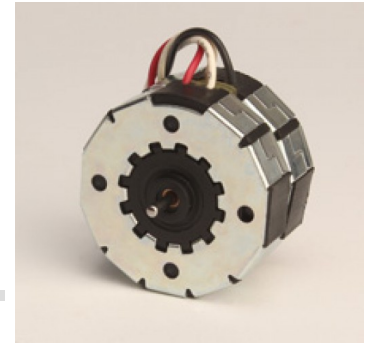




MTS3a



Stepper Motor 7.5°

Design

7.5° MTS3a- 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° MTS3a- 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

Yarn Movement, Level Switches, Valve Actuators.

Options

7.5° MTS3a- Permanent magnet stepper motor with simple mechanical structure. Clawpole principle (Tin Can) with 2 stator halves. Self lubricated sinteres sleeve with long life expectancy.

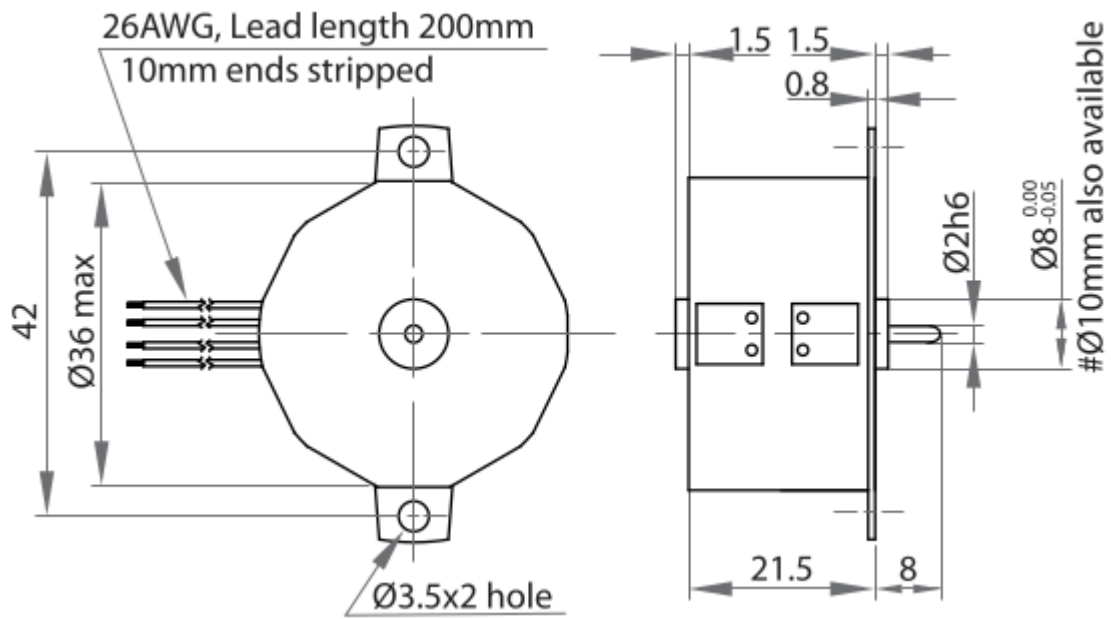
Standard Data

Parameter	Value	Unit
Motor type	Permanent Magnet (PM) stepper motor	
Electrical Enclosure	40	IP
Life expectancy	3 Year in Continuous operation	
Connections	Flexible leads 26 AWG, 200mm length, end striped 10mm	
Weight	65	g
Mounting	Any position by ears or screw clip	

