Free Joint

Absorbs misalignment and lack of parallelism between driven body and cylinder

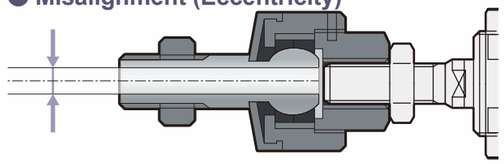
Effect

- Prevents rod metal from being snagged.
- Packing damage prevention.
- Easy assembly centering.
- Prevents chattering of cylinders.
- Low pressure actuation.
- Prevents reduction in thrust.

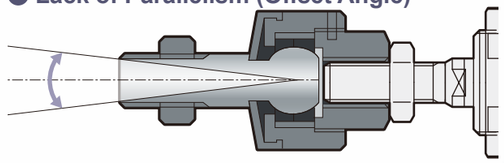
Functional Explanation

Lateral load is the biggest weak point of pneumatic cylinders. When using a cylinder, it is necessary to create a state where no lateral load is applied to the Piston Rod so that the direction of motion of the Piston Rod is on the same line as the direction of motion of the load. This product is an important part that absorbs misalignment (eccentricity) and lack of parallelism (offset angle) between the driven body and the cylinder, reducing lateral load.

● Misalignment (Eccentricity)



● Lack of Parallelism (Offset Angle)

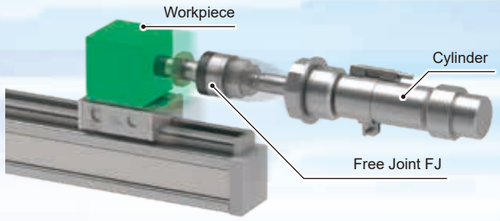


Free Joint FJ Series

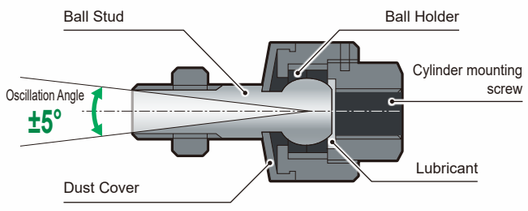
Applicable Cylinder Bore ø20 to ø200

This is the most versatile floating joint that transmits the high thrust of a cylinder using a ball joint system.

Easy alignment of centers and parallelism



Filled with lubricant, no lubrication required
Compatible with high tensile/compressive forces
Oscillation Angle ±5°
With Dust Cover



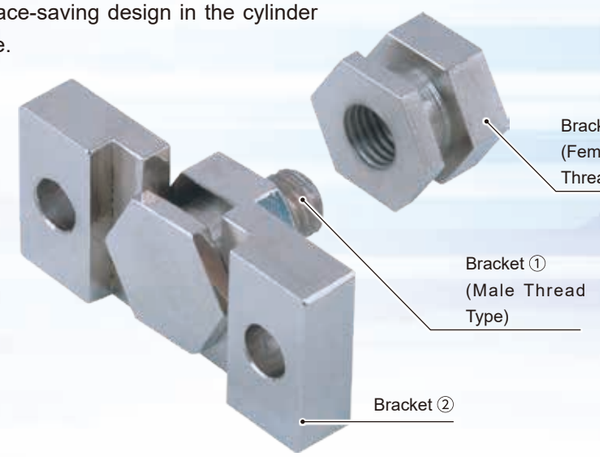
3 mounting types standardized

Basic type　Foot type　Flange Type

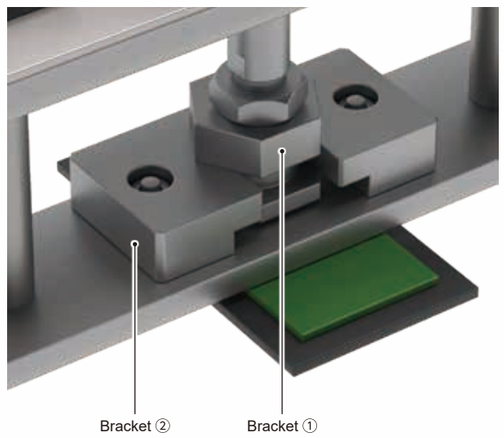
Simple Flow Controller FK Series

Applicable Cylinder Bore ø6 to ø100

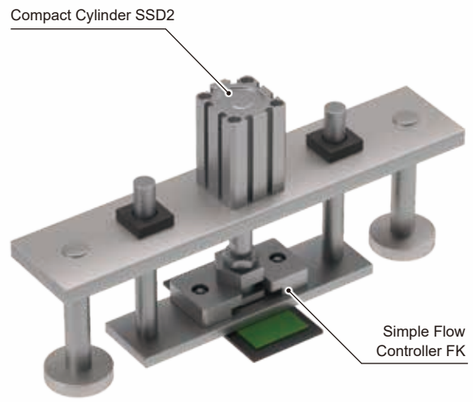
Due to its thin shape, space-saving design in the cylinder stroke direction is possible.



Easy alignment of centers and parallelism



Matching with Compact Cylinder



Mountable in a short time