



UNIT III

FUSION 360

PRIMITIVE SHAPES

Solid primitives

The following commands in the **Design** workspace, in the **Solid > Create** panel, let you create a solid body from a primitive shape in Fusion 360.

You can use the following commands to create a solid body from a primitive shape:

- **Box** 
- **Cylinder** 
- **Sphere** 
- **Torus** 
- **Coil** 
- **Pipe** 

Note: Some commands also appear in the **Generative Design**, **Simulation**, and **Manufacture** workspaces. The organization of commands differs in each workspace.

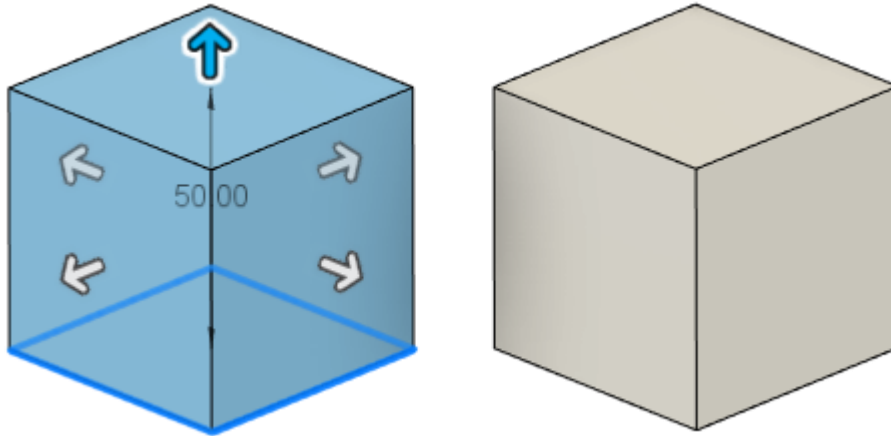
You can specify the type of operation you need for your design.

Operation	Description
Join	Combines the new body with an existing body.
Cut	Cuts an area out of an existing body.
Intersect	Creates a body at the intersection of an existing body and the new body.
New Body	Creates a new body in the active component.
New Component	Creates a new body in a new component.

Box

The **Box** command creates a solid body in the shape of a primitive box.

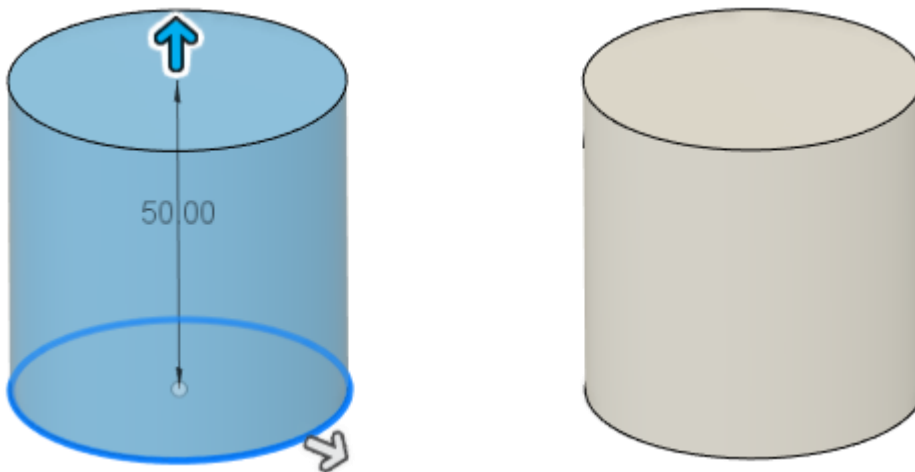
You select a plane or planar face, place the first corner, specify the length and width, then specify the height of the box.



Cylinder

The **Cylinder** command creates a solid body in the shape of a primitive cylinder.

You select a plane or planar face, place the center point, specify the diameter, then specify the height of the cylinder.



Sphere

The **Sphere** command creates a solid body in the shape of a primitive sphere.

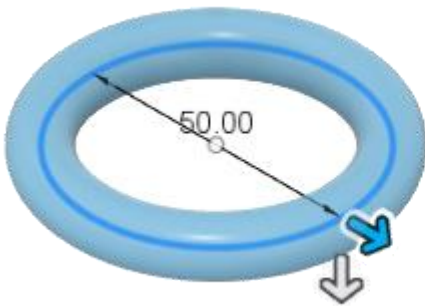
You select a plane or planar face, place the center point, then specify the diameter of the sphere.



Torus

The **Torus** command creates a solid body in the shape of a primitive torus.

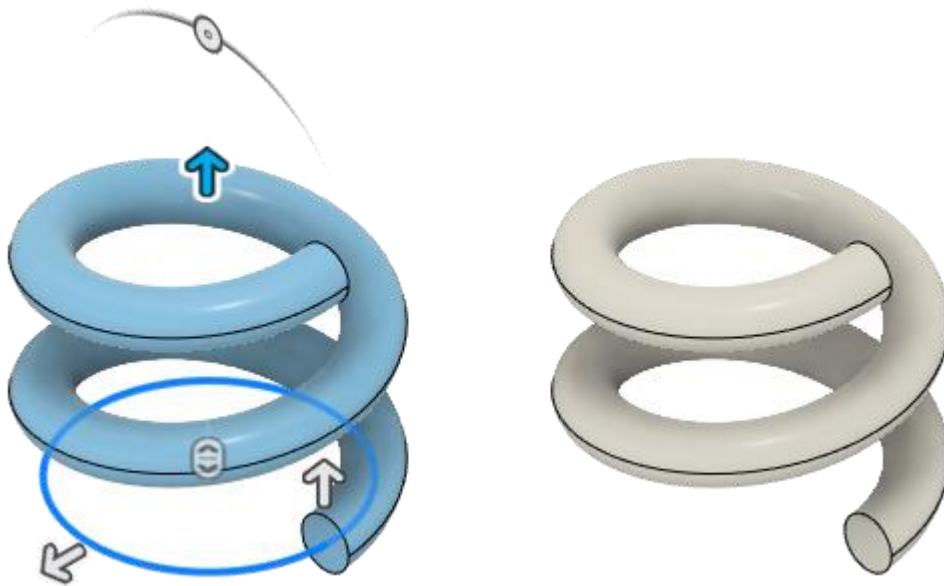
You select a plane or planar face, place the center point, specify the inner diameter, then specify the torus diameter. You can also select the position of the torus relative to the inner diameter.



Coil

The **Coil** command creates a solid body in the shape of a primitive coil.

You select a plane or planar face, place the center point, specify the diameter, then adjust the coil settings. You can adjust the coil type, rotation, diameter, number of revolutions, height, angle, and section shape.



Pipe

The **Pipe** command creates a solid body in the shape of a primitive pipe that follows a path.

You select a path for the pipe to follow, then specify the distance, section shape, and section size. You can also choose to hollow the pipe.

