

## Applications

Head Drive for Floppy Disk Drive  
 Pick Up Drive for CD  
 Pick Up Drive for DVD

## Reference Characteristics

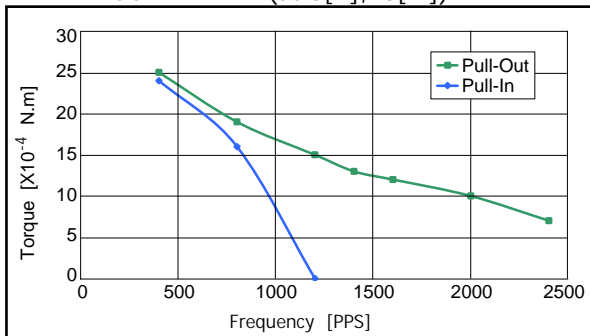
Motor Size	PL15S-020	
Number of Steps per Rotation	20	
Drive Method	2-2 PHASE	
Drive Circuit	BIPOLAR CONST. VOLT.	
Drive Voltage	5[V]	
Coil Resistance/Phase	10[Ω]	
Magnet Material	Nd-Fe-B bonded magnet (MS70)	
Holding Torque	30[X10 <sup>-4</sup> N.m]	
Maximum PULL-IN Frequency	1450[PPS]	

### Typical Torque Characteristics

Driver Frequency	400[PPS]	1400[PPS]
PULL-OUT Torque	25[X10 <sup>-4</sup> N.m]	13[X10 <sup>-4</sup> N.m]

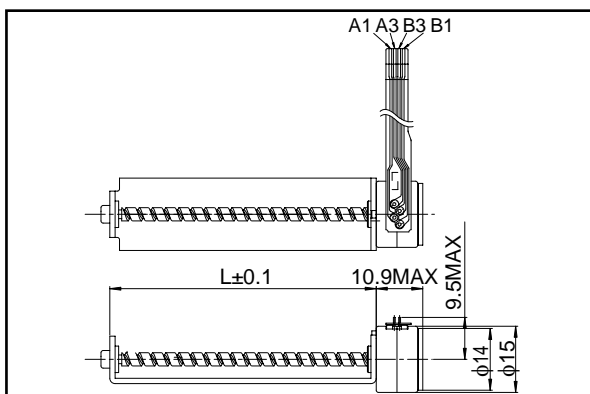
## Torque Characteristics

PL LEAD SCREW TYPE(at 5[V],10[Ω])

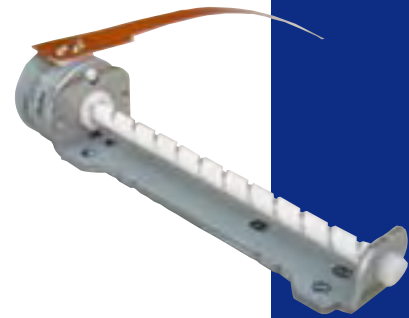


These torque values are reference only.  
 Heat radiation conditions and temperature rise effect by duty are different on each equipment, therefore please select motors after considering the heat conditions in the actual equipment.

## Dimensions



# PL15S-020



PM Motor  
 PL Type

## Switching Sequence (Viewed from Lead Screw Side)

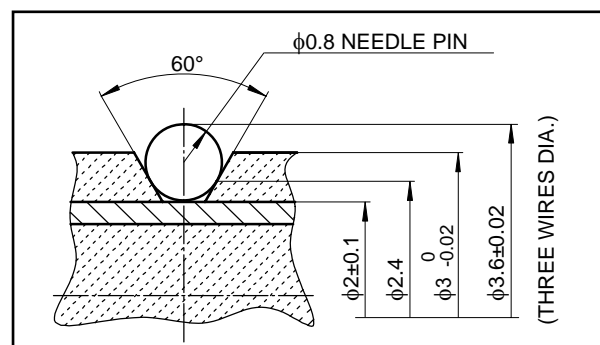
STEP	TERMINAL	A1	A2	B1	B3
1		-	+	+	-
2		-	+	-	+
3		+	-	-	+
4		+	-	+	-

CW ↓      ↑ CCW

## Lead Screw Spec

OUTSIDE DIA.	φ3
MINOR DIA.	φ2
PITCH DIA.	φ2.4
PITCH	3.0
LEAD ANGLE	21°41' 49'
LEAD DIRECTION	RIGHT-HAND SINGLE THREAD
SIMPLE PITCH ERROR	0.020
CUMULATIVE PITCH ERROR	0.030

## Detail of Screw



Performance values shown on this website are representative.  
 Motor design and specifications are subject to change without notice.