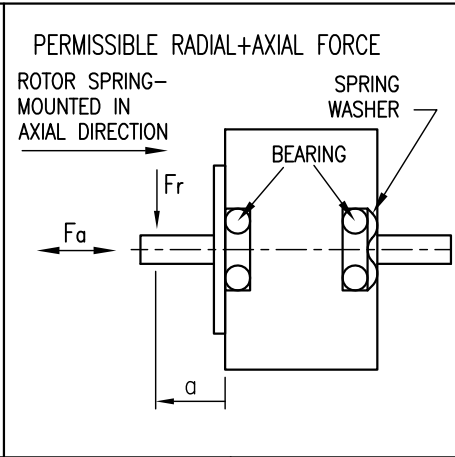


SPECIFICATION	CONNECTION	BIPOLAR PARALLEL
VOLTAGE (VDC)		3.15
AMPS/PHASE		1.8
RESISTANCE/PHASE (Ohms)@25°C		1.75±10%
INDUCTANCE/PHASE (mH) @1KHz		3.3±20%
HOLDING TORQUE (Nm) [lb-in]		0.5 [4.425]
DETENT TORQUE (Nm) [lb-in]		0.022 [0.1946]
STEP ANGLE (°) ± ACCURACY		1.8±5% (NON-ACCUM)
BACK-EMF (V) (300 U/min)		6.9
ROTOR INERTIA (Kg-m ²) [lb-in ²]		8.2x10 ⁻⁶ [0.028]
WEIGHT (Kg) [lb]		0.42 [0.95]
TEMPERATURE RISE: MAX.80°C (MOTOR STANDSTILL; FOR 2 PHASE ENERGIZED)		
AMBIENT TEMPERATURE -10~ 50°C [14°F ~ 122°F]		
INSULATION RESISTANCE 100 MOhm (UNDER NORMAL TEMPERATURE AND HUMIDITY)		
INSULATION CLASS B 130° [266°F]		
DIELECTRIC STRENGTH 500VAC FOR 1 MIN. (BETWEEN THE MOTOR COILS AND THE MOTOR CASE)		
AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION)		

FULL STEP 2 PHASE-Ex., WHEN FACING MOUNTING END (X)

STEP	A	B	A\	B\	CCW	CW
1	+	+	-	-	↑	↓
2	-	+	+	-	↓	↑
3	-	-	+	+	↑	↓
4	+	-	-	+	↓	↑



AXIAL-FORCE Fa (N)	Fa=15			
DISTANCE a (mm)	5	10	15	20
RADIAL-FORCE Fr (N)	58	36	26	20
	AXIAL	RADIAL		
SHAFT PLAY (mm)	0.08	0.02		
AT LOAD MAX: (N)	4.5	4.5		

M12-5 POLE MOTOR

PIN. NO.	ASSIGNMENT
1	A\
2	A
3	B
4	B\
5	HOUSING

BRAKE CONNECTOR M8

PIN. NO.	ASSIGNMENT
1	BRAKE +24V
3	BRAKE/GND
4	NC

CABLE MOTOR:
ZK-M12-5-2m(5m)
STRAIGHT OR 90°
ANGELED

M12-8 POLE ENCODER

PIN. NO.	ASSIGNMENT
1	A
2	A\
3	B
4	B\
5	GND
6	I\
7	I
8	Vcc (5V)
HOUSING	GND/SHIELDING

CABLE ENCODER:
ZK-M12-8-2m(5m)
STRAIGHT OR 90°
ANGELED

				 Nanotec [®] PLUG & DRIVE	SCALE FREE	APVD	G.S.	30.05.11	STEPPER MOTOR IN PROTECTION DWG.NO AS4118L1804-EB
1	M3 DEPTH + M12 HEIGHT	01.08.14	J.D.		X ±0.5	CHKD			
REV	DESCRIPTION	DATE	APVD	AS4118L1804-EB	1PL ±0.2	DRN	J.W.	30.05.11	
					2PL ±0.1	SIGNATURE		DATE	
					ANGLE ±30'				