



26.10.20 Editors - Properties Editor - Particle Properties Tab - Force Field Settings panel

Table of content

Force Field Settings panel.....	4
Self Effect.....	4
Effector Amount.....	4
Type 1 and Type 2 Sub panels.....	4
Type 1 / 2.....	4
Force.....	4
Strength.....	4
Flow.....	4
Affect.....	4
Location.....	4
Rotation.....	4
Noise Amount.....	4
Seed.....	5
Gravitation.....	5
Absorption.....	5
Wind Factor.....	5
Wind.....	5
Strength.....	5
Flow.....	5
Affect.....	5
Location.....	5
Rotation.....	5
Noise Amount.....	5
Seed.....	5
Absorption.....	5
Wind Factor.....	5
Vortex.....	6
Strength.....	6
Flow.....	6
Affect.....	6
Location.....	6
Rotation.....	6
Noise Amount.....	6
Seed.....	6
Absorption.....	6
Wind Factor.....	6
Magnetic.....	6
Strength.....	6
Flow.....	6
Affect.....	6
Location.....	6
Rotation.....	6
Noise Amount.....	7
Seed.....	7
Absorption.....	7

Wind Factor.....	7
Harmonic.....	7
Strength.....	7
Damping.....	7
Rest Length.....	7
Affect.....	7
Location.....	7
Rotation.....	7
Noise Amount.....	7
Seed.....	7
Multiple Springs.....	7
Absorption.....	7
Wind Factor.....	7
Charge.....	8
Strength.....	8
Flow.....	8
Affect.....	8
Location.....	8
Rotation.....	8
Noise Amount.....	8
Seed.....	8
Absorption.....	8
Wind Factor.....	8
Lenard Jones.....	8
Strength.....	8
Flow.....	8
Affect.....	9
Location.....	9
Rotation.....	9
Noise Amount.....	9
Seed.....	9
Absorption.....	9
Wind Factor.....	9
Texture.....	9
Strength.....	9
Flow.....	9
Affect.....	9
Location.....	9
Rotation.....	9
Noise Amount.....	9
Seed.....	9
Absorption.....	9
Wind Factor.....	10
Curve Guide.....	10
Strength.....	10
Flow.....	10
Affect.....	10
Location.....	10
Rotation.....	10
Noise Amount.....	10
Seed.....	10
Absorption.....	10
Wind Factor.....	10

Boid.....	10
Strength.....	10
Flow.....	10
Affect.....	11
Location.....	11
Rotation.....	11
Noise Amount.....	11
Seed.....	11
Absorption.....	11
Wind Factor.....	11
Turbulence.....	11
Strength.....	11
Size.....	11
Flow.....	11
Affect.....	11
Location.....	11
Rotation.....	11
Noise Amount.....	11
Seed.....	11
Global.....	12
Absorption.....	12
Wind Factor.....	12
Drag.....	12
Linear.....	12
Quadratic.....	12
Affect.....	12
Location.....	12
Rotation.....	12
Noise Amount.....	12
Seed.....	12
Absorption.....	12
Wind Factor.....	12
Fluid Flow.....	13
Strength.....	13
Flow.....	13
Affect.....	13
Location.....	13
Rotation.....	13
Noise Amount.....	13
Seed.....	13
Absorption.....	13
Wind Factor.....	13
Falloff subpanel.....	13
Z Direction.....	13
Power.....	13
Min Distance.....	13
Max Distance.....	13

Force Field Settings panel

The Force Field Settings panel allows you to make each individual act as a force field, allowing them to affect other dynamic systems, or even, each other.

Self Effect

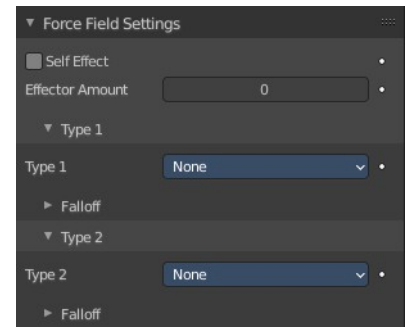
Causes the particle force fields to have an effect on other particles within the same system.

