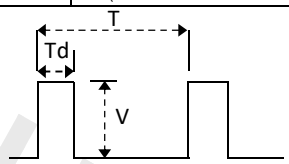
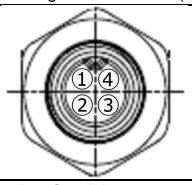
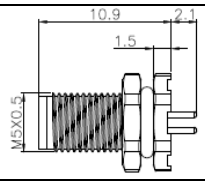
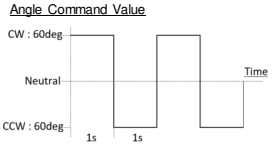
BLA15-06H-AA1 Technical Specification

Futaba

Update Number
210121-01

	Item	Specification	Remark
1	Communication Interface	PWM	Signal Voltage:V — HIGH : min. 2.0V max. Vcc; LOW : min. 0.0V max. 0.45V Frame Rate:T — 3.0～30ms (Default 14.25ms) CW/Center/CCW:Td — 920/1520/2120μs (Resolution recommends less than 1μs.) 
		S.BUS / S.BUS2	Futaba Serial Protocol (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 4.0～DC 8.4V	—
5	Standby Current	≤ 50mA	at 6.0～7.4V
6	Starting Current*	≤ 2.6A	at 7.4V
7	Consumption Current*	LL / Me / UL / unit 115 / 230 / 345 / mA	at 7.4V , No-Load LL : Low Limit Me : Medium Value UL : Upper Limit
8	Max. Torque*	LL / Me / UL / unit 7.2 / 10.3 / 13.4 / kgf･cm 0.7 / 1.0 / 1.3 / N･m 100.0 / 143.0 / 186.1 / ozf･in	at 7.4V
		8.3 kgf･cm	at 6.0V Medium Value
9	Rated Torque*	1.0 kgf･cm 0.10 N･m 14 ozf･in	at 7.4V 10% of Max. Torque
10	No Load Speed*	LL / Me / UL / unit 0.12 / 0.15 / 0.18 / s/60° 333 / 400 / 500 / °/s 56 / 67 / 83 / rpm	at 7.4V
		0.18 s/60°	at 6.0V Medium Value
11	Default Travel Angle	CW 60° (920us) CCW 60° (2120us)	—
12	Max Travel Angle	CW 90° (920us) CCW 90° (2120us)	Programing tool (CIU-2 or CIU-3,S-Link) required.
13	BackLash*	≤ 0.5°	—
14	Operating Temperature Range	-30～+70℃ (-22～158°F)	—
15	Storage Temperature Range	-40～+80℃ (-40～176°F)	—
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	44g	With horn and screws Without cable
18	Case Material	Aluminum	Surface : Anodizing Salt Water Resistance
19	Gear Set Material	Steel	Surface : Hardening treatment
20	Gear bearing	2 ball bearing	—
21	Position Sensor	Magnetic Encoder	—
22	Motor Type	Brushless DC Motor	—
23	Cable	Non-Shielded Cable (Detachable)	Cable Length : 15.75 inch (400mm)
24	Connector	Manufacture: Neltron Industrial Co., Ltd. Type: 120505-04P-FA-PB Mating: 4P M5FS-STR 400MM etc. Pin Assignment: 1 White Non Conection; 2 Red PWM / S.BUS; 3 Green Battery(-); 4 Black Battery(+)	 
25	MTTF *	Operating time > 700h (TBC)	Operating Condition ・at 7.4V ・±60°, 0.5Hz sweep Test Condition ・Load : 1.0 kgf･cm 
26	Vibration Resistance *	Operating time > 350h (TBC)	Operating Condition ・at 7.4V ・±60°, 0.5Hz sweep ・No-Load Test Condition (sine wave) ・Frequency :10 to 500Hz (sweep 1oct/min, amplitude limit 2mm) ・Acceleration : 300m/s^2 ・Vibration axis : X,Y,Z

* At 23±5℃ (Initial Performance Data)

All Specifications are subject to change without prior notice.

