

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	100M 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
Mechanical characteristics	
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 ² REF.
Mass	560 g REF.
Environmental harmony	
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



