HLS12 (7.4V) General Specification.

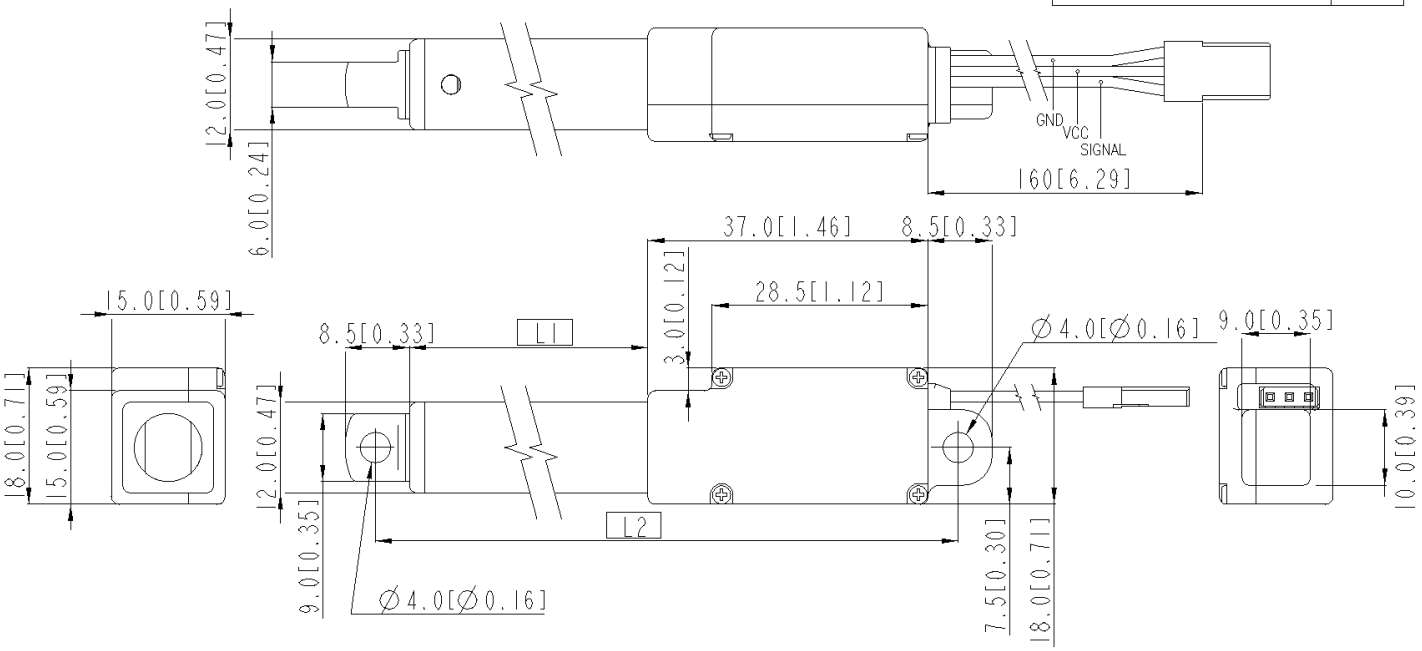
LINEAR SERVO -Lead 5mm SERVO

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		7.4V										
Gear Ratio		50:1			100:1			210:1			380:1	
No Load	Speed	30.9mm/s			16.1mm/s			7.5mm/s			4.1mm/s	
	Current	130mA										
Load Spec		Load	Speed	Current	Load	Speed	Current	Load	Speed	Current	Load	Speed	Current
Maximum Efficiency Point		1.2kgf·m (12.11Nm)	23.47mm/s	250mA	2.1kgf·m (20.59Nm)	12.72mm/s	250mA	4.4kgf·m (43.60Nm)	5.56mm/s	250mA	8.0kgf·m (78.72Nm)	3.09mm/s	250mA
Peak Power Point		2.1kgf·m (20.59Nm)	17.29mm/s	370mA	3.8kgf·m (37.54Nm)	8.65mm/s	370mA	7.7kgf·m (75.09Nm)	3.95mm/s	370mA	12.4kgf·m (121.11Nm)	2.35mm/s	370mA
Max Force (Lifted)		2.7kgf·cm (26.64Nm)	8.21mm/s	490mA	5.2kgf·m (50.87Nm)	3.95mm/s	490mA	9.9kgf·m (96.89Nm)	2.84mm/s	490mA	14.8kgf·m (145.33Nm)	1.48mm/s	490mA
Stall Thrust		3.1kgf·m (30.28Nm)			6.2kgf·m (60.56Nm)			12.4kgf·m (121.11Nm)			22.2kgf·m (218.00Nm)		
Stall Current		620mA										
Max Static Force		25.19kgf·m (247Nm) (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	
Abover 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)

ISO 9001:2015 14001:2015 CERTIFIED COMPANY

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