# Motor for general environment

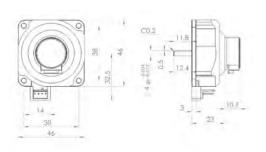
PSM40S SERIES

### PSM40S-E2T



Small motor with 2,000 p/r encoder for general environment.

Equipped with 2,000 pulse/turn TTL signals output encoder.Motor position and speed can be controlled with accuracy of  $\pm$  0.045 ° (Multiplying by 4 times). It is ideal as a motor for ultra-high precision indexing equipment.



% There is a mounting screw hole with a depth of 3.5 mm with 3-M3 PCD  $\Phi 28$  on the motor base side

Model Name	Motor with 2,00	00 p/r encoder PSM40S-E2T
Drive Frequency	52~58 [KHz]	Number of rotations - from A
Drive Voltage	130 [Vrms]	300 280[rpm]
Rated Speed	150[rpm]	250 200 - 175 - 0.15[N·m] / 150[rpm]
Maximum Speed	250[rpm]	150
Rated Torque	0.15 [N·m]	0.3[N·m] / 20[rpm]
Maximum Torque	0.3 [N·m]	50 - 25 -
Holding Torque	0.3 [N·m]	0 0.1 0.2 0.3 0.4 [N·m]
Direction & Response	CW、CCW、Less	than 1 [ms] ( No-load )
Temperature Range	-10 ~ +55 [°C]	
Life Time	3,000 [Hours]	
Size(W×D×H)	46×46×46 [mm]	
Weight	90[g]	
Encoder resolution	2,000[p/r]	
Minimum Accuracy	0.045°	

# Motor for magnetic field environment

PSM40N SERIES

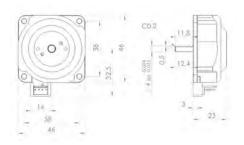
#### PSM40N-A



Sensorless single-shaft small motor for magnetic field environment.

Applicable to 3 [T] magnetic field environment.
Minimum size for PSM 60 N series.

It is ideal as a positioning and transport motor using sensors installed in devices such as MRI and elemental analyzers that are used in high-magnetic field.



lpha There is a mounting screw hole with a depth of 3.5 mm with 3-M3 PCD  $\Phi$ 28 on the motor base side

Model Name	Single-shaft motor PSM40N-A	
Drive Frequency	52~58 [KHz] Number of rotations [rpm] A	
Drive Voltage	130 [Vrms] 300 280[rpm] 280[rpm]	
Rated Speed	150[rpm] 250 7 200 7 0.15[N·m] / 150[rpm]	
Maximum Speed	250[rpm] 150 125 1	
Rated Torque	0.15 [N·m] 100 + 0.3[N·m] / 20[rpm]	
Maximum Torque	0.3 [N·m] 50 + 25 + Torque	
Holding Torque	0.3 [N·m] 0 0.1 0.2 0.3 0.4 (N·m)	
Direction & Response	CW、CCW、Less than 1 [ms] ( No-load )	
Temperature Range	-10 ~ +55 [℃]	
Life Time	3,000 [Hours]	
Size(W×D×H)	46×46×35.5 [mm]	
Weight	83 [g]	
Encoder resolution	Without encoder, Single-shaft	
Minimum Accuracy	Depends on external sensor	

#### Motor for magnetic field environment

PSM40N SERIES

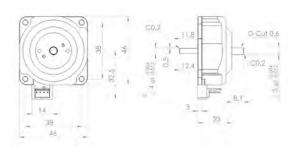
### PSM40N-B



Sensorless double-shaft small motor for magnetic field environment.

It has a subshaft for mounting external sensors of other manufacturers directly to the motor.

This motor can control the equipment using a third-party encoder or tacho generator that can be used in a magnetic field.



% There is a mounting screw hole with a depth of 3.5 mm with 3-M3 PCD  $\Phi$ 28 on the motor base side

Model Name	Double-shaft motor PSM40N-B	
Drive Frequency	52~58 [KHz] Number of rotations [rom] A	
Drive Voltage	130 [Vrms] 300 280[rpm]	
Rated Speed	150[rpm] 200 + 0.15[N·m] / 150[rpm]	
Maximum Speed	250[rpm] 150 125	
Rated Torque	0.15 [N·m] 100 + 0.3[N·m] / 20[rpm]	
Maximum Torque	0.3 [N·m] 50 to Torque	
Holding Torque	0.3 [N·m] 0 0.1 0.2 0.3 0.4 [N·m]	
Direction & Response	CW、CCW、Less than 1 [ms] ( No-load )	
Temperature Range	-10 ~ +55 [℃]	
Life Time	3,000 [Hours]	
Size(W×D×H)	46×46×43.5 [mm]	
Weight	84 [g]	
Encoder resolution	Without encoder, Single-shaft	
Minimum Accuracy	Depends on external sensor	

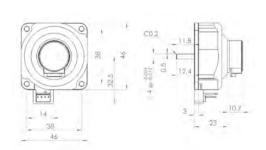
## PSM40N-E



Small motor with 500 p/r encoder for magnetic field environment.

