

BLA1HH51 Technical Specification

Item		Specification				Remark	
1	Communication Interface	PWM				Signal Voltage:V	HIGH : min. 2.0V max. 20V 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				Futaba Serial Protocol (Please ask us for more information.)	
2	Rated Voltage	28V DC				-	
3	Operating Voltage	20 ~ 30V DC				-	
4	Standby Current	≤ 55mA				at 28V	
5	Starting Current*	2.6A				at 28V	
6	Consumption Current*	LL	Me	UL	unit	at 28V , No-Load	
		50	110	170	mA	LL : Low Limit Me : Medium Value UL : Upper Limit	
7	Max. Torque*	LL	Me	UL	unit	at 28V	
		30.1	43.0	55.9	kgf-cm		
		3.0	4.2	5.5	N-m		
		418.0	597.2	776.3	ozf-in		
8	Rated Torque*	8.6			kgf-cm	at 28V	
		0.84			N-m	20% of Max. Torque	
		119.4			ozf-in		
9	No Load Speed*	LL	Me	UL	unit	at 28V	
		0.08	0.11	0.14	sec/60°		
		428.6	545.5	750.0	°/sec		
		71.4	90.9	125.0	rpm		
10	Default Travel Angle	CW 60° (920us) CCW 60° (2120us)				-	
11	Max Travel Angle	CW 90° (920us) CCW 90° (2120us)				Programing tool (CIU-2 or CIU-3,S-Link) required.	
12	BackLash*	≤ 0.5°				-	
13	Operating Temperature Range	-30~+70°C (14~113°F)				-	
14	Storage Temperature Range	-40~+80°C (-4~140°F)				-	
15	Outer Dimension	1.59 x 0.83 x 1.51 inch (40.5 x 21.0 x 38.4mm)				-	
16	Weight	3.53oz (100g)				with Horn and set screw	
17	Case Material	Upper : AL / Middle : AL / Bottom : AL				-	
18	Gear Set Material	1st,2nd,3rd,4th(Final) : Metal				-	
19	Cable	Shielded Cable				Cable Length : 15.75 inch (400mm)	
20	Connector	Manufacture	Tyco Electronics				
		Type	TE794617-6				
		Mating	TE794616-6 etc.				
		Pin Assignment	1	White	S.BUS / PWM		
			2	Red	Vcc		
			3	Black	GND		
			4	Yellow	Position Feedback+		
			5	Green	Position Feedback-		
			6	Shield	Case Shield Line		
21	MTTF	> 500h (Load : 3kgf-cm)				Test Condition • Test Voltage : 28V • Operating Condition : 0.5Hz sweep (±45°) • Input Pluse : PWM • Calculated by Weibull analysis	
22	Vibration Resistance *	Operating time ≥ 200h (at 28V)				Test Condition Frequency range : 10 to 500Hz Sweep Rate : 1 oct /min Acceleration : 10G (98m/s ²) Vibration axis : X, Y, Z	

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

** Custom connector. If necessary, Please use the extension cord sold from Futaba.

All Specifications are subject to change without prior notice.

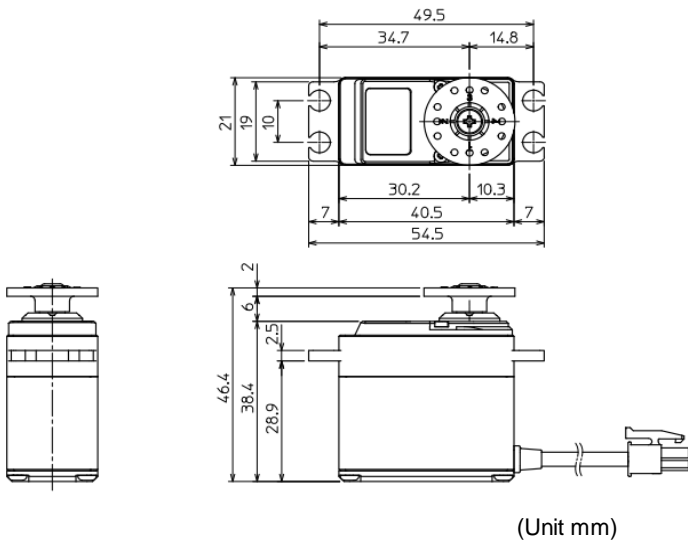
Caution

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.

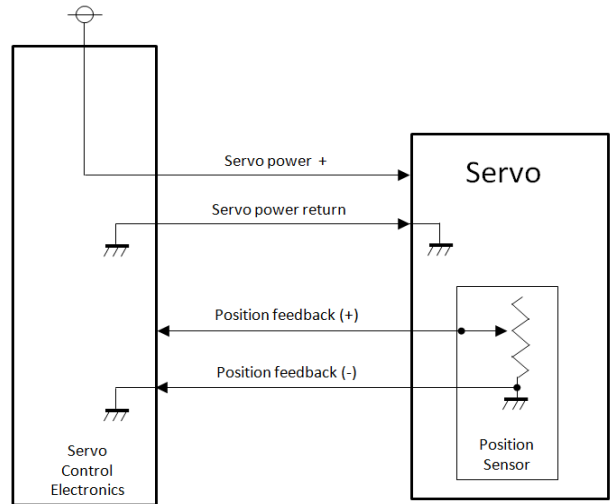
- (1)Medical Devices
- (2)Aerospace/Aviation Related Devices
- (3)Nuclear Related Devices

e.t.c.

Outer Dimension



Position Feedback



Performance Curves

