4.6 (181)	4.6 (181)	A: 4.2 (165) B: 4.6 (181)	4.2 (165)	
Velocity max at Fpk,mot	Vmax, fpk	m/s (in/s)	2.0 (78.7)	2.0 (78.7)	A: 1.9 (74.8) B: 2.0 (78.7)	1.9 (74.8)	



Acceleration max (unloaded)	gmax	G	26	24	30	24	30	24	36	30
Absolute Digital Encoder resolution	Enc res	nm	1.0 (internal to the servo drive) (playback resolution either 16 bit or 24 bit of full Stroke)							
Noise Level – Typical (NVH mode)	SPL(A)	dbA	45							
Safety rating, DIN EN 61508***	SIL		2							
Safety rating, DN EN ISO 13849-1***	Cat		3							
Performance, DIN EN ISO 13849-1***	PL		D							
Bearing Material			Qty 4, Prelubricated, Preloaded t-rail caged roller bearings. Replacement interval 15 years under designed usage							
Facility Requirements		V A	380-480Vac, 3φ, 50-60 Hz Current Rating based on motor sizing and system performance requirements							
Air Supply, rated	Prated	Psi (Bar)	80 (5.5), higher Static Load Support possible at higher supply pressures							
Recommended Liquid cooling flow, approx 20deg delta C	Q	Lpm (gpm)	3 (.8)	4.5 (1.2)	5 (1.32)	8 (2.1)		10 (2.6)	10 (2.6)	
Max Motor Heat Removal	Qp	kW Btu/hr	2.94 (10,032)	4.41 (15,048)	A: 5.3 (18,084) B: 5.88 (20,063)	10.7 (36,510)		10.7 (36,510)	10.7 (36,510)	

