

## Table of Contents

Table of Contents	1
MotionPathVert(bpy_struct)	3
Inherited Properties	3
Inherited Functions	3
References	4
NodeSocket(bpy_struct)	78
Inherited Properties	81
Inherited Functions	81
References	81
NodeSocketBool(NodeSocketStandard)	83
Inherited Properties	83
Inherited Functions	84
NodeSocketCollection(NodeSocketStandard)	85
Inherited Properties	85
Inherited Functions	86
NodeSocketColor(NodeSocketStandard)	87
Inherited Properties	87
Inherited Functions	88
NodeSocketFloat(NodeSocketStandard)	89
Inherited Properties	89
Inherited Functions	90
NodeSocketFloatAngle(NodeSocketStandard)	91
Inherited Properties	91
Inherited Functions	92
NodeSocketFloatColorTemperature(NodeSocketStandard)	93
Inherited Properties	93
Inherited Functions	94
NodeSocketFloatDistance(NodeSocketStandard)	95
Inherited Properties	95
Inherited Functions	96
NodeSocketFloatFactor(NodeSocketStandard)	97
Inherited Properties	97
Inherited Functions	98
NodeSocketFloatFrequency(NodeSocketStandard)	99
Inherited Properties	99
Inherited Functions	100
NodeSocketFloatPercentage(NodeSocketStandard)	101
Inherited Properties	101
Inherited Functions	102
NodeSocketFloatTime(NodeSocketStandard)	103
Inherited Properties	103
Inherited Functions	104
NodeSocketFloatTimeAbsolute(NodeSocketStandard)	105
Inherited Properties	105
Inherited Functions	106
NodeSocketFloatUnsigned(NodeSocketStandard)	107
Inherited Properties	107
Inherited Functions	108
NodeSocketFloatWavelength(NodeSocketStandard)	109
Inherited Properties	109
Inherited Functions	110
NodeSocketGeometry(NodeSocketStandard)	111
Inherited Properties	111
Inherited Functions	112
NodeSocketImage(NodeSocketStandard)	113
Inherited Properties	113
Inherited Functions	114
NodeSocketInt(NodeSocketStandard)	115

Inherited Properties	115
Inherited Functions	116
<b>NodeSocketIntFactor(NodeSocketStandard)</b>	<b>117</b>
Inherited Properties	117
Inherited Functions	118
<b>NodeSocketIntPercentage(NodeSocketStandard)</b>	<b>119</b>
Inherited Properties	119
Inherited Functions	120
<b>NodeSocketIntUnsigned(NodeSocketStandard)</b>	<b>121</b>
Inherited Properties	121
Inherited Functions	122
<b>NodeSocketMaterial(NodeSocketStandard)</b>	<b>123</b>
Inherited Properties	123
Inherited Functions	124
<b>NodeSocketMatrix(NodeSocketStandard)</b>	<b>125</b>
Inherited Properties	125
Inherited Functions	126
<b>NodeSocketMenu(NodeSocketStandard)</b>	<b>127</b>
Inherited Properties	127
Inherited Functions	128
<b>NodeSocketObject(NodeSocketStandard)</b>	<b>129</b>
Inherited Properties	129
Inherited Functions	130
<b>NodeSocketRotation(NodeSocketStandard)</b>	<b>131</b>
Inherited Properties	131
Inherited Functions	132

[Skip to content](#)

# MotionPathVert(bpy\_struct)

base class — [bpy\\_struct](#)

**class** `bpy.types.MotionPathVert(bpy_struct)`

Cached location on path

**co**

**TYPE:**

[mathutils.Vector](#) of 3 items in  $[-\text{inf}, \text{inf}]$ , default (0.0, 0.0, 0.0)

**select**

Path point is selected for editing

**TYPE:**

boolean, default False

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

[bpy.types.Struct](#) subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- [bpy\\_struct.id\\_data](#)

## Inherited Functions

- [bpy\\_struct.as\\_pointer](#)
- [bpy\\_struct.driver\\_add](#)
- [bpy\\_struct.driver\\_remove](#)
- [bpy\\_struct.get](#)
- [bpy\\_struct.id\\_properties\\_clear](#)
- [bpy\\_struct.id\\_properties\\_ensure](#)
- [bpy\\_struct.id\\_properties\\_ui](#)
- [bpy\\_struct.is\\_property\\_hidden](#)
- [bpy\\_struct.is\\_property\\_overridable\\_library](#)
- [bpy\\_struct.items](#)
- [bpy\\_struct.keyframe\\_delete](#)
- [bpy\\_struct.keyframe\\_insert](#)
- [bpy\\_struct.keys](#)
- [bpy\\_struct.path\\_from\\_id](#)
- [bpy\\_struct.path\\_resolve](#)
- [bpy\\_struct.pop](#)
- [bpy\\_struct.property\\_overridable\\_library\\_set](#)
- [bpy\\_struct.property\\_unset](#)

- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.type_recast`
- `bpy_struct.values`

## References

- `MotionPath.points`

[Previous](#)  
[MotionPath\(bpy\\_struct\)](#)  
[Report issue on this page](#)

Copyright © Blender Authors  
Made with [Furo](#)

Ne  
MovieClip(I





































































































































































[Skip to content](#)

# NodeSocket(bpy\_struct)

base class — [bpy\\_struct](#)

subclasses — [NodeSocketStandard](#)

**class** bpy.types.**NodeSocket(bpy\_struct)**

Input or output socket of a node

**bl\_idname**

**TYPE:**

string, default “”, (never None)

**bl\_label**

Label to display for the socket type in the UI

**TYPE:**

string, default “”, (never None)

**bl\_subtype\_label**

Label to display for the socket subtype in the UI

**TYPE:**

string, default “”, (never None)

**description**

Socket tooltip

**TYPE:**

string, default “”, (never None)

**display\_shape**

Socket shape

**TYPE:**

enum in [‘CIRCLE’, ‘SQUARE’, ‘DIAMOND’, ‘CIRCLE\_DOT’, ‘SQUARE\_DOT’, ‘DIAMOND\_DOT’], default ‘CIRCLE’

**enabled**

Enable the socket

**TYPE:**

boolean, default False

**hide**

Hide the socket

**TYPE:**

boolean, default False

**hide\_value**

Hide the socket input value

**TYPE:**

boolean, default False

**identifier**

Unique identifier for mapping sockets

**TYPE:**

string, default "", (readonly, never None)

**is\_linked**

True if the socket is connected

**TYPE:**

boolean, default False, (readonly)

**is\_multi\_input**

True if the socket can accept multiple ordered input links

**TYPE:**

boolean, default False, (readonly)

**is\_output**

True if the socket is an output, otherwise input

**TYPE:**

boolean, default False, (readonly)

**is\_unavailable**

True if the socket is unavailable

**TYPE:**

boolean, default False, (readonly)

**label**

Custom dynamic defined socket label

**TYPE:**

string, default "", (readonly, never None)

**link\_limit**

Max number of links allowed for this socket

**TYPE:**

int in [1, 4095], default 0

**name**

Socket name

**TYPE:**

string, default "", (never None)

**node**

Node owning this socket

**TYPE:**

[Node](#), (readonly)

**pin\_gizmo**

Keep gizmo visible even when the node is not selected

**TYPE:**

boolean, default False

## show\_expanded

Socket links are expanded in the user interface

### TYPE:

boolean, default False

## type

Data type

### TYPE:

enum in [Node Socket Type Items](#), default 'VALUE'

## links

List of node links from or to this socket.

### TYPE:

[NodeLinks](#)

Note

Takes  $O(\text{len}(\text{nodetree.links}))$  time.

(readonly)

## draw(context, layout, node, text)

Draw socket

### PARAMETERS:

- **layout** ([UILayout](#), (never None)) – Layout, Layout in the UI
- **node** ([Node](#), (never None)) – Node, Node the socket belongs to
- **text** (*string*, (never None)) – Text, Text label to draw alongside properties

## draw\_color(context, node)

Color of the socket icon

### PARAMETERS:

**node** ([Node](#), (never None)) – Node, Node the socket belongs to

### RETURNS:

Color

### RETURN TYPE:

float array of 4 items in [0, 1]

## classmethod draw\_color\_simple()

Color of the socket icon. Used to draw sockets in places where the socket does not belong to a node, like the node interface panel. Also use to draw node sockets if draw\_color is not defined.

### RETURNS:

Color

### RETURN TYPE:

float array of 4 items in [0, 1]

## classmethod bl\_ma\_get\_subclass(id, default=None)

### PARAMETERS:

**id** (*str*) – The RNA type identifier.

### RETURNS:



#### RETURNS:

The RNA type or default when not found.

#### RETURN TYPE:

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

#### PARAMETERS:

**id** (*str*) – The RNA type identifier.

#### RETURNS:

The class or default when not found.

