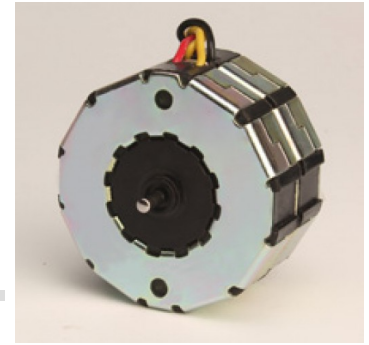




MTS4a



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 sinteres sleeve with long life expectancy.

Features

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

Application

Diamond machine.

Options

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

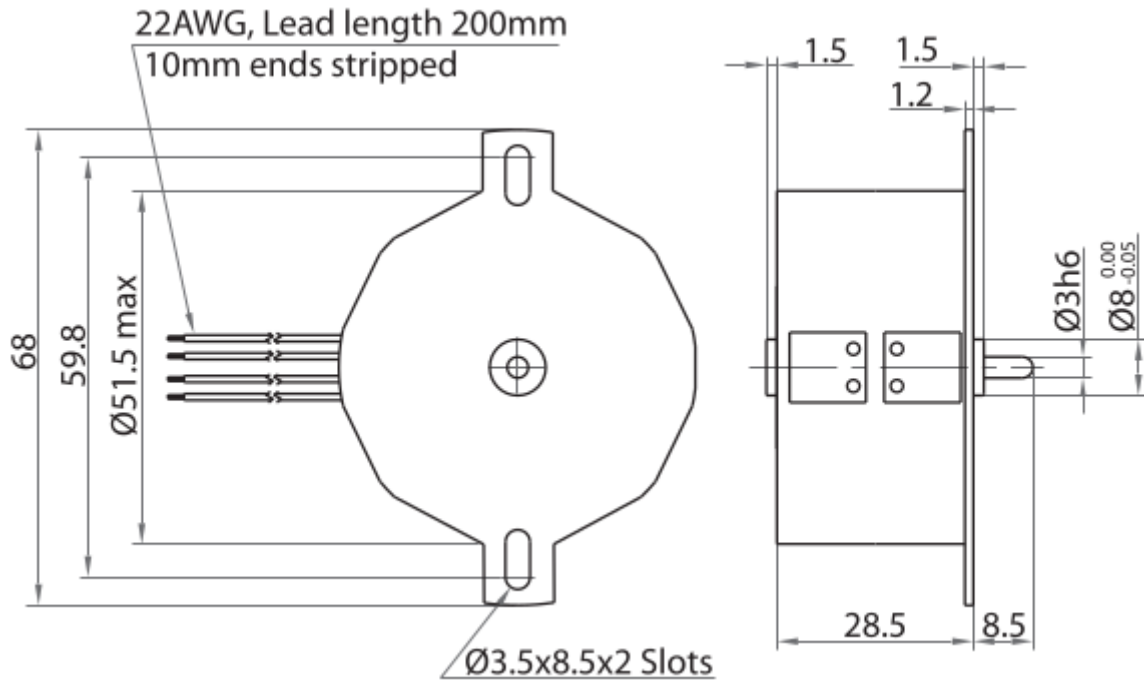
Standard Data

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

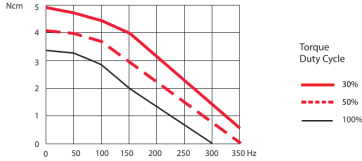
Parameter	Value	Unit
Steps per revolution	48	
Degree/step	7.5	
Winding type	Bipolar, Unipolar	
Standard Voltage	6, 12 , 24	V
Resistance per winding at 6V - (Bipolar)	9.5	Ω
Resistance per winding at 12V - (Bipolar)	61	Ω
Resistance per winding at 24V - (Bipolar)	251	Ω
Resistance per winding at 6V - (Unipolar)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

Dimensional Drawing



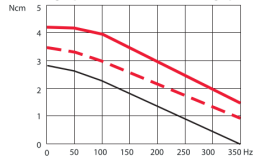
Torque Graphs

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

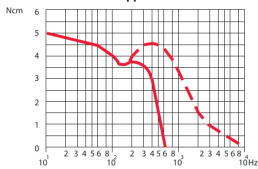


2-Phase stepper Motor MTSB4a

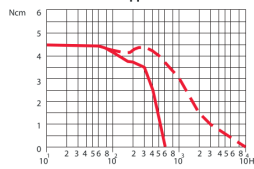
Start range (pull-in) with constant voltage power stage



4-Phase Stepper Motor MTSU4a



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



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