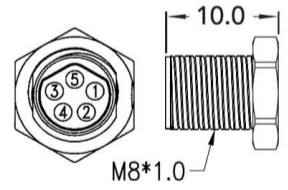
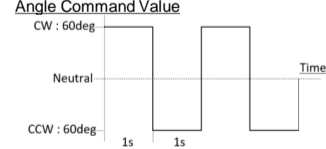


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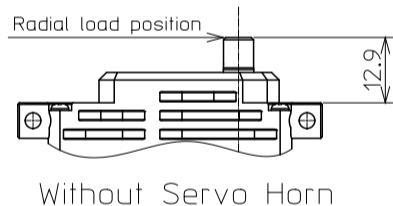
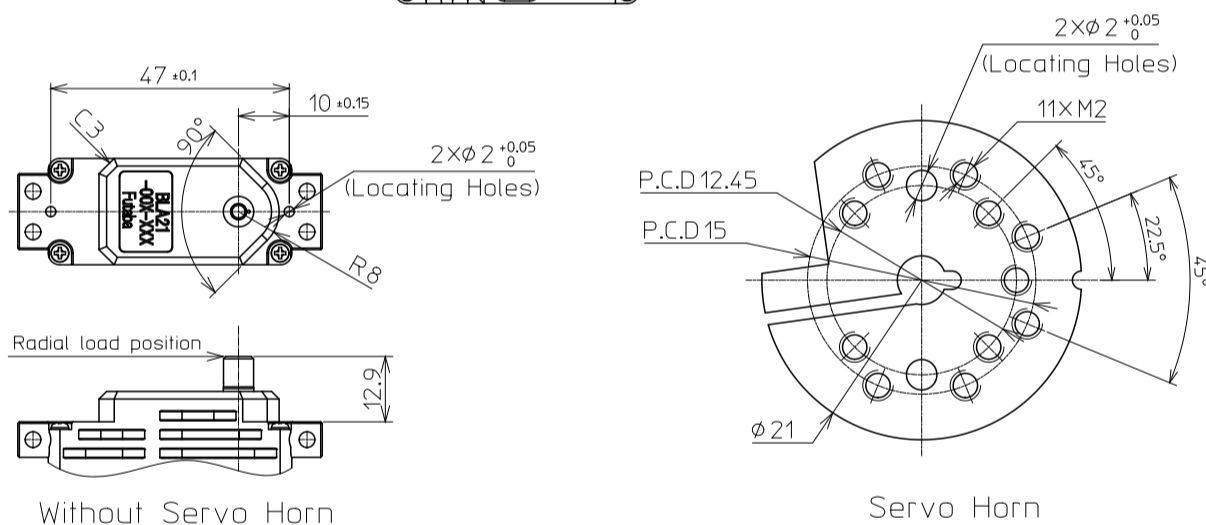
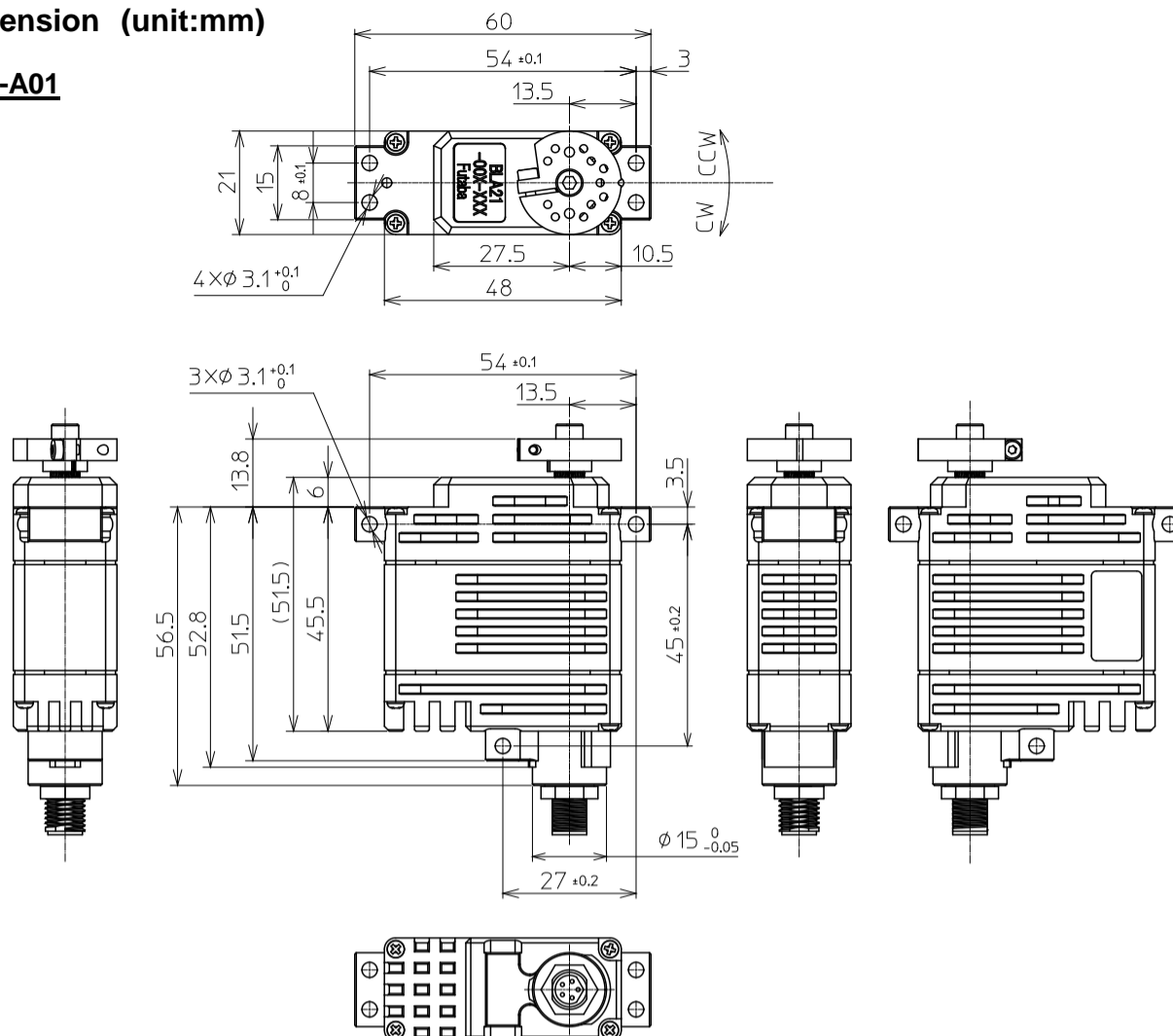
Item		Specification				Remark		
1	CommunicationInterface	CAN BUS				Protocol	UAVCAN V0	
						Baud Rate	1Mbps	
						Sample Point	87.5%	
						Node ID	1~127	
(Please ask us for more information)								
2	International Protection Code	IP67				Waterproof and dustproof		
3	Rated Voltage	24.0 ~ 28.0V				DC power supply.		
4	Operating Voltage	20.0 ~ 32.0V				DC power supply.		
5	Standby Current	≤ 37mA				at 28.0V		
6	Starting Current *	Design value	≤ 5A			at 28.0V		
		Protection	3.2A			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 28.0V 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 28.0V, No-Load LL : Low Limit Me : Medium Value UL : Upper Limit		
		20	80	140	mA			
9	Max. Torque *	LL	Me	UL	unit	at 28.0V		
		34.0	46.0	58.0	kgf·cm			
		3.33	4.51	5.69	N·m			
		472	639	805	ozf·in	at 24.0V Medium Value at 32.0V Reference value		
		44.0			kgf·cm			
48.0			kgf·cm					
10	Rated Torque *	15.0			kgf·cm	at 28.0V		
		1.47			N·m			
		208			ozf·in	at 24.0V Medium Value at 32.0V Reference value		
		13.9			kgf·cm			
		15.0			kgf·cm			
11	No Load Speed * (Angle control mode)	LL	Me	UL	unit	at 28.0V		
		0.04	0.07	0.10	s/60°			
		600	857	1500	°/s			
		100	143	250	rpm	at 24.0V Medium Value at 32.0V Reference value		
		0.08			s/60°			
0.06			s/60°					
12	No Load Speed * (Speed control mode)	LL	Me	UL	unit	at 28.0V		
		100	143	250	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 28V, No-Load, Position: ±60°	
		±1.5			°	Measured value		
14	BackLash *	≤ 0.5°				-		
