

HLS12 (6V) General Specification.



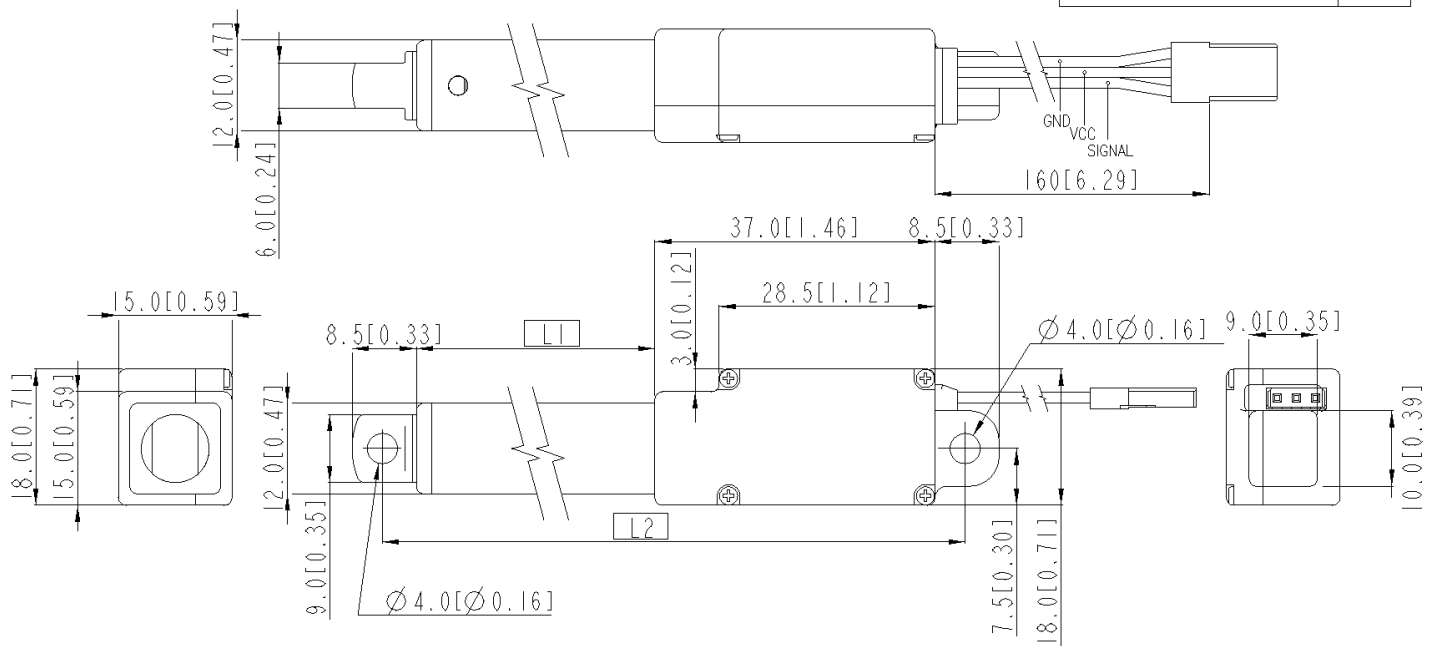
LINEAR SERVO -Lead 5mm SERVO

Control System		PWM											
Operating Voltage Range		4.0 ~ 8.4V											
Motor Type		Cored Metal Brush											
Controller (MCU)		32bit programmable Digital											
Lead Screw		LEAD 5mm											
Voltage		6.0V											
Gear Ratio		50:1			100:1			210:1			380:1		
No Load	Speed	25.0mm/s			13.0mm/s			6.1mm/s			3.3mm/s		
	Current	100mA											
Load Spec		Load	Speed	Current	Load	Speed	Current	Load	Speed	Current	Load	Speed	Current
Maximum Efficiency Point		1.0kgf·m (9.81Nm)	19.0 mm/s	200mA	1.7kgf·m (16.67Nm)	10.3 mm/s	200mA	3.6kgf·m (35.30Nm)	4.5 mm/s	200mA	6.5kgf·m (63.74Nm)	2.5 mm/s	200mA
Peak Power Point		1.7kgf·m (16.67Nm)	14.0 mm/s	300mA	3.1kgf·m (30.40Nm)	7.0 mm/s	300mA	6.2kgf·m (60.80Nm)	3.2 mm/s	300mA	10.0kgf·m (98.07Nm)	1.9 mm/s	300mA
Max Force (Lifted)		2.2kgf·cm (21.57Nm)	6.65mm/s	400mA	4.2kgf·m (41.19Nm)	3.2 mm/s	400mA	8.0kgf·m (78.45Nm)	2.3 mm/s	400mA	12.0kgf·m (117.68Nm)	1.2 mm/s	400mA
Stall Thrust		2.5kgf·m (24.52Nm)			5.0kgf·m (49.03Nm)			10.0kgf·m (98.07Nm)			18.0kgf·m (176.52Nm)		
Stall Current		500mA											
Max Static Force		20.39kgf·m (200Nm) (above)											
Stroke SPEC		30mm			50mm			100mm					
Repeatability		±0.2mm			±0.3mm			±0.5mm					
Max Side Load (Extended)		4.08kgf·m (40Nm)			3.06kgf·m (30Nm)			1.53kgf·m (15Nm)					
Weight		34g (1.199oz)			40g(1.411oz)			56g (1.975oz)					
Outline Dimensions		82.0mm x 15.0mm x 18.0mm (3.228inch x 0.591inch x 0.709inch)			102.0mm x 15.0mm x 18.0mm (4.016inch x 0.591inch x 0.709inch)			152.0mm x 15.0mm x 18.0mm (5.984inch x 0.591inch x 0.709inch)					
Operating Temperature Range		-10°C ~ +50°C(+14°F ~ +122°F)											
Vibrations at No Load		-											
Storage Temperature Range		-30°C ~ +80°C (-22°F ~ +176°F)											
Connector Wire Length		160mm(6.294inch)											
Bearing Type		Flange bearing											
Case Material		Engineering Plastic & Aluminum Pipe											
Gear Material		4 Metal Gears											

HLS12-XXXX-XX [EX, HLS12-50100-6V]
 — VOLTAGE OPTION
 — GEARING OPTION
 — STROKE OPTION

	L1	L2
HLS12-30-XX	36.5[1.44]	82[3.22]
HLS12-50-XX	56.5[2.22]	102[4.02]
HLS12-100-XX	106.5[4.20]	152[5.98]

Tolerance ,Unless otherwise stated is	
Above 0.5 to and Including 9.0	0.05
Excess 9 to and Including 120	0.1
Excess 120 to and Including 315	0.2
Excess 315 to and Including 1000	1
Excess 1000 to and Including 2000	2



1:1 scale (unit : mm)



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