#### RETURN TYPE:

`type`

## Inherited Properties

- `bpy_struct.id_data`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`

## References

- `CompositorNodeOutputFileFileSlots.new`
- `CompositorNodeOutputFileFileSlots.remove`
- `CompositorNodeOutputFileLayerSlots.new`
- `CompositorNodeOutputFileLayerSlots.remove`
- `Node.inputs`
- `Node.outputs`
- `NodeInputs.new`
- `NodeInputs.remove`
- `NodeLink.from_socket`
- `NodeLink.to_socket`
- `NodeLinks.new`
- `NodeLinks.new`
- `NodeOutputs.new`
- `NodeOutputs.remove`
- `NodeTreeInterfaceSocketGeometr`
- `NodeTreeInterfaceSocketImage.f`
- `NodeTreeInterfaceSocketImage.i`
- `NodeTreeInterfaceSocketInt.fro`
- `NodeTreeInterfaceSocketInt.ini`
- `NodeTreeInterfaceSocketIntFact`
- `NodeTreeInterfaceSocketIntFact`
- `NodeTreeInterfaceSocketIntPerc`
- `NodeTreeInterfaceSocketIntPerc`
- `NodeTreeInterfaceSocketIntUnsi`
- `NodeTreeInterfaceSocketIntUnsi`
- `NodeTreeInterfaceSocketMateria`
- `NodeTreeInterfaceSocketMateria`
- `NodeTreeInterfaceSocketMatrix.`

- [NodeTreeInterfaceSocket.from\\_socket](#)
- [NodeTreeInterfaceSocket.init\\_socket](#)
- [NodeTreeInterfaceSocketBool.from\\_socket](#)
- [NodeTreeInterfaceSocketBool.init\\_socket](#)
- [NodeTreeInterfaceSocketCollection.from\\_socket](#)
- [NodeTreeInterfaceSocketCollection.init\\_socket](#)
- [NodeTreeInterfaceSocketColor.from\\_socket](#)
- [NodeTreeInterfaceSocketColor.init\\_socket](#)
- [NodeTreeInterfaceSocketFloat.from\\_socket](#)
- [NodeTreeInterfaceSocketFloat.init\\_socket](#)
- [NodeTreeInterfaceSocketFloatAngle.from\\_socket](#)
- [NodeTreeInterfaceSocketFloatAngle.init\\_socket](#)
- [NodeTreeInterfaceSocketFloatColorTemperature.from\\_socket](#)
- [NodeTreeInterfaceSocketFloatColorTemperature.init\\_socket](#)
- [NodeTreeInterfaceSocketFloatDistance.from\\_socket](#)
- [NodeTreeInterfaceSocketFloatDistance.init\\_socket](#)
- [NodeTreeInterfaceSocketFloatFactor.from\\_socket](#)
- [NodeTreeInterfaceSocketFloatFactor.init\\_socket](#)
- [NodeTreeInterfaceSocketFloatFrequency.from\\_socket](#)
- [NodeTreeInterfaceSocketFloatFrequency.init\\_socket](#)
- [NodeTreeInterfaceSocketFloatPercentage.from\\_socket](#)
- [NodeTreeInterfaceSocketFloatPercentage.init\\_socket](#)
- [NodeTreeInterfaceSocketFloatTime.from\\_socket](#)
- [NodeTreeInterfaceSocketFloatTime.init\\_socket](#)
- [NodeTreeInterfaceSocketFloatTimeAbsolute.from\\_socket](#)
- [NodeTreeInterfaceSocketFloatTimeAbsolute.init\\_socket](#)
- [NodeTreeInterfaceSocketFloatUnsigned.from\\_socket](#)
- [NodeTreeInterfaceSocketFloatUnsigned.init\\_socket](#)
- [NodeTreeInterfaceSocketFloatWavelength.from\\_socket](#)
- [NodeTreeInterfaceSocketFloatWavelength.init\\_socket](#)
- [NodeTreeInterfaceSocketGeometry.from\\_socket](#)
- [NodeTreeInterfaceSocketMatrix.](#)
- [NodeTreeInterfaceSocketMenu.fr](#)
- [NodeTreeInterfaceSocketMenu.in](#)
- [NodeTreeInterfaceSocketObject.](#)
- [NodeTreeInterfaceSocketObject.](#)
- [NodeTreeInterfaceSocketRotatio](#)
- [NodeTreeInterfaceSocketRotatio](#)
- [NodeTreeInterfaceSocketShader.](#)
- [NodeTreeInterfaceSocketShader.](#)
- [NodeTreeInterfaceSocketString.](#)
- [NodeTreeInterfaceSocketString.](#)
- [NodeTreeInterfaceSocketStringF](#)
- [NodeTreeInterfaceSocketStringF](#)
- [NodeTreeInterfaceSocketTexture](#)
- [NodeTreeInterfaceSocketTexture](#)
- [NodeTreeInterfaceSocketVector.](#)
- [NodeTreeInterfaceSocketVector.](#)
- [NodeTreeInterfaceSocketVectorA](#)
- [NodeTreeInterfaceSocketVectorA](#)
- [NodeTreeInterfaceSocketVectorD](#)
- [NodeTreeInterfaceSocketVectorD](#)
- [NodeTreeInterfaceSocketVectorE](#)
- [NodeTreeInterfaceSocketVectorE](#)
- [NodeTreeInterfaceSocketVectorT](#)
- [NodeTreeInterfaceSocketVectorT](#)
- [NodeTreeInterfaceSocketVectorV](#)
- [NodeTreeInterfaceSocketVectorV](#)
- [NodeTreeInterfaceSocketVectorX](#)
- [NodeTreeInterfaceSocketVectorX](#)
- [UILayout.template\\_node\\_link](#)
- [UILayout.template\\_node\\_view](#)