Effector Amount

Set how many of the particles act as force fields. 0 means all of them are effectors.

Type 1 and Type 2 Sub panels

You can give particle systems up to two force fields. By default they do not have any force field enabled. Choose an effector type from the selector to enable them.



Type 1 / 2

Force

Radial field towards the center of an object.

Strength

The strength of the force.

Flow

Convert effector force into air force velocity.

Affect

Location

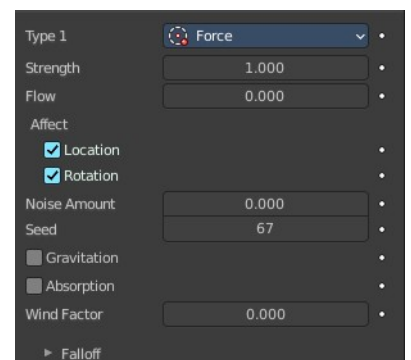
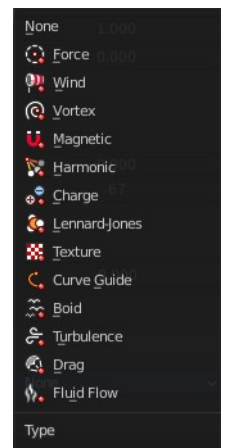
Affect the location of the particles.

Rotation

Affect the rotation of the particles.

Noise Amount

Amount of noise for the force effect.



Seed

The random seed for the noise amount.

Gravitation

Multiply force by 1 divided through the distance in square.

Absorption

Force gets absorbed by collision objects.

Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.

Wind

Constant force along the Z axis.

Strength

The strength of the force.

Flow

Convert effector force into air force velocity.

Affect

Location

Affect the location of the particles.

Rotation

Affect the rotation of the particles.

Noise Amount

Amount of noise for the force effect.

Seed

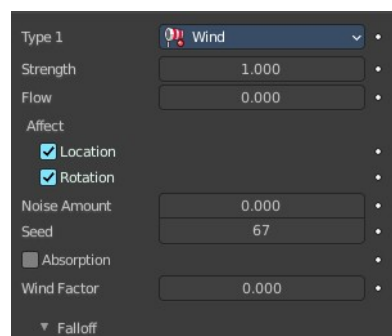
The random seed for the noise amount.

Absorption

Force gets absorbed by collision objects.

Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.



Vortex

Spiraling force that twists the force object's local Z axis.

Strength

The strength of the force.

Flow

Convert effector force into air force velocity.

Affect

Location

Affect the location of the particles.

Rotation

Affect the rotation of the particles.

Noise Amount

Amount of noise for the force effect.

Seed

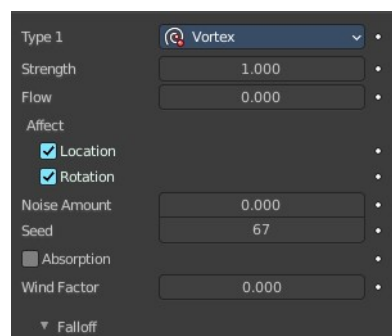
The random seed for the noise amount.

Absorption

Force gets absorbed by collision objects.

Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.



Magnetic

Force field depends of the speed of the particles.

Strength

The strength of the force.

Flow

Convert effector force into air force velocity.

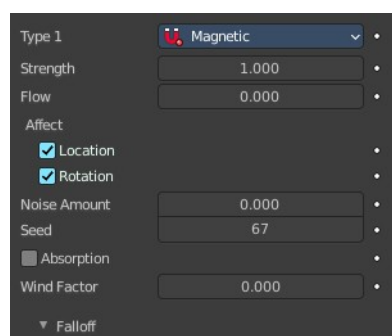
Affect

Location

Affect the location of the particles.

Rotation

Affect the rotation of the particles.



Noise Amount

Amount of noise for the force effect.

Seed

The random seed for the noise amount.

Absorption

Force gets absorbed by collision objects.

Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.

