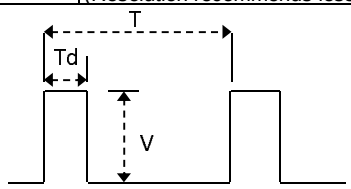
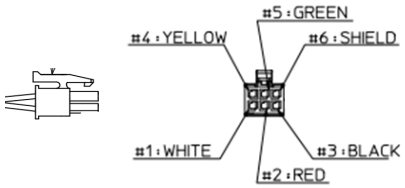
BLA2FB21/22 Technical Specification

Update Number
160419-05

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

	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 Left/Center/Right:Td — 1060/760/460µs (Resolution recommends less than 1µs.) 
		S.BUS	Futaba Serial Protocol (Please ask us for more information.)
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: 100 / Me: 200 / UL: 300 / unit: mA	at 8.0V , No-Load LL : Low Limit Me : Medium Value UL : Upper Limit
6	Max. Torque*	LL / Me / UL / unit 5.8 / 8.4 / 10.8 / kgf-cm 0.57 / 0.82 / 1.06 / N-m 80.5 / 116.7 / 150.0 / ozf-in	at 8.0V
7	Rated Torque*	LL / Me / UL / unit 1.2 / 1.7 / 2.2 / kgf-cm 0.11 / 0.16 / 0.21 / N-m 16.1 / 23.3 / 30.0 / ozf-in	at 8.0V 20% of Max. Torque
8	No Load Speed*	LL / Me / UL / unit 0.02 / 0.04 / 0.06 / sec/60° 1000.0 / 1500.0 / 3000.0 / °/sec 166.7 / 250.0 / 500.0 / rpm	at 8.0V
9	Default Travel Angle	CW 50° (460µs) CCW 50° (1060µs)	–
10	Max Travel Angle	CW 75° (460µs) CCW 75° (1060µs)	Programing tool (CIU-2,S-Link) required.
11	BackLash*	≤ 0.5°	–
12	Operating Temperature Range	-40～+60℃ (-40～140°F)	–
13	Operating Humidity Range	≤ 90%RH	–
14	Storage Temperature Range	-54～+71℃ (-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	Cable	Shielded Cable	Cable Length : BLA2FB21 15.75 inch (400mm) BLA2FB22 5.91 inch (150mm)
21	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 Sield Line	
22	MTT(B)F*	1000h (Calculated by Weibull analysis.)	Test Condition at 8.0V / Load : 20% of Max. Torque / 0.5Hz sweep (±50°)
23	Vibration Resistance *	Operating time ≥ 50h (at 8.0V)	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℃

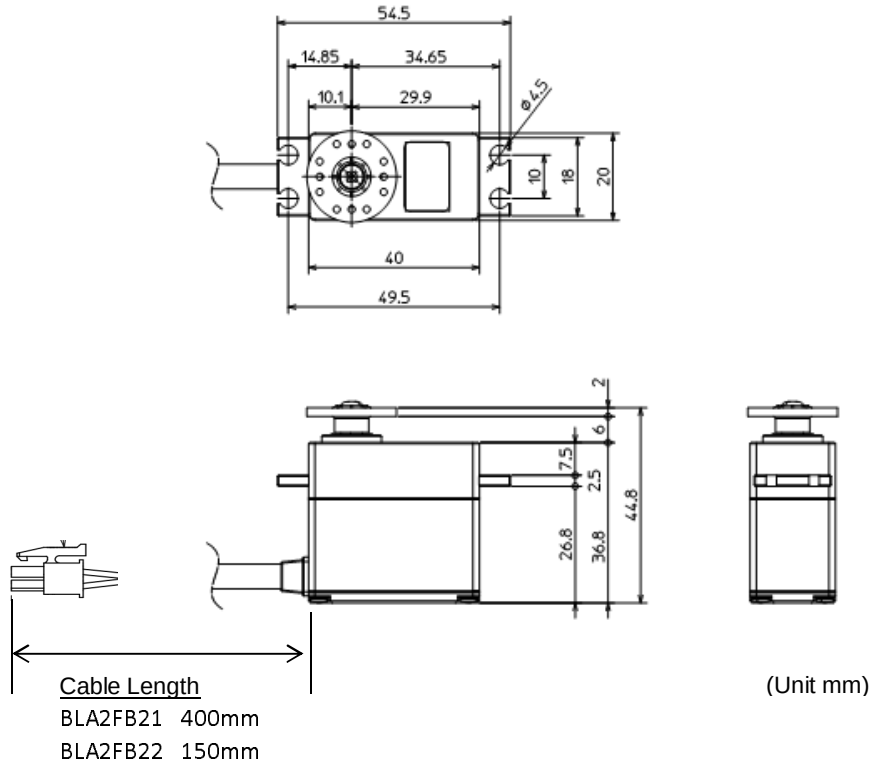
All Specifications are subject to change without prior notice.

■Caution

This product SHOULD NOT been used for the devices that is directly related to human life 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



Cable Length
BLA2FB21 400mm
BLA2FB22 150mm

(Unit mm)

Position Feedback