



MTS2b



Stepper Motor 15°

Design

15° MTS2b - 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

15° MTS2b - 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

Liquid Dispenser, Valve actuators.

Options

15° MTS2b - Permanent magnet stepper motor with simple mechanical structure. Clawpole principle (Tin Can) with 2 stator halves. Self lubricated sinteres sleeve with long life expectancy.

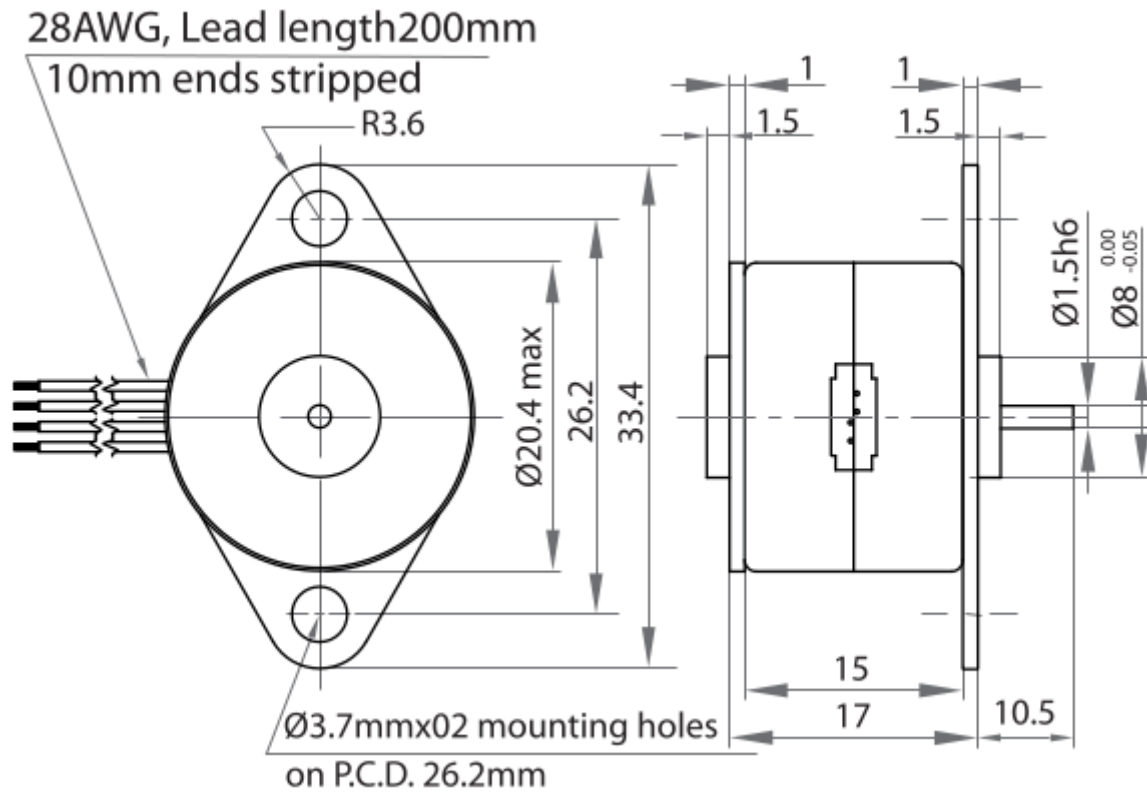
Standard Data

Parameter	Value	Unit
Motor type	Permanent Magnet (PM) stepper motor	
Electrical Enclosure	40	IP
Life expectancy	3 Year in Continuous operation	
Connections	Flexible leads 30 AWG, 200mm length, end striped 10mm	
Weight	30	g
Mounting	Any position by ears or screw clip	

Technical Data

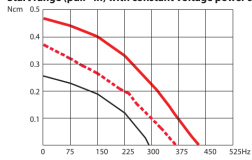
Parameter	Value	Unit
Steps per revolution	24	
Degree/step	15	
Winding type	bipolar, unipolar	
Standard Voltage	6, 12, 24	V
Resistance per winding at 6V - (Bipolar)	27	Ω
Resistance per winding at 12V - (Bipolar)	125	Ω
Resistance per winding at 24V - (Bipolar)	500	Ω
Resistance per winding at 6V - (Unipolar)	35	Ω
Resistance per winding at 12V - (Unipolar)	150	Ω
Resistance per winding at 24V - (Unipolar)	600	Ω
Winding temperature	105 Max	°C
Holding torque	0.4, (MTSB2b), 0.3, (MTSU2b)	Ncm
Axial Force at 0.4		Ncm
Axial Force at (MTSB2b)	1	Ncm
Axial Force at 0.3		Ncm
Axial Force at (MTSU2b)		Ncm
Lateral Force at 0.4		Ncm
Lateral Force at (MTSB2b)	0.8	N
Lateral Force at 0.3		N
Lateral Force at (MTSU2b)		
Rotor inertia at 0.4		gcm ²
Rotor inertia at(MTSB2b)	0.3	
Rotor inertia at 0.3		
Rotor inertia at (MTSU2b)		

Dimensional Drawing



Torque Graphs

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



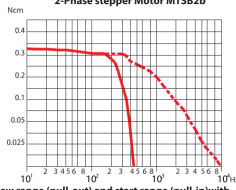
Torque
Duty Cycle

— 30%

- - - 50%

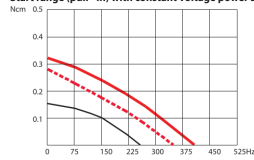
— 100%

2-Phase stepper Motor MTSB2b



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

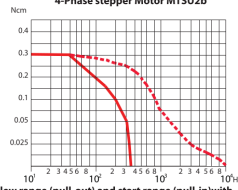


Torque

— Start range

- - - Slew range

4-Phase stepper Motor MTSU2b



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