# NodeSocketBool(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketBool(NodeSocketStandard)`

Boolean value socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

boolean, default False

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketCollection(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketCollection(NodeSocketStandard)`

Collection socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

`Collection`

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketColor(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketColor(NodeSocketStandard)`

RGBA color socket of a node

## default\_value

Input value used for unconnected socket

## TYPE:

float array of 4 items in [0, inf], default (0.0, 0.0, 0.0, 0.0)

## links

List of node links from or to this socket.

## TYPE:

`NodeLinks`

## Note

Takes  $O(\text{len}(\text{nodetree.links}))$  time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

## PARAMETERS:

**id** (*str*) – The RNA type identifier.

## RETURNS:

The RNA type or default when not found.

## RETURN TYPE:

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

## PARAMETERS:

**id** (*str*) – The RNA type identifier.

## RETURNS:

The class or default when not found.

## RETURN TYPE:

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`



# NodeSocketFloat(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

`class bpy.types.NodeSocketFloat(NodeSocketStandard)`

Floating-point number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

float in `[-inf, inf]`, default 0.0

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

`classmethod bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

`classmethod bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketFloatAngle(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketFloatAngle(NodeSocketStandard)`

Floating-point number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

float in `[-inf, inf]`, default `0.0`

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketFloatColorTemperature(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketFloatColorTemperature(NodeSocketStandard)`

Floating-point number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

float in `[-inf, inf]`, default 0.0

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketFloatDistance(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketFloatDistance(NodeSocketStandard)`

Floating-point number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

float in `[-inf, inf]`, default 0.0

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`



# NodeSocketFloatFactor(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketFloatFactor(NodeSocketStandard)`

Floating-point number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

float in [0, 1], default 0.0

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketFloatFrequency(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketFloatFrequency(NodeSocketStandard)`

Floating-point number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

float in `[-inf, inf]`, default 0.0

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketFloatPercentage(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketFloatPercentage(NodeSocketStandard)`

Floating-point number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

float in `[-inf, inf]`, default 0.0

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketFloatTime(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketFloatTime(NodeSocketStandard)`

Floating-point number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

float in `[-inf, inf]`, default 0.0

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`



# NodeSocketFloatTimeAbsolute(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketFloatTimeAbsolute(NodeSocketStandard)`

Floating-point number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

float in `[-inf, inf]`, default `0.0`

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketFloatUnsigned(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketFloatUnsigned(NodeSocketStandard)`

Floating-point number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

float in `[0, inf]`, default `0.0`

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketFloatWavelength(NodeSocketStandard)

base classes — [bpy\\_struct](#), [NodeSocket](#), [NodeSocketStandard](#)

**class** `bpy.types.NodeSocketFloatWavelength(NodeSocketStandard)`

Floating-point number socket of a node

## default\_value

Input value used for unconnected socket

## TYPE:

float in `[-inf, inf]`, default 0.0

## links

List of node links from or to this socket.

## TYPE:

[NodeLinks](#)

## Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

## PARAMETERS:

**id** (*str*) – The RNA type identifier.

## RETURNS:

The RNA type or default when not found.

## RETURN TYPE:

[bpy.types.Struct](#) subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

## PARAMETERS:

**id** (*str*) – The RNA type identifier.

## RETURNS:

The class or default when not found.

## RETURN TYPE:

