

BLA2FB21/22 Technical Specification

Update Number

200902-01

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	2.0~30ms		
						CW/Center/CCW:Td	460/760/1060μs (Resolution recommends less than 1μs.)		
2	Rated Voltage	8.0V DC				-			
3	Operating Voltage	4.0~8.4V DC				-			
4	Standby Current	≤ 45mA				at 8.0V			
5	Consumption Current*	LL	Me	UL	unit	at 8.0V , No-Load			
		100	200	300	mA	LL : Low Limit Me : Medium Value UL : Upper Limit			
6	Max. Torque*	LL	Me	UL	unit	at 8.0V			
		5.8	8.4	10.8	kgf-cm				
		0.57	0.82	1.06	N-m				
		80.5	116.7	150.0	ozf-in				
7	Rated Torque*	LL	Me	UL	unit	at 8.0V 20% of Max. Torque			
		1.7			kgf-cm				
		0.16			N-m				
		23.3			ozf-in				
8	No Load Speed*	LL	Me	UL	unit	at 8.0V			
		0.02	0.04	0.06	sec/60°				
		1000.0	1500.0	3000.0	%/sec				
		166.7	250.0	500.0	rpm				
9	Default Travel Angle	CW 50° (460μs) CCW 50° (1060μs)				-			
10	Max Travel Angle	CW 75° (460μs) CCW 75° (1060μs)				Programing tool (CIU-2 or CIU-3,S-Link) required.			
11	BackLash*	≤ 0.5°				-			
12	Operating Temperature Range	-40~+60°C (-40~140°F)				-			
13	Operating Humidity Range	≤ 90%RH				-			
14	Storage Temperature Range	-54~+71°C (-65.2~159.8°F)				-			
15	Storage Humidity Range	≤ 90%RH				-			
16	Outer Dimension	1.58 x 0.79 x 1.44 inch (40.0 x 20.0 x 36.8mm)				-			
17	Weight	BLA2FB21 : 3.17oz (90g) BLA2FB22 : 2.79oz (79g)				-			
18	Case Material	Upper : AL / Middle : AL / Bottom : AL				-			
19	Gear Set Material	1st : Resin / 2nd,3rd,4th(Final) : Metal				-			
20	Position Sensor	Potentiometer (Contact type)				-			
21	Motor Type	Brushless DC Motor				-			
22	Cable	Shielded Cable				Cable Length : BLA2FB21 15.75 inch (400mm) BLA2FB22 5.91 inch (150mm)			
23	Connector	Manufacture	Tyco Electronics						
		Type	TE794617-6						
		Mating	TE794616-6 etc.						
		Pin Assignment	1	White	PWM				
			2	Red	Vcc				
			3	Black	GND				
			4	Yellow	Position Feedback+				
5	Green		Position Feedback-						
6	Shield	Case Shield Line							
24	MTTF	1000h				Test Condition at 8.0V / Load : 20% of Max. Torque / 0.5Hz sweep (±50°)			
25	Vibration Resistance *	Operating time ≥ 50h (at 8.0V)				Test Condition			
						Frequency range		80 to 400Hz	
						Acceleration		30G (294m/s ²)	
						Sweep rate		1.2 min / single-sweep	
						Vibration axis		X, Y, Z	

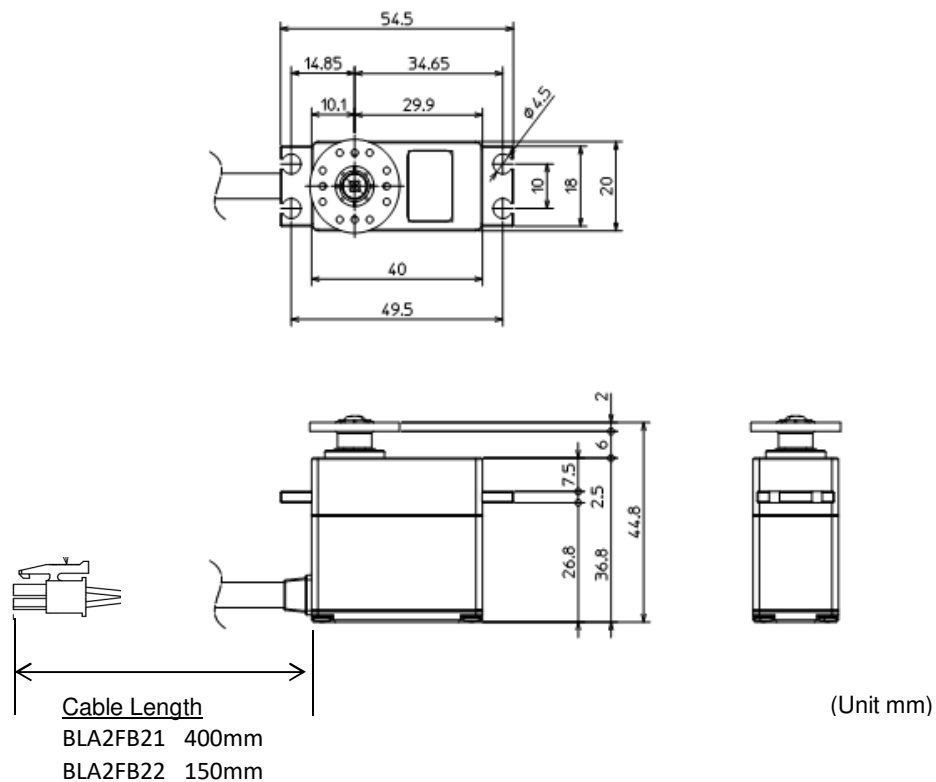
* Initial Performance Data at 23±5°C

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.

Outer Dimension



Position Feedback

