



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 sinter sleeve with long life expectancy.

Application

Liquid Dispenser, Valve actuators.

Standard Data

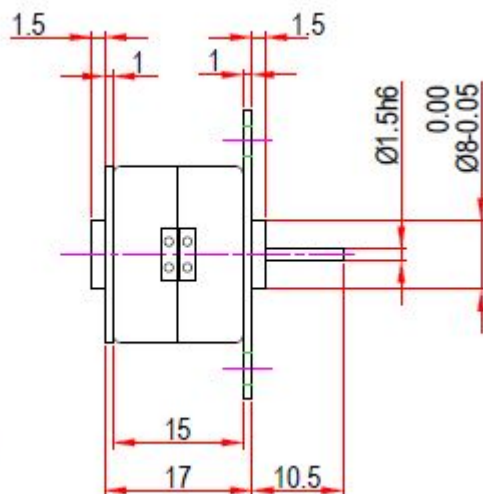
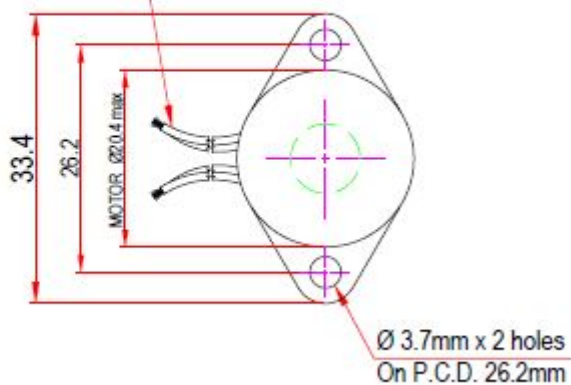
Parameter	Value	Unit
Motor type	Permanent Magnet (PM) stepper motor	
Electrical Enclosure	40	IP
Life expectancy	3 Year in Continuous operation	
Connections	Flexible leads 30 AWG, 200mm length, end striped 10mm	
Weight	30	g
Mounting	Any position by ears or screw clip	

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, 125, 500	Ω
Resistance per winding at 6V - (Unipolar)	35, 150, 600	Ω
Winding temperature	105 max	$^{\circ}\text{C}$
Holding torque	0.4 (MTSB2b) 0.3 (MTSU2b)	Ncm
Axial Force	0	N
Lateral Force	0.8	N
Rotor Inertia	0.3	gcm ²

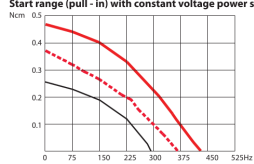
Dimensional Drawing

30AWG Leads length 200mm
10mm ends stripped



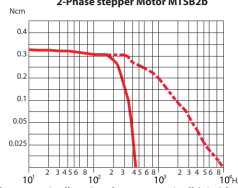
Torque Graphs

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



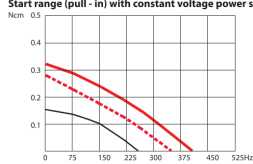
Torque
Duty Cycle
— 30%
- - - 50%
— 100%

2-Phase stepper Motor MTSB2b



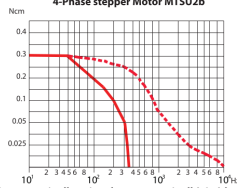
Slew range (pull-out) and start range (pull-in) with constant current power stage (chopper Drive)

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)