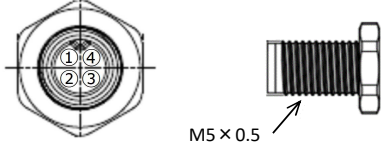
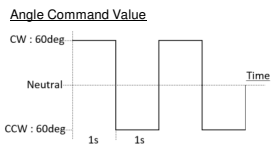


BLA15-06U-A01 Technical Specification

Item		Specification				Remark		
1	Communication Interface	CAN BUS				Protocol	UAVCAN V0	
						Baud Rate	1Mbps	
						Sample Point	87.5%	
						Node ID	1~127	
(Please ask us for more information)								
2	International Protection Code	IP67				Waterproof and dustproof		
3	Rated Voltage	DC 6.0~DC 7.4V				-		
4	Operating Voltage	DC 5.0~DC 8.4V				-		
5	Standby Current	≤ 70mA				at 6.0~7.4V		
6	Starting Current *	Design value	≤ 2.6A			at 7.4V		
		Protection	2.1A			100% of torque control. See No.7.		
7	Operating mode	Angle control	+36,000,000.0° ~ -36,000,000.0°			See No.13.		
		Speed control	-150rpm ~ +150rpm			Commandable speed. See No.12 for actual speed.		
		Torque control	-100% ~ +100%			Max. torque at supply voltage of 7.4V is 100%. See No.9. The actual torque that can be output depends on the power supply, load, etc., so use the command value as a guide.		
8	Consumption Current *	LL	Me	UL	unit	at 7.4V, No-Load LL : Low Limit Me : Medium Value UL : Upper Limit		
		115	230	345	mA			
9	Max. Torque *	LL	Me	UL	unit	at 7.4V		
		6.2	10.3	14.4	kgf·cm			
		0.61	1.01	1.41	N·m			
		86.1	143.0	200.0	ozf·in			
		8.3			kgf·cm	at 6.0V Medium Value		
10	Rated Torque *	1.0			kgf·cm	at 7.4V 10% of Max. Torque		
		0.10			N·m			
		14.3			ozf·in			
11	No Load Speed * (Angle control mode)	LL	Me	UL	unit	at 7.4V		
		0.11	0.14	0.17	s/60°			
		353	429	545	°/s			
		59	71	91	rpm			
		0.18			s/60°	at 6.0V Medium Value		
12	No Load Speed * (Speed control mode)	LL	Me	UL	unit	at 7.4V		
		59	71	91	rpm			
13	Travel Angle *	Range	Mechanical	+179.9° ~ -180.0°			Absolute	
			Software	+36,000,000.0° ~ -36,000,000.0°				
		Accuracy	±3.0			°	Standard value	at 7.4V, No-Load, Position: ±60°
			±1.5			°	Measured value	
14	BackLash *	≤ 0.5°				-		
15	Temperature Range	Operating	-30~+70°C (-22~158°F)			*The operating noise of servo may become loud in low temperature.		
		Storage	-40~+80°C (-40~176°F)			-		
		Protection	+80°C (176°F)			Torque OFF at set temperature or higher.		
16	Outer Dimension	39.4 x 15.0 x 29.4mm (1.55 x 0.59 x 1.16 in)				Refer to Outer Dimension		
17	Weight	45g				with Horn and screws without cables		
18	Case Material	Aluminum				Surface : Anodizing Salt Water Resistance		
19	Gear Set Material	Steel				Surface : Hardening treatment		
20	Gear bearing	2 ball bearing				-		
21	Radial load	50N				Load position : Refer to Outer Dimension * Design reference value.		
22	Position Sensor	Magnetic Encoder				-		
23	Motor Type	Brushless DC Motor				-		
24	Cable	Non-Shielded Cable (Detachable)				Cable Length : 15.75 inch (400mm)		
25	Connector	Manufacture	Neltron Industrial Co., Ltd.					
		Type	120505-04P-FA-PB					
		Mating	120505-04S-A-MM etc.					
		Pin Assignment	1	White	Battery(+)			
2	Red		Battery(-)					
3	Green		CAN-H					
4	Black		CAN-L					
26	MTTF *	Operating time > 1000h (TBC)				<p>Operating Condition</p> <ul style="list-style-type: none"> at 7.4V ±60°, 0.5Hz sweep <p>Test Condition</p> <ul style="list-style-type: none"> Load : 1.0 kgf·cm <p>Angle Command Value</p> 		
		Operating time > 500h (TBC)						
27	Vibration Resistance *	Operating time > 500h (TBC)				<p>Test Condition (sine wave)</p> <ul style="list-style-type: none"> Frequency : 10 to 500Hz (sweep 1oct/min, amplitude limit 2mm) Acceleration : 300m/s² Vibration axis : X,Y,Z 		

* At 23±5°C (Initial Performance Data)