Harmonic

The source of this force field is the zero point of a harmonic oscillator.

Strength

The strength of the force.

Damping

Damping of the harmonic force.

Rest Length

The rest length of the harmonic force.

Affect

Location

Affect the location of the particles.

Rotation

Affect the rotation of the particles.

Noise Amount

Amount of noise for the force effect.

Seed

The random seed for the noise amount.

Multiple Springs

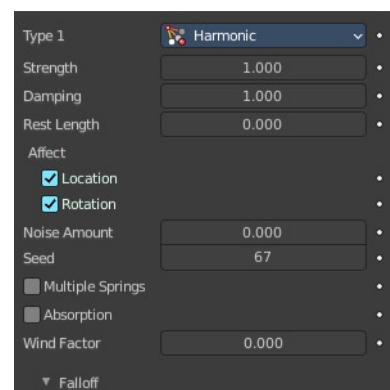
Every point is effected by multiple springs.

Absorption

Force gets absorbed by collision objects.

Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.



Charge

Special force field based on the charge of particles. Charge force fields just affects other charge force fields.

Strength

The strength of the force.

Flow

Convert effector force into air force velocity.

Affect

Location

Affect the location of the particles.

Rotation

Affect the rotation of the particles.

Noise Amount

Amount of noise for the force effect.

Seed

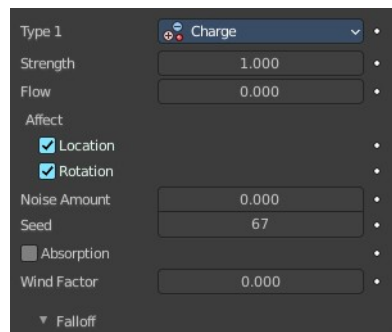
The random seed for the noise amount.

Absorption

Force gets absorbed by collision objects.

Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.



Lenard Jones

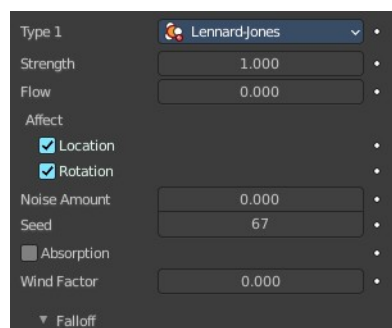
Force field based on the lennard jones potential. The Lennard-Jones potential describes the interactions of two neutral particles using a relatively simple mathematical model.

Strength

The strength of the force.

Flow

Convert effector force into air force velocity.



Affect

Location

Affect the location of the particles.

Rotation

Affect the rotation of the particles.

Noise Amount

Amount of noise for the force effect.

Seed

The random seed for the noise amount.

Absorption

Force gets absorbed by collision objects.

Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.

Texture

Force field based on a texture. There is no way to add a texture here though.

Strength

The strength of the force.

Flow

Convert effector force into air force velocity.

Affect

Location

Affect the location of the particles.

Rotation

Affect the rotation of the particles.

Noise Amount

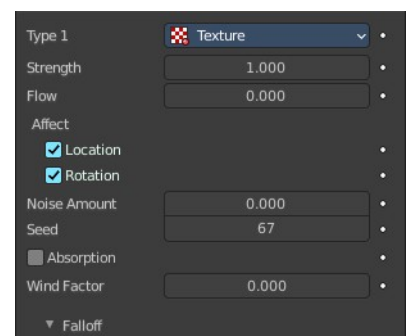
Amount of noise for the force effect.

Seed

The random seed for the noise amount.

Absorption

Force gets absorbed by collision objects.



Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.

Curve Guide

Creates a force along a curve object. There is no way to add a curve here though.

Strength

The strength of the force.

Flow

Convert effector force into air force velocity.

Affect

Location

Affect the location of the particles.

Rotation

Affect the rotation of the particles.

Noise Amount

Amount of noise for the force effect.

