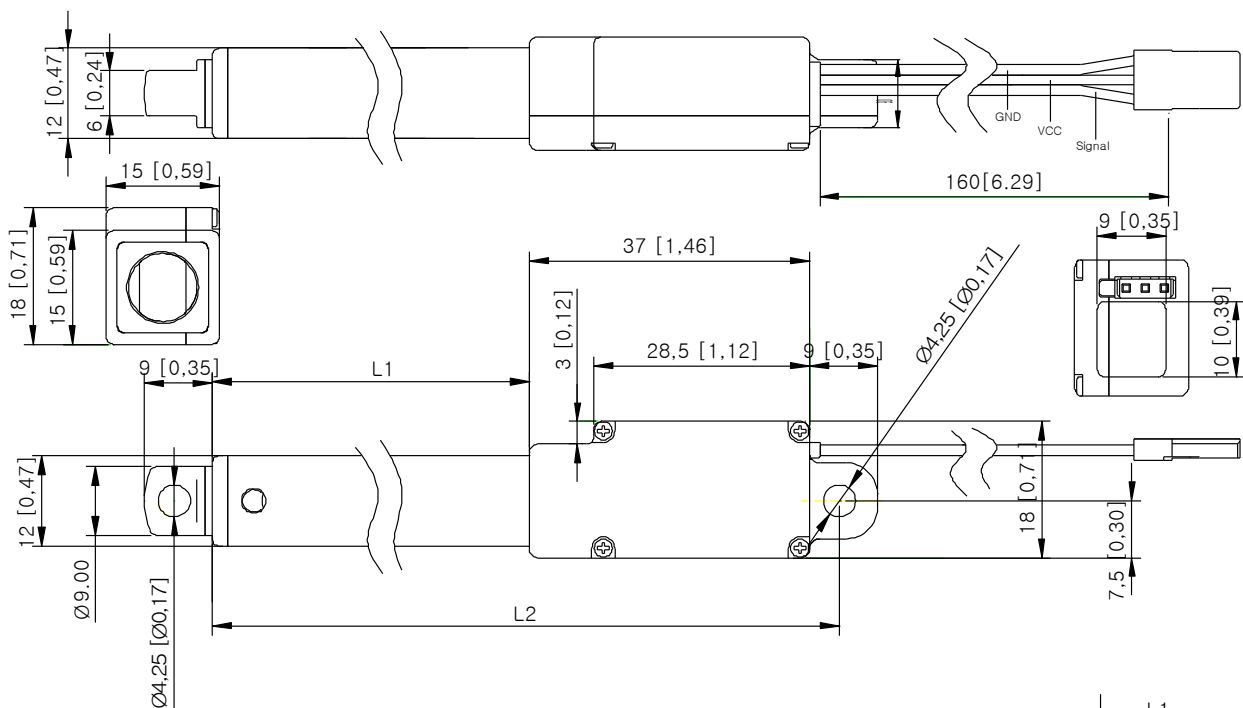


HLS12 (6V) General Specification.



LINEAR SERVO -Lead 5mm SERVO

Control System		PWM											
Operating Voltage Range		6.0V											
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		1.0kg (10N)	19.0 mm/s	200mA	1.7kg (17N)	13.0 mm/s	200mA	3.6kg (36.0N)	4.5 mm/s	200mA	6.5kg (65.0N)	2.5 mm/s	200mA
Peak Power Point		1.7kg (17N)	14.0 mm/s	300mA	3.1kg (31N)	7.0 mm/s	300mA	7.0kg (70N)	3.2 mm/s	300mA	10.0kg (100N)	1.9 mm/s	300mA
Max Force (Lifted)		2.2kg (22N)	6.7 mm/s	400mA	4.2kg (42N)	3.2 mm/s	400mA	8.5kg (85N)	2.3 mm/s	400mA	15.0kg (130N)	1.2 mm/s	400mA
Stall Torque		2.5kg(25N)			4.2kg(42N)			10.0kg(100N)			18.0kg(180N)		
Stall Current		500mA											
Max Static Force		200N (above)											
Stroke SPEC		30mm			50mm			100mm					
Repeatability		±0.2mm			±0.3mm			±0.5mm					
Max Side Load (Extended)		40N			30N			15N					
Weight		34g (1.20oz)			40g(1.41oz)			56g (1.98oz)					
Outline Dimensions		82.0mm x 15.0mm x 18.0mm (3.23inch x 0.59inch x 0.71inch)			102.0mm x 15.0mm x 18.0mm (4.02inch x 0.59inch x 0.71inch)			152.0mm x 15.0mm x 18.0mm (5.98inch x 0.59inch x 0.71inch)					
Operating Temperature Range		-10°C ~ +50°C											
Vibrations at No Load		-											
Storage Temperature Range		-30°C ~ +80°C (-31°F ~ +176°F)											
Connector Wire Length		160mm(6.29in)											
Ball Bearing		Flange bearing											
Case Material		Engineering Plastic & Aluminum Pipe											
Gear Material		4 Metal											



