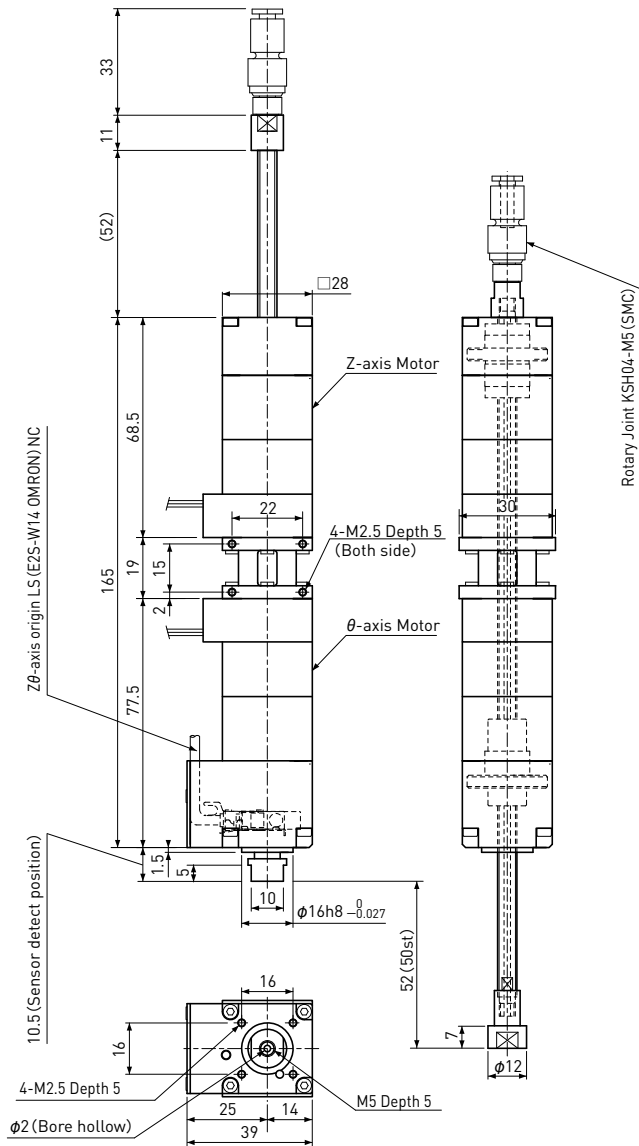


Standard style of VZθ DD series

Direct Drive type

DDVZ28 - G10 - 050 N

□28 / NEMA 11 2-phase Stepping Motor
Lead 10mm Travel 50mm



Parts List	
Motor	NEMA 11 Hollow Stepping Motor 0.67A/phase
Drive Screw	Ball Screw φ6 (Lead 10mm)
Sliding Guide	Ball Spline φ6mm
Sensor (Linear, Rotary)	Proximity Sensor E2S-W14-1M(OMRON)

Motor (Z, θ -axis)	
A	Black
Ā	Green
B	Red
B̄	Blue

UL1061,AWG24 (300mm)

Sensor (Z, θ -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	θ Axis
Movable Range	50mm	± 360°
Repeatability	±0.010mm	±0.03°
Resolution	50 μm (Full Step)	1.8° (Full Step)
Maximum Speed	120mm / sec	3 rev / sec
Maximum acceleration	0.6 m/sec ²	150π rad/sec ²
Reference Thrust Force	5N	—
Maximun Permissible Moment	—	0.15×10 ⁻⁴ kg·m ² (※1)
Mass	540g	
Operating Temperature	0~40°C (No Condensation)	

Reference of Moment of Inertia		
Dia.	Height	
	Aluminum	Steel
φ20mm	340mm (300g)	120mm (300g)
φ30mm	65mm (130g)	25mm (130g)
φ40mm	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 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.

