

Electrical characteristics						
Rated voltage	4.08 V					
Rated current	1.7 A					
Max. input	13.9 W					
Step angle	1.8 °					
Step accuracy(positional)	1.8 °	±	0.09 °	at	Rated current DUAL	
Max. holding torque	690 mNm [	7040 gfcm]	MIN.	at	Rated current DUAL	
Detent torque	35.0 mNm [	357 gfcm]	REF.			
Pull out torque	-	mNm [	-	gfcm]	MIN.	at - Hz
	-	mNm [	-	gfcm]	MIN.	at - Hz
Max. no load response	-	Hz	MIN.			
Max. slew speed	-	Hz	MIN.			
Driving condition	DC	24 V	1.7 A[φ]	DUAL	STK682-001-E	
Winding resistance	2.4 Ω	±	0.24 Ω			
Winding inductance	4.7 mH	REF.	at 1 kHz, 1 V[RMS]			
Insulation resistance	1 00M Ω 100M Ω MIN. with DC 500 V insulation resistance tester applied between winding and case.					
Dielectric strength	There shall be no breakdown at AC500 V (50 or 60) Hz applied for 60 s between winding and case.					
Temperature rise	-					
Class of insulation	-					
Ambient temperature	0 °C ~ +50 °C					
<b>Mechanical characteristics</b>						
Direction of shaft rotation	Rotation of shaft to be CW facing mounting end when connection FIG.1 and sequenced as FIG. 2.					
Radial play	20 μm MAX. at 4.4 N[450 gf] LOAD					
End play	0.2 mm MAX. at 49 N[5 kgf] LOAD					
Rotor inertia	162 gcm <sup>2</sup> REF.					
Mass	560 g REF.					
<b>Environmental harmony</b>						
Composed parts are RoHS compliant.						

## Special specifications

### ( i ) Encoder specifications

ITEM	Specifications
Encoder type	AVAGO AEDR-8501 Incremental
Detection method	Reflective surface
Output seal	A, $\bar{A}$ , B, $\bar{B}$ , I, $\bar{I}$ (Three channel) Line driver output
Resolution	4,000 CPR
Supply voltage	DC 5 V $\pm$ 0.25 V
Supply current	25 mA REF.
Output voltage	-0.5 V to +5.5 V
Wave form	Rectangle wave
Count frequency	220 kHz MAX. (4X)
State $S_1, S_2, S_3, S_4$	$(C/4) \pm (C/8)$
Index pulse width $P_0$	$(C/4) \leq P_0 \leq (3C/4)$
Duty	$(C/2) \pm (C/4)$

### OUTPUT WAVE FORM





