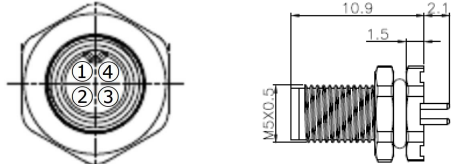
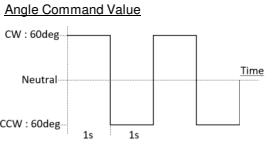


# BLA15-06U-A01 Technical Specification

Update Number  
210119-01

Item	Specification	Remark					
1	Communication Interface	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 *	≤ 2.6A	at 7.4V				
7	Consumption Current *	LL	Me	UL	unit	at 7.4V , No-Load LL : Low Limit Me : Medium Value UL : Upper Limit	
		115	230	345	mA		
8	Max. Torque *	LL	Me	UL	unit	at 7.4V	
		7.2	10.3	13.4	kgf·cm		
		0.71	1.01	1.31	N·m		
		100	143	186	ozf·in		
		8.3			kgf·cm		at 6.0V Medium Value
9	Rated Torque *	1.0			kgf·cm	at 7.4V 10% of Max. Torque	
		0.10			N·m		
		14			ozf·in		
10	No Load Speed *	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
11	Travel Angle	CW 180° (+180°) CCW 180° (-180°)				—	
12	BackLash *	≤ 0.5°				—	
13	Operating Temperature Range	-30~+70°C (-22~158°F)				—	
14	Storage Temperature Range	-40~+80°C (-40~176°F)				—	
15	Outer Dimension	39.4 x 15.0 x 29.4mm (1.55 x 0.59 x 1.16 in)				Refer to Outer Dimension	
16	Weight	44g				with Horn and screws without cables	
17	Case Material	Aluminum				Surface : Anodizing Salt Water Resistance	
18	Gear Set Material	Steel				Surface : Hardening treatment	
19	Gear bearing	2 ball bearing				—	
20	Position Sensor	Magnetic Encoder				—	
21	Motor Type	Brushless DC Motor				—	
22	Cable	Non-Shielded Cable (Detachable)				Cable Length : 15.75 inch (400mm)	
23	Connector	Manufacture	Neltron Industrial Co., Ltd.				
		Type	120505-04P-FA-PB				
		Mating	4P M5FS-STR 400MM etc.				
		Pin Assignment	1	White	Battery(+)		
			2	Red	Battery(-)		
3	Green		CAN-H				
4	Black		CAN-L				
24	MTTF *	Operating time > 700h (TBC)	<u>Operating Condition</u> • at 7.4V • ±60°, 0.5Hz sweep <u>Test Condition</u> • Load : 1.0 kgf·cm		<u>Angle Command Value</u> 		
			<u>Operating Condition</u> • at 7.4V • ±60°, 0.5Hz sweep • No-Load <u>Test Condition (sine wave)</u> • Frequency : 10 to 500Hz (sweep 1oct/min, amplitude limit 2mm) • Acceleration : 300m/s <sup>2</sup> • Vibration axis : X,Y,Z				
25	Vibration Resistance *	Operating time > 350h (TBC)	<u>Operating Condition</u> • at 7.4V • ±60°, 0.5Hz sweep • No-Load <u>Test Condition (sine wave)</u> • Frequency : 10 to 500Hz (sweep 1oct/min, amplitude limit 2mm) • Acceleration : 300m/s <sup>2</sup> • Vibration axis : X,Y,Z				

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

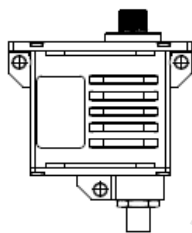
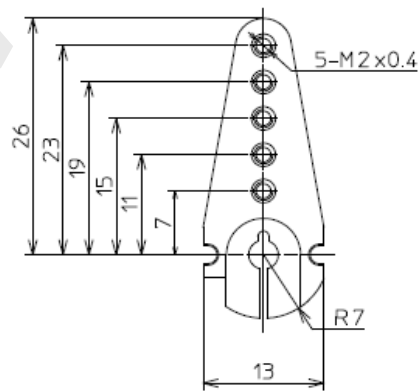
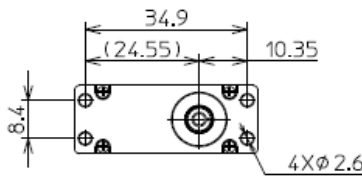
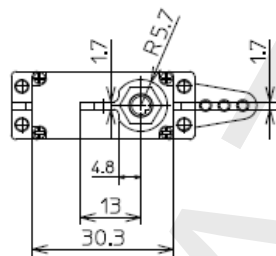
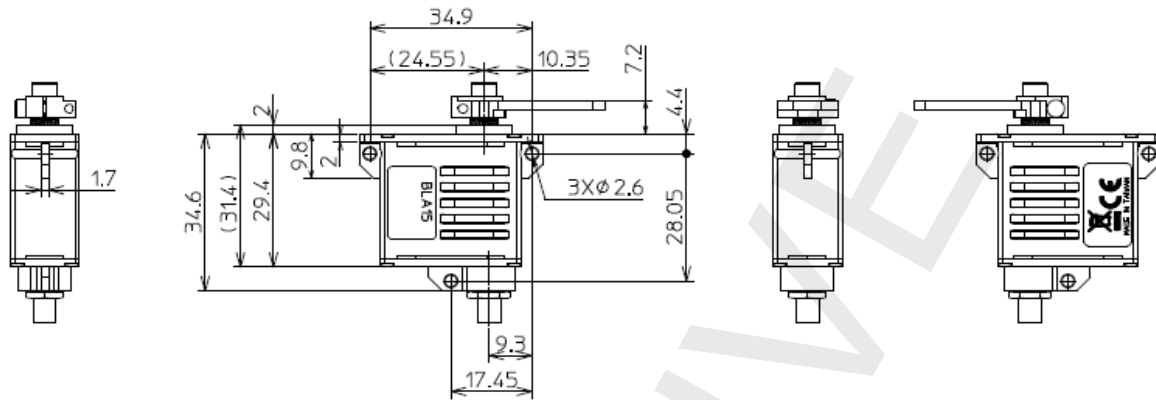
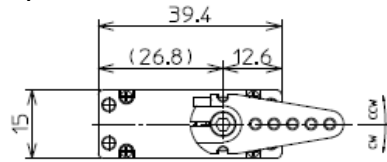
**All Specifications are subject to change without prior notice.**

**Caution**

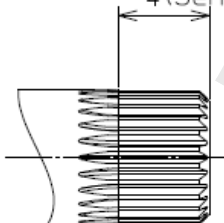
- This product SHOULD NOT be used for the devices that is directly related to human life.
- Keep the servo away from an object which produces a strong magnetic field.
- There is a possibility of malfunction if the servo is affected by a strong magnetic field.

**Outer Dimension (unit:mm)**

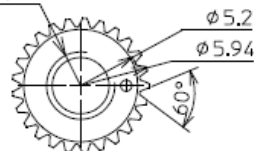
**BLA15-06U-A01**



4 (Serration Length)



M3X0.5(depth=7.0)



**Sarretion Size**

Standard Diameter : Ø6

Angle : 60°

Tooth : 25