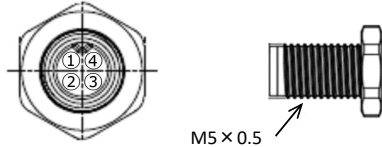
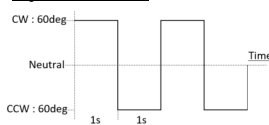
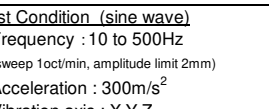
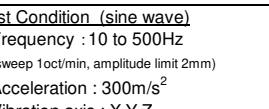
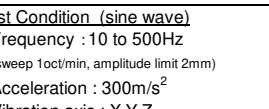


BLA15-06U-A01 Technical Specification

Update Number

210518-01

Item			Specification				Remark		
1	Communication Interface		CAN BUS				Protocol	UAVCAN V0	
							Baud Rate	1Mbps	
							Sample Point	87.5%	
							Node ID	1~127	
							(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 5.0~DC 8.4V				—		
5	Standby Current		≤ 70mA				at 6.0~7.4V		
6	Starting Current *	Design value	≤ 2.6A				at 7.4V		
		Protection	2.1A				100% of torque control. See No.7.		
7	Operating mode	Angle control	+36,000,000.0° ~ -36,000,000.0°				See No.13.		
		Speed control	-300rpm ~ +300rpm				Commandable speed. See No.12 for actual speed.		
		Torque control	-100% ~ +100%				Max. torque at supply voltage of 7.4V is 100%. See No.9. The actual torque that can be output depends on the power supply, load, etc., so use the command value as a guide.		
8	Consumption Current *		LL	Me	UL	unit	at 7.4V, No-Load		
			115	230	345	mA	LL : Low Limit Me : Medium Value UL : Upper Limit		
9	Max. Torque *		LL	Me	UL	unit	at 7.4V		
			6.2	10.3	14.4	kgf·cm			
			0.61	1.01	1.41	N·m			
			86.1	143.0	200.0	ozf·in			
			8.3			kgf·cm	at 6.0V Medium Value		
10	Rated Torque *		1.0			kgf·cm	at 7.4V		
			0.10			N·m	10% of Max. Torque		
			14.3			ozf·in			
11	No Load Speed * (Angle control mode)		LL	Me	UL	unit	at 7.4V		
			0.11	0.14	0.17	s/60°			
			353	429	545	°/s			
			59	71	91	rpm			
			0.18			s/60°	at 6.0V Medium Value		
12	No Load Speed * (Speed control mode)		LL	Me	UL	unit	at 7.4V		
			353	429	545	rpm			
13	Travel Angle *	Range	Mechanical	+179.9° ~ -180.0°			Absolute		
			Software	+36,000,000.0° ~ -36,000,000.0°			Pseudo absolute *Incremental above mechanical range.		
		Accuracy	±3.0			°	Standard value	at 7.4V, No-Load, Position:±60°	
			±1.5			°	Measured value		
14	BackLash *		≤ 0.5°				—		
15	Temperature Range	Operating	-30~+70°C (-22~158°F)				*The operating noise of servo may become loud in low temperature.		
		Storage	-40~+80°C (-40~176°F)				—		
		Protection	+80°C (176°F)				Torque OFF at set temperature or higher.		
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		45g				with Horn and screws without cables		
18	Case Material		Aluminum				Surface : Anodizing Salt Water Resistance		
19	Gear Set Material		Steel				Surface : Hardening treatment		
20	Gear bearing		2 ball bearing				—		
21	Radial load		50N				Load position : Refer to Outer Dimension * Design reference value.		
22	Position Sensor		Magnetic Encoder				—		
23	Motor Type		Brushless DC Motor				—		
24	Cable		Non-Shielded Cable (Detachable)				Cable Length : 15.75 inch (400mm)		
25	Connector		Manufacture	Neltron Industrial Co., Ltd.					
			Type	120505-04P-FA-PB					
			Mating	120505-04S-A-MM etc.					
			Pin Assignment	1	White	Battery(+)			
				2	Red	Battery(-)			
26	MTTF *	Operating time > 1000h (TBC)				Operating Condition			
						* at 7.4V			
						* ±60°, 0.5Hz sweep			
27	Vibration Resistance *	Operating time > 500h				Test Condition			
						* Load : 1.0 kgf·cm			
27	Vibration Resistance *	Operating time > 500h				Operating Condition			
						* at 7.4V			
						* ±60°, 0.5Hz sweep			
27	Vibration Resistance *	Operating time > 500h				Test Condition			
						* No-Load			

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

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.
- 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.
- Please do not twist the cable. Twisting the cable will could result in breakage.

Outer Dimension (unit:mm)

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