

Generic Spring Constraint

Reference

Panel:

Physics ▸ Rigid Body Constraint

Type:

Generic Spring

The generic spring constraint adds some spring parameters for the X/Y/Z axes to all the options available on the Generic constraint. Using the spring alor allows the objects to bounce around as if attached with a spring anchored at the constraint object. This is usually a little too much freedom, so most applications will benefit from enabling translation or rotation constraints.

If the damping on the springs is set to 1, then the spring forces are prevented from realigning the anchor points, leading to strange behavior. If your spring are acting weird, check the damping.

Options

TODO


Update image

▼ Rigid Body Constraint

Type: Generic Spring

☒ Enabled

☒ Disable Collisions

Object 1: 

Object 2: 

☐ Breakable

Threshold: 10.00

☐ Override Iterations

Iterations: 10

Limits:

X Axis

Lower: -1.000

Upper: 1.000

Y Axis

Lower: -1.000

Upper: 1.000

Z Axis

Lower: -1.000

Upper: 1.000

X Angle

Lower: -45°

Upper: 45°

Y Angle

Lower: -45°

Upper: 45°

Z Angle

Lower: -45°

Upper: 45°

Springs:

X Axis

Stiffness: 10.00

Damping: 0.50

Y Axis

Stiffness: 10.00

Damping: 0.50

Z Axis

Stiffness: 10.00

Damping: 0.50

X Angle

Stiffness: 10.00

Damping: 0.50

Y Angle

Stiffness: 10.00

Damping: 0.50

Z Angle

Stiffness: 10.00

Damping: 0.50

Generic Spring constraint options.

Limits

X/Y/Z Axis

Enables/disables limit translation on X, Y or Z axis respectively.

Lower

Lower limit of translation for X, Y or Z axis respectively.

Upper

Upper limit of translation for X, Y or Z axis respectively.

X/Y/Z Angle

Enables/disables limit rotation around the X, Y or Z axis respectively.

Lower

Lower limit of rotation for X, Y or Z axis respectively.

Upper

Upper limit of rotation for X, Y or Z axis respectively.

Springs

X/Y/Z Axis

Enables/disables springs translation on X, Y or Z axis respectively.

Stiffness

Spring Stiffness of the translation on X, Y or Z axis respectively. Specifies how “bendy” the spring is.

Damping

Spring Damping of the translation on X, Y or Z axis respectively. Amount of damping the spring has.

X/Y/Z Angle

Enables/disables springs rotation around the X, Y or Z axis respectively.

Stiffness

Spring Stiffness of the rotation around the X, Y or Z axis respectively. Specifies how “bendy” the spring is.

Damping

Spring Damping of the rotation around the X, Y or Z axis respectively. Amount of damping the spring has.