

BLA1HD Technical Specification

Update Number

(THIS DATA IS JUST A REFERENCE. IT IS NOT A GUARANTEED DATA.)

160419-02

Item		Specification				Remark			
1	Communication Interface	PWM				Signal Voltage:V	HIGH : min. 2.0V max. Vcc		
						Frame Rate:T	3.0~30ms (Default 14.25ms)		
					Left/Center/Right:Td	2120/1520/920μs (Resolution recommends less than 1μs.)			
		S.BUS				Futaba Serial Protocol (Please ask us for more information.)			
2	Rated Voltage	6.0~7.4V DC				-			
3	Operating Voltage	4.0~8.4V DC				-			
4	Standby Current	≤ 45mA				at 6.0~7.4V			
5	Consumption Current*	LL	Me	UL	unit	at 7.4V , No-Load			
		145	225	305	mA	LL : Low Limit Me : Medium Value UL : Upper Limit			
6	Max. Torque*	LL	Me	UL	unit	at 7.4V			
		5.4	7.6	9.8	kgf-cm				
		0.53	0.75	0.96	N-m				
		75.0	105.5	136.1	ozf-in				
7	Rated Torque*	LL	Me	UL	unit	at 7.4V 20% of Max. Torque			
		1.1	1.5	2.0	kgf-cm				
		0.11	0.15	0.19	N-m				
		15.0	21.1	27.2	ozf-in				
8	No Load Speed*	LL	Me	UL	unit	at 7.4V			
		0.07	0.1	0.13	sec/60°				
		461.5	600.0	857.1	°/sec				
		76.9	100.0	142.9	rpm				
9	Default Travel Angle	CW 60° (920us) CCW 60° (2120us)				-			
10	Max Travel Angle	CW 90° (920us) CCW 90° (2120us)				Programming tool (CIU-2,S-Link) required.			
11	BackLash*	≤ 0.5°				-			
12	Operating Temperature Range	-10~+45°C (14~113°F)				-			
13	Storage Temperature Range	-20~+60°C (-4~140°F)				-			
14	Outer Dimension	1.30 x 0.59 x 1.07 inch (33.0 x 15.0 x 27.1mm)				-			
15	Weight	0.99oz (28g)				-			
16	Case Material	Upper : Resin / Middle : Resin / Bottom : Resin				-			
17	Gear Set Material	1st ,2nd,3rd,4th,5th(Final) : Metal				-			
18	Cable	Non-Shielded Cable				Cable Length : 11.81 inch (300mm)			
19	Connector	Manufacture	J.A.M Co., LTD.						
		Type	FC25-03HG						
		Mating	FC25-03M etc.						
		Pin Assignment	1	White	S.BUS / PWM				
		2	Red	Vcc					
		3	Black	GND					
20	MTT(B)F*	40h (Calculated by Weibull analysis.)				Test Condition at 7.4V / Load : 20% of Max. Torque / 0.5Hz sweep (±60°)			
21	Vibration Resistance *	Operating time ≥ 50h (at 7.4V)				Test Condition			
						Frequency range		80 to 400Hz	
						Acceleration		30G (294m/s ²)	
						Sweep rate		1.2min	
						Vibration axis		X, Y, Z	

* Initial Performance Data at 23±5°C

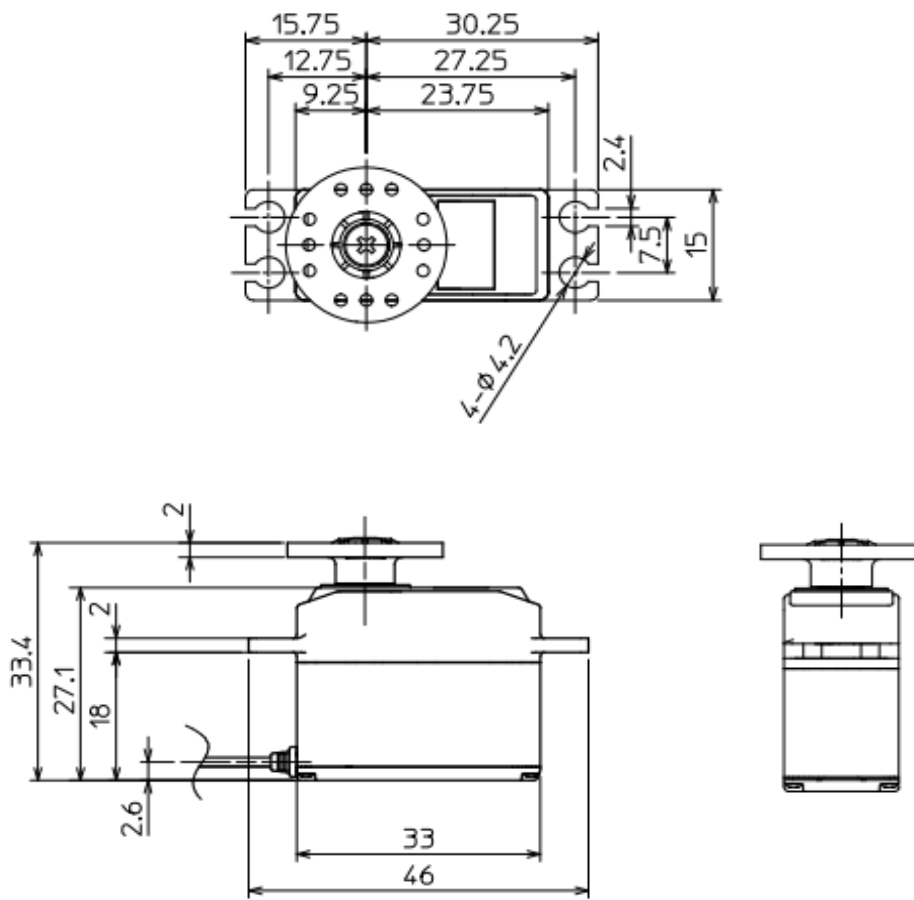
All Specifications are subject to change without prior notice.

Caution

This product SHOULD NOT be used for the devices that is directly related to human life and/or harmful devices for human body such as below applications.

- (1) Medical Devices
- (2) Aerospace/Aviation Related Devices
- (3) Nuclear Related Devices e.t.c.

Outer Dimension



(Unit mm)