Equipped with 500 pulse/turn TTL signals output encoder. Motor position and speed can be controlled with accuracy of  $\pm$  0.18  $^{\circ}$  (Multiplying by 4 times) in a magnetic field environment of 3 [T].

It is ideal as a motor for small transfer equipment using ball screws.



\*\* There is a mounting screw hole with a depth of 3.5 mm with 3-M3 PCD Φ28 on the motor base side

Model Name	Motor with 500 p/r encoder PSM40N-E	
Drive Frequency	52~58 [KHz] Number of rotations from A	
Drive Voltage	130 [Vrms] 300 280[rpm]	
Rated Speed	150[rpm] 200 0.15[N·m] / 150[rpm]	
Maximum Speed	250[rpm] 150 125	
Rated Torque	0.15 [N·m] 100 + 0.3[N·m] / 20[rpm]	
Maximum Torque	0.3 [N·m] 50 25 Torque	
Holding Torque	0.3 [N·m] 0 0.1 0.2 0.3 0.4 [N·m]	
Direction & Response	CW、CCW、Less than 1 [ms] ( No-load )	
Temperature Range	-10 ~ +55 [°C]	
Life Time	3,000 [Hours]	
$Size(W \times D \times H)$	46×46×46 [mm]	
Weight	90[g]	
Encoder resolution	500 [p/r]	
Minimum Accuracy	0.18°	

#### Motor for magnetic field environment

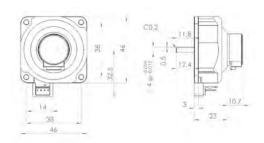
PSM40N SERIES

#### PSM40N-ET



Small motor with 1,000 p/r encoder for magnetic field environment.

Equipped with 1,000 pulse/trun TTL signals output encoder. Motor position and speed can be controlled with accuracy of  $\pm$  0.09 ° (Multiplying by 4 times) in a magnetic field of 3 [T]. It is ideal as a motor for high-precision positioning stages used in MRI.



% There is a mounting screw hole with a depth of 3.5 mm with 3-M3 PCD  $\Phi 28$  on the motor base side

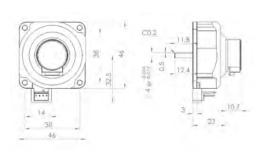
Model Name	Motor with 1,000 p/r encoder PSM40N-ET
Drive Frequency	52~58 [KHz] Number of rotations from 1 A
Drive Voltage	130 [Vrms] 300 280[rpm]
Rated Speed	150[rpm] 200 - 0.15[N·m] / 150[rpm]
Maximum Speed	250[rpm] 150 125 1
Rated Torque	0.15 [N·m] 100 100 100 100 100 100 100 100 100 10
Maximum Torque	0.3 [N·m] 50 to Torque
Holding Torque	0.3 [N·m] 0 0.1 0.2 0.3 0.4 [N·m]
Direction & Response	CW、CCW、Less than 1 [ms] ( No-load )
Temperature Range	-10 ~ +55 [°C]
Life Time	3,000 [Hours]
Size(W×D×H)	46×46×46 [mm]
Weight	90[g]
Encoder resolution	1,000 [p/r]
Minimum Accuracy	0.09°

## PSM40N-ET2



Small motor with 2,000 p/r encoder for magnetic field environment.

Equipped with 2,000 pulse/turn TTL signals output encoder. Motor position and speed can be controlled with an accuracy of  $\pm$  0.045  $^{\circ}$  (Multiplying by 4 times) in a magnetic field of 3 [T]. It is ideal as a motor for ultra-high precision indexing equipment used in MRI.



 $\ensuremath{\%}$  There is a mounting screw hole with a depth of 3.5 mm with 3-M3 PCD  $\Phi28$  on the motor base side

Model Name	Motor with 2,000	0 p/r encoder PSM40N-E2T
Drive Frequency	52~58 [KHz]	Number of rotations [rom] A
Drive Voltage	130 [Vrms]	300 280[rpm] - 250
Rated Speed	150[rpm]	200 0.15[N·m] / 150[rpm]
Maximum Speed	250[rpm]	150
Rated Torque	0.15 [N·m]	75 0.3[N·m] / 20[rpm]
Maximum Torque	0.3 [N·m]	50 - 25 -
Holding Torque	0.3 [N·m]	0 0.1 0.2 0.3 0.4 [N·m]
Direction & Response	CW、CCW、Less t	than 1 [ms] ( No-load )
Temperature Range	-10 ~ +55 [°C]	
Life Time	3,000 [Hours]	
Size(W×D×H)	46×46×46 [mm	n]
Weight	90[g]	
Encoder resolution	2,000[p/r]	
Minimum Accuracy	0.045°	