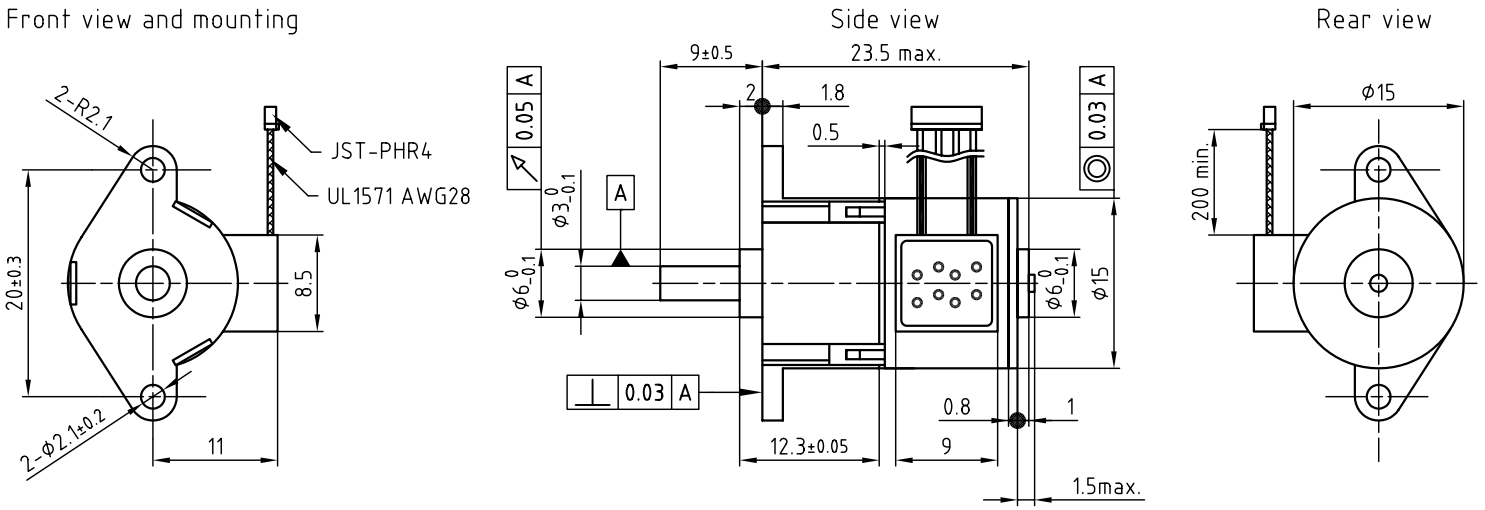


SPECIFICATION \ CONNECTION	BIPOLAR
VOLTAGE (VDC)	5
AMPS/PHASE	0.5
RESISTANCE/PHASE (Ohms)@25°C	10±7%
INDUCTANCE/PHASE (mH) @1KHz	2.3±20%
HOLDING TORQUE (Nm) [lb-in]	0.135 [1.19]
RATIO	1:50
STEP ANGLE (°)	18/50
STEP ACCURACY (NON-ACCUM)	±7%
ROTOR INERTIA (Kg-m^2) [lb-in^2]	1.0x10^{-7} [3.416X10^{-4}]
WEIGHT (Kg) [lb]	0.012 [0.026]

TEMPERATURE RISE: MAX.80°C (MOTOR STANDSTILL; FOR 2 PHASE ENERGIZED)

AMBIENT TEMPERATURE -20°~ 50°C [-4°F ~ 122°F]

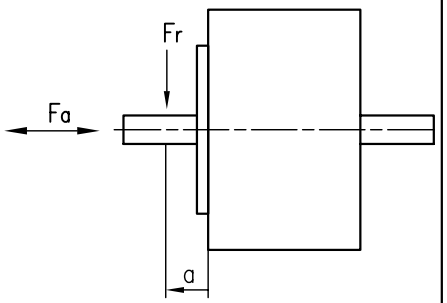
INSULATION RESISTANCE 100 MOhm (UNDER NORMAL TEMPERATURE AND HUMIDITY)

INSULATION CLASS E 120° [248°F]

DIELECTRIC STRENGTH 500VAC FOR 1 MIN. (BETWEEN THE MOTOR COILS AND THE MOTOR CASE)

AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION)

PERMISSIBLE RADIAL+AXIAL FORCE



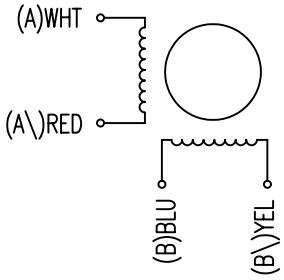
AXIAL-FORCE Fa (N)	Fa=1.0	
DISTANCE a (mm)	1/2 SCHAFTLENGTH	
RADIAL-FORCE Fr (N)	Fr=2.0	
	AXIAL	RADIAL
SHAFT PLAY (mm)	0.08	0.06
AT LOAD MAX: (N)	4.5	4.5

TYPE OF CONNECTION (EXTERN)	MOTOR		
BIPOLAR	CONNECTOR PIN NO.	LEADS	WINDING
A —	1	WHT	A
A\ —	2	RED	A\
B —	3	BLU	B
B\ —	4	YEL	B\

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

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

WIRING DIAGRAM



REV	DESCRIPTION	DATE	APVD

NANOTEC:

SPG1518M0504-50

SCALE FREE		APVD		
X	±0.5	CHKD		
1PL	±0.2	DRN	J.W.	11.01.08
2PL	±0.1	SIGNATURE		DATE
ANGLE	±30'			

STEPPING MOTOR

DWG.NO

SPG1518M0504-50