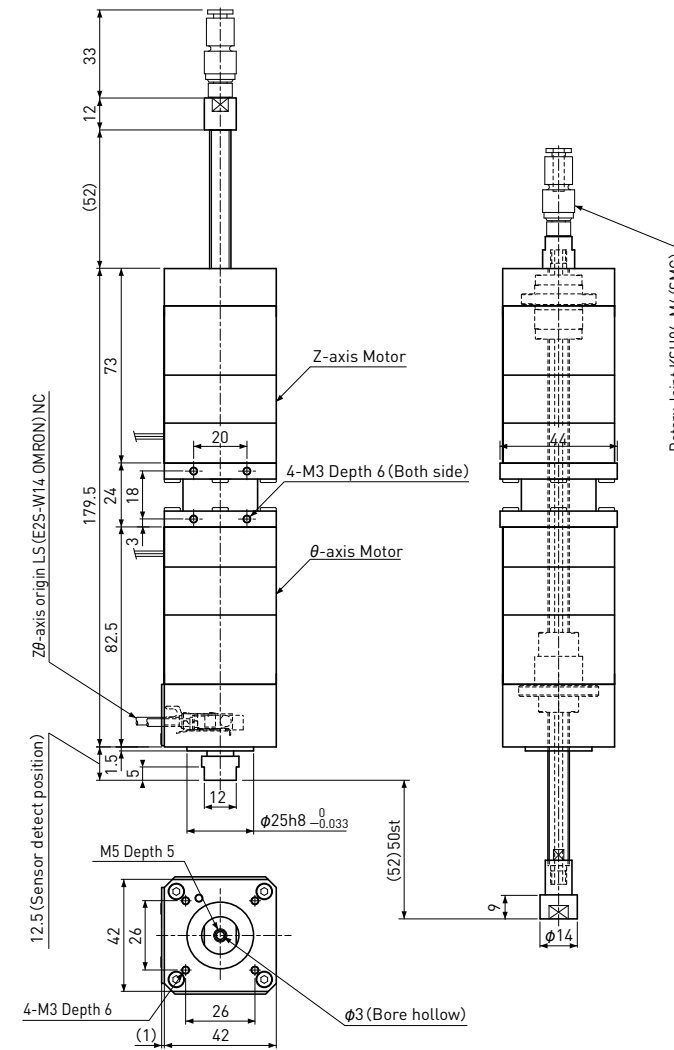
※1 For the Maximum Permissible Moment, see "Reference of Moment of Inertia" table above.
 ※2 For the technical information, see "Actuator Technical Description".

Standard style of VZθ DD series

Direct Drive type

DDVZ42 - G10 - 050 N

□42 / NEMA 17 2-phase Stepping Motor
Lead 10mm Travel 50mm



Parts List	
Motor	NEMA 17 Hollow Stepping Motor 1.2A/phase
Drive Screw	Ball Screw φ8 (Lead 10mm)
Sliding Guide	Ball Spline φ8mm
Sensor (Linear, Rotary)	Proximity Sensor E2S-W14-1M(OMRON)

Motor (Z, θ -axis)	
A	Black
Ā	Green
B	Red
B̄	Blue

UL1061,AWG24 (300mm)

Sensor (Z, θ -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	θ Axis
Movable Range	50mm	± 360°
Repeatability	±0.010mm	±0.03°
Resolution	50 μm (Full Step)	1.8° (Full Step)
Maximum Speed	200mm / sec	3 rev / sec
Maximum acceleration	1 m/sec ²	150π rad/sec ²
Reference Thrust Force	25N	—
Maximun Permissible Moment	—	0.15×10 ⁻³ kg·m ² (※1)
Mass	1150g	
Operating Temperature	0~40°C (No Condensation)	

Reference of Moment of Inertia		
Dia.	Height	
	Aluminum	Steel
φ30mm	670mm (1300g)	240mm (1300g)
φ50mm	85mm (460g)	30mm (460g)
φ100mm	5mm (110g)	1.5mm (90g)

Precautions
 1) The Z-axis does not have brake device. Please be careful when the power supply is switched off in case 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".