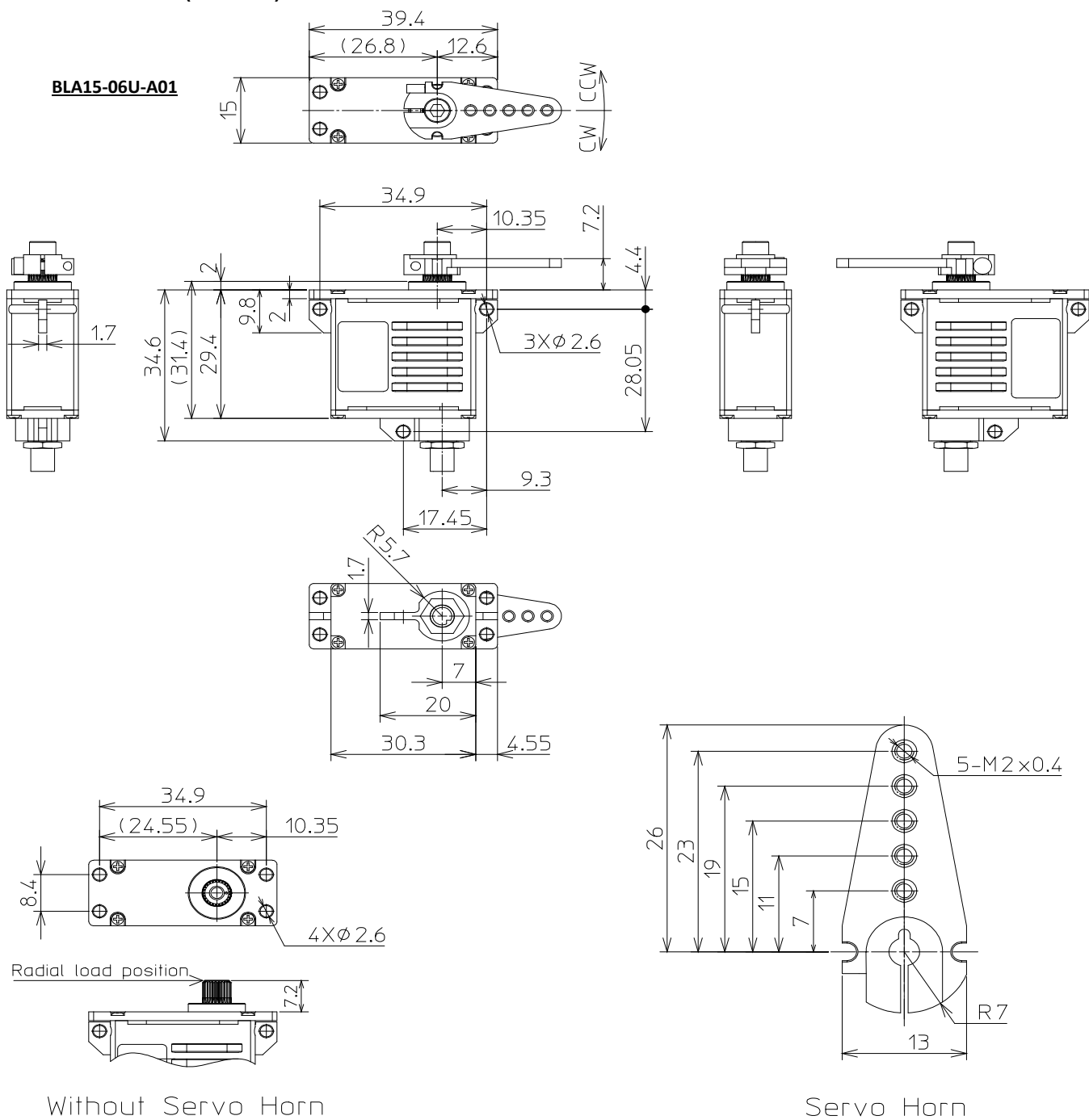
All Specifications are subject to change without prior notice.

Caution

- This product **SHOULD NOT** be used for the devices that is directly related to human life.
- Keep the servo away from an object which produces a strong magnetic field.
- There is a possibility of malfunction if the servo is affected by a strong magnetic field.
- Please do not twist the cable. Twisting the cable will could result in breakage.

Outer Dimension (unit:mm)

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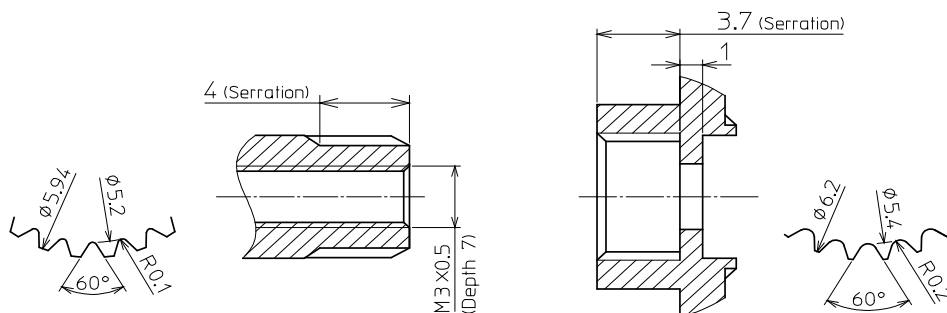


Without Servo Horn

Servo Horn

OUTPUT SHAFT Unit(mm)

SERVO HORN Unit(mm)



Sarretion Size

Standard Diameter : $\Phi 6$
Angle : 60°
Tooth : 25