

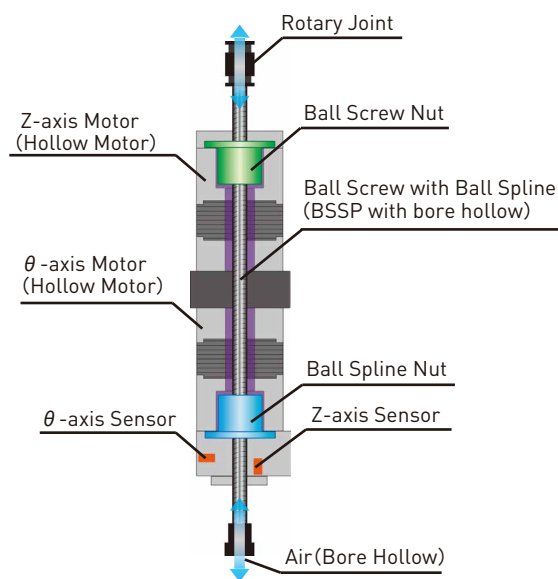
Q&A

Question:

Please let me know the principle of operation for V-Z- θ Actuator!

Below we will explain the operating principle of Direct Drive type, Hybrid type and Belt Drive type Actuator.

【Direct Drive】



-Principle of Operation- Linear Motion (Z)

Linear motion by driving a Z-axis Motor and rotating the Ball Screw Nut. At this time, the Ball Spline Nut plays a role of anti-rotating device and slide guide of a Screw Shaft.

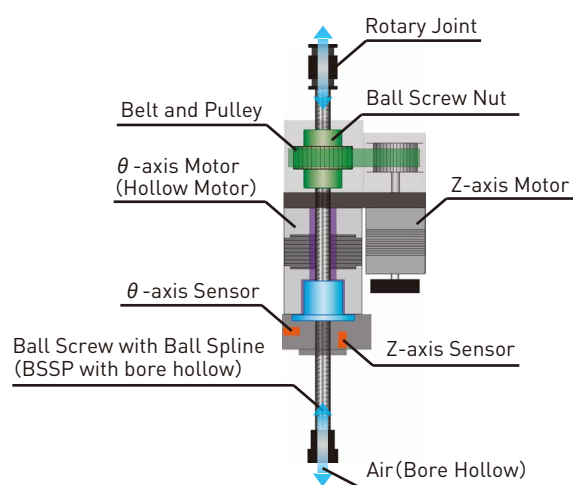
Rotation (θ)

Turn the Ball Screw Nut and Ball Spline Nut at the same time, same speed and direction, the Shaft rotates without moving up and down.

Vacuum (V)

Bore Hollow can be multi uses. For example vacuum and blow function.

【Hybrid Drive】



-Principle of Operation- Linear Motion (Z)

For linear motion, drive the Ball Screw Nut by Z-axis Motor through the belt. In this case, Ball Spline Nut plays a role of slide guide and anti-rotating device.

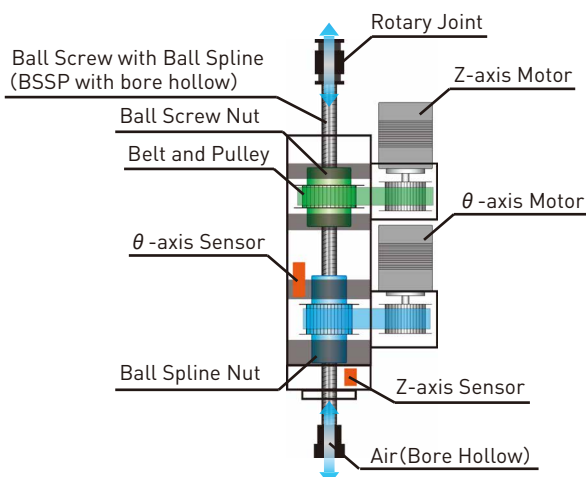
Rotation (θ)

Turn the Ball Screw Nut and Ball Spline Nut at the same time, same speed and direction, the Shaft rotates without moving up and down.

Vacuum (V)

Bore Hollow can be multi uses. For example, vacuum and blow function.

【Belt Drive】



-Principle of Operation- Linear Motion (Z)

For linear motion, drive the Ball Screw Nut by Z-axis Motor through the Belt. In this case, Ball Spline Nut plays a role of slide guide and anti-rotating device.

Rotation (θ)

Turn the Ball Screw Nut and Ball Spline Nut at the same time, same speed and direction, the Shaft rotates without moving up and down.

Vacuum (V)

Bore Hollow can be multi uses. For example, vacuum and blow function.

You can create better image if you look at our YouTube videos!