HLS12-XXXX-XX (EX , HLS12-50100-6V)

└ VOLTAGE OPTION
 └ GEARING OPTION
 └ STROKE OPTION

	L1	L2
HLS12-30-XX	36[1.41]	82[3.22]
HLS12-50-XX	56[2.20]	102[4.02]
HLS12-100-XX	106[4.17]	152[5.98]

1:1 scale (unit : mm)



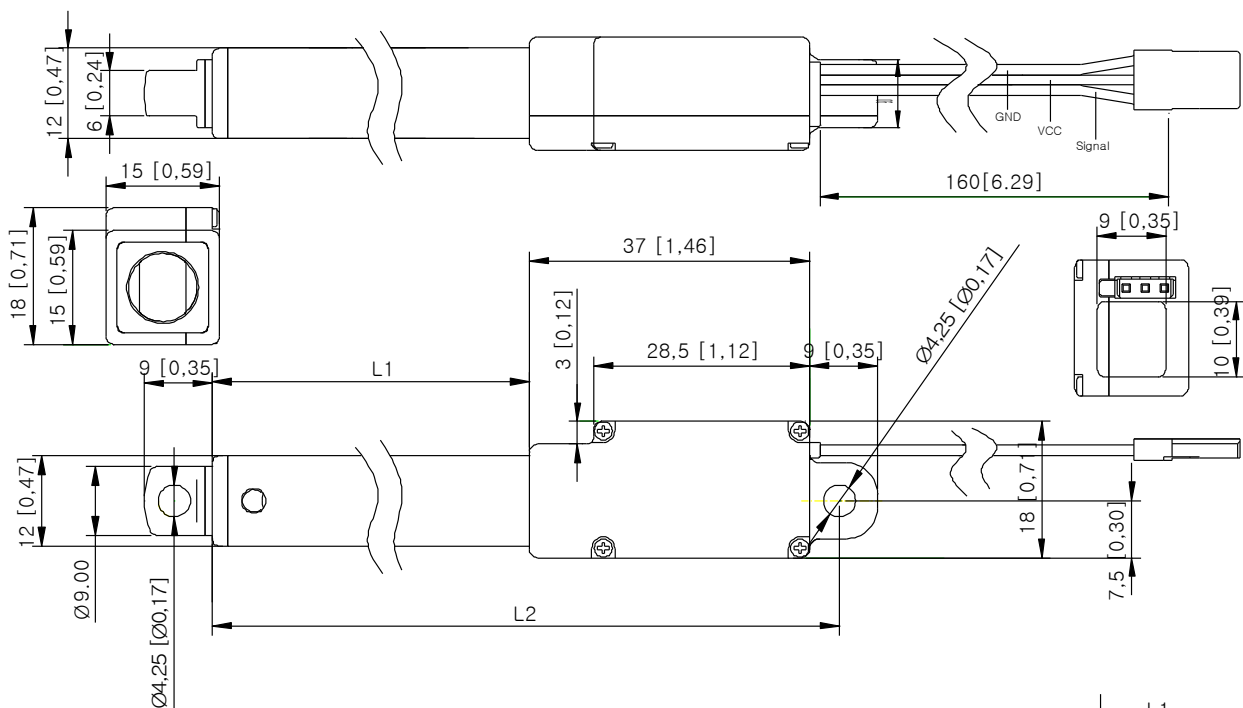
https://hitec.com

HLS12 (4.8V) General Specification.