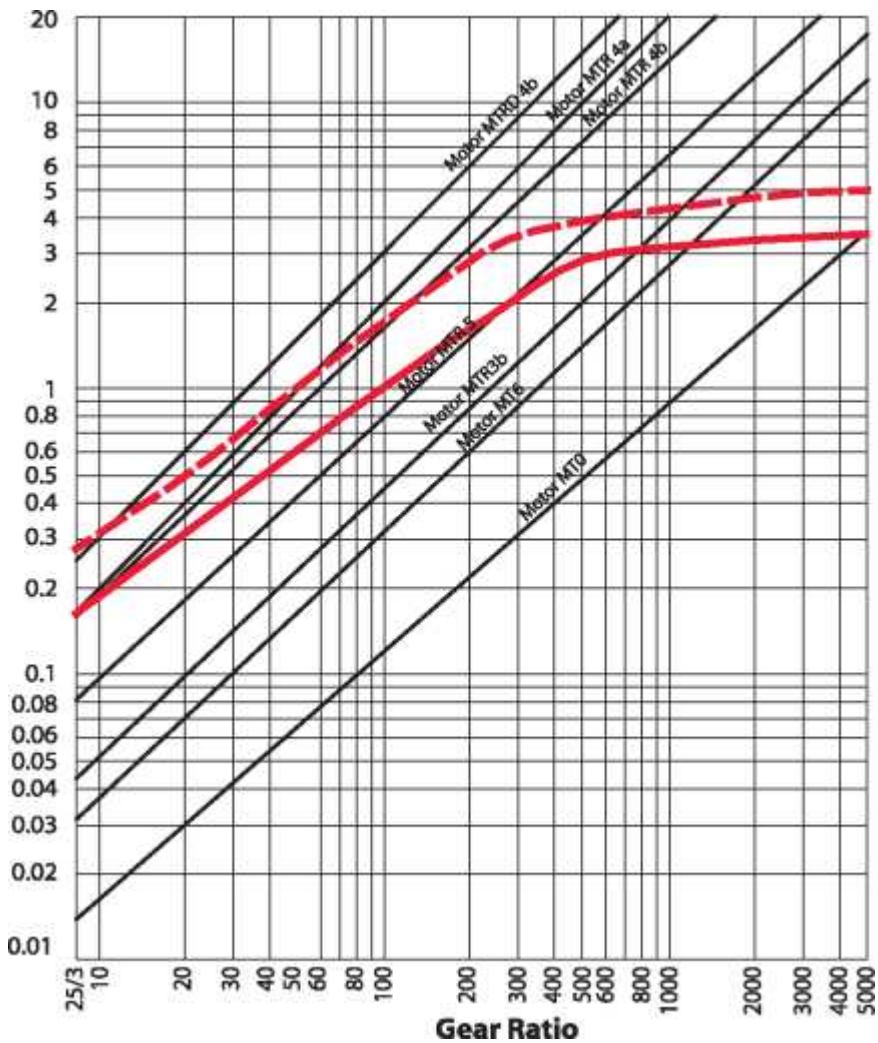
Technical Data

Parameter	Value	Unit
Steps per revolution	48	
Degree/step	7.5	
Winding type	bipolar, unipolar	
Standard Voltage	3, 6, 12, 24	V
Resistance per winding at 3V - (Bipolar)	11.5	
Resistance per winding at 6V - (Bipolar)	18.5	Ω
Resistance per winding at 12V - (Bipolar)	100	Ω
Resistance per winding at 24V - (Bipolar)	460	Ω
Resistance per winding at 3V - (Unipolar)	12	
Resistance per winding at 6V - (Unipolar)	28.5	Ω
Resistance per winding at 12V - (Unipolar)	120	Ω
Resistance per winding at 24V - (Unipolar)	500	Ω
Winding temperature	105 Max	°C
Holding torque	1.6, (MTSB3a), 1.2, (MTSU3a)	Ncm
Axial Force at 1.6		Ncm
Axial Force at (MTSB3a)	1	Ncm
Axial Force at 1.2		Ncm
Axial Force at (MTSU3a)		Ncm
Lateral Force at 1.6		Ncm
Lateral Force at (MTSB3a)	3	N
Lateral Force at 1.2		N
Lateral Force at (MTSU3a)		
Rotor inertia at 1.6		gcm ²
Rotor inertia at (MTSB3a)	2.9	
Rotor inertia at 1.2		
Rotor inertia at (MTSU3a)		

Dimensional Drawing

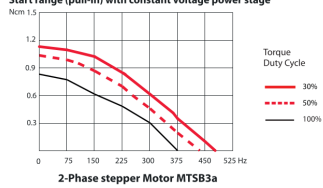


Gear Ratio

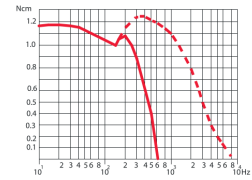
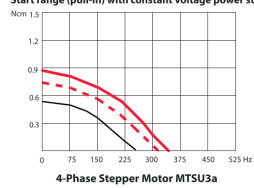


Torque Graphs

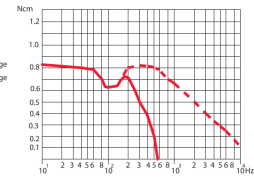
Start range (pull-in) with constant voltage power stage



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



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)