

## Hybrid Type Stepping Motor 20mm square type

Stepping motors rotate at fixed angles with digitally controlled electronic pulses and they are able to start, stop and position with good control characteristics.

Hybrid-type stepping motors consist of a rotor with permanent magnets and magnetic bodies, and by using Minebea's high-precision ball bearings they can perform highly precise and reliable motions.

Our new 20mm (Nema 8) stepping motors are available in two motor lengths of 30mm and 40mm. This small size 2-phase stepping motors are suitable to devices where the space is quite limited and which require high step accuracy and resolution, contributing to reduction in size and weight.

The standard connector type simplifies the wiring process in assembling automation equipment and labor-saving devices.



Applications: medical equipments, inspection devices, electric cylinders, electric grippers, electronic microscope, and devices with space limitations.

RoHS Compliant

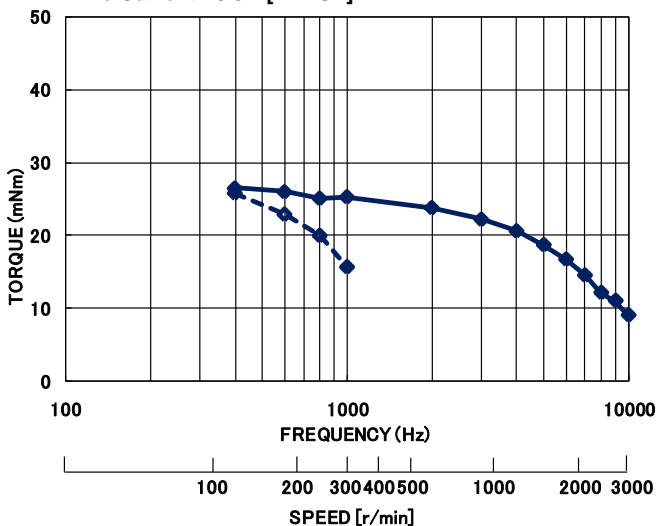
### Lineup

Model	Motor Size (mm)	Step Angle (deg)	Drive Sequence	Rated Current (A)	Resistance (ohms)	Holding Torque (mNm)	Inductance (mH)	Detent Torque (mNm)	Mass (g)
08PM-K049BSTDCN	□20 × 30	1.8	BI-POLAR	0.5	8.0	20	3.8	2	50
08PM-K139BSTDCN	□20 × 40	1.8	BI-POLAR	0.6	6.5	36	3.2	2.5	70

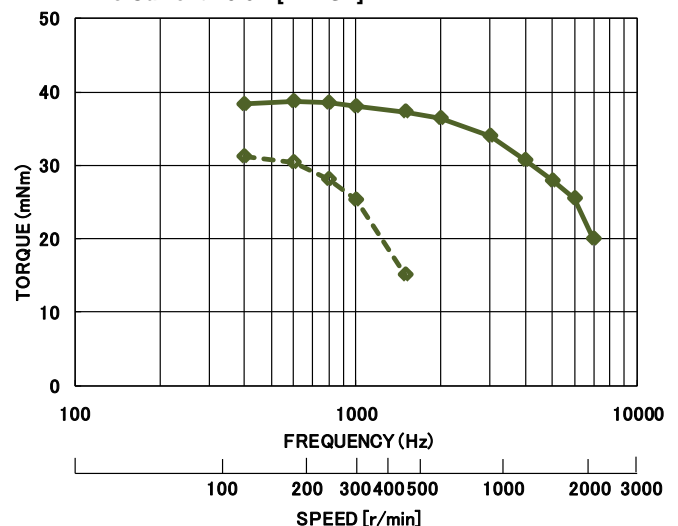
\*300mm lead wires will be supplied with motors.

### Torque / Speed Characteristics

Model No: 08PM-K049BSTDCN  
 Driver: Chopper Dual  
 Supply Voltage: 24.0(Volt)  
 Drive Current : 0.5A [PHASE]



Model No: 08PM-K139BSTDCN  
 Driver: Chopper Dual  
 Supply Voltage: 24.0(Volt)  
 Drive Current : 0.6A [PHASE]



—: Pull-in torque  
 - - -: Pull-out torque

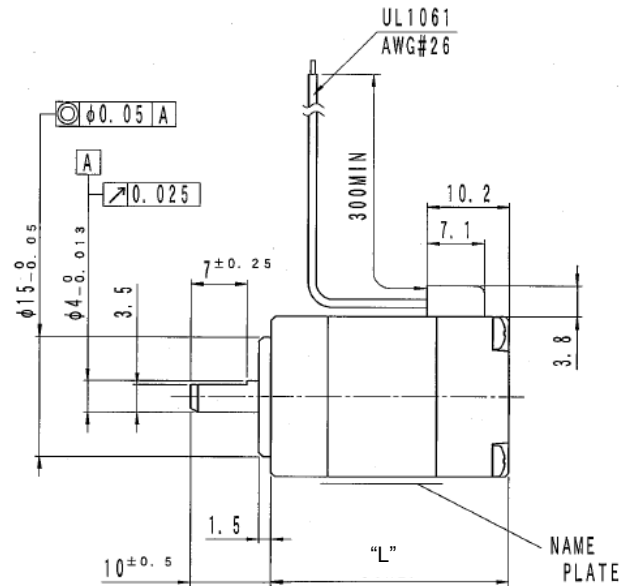
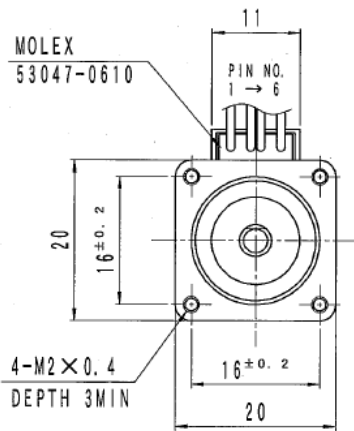
### General Specifications

Step Accuracy	±5%
Temperature Rise	80°C MAX
Ambient Temperature Range	-10°C ~ +50°C
Insulation Resistance	100MΩ MIN. DC 500V
Dielectric Strength	AC 500V 1min
Radial Play	20μm MAX. (at 4.4N{450gf} [Load])
End Play	80μm MAX. (at 4.4N{450gf} [Load])

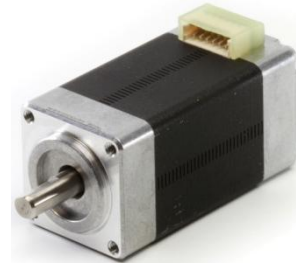
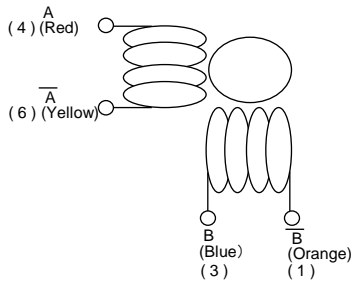
■ Specifications are subject to change without notice.

## Outline

Model	"L" (mm)
08PM-K049BSTDCN	30
08PM-K139BSTDCN	40



## BI-POLAR Wiring Connection Diagram



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