

HLS12 (4.8V) General Specification.



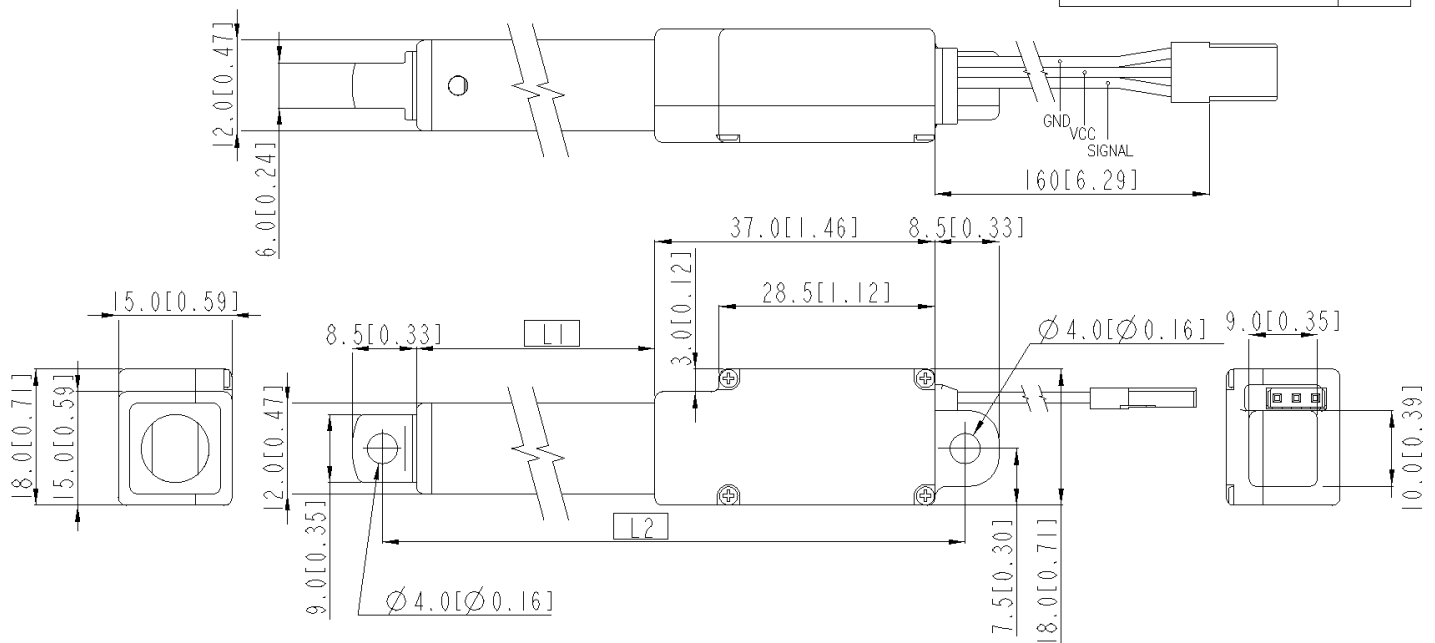
LINEAR SERVO -Lead 5mm SERVO

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	4.8V											
Gear Ratio	50:1			100:1			210:1			380:1		
No Load	Speed	20.0mm/s		10.4mm/s		4.9mm/s		2.6mm/s				
	Current	80mA										
Load Spec	Load	Speed	Current	Load	Speed	Current	Load	Speed	Current	Load	Speed	Current
Maximum Efficiency Point	0.8kgf·m (7.85Nm)	15.2 mm/s	160mA	1.4kgf·m (13.34Nm)	8.24mm/s	160mA	2.9kgf·m (28.24Nm)	3.6 mm/s	160mA	5.2kgf·m (50.99Nm)	2.0 mm/s	160mA
Peak Power Point	1.4kgf·m (13.34Nm)	11.2 mm/s	240mA	2.5kgf·m (24.32Nm)	5.6 mm/s	240mA	5.0kgf·m (48.64Nm)	2.56mm/s	240mA	8.0kgf·m (78.45Nm)	1.52mm/s	240mA
Max Force (Lifted)	1.8kgf·cm (17.26Nm)	5.32mm/s	320mA	3.4kgf·m (32.95Nm)	2.56mm/s	320mA	6.4kgf·m (62.76Nm)	1.84mm/s	320mA	9.6kgf·m (94.14Nm)	0.96mm/s	320mA
Stall Thrust	2.0kgf·m (19.61Nm)			4.0kgf·m (39.23Nm)			8.0kgf·m (78.45Nm)			14.4kgf·m (141.22Nm)		
Stall Current	400mA											
Max Static Force	16.32kgf·m (160Nm) (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)

