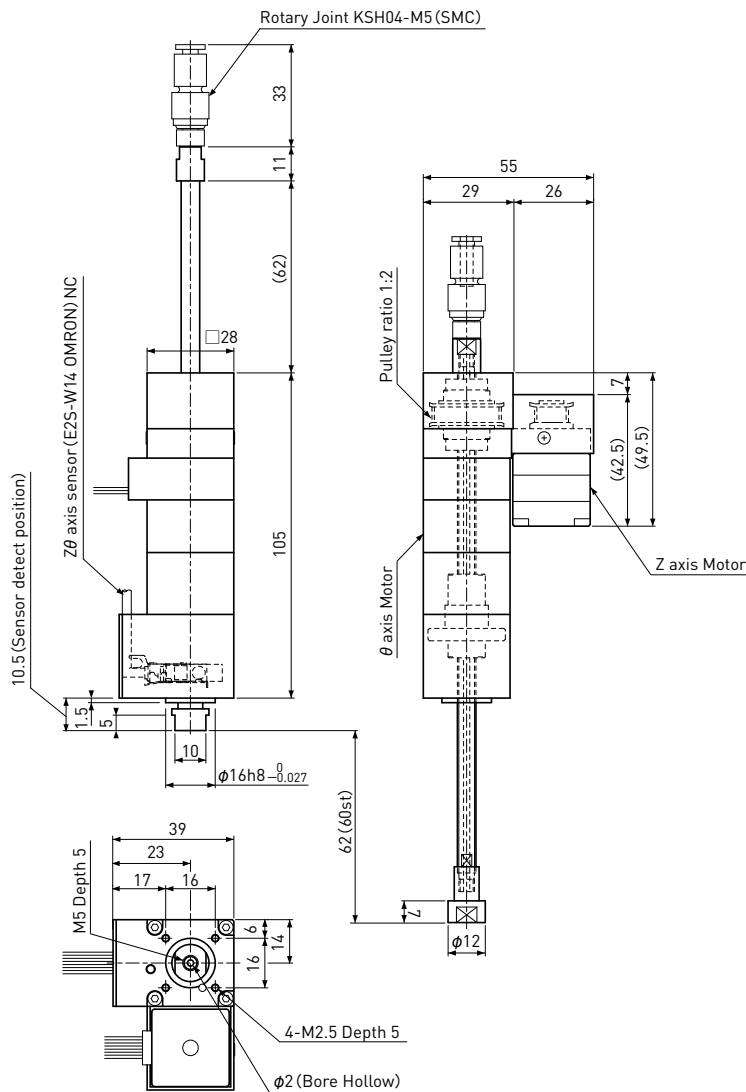


## HDVZ28 - G10 - 060 N

□25/28 (NEMA10/11) 2-phase Stepping Motor  
Lead 10mm Travel 60mm

Parts List		
Motor	Z	NEMA 10 Stepping Motor 0.7A/phase
	$\theta$	NEMA 11 Hollow Stepping Motor 0.67A/phase
Drive Screw	Ball Screw $\phi 6$ (Lead 10mm)	
Sliding Guide	Ball Spline $\phi 6$ mm	
Sensor (Linear, Rotary)	Proximity Sensor E2S-W14-1M(OMRON)	

## Z-axis Motor

A	Red
$\bar{A}$	Yellow
B	Blue
$\bar{B}$	Orange

UL1061,AWG26 (300mm)

 $\theta$ -axis Motor

A	Black
$\bar{A}$	Green
B	Red
$\bar{B}$	Blue

UL1061,AWG24 (300mm)

Sensor(Z,  $\theta$ -axis)

+12~24V	Brown
LS	Black
GND	Blue

1000mm

## Specifications

※The numbers in table below are reference. Detail dimensions will be provided by drawing.

Items	Z Axis	$\theta$ Axis
Movable Range	60mm	$\pm 360^\circ$
Repeatability	$\pm 0.020$ mm	$\pm 0.03^\circ$
Resolution	25 $\mu$ m (Full Step)	1.8° (Full Step)
Maximum Speed	200mm / sec	3 rev / sec
Maximum acceleration	1 m/sec <sup>2</sup>	150 $\pi$ rad/sec <sup>2</sup>
Reference Thrust Force	5N	—
Maximum Permissible Moment	—	0.15 $\times 10^{-4}$ kg·m <sup>2</sup> (※1)
Reduction ratio	1/2	—
Mass	440g	
Operating Temperature	0~40°C (No Condensation)	

Reference of Moment of Inertia		
Dia.	Height	
	Aluminum	Steel
$\phi 20$ mm	340mm (300g)	120mm (300g)
$\phi 30$ mm	65mm (130g)	25mm (130g)
$\phi 40$ mm	20mm (75g)	7.5mm (75g)

## Precautions

- 1) The Z-axis does not have brake device. Please be careful when the power supply is switched off in case of Z-axis may free-fall.
- 2) Reference of Moment of Inertia table shows the theoretical values. KSS recommends that you should apply actual moment to the machine and confirm the safety operation before use.

※1 For the Maximum Permissible Moment, see "Reference of Moment of Inertia" table above.

※2 For the technical information, see "Actuator Technical Description".