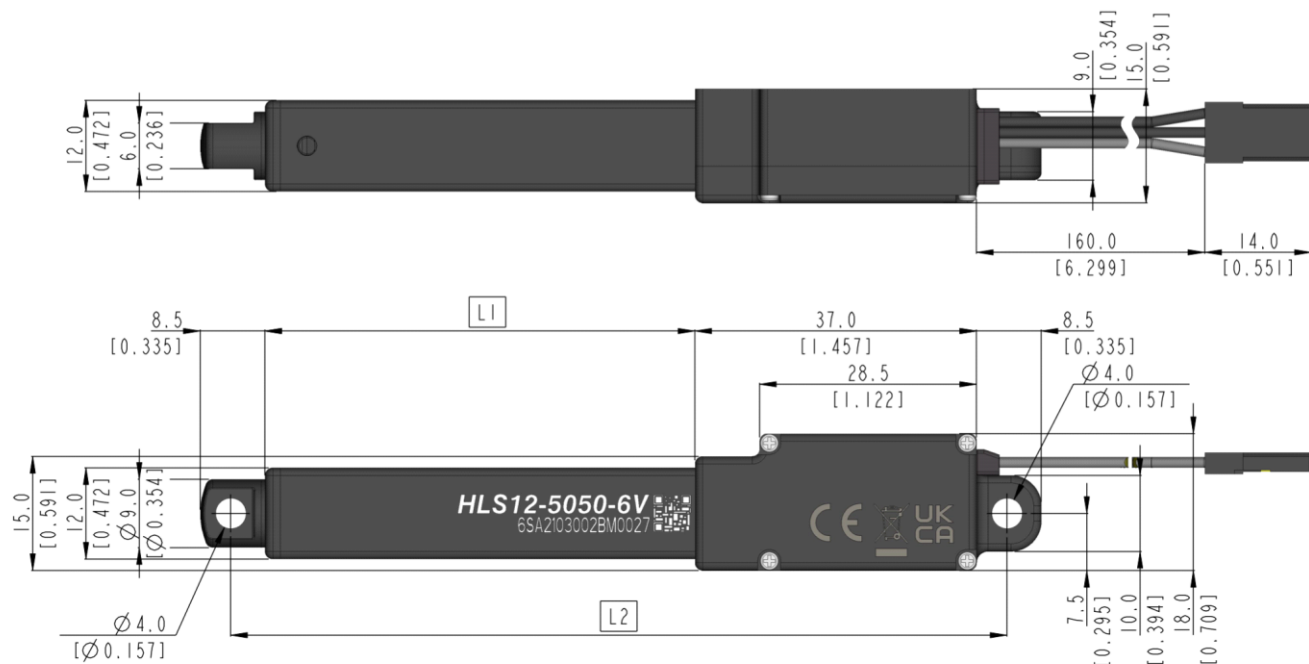


HLS12 (6V) General Specification.

Control System		PWM											At the Max voltage, it is recommended to be used only for a short time duration.	
Lead Screw		LEAD 5mm												
Motor Type		Cored Metal Brush												
Operating Voltage Range		4.0 ~ 8.4V												
Voltage		6.0V											At 25°C(±10%), 45%RH(±10%) <u>measurement</u> <u>environment</u>	
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 (9.81N)	19.0mm/s	200mA	1.7kgf (16.67N)	10.3mm/s	200mA	3.6kgf (35.30N)	4.5mm/s	200mA	6.5kgf (63.74N)	2.5mm/s		200mA
Peak Power Point		1.7kgf (16.67N)	14.0mm/s	300mA	3.1kgf (30.40N)	7.0mm/s	300mA	6.2kgf (60.80N)	3.2mm/s	300mA	10.0kgf (98.07N)	1.9mm/s		300mA
Max Force (Lifted)		2.2kgf (21.57N)	6.7mm/s	400mA	4.2kgf (41.19N)	3.2mm/s	400mA	8.0kgf (78.45N)	2.3mm/s	400mA	12.0kgf (117.68N)	1.2mm/s		400mA
Stall Force		2.5kgf (24.52N)			5.0kgf (49.03N)			10.0kgf (98.07N)			18.0kgf (176.52N)			
Stall Current		500mA												
Max Static Force		20.39kgf (200N) (above)												
Stroke SPEC		30mm			50mm			100mm						-
Repeatability		±0.2mm			±0.3mm			±0.5mm						-
Max Side Load (Extended)		4.08kgf (40N)			3.06kgf (30N)			1.53kgf (15N)						-
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)						General Tolerance ±0.1mm
Weight		34g (1.199oz)			40g(1.411oz)			56g (1.975oz)						Excluding the weight of Horn
Operating Temperature Range		-10°C ~ +50°C(+14°F ~ +122°F)											-	
Storage Temperature Range		-30°C ~ +80°C (-22°F ~ +176°F)											-	
Connector Wire Length		160mm(6.294inch)												1. SIGNAL 2. VCC 3. GND
Connector Wire Gauge		24AWG												
Bearing Type		Flange bearing											-	
Case Material		Engineering Plastic & Aluminum Pipe											-	
Gear Material		4 Metal Gears											-	
IP-Rating		IP4X											-	
Servo Amplifier Type		32bit programmable Digital											-	

HLS12-XXXX-XX [EX, HLS12-5050-6V]
 └── VOLTAGE OPTION
 └── GEARING OPTION
 └── STROKE OPTION

	L1	L2
HLS12-30-XX	36.5[1.437]	82.0[3.228]
HLS12-50-XX	56.5[2.224]	102.0[4.016]
HLS12-100-XX	106.5[4.193]	152.0[5.984]



1:1 scale (Unit : mm[inch])

- This product should not be used directly on the human body for medical purposes.
- This product should not be used for war weapons.
- All specifications are subject to change without notice.

