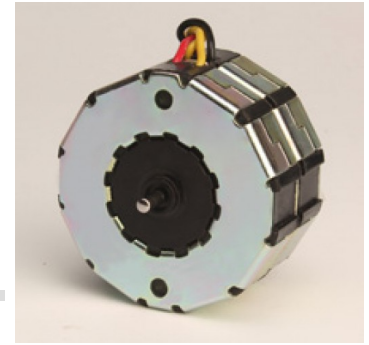




MTS4a



Stepper Motor 7.5°

Design

7.5° MTS4a - Permanent magnet stepper motor with simple mechanical structure. Clawpole principle (Tin Can) with 2 stator halves. Self lubricated sinter sleeve with long life expectancy.

Application

Diamond machine.

Standard Data

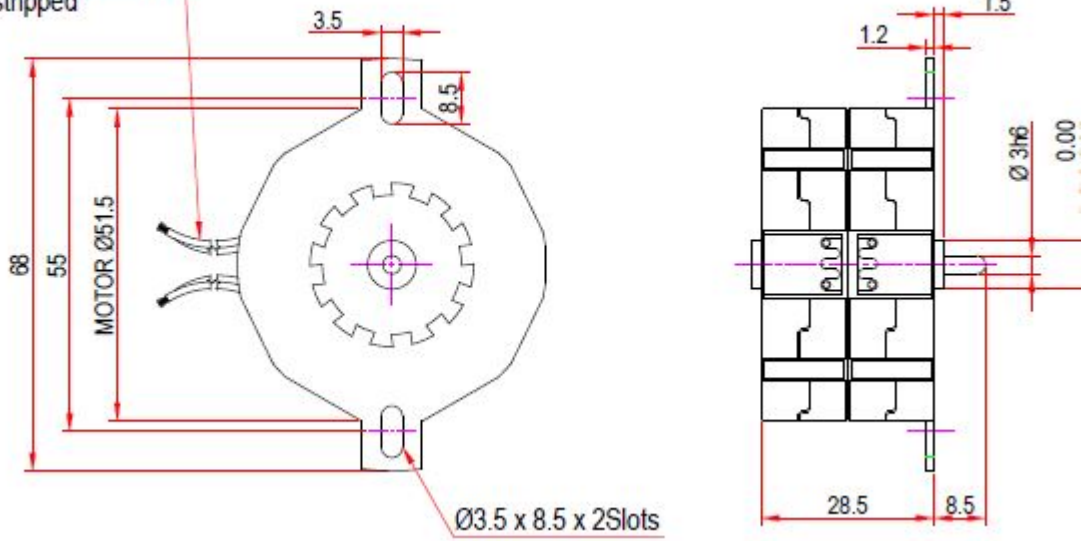
Parameter	Value	Unit
Motor type	Permanent Magnet (PM) stepper motor	
Electrical Enclosure	40	IP
Life expectancy	3 Year in Continuous operation	
Connections	Flexible leads 22 AWG, 200mm length, end striped 10mm	
Weight	200	g
Mounting	Any position by ears or screw clip	

Technical Data

Parameter	Value	Unit
Steps per revolution	48	
Degree/step	7.5	
Winding type	Bipolar, Unipolar	
Standard Voltage	6, 12, 24	V
Resistance per winding at 6V - (Bipolar)	9.5, 61, 251	Ω
Resistance per winding at 24V - (Unipolar)	15, 61, 251	Ω
Winding temperature	105 Max	°C
Holding torque	6.2 (MTSB4a), 4.5 (MTSU4a)	Ncm
Axial Force	3	N
Lateral Force	6	N
Rotor inertia at 6.2	6	gcm ²

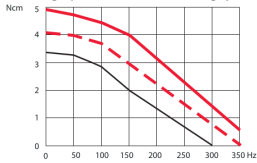
Dimensional Drawing

22AWG Leads length 200mm
10mm ends stripped

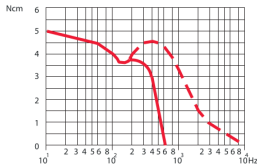


Torque Graphs

Start range (pull-in) with constant voltage power stage

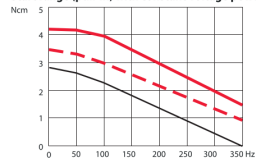


2-Phase stepper Motor MTSB4a

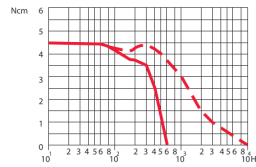


Slew range (pull-out) and start range (pull-in) with constant current power stage (chopper Drive)

Start range (pull-in) with constant voltage power stage



4-Phase Stepper Motor MTSU4a



Slew range (pull-out) and start range (pull-in) with constant current power stage (chopper Drive)