LINEAR SERVO -Lead 5mm SERVO

Control System		PWM											
Operating Voltage Range		4.8V											
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		0.8kg (8N)	15.2 mm/s	160mA	1.4kg (14N)	10.4 mm/s	160mA	2.9kg (28.8N)	3.6 mm/s	160mA	5.2kg (52.0N)	2.0 mm/s	160mA
Peak Power Point		1.4kg (14N)	11.2 mm/s	240mA	2.5kg (25N)	5.6 mm/s	240mA	5.6kg (56N)	2.6 mm/s	240mA	8.0kg (80N)	1.5 mm/s	240mA
Max Force (Lifted)		1.8kg (18N)	5.3 mm/s	320mA	3.4kg (34N)	2.6 mm/s	320mA	6.8kg (68N)	1.8 mm/s	320mA	12.0kg (104N)	1.0 mm/s	320mA
Stall Torque		2.0kg(20N)			3.4kg(34N)			8.0kg(80N)			14.4kg(144N)		
Stall Current		400mA											
Max Static Force		160N (above)											
Stroke SPEC		30mm			50mm			100mm					
Repeatability		±0.2mm			±0.3mm			±0.5mm					
Max Side Load (Extended)		40N			30N			15N					
Weight		34g (1.20oz)			40g(1.41oz)			56g (1.98oz)					
Outline Dimensions		82.0mm x 15.0mm x 18.0mm (3.23inch x 0.59inch x 0.71inch)			102.0mm x 15.0mm x 18.0mm (4.02inch x 0.59inch x 0.71inch)			152.0mm x 15.0mm x 18.0mm (5.98inch x 0.59inch x 0.71inch)					
Operating Temperature Range		-10°C ~ +50°C											
Vibrations at No Load		-											
Storage Temperature Range		-30°C ~ +80°C (-31°F ~ +176°F)											
Connector Wire Length		160mm(6.29in)											
Ball Bearing		Flange bearing											
Case Material		Engineering Plastic & Aluminum Pipe											
Gear Material		4 Metal											



HLS12-XXXX-XX (EX , HLS12-50100-6V)

└── VOLTAGE OPTION
 └── GEARING OPTION
 └── STROKE OPTION

	L1	L2
HLS12-30-XX	36[1.41]	82[3.22]
HLS12-50-XX	56[2.20]	102[4.02]
HLS12-100-XX	106[4.17]	152[5.98]

1:1 scale (unit : mm)