Seed

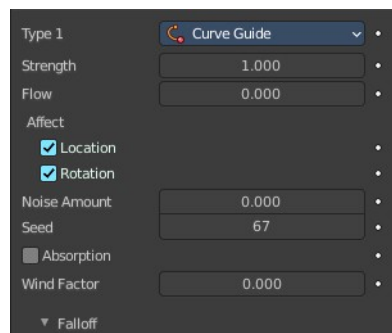
The random seed for the noise amount.

Absorption

Force gets absorbed by collision objects.

Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.



Boid

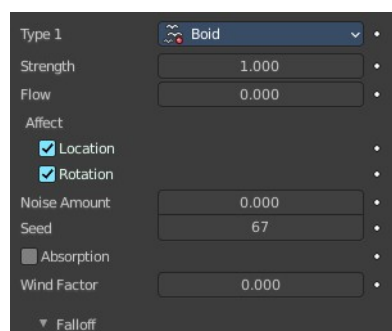
Creates a force that acts as a boid's predator or target.

Strength

The strength of the force.

Flow

Convert effector force into air force velocity.



Affect

Location

Affect the location of the particles.

Rotation

Affect the rotation of the particles.

Noise Amount

Amount of noise for the force effect.

Seed

The random seed for the noise amount.

Absorption

Force gets absorbed by collision objects.

Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.

Turbulence

Create turbulence with a noise field.

Strength

The strength of the force.

Size

The size of the turbulence.

Flow

Convert effector force into air force velocity.

Affect

Location

Affect the location of the particles.

Rotation

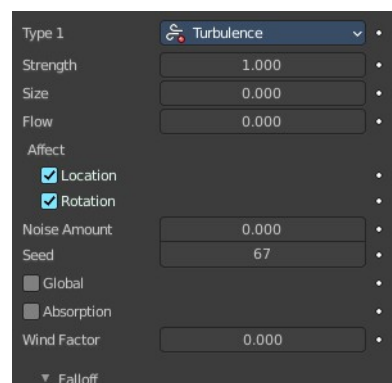
Affect the rotation of the particles.

Noise Amount

Amount of noise for the force effect.

Seed

The random seed for the noise amount.



Global

Use global coordinates for the turbulence.

Absorption

Force gets absorbed by collision objects.

Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.

Drag

Create a force that dampens motion.

Linear

Drag component proportional to velocity.

Quadratic

Drag component proportional to square velocity.

Affect

Location

Affect the location of the particles.

Rotation

Affect the rotation of the particles.

Noise Amount

Amount of noise for the force effect.

Seed

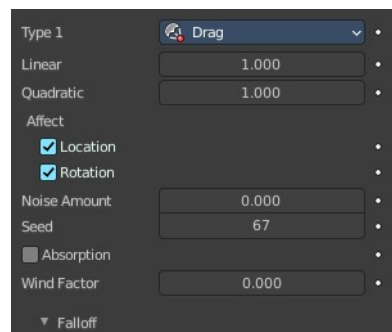
The random seed for the noise amount.

Absorption

Force gets absorbed by collision objects.

Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.



Fluid Flow

Create a force field based on fluid simulation velocities.

Strength

The strength of the force.

Flow

Convert effector force into air force velocity.

Affect

Location

Affect the location of the particles.

Rotation

Affect the rotation of the particles.

Noise Amount

Amount of noise for the force effect.

Seed

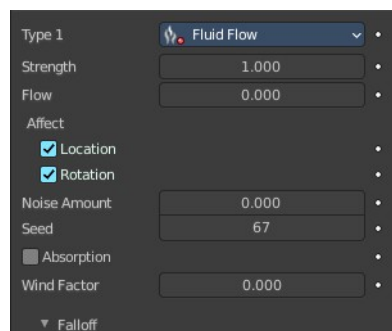
The random seed for the noise amount.

Absorption

Force gets absorbed by collision objects.

Wind Factor

How much the force is reduced when acting parallel to a surface. Like a cloth.



Falloff subpanel

Z Direction

Apply the effect in both directions along Z axis, or just one direction.

Power

How quickly the strength falls off with increasing distance from the force field.

Min Distance

Minimum distance for the fields falloff.

Max Distance

Maximum distance for the fields falloff.

