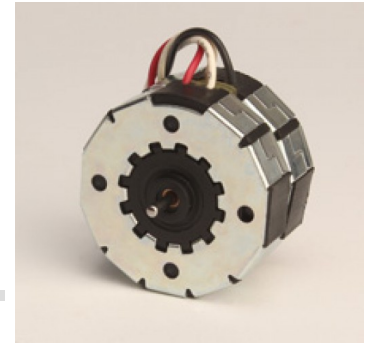




## MTS3a



### 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.

#### Application

Yarn Movement, Level Switches, Valve Actuators.

#### Standard Data

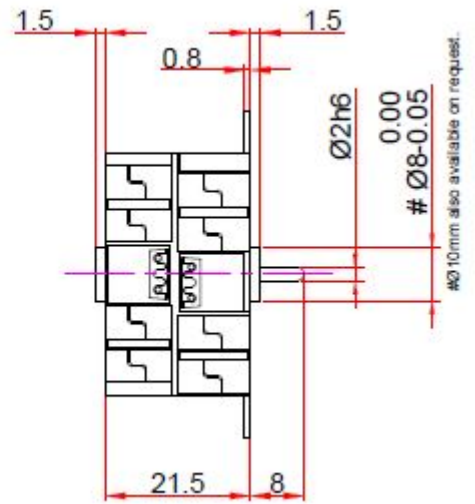
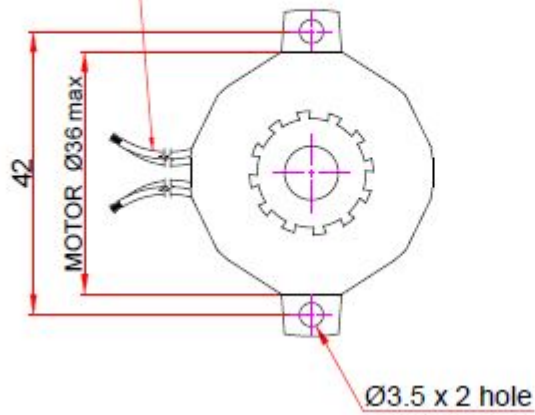
Parameter	Value	Unit
Motor type	Permanent Magnet (PM) stepper motor	
Electrical Enclosure	40	IP
Life expectancy	3 Year in Continuous operation	
Connections	Flexible leads 26 AWG, 200mm length, end striped 10mm	
Weight	65	g
Mounting	Any position by ears or screw clip	

#### 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 (Bipolar)	11.5, 18.5, 100, 460	Ω
Resistance per winding (Unipolar)	12. 28.5, 120, 500	Ω
Winding temperature	105 max.	°C
Holding torque	1.6 (MTSB3a), 1.2 (MTSU3a)	Ncm
Axial Force	1	N
Lateral Force	3	N
Rotor inertia	2.9	gcm <sup>2</sup>

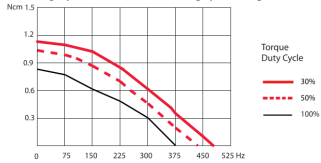
## Dimensional Drawing

26AWG Leads length 200mm  
10mm ends stripped

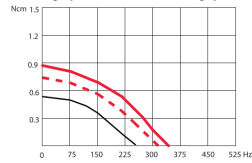


## Torque Graphs

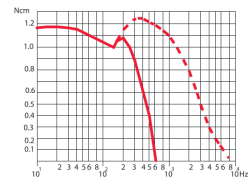
Start range (pull-in) with constant voltage power stage



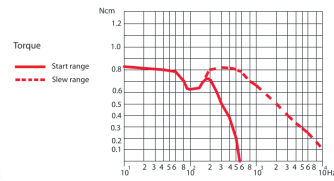
Start range (pull-in) with constant voltage power stage



2-Phase stepper Motor MTSB3a



4-Phase Stepper Motor MTSU3a



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)