15	Temperature Range	Operating	-40~+70°C (-40~158°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	48.0x 21.0 x 51.5mm (1.89 x 0.83 x 2.03 in)				Refer to Outer Dimension		
17	Weight	130g				with Horn and screws, without cables		
18	Case Material	Aluminum				Surface : Anodizing Salt Water Resistance, EMC Case Shielding		
19	Gear Set Material	Steel				Surface : Hardening treatment		
20	Gear bearing	8 ball bearing				-		
21	Radial load	100N				Load position : Refer to Outer Dimension * Design reference value.		
22	Position Sensor	Magnetic Encoder				-		
23	Motor Type	Brushless DC Motor				-		
24	Cable	Shielded Cable (Detachable)				Cable Length : 15.75 inch (400mm)		
25	Connector	Manufacture	ODS Electronics Co., Ltd.					
		Type	MMEPM05MCC-SHS7001					
		Mating	MAEAF05FCC-SRC7000 etc.					
		Pin Assignment	1	Brown	Battery(+)			
			2	White	Battery(-)			
3	Blue		CAN-H					
4	Black		CAN-L					
5	Drain	Case Shield Line						
26	MTTF *	Operating time > 1,000h (TBC)				Operating Condition • at 28.0V • ±60°, 0.5Hz sweep Test Condition • Load : Rated Torque (Powder Brake)		
						Angle Command Value 		
27	Vibration Resistance *	Operating time ≥ 500h (TBC)				Operating Condition • at 28.0V • ±60°, 0.5Hz sweep • No-Load Test Condition (sine wave) • Frequency : 10 to 500Hz (sweep 1oct/min, amplitude limit 2mm) • Acceleration : 300m/s ² • Vibration axis : X,Y,Z		

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

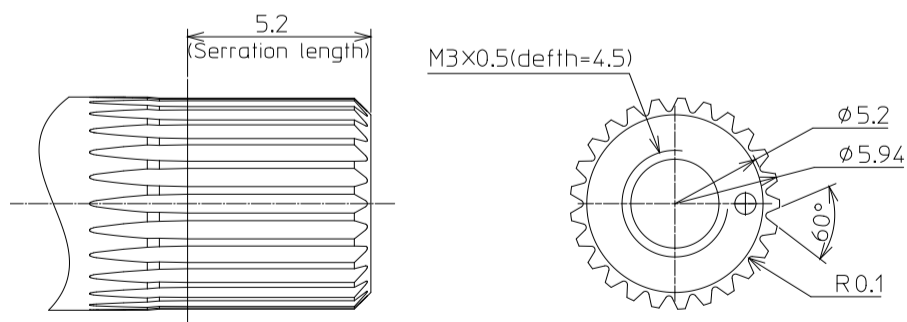
All Specifications are subject to change without prior notice.

Outer Dimension (unit:mm)

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OUTPUT SHAFT



Sarretion Size

Standard Diameter : $\Phi 6$
Angle : 60°
Tooth : 25

■ 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.