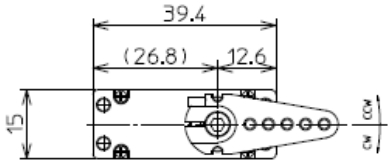
■Caution

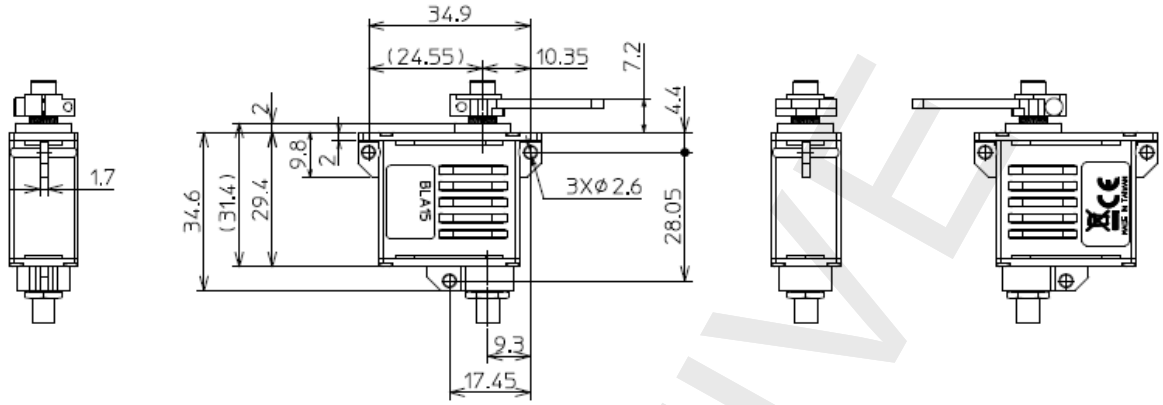
- **This product SHOULD NOT been used for the devices that is directly related to human life.**
- **Keep the servo away from an object which produces a strong magnetic field.**
  There is a possibility of malfunction if the servo is affected by a strong magnetic field.

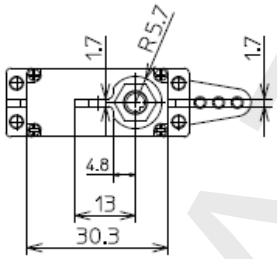
FUTABA

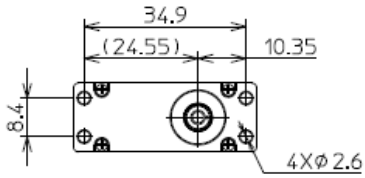
Outer Dimension

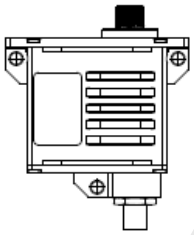
BLA15-06H-AA1

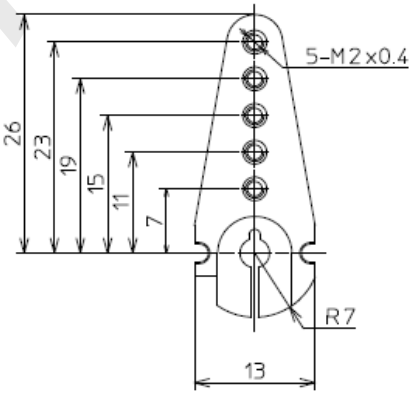


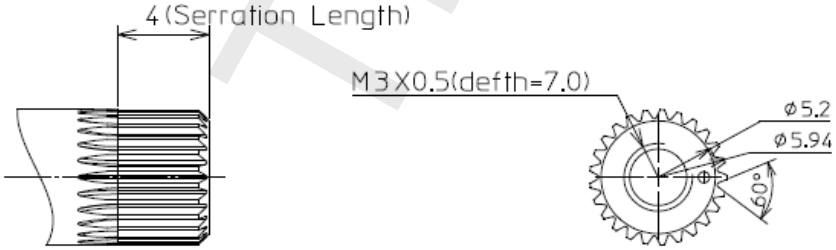












Sarretion Size

Standard Diameter : Φ6
Angle : 60˚
Tooth : 25

TENTATIVE