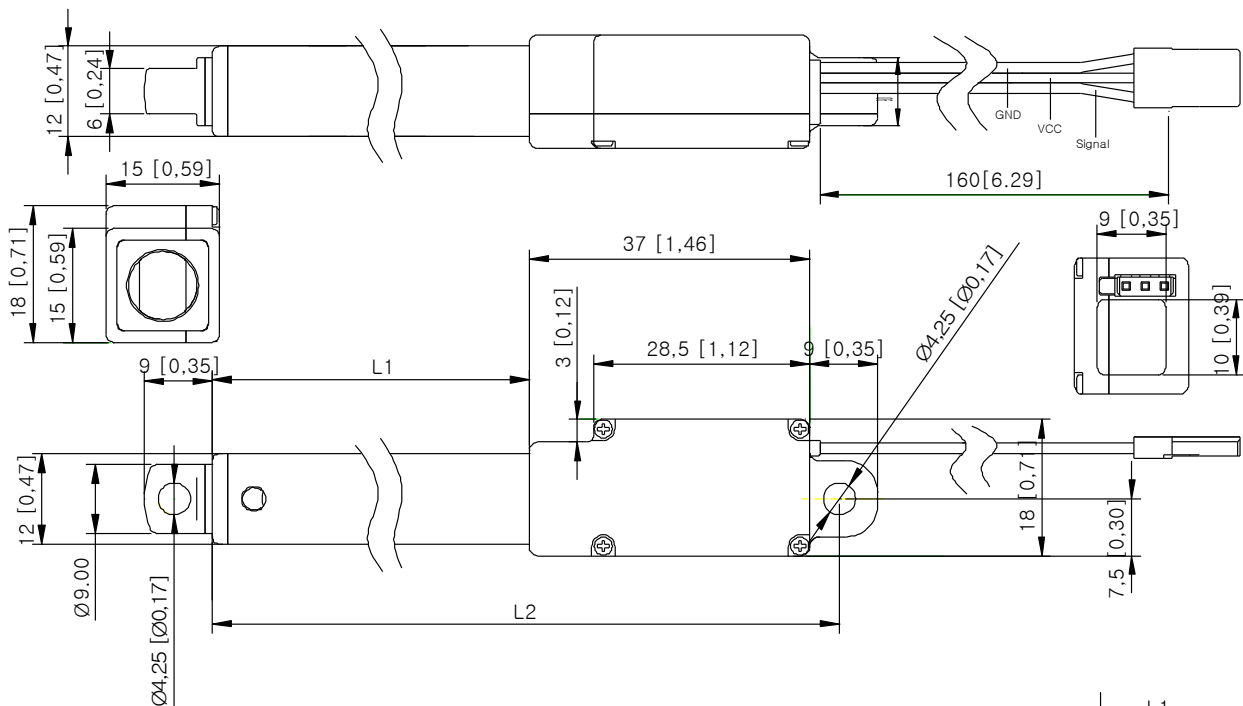
<https://hitec.com>

HLS12 (7.4V) General Specification.



LINEAR SERVO -Lead 5mm SERVO

Control System	PWM												
Operating Voltage Range	7.4V												
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	1.2kg (12N)	23.5 mm/s	250mA	2.1kg (21N)	16.1 mm/s	250mA	4.4kg (44.5N)	5.6 mm/s	250mA	8.0kg (80.3N)	3.1 mm/s	250mA	
Peak Power Point	2.1kg (21N)	17.3 mm/s	370mA	3.8kg (38N)	8.6 mm/s	370mA	8.6kg (87N)	4.0 mm/s	370mA	12.4kg (124N)	2.3 mm/s	370mA	
Max Force (Lifted)	2.7kg (27N)	8.2 mm/s	490mA	5.2kg (52N)	4.0 mm/s	490mA	10.5kg (105N)	2.8 mm/s	490mA	18.5kg (161N)	1.5 mm/s	490mA	
Stall Torque	3.1kg(31N)			5.2kg(52N)			12.4kg(124N)			22.2kg(222N)			
Stall Current	620mA												
Max Static Force	247N (above)												
Stroke SPEC	30mm			50mm			100mm						
Repeatability	±0.2mm			±0.3mm			±0.5mm						
Max Side Load (Extended)	40N			30N			15N						
Weight	34g (1.20oz)			40g(1.41oz)			56g (1.98oz)						
Outline Dimensions	82.0mm x 15.0mm x 18.0mm (3.23inch x 0.59inch x 0.71inch)			102.0mm x 15.0mm x 18.0mm (4.02inch x 0.59inch x 0.71inch)			152.0mm x 15.0mm x 18.0mm (5.98inch x 0.59inch x 0.71inch)						
Operating Temperature Range	-10°C ~ +50°C												
Vibrations at No Load	-												
Storage Temperature Range	-30°C ~ +80°C (-31°F ~ +176°F)												
Connector Wire Length	160mm(6.29in)												
Ball Bearing	Flange bearing												
Case Material	Engineering Plastic & Aluminum Pipe												
Gear Material	4 Metal												



HLS12-XXXX-XX (EX , HLS12-50100-6V)

└ VOLTAGE OPTION
 └ GEARING OPTION
 └ STROKE OPTION

	L1	L2
HLS12-30-XX	36[1.41]	82[3.22]
HLS12-50-XX	56[2.20]	102[4.02]
HLS12-100-XX	106[4.17]	152[5.98]

1:1 scale (unit : mm)



<https://hitec.com>