

# M42STH series- High Torque 42mm / NEMA Size 17, 1.8 degree

## Hybrid Stepper Motors



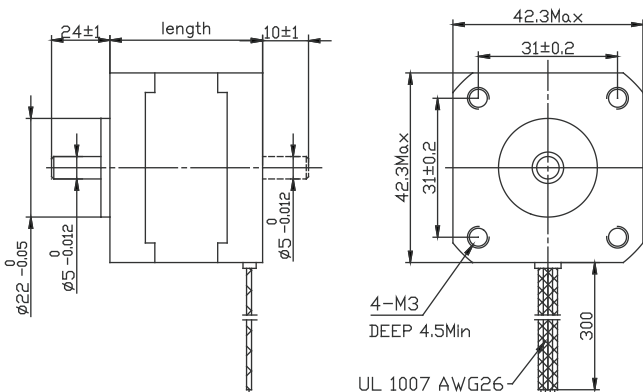
### General Specifications

Step Angle Accuracy	±5% (full step, no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C max. (rated current, 2 phases on)
Ambient Temperature	-20°C ~ +50°C
Insulation Resistance	100MΩ min., 500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.02mm max. (450g load)
Shaft Axial Play	0.08mm max. (450g load)
Max. Radial Force	28N (20mm from the flange)
Max. Axial Force	10N

### Model Specifications

Model Part Number		Voltage V	Current /phase A	Resistance /phase Ω	Inductance /phase mH	Holding Torque mNm	Rotor Inertia gcm <sup>2</sup>	Detent Torque gcm	No. of Leads	Length mm	Weight g
Single shaft	Double shaft										
M42STH25-0404S	M42STH25-0404D	9.6	0.4	24	36	167	20	75	4	25	150
M42STH33-0956S	M42STH33-0956D	4	0.95	4.2	2.5	157	35	120	6	34	220
M42STH33-0406S	M42STH33-0406D	9.6	0.4	24	15	157	35	120	6	34	220
M42STH33-0316S	M42STH33-0316D	12	0.31	38.5	21	157	35	120	6	34	220
M42STH33-1334S	M42STH33-1334D	2.8	1.33	2.1	2.5	216	35	120	4	34	220
M42STH38-1206S	M42STH38-1206D	4	1.2	3.3	3.2	255	54	150	6	40	280
M42STH38-0806S	M42STH38-0806D	6	0.8	7.5	6.7	255	54	150	6	40	280
M42STH38-0406S	M42STH38-0406D	12	0.4	30	30	255	54	150	6	40	280
M42STH38-1684S	M42STH38-1684D	2.8	1.68	1.65	3.2	353	54	150	4	40	280
M42STH47-1206S	M42STH47-1206D	4	1.2	3.3	2.8	311	68	200	6	48	350
M42STH47-0806S	M42STH47-0806D	6	0.8	7.5	6.3	311	68	200	6	48	350
M42STH47-0406S	M42STH47-0406D	12	0.4	30	25	311	68	200	6	48	350
M42STH47-1684S	M42STH47-1684D	2.8	1.68	1.65	2.8	431	68	200	4	48	350
M42STH60-1206S	M42STH60-1206D	7.2	1.2	6	7	637	102	280	6	60	500

### Dimensions (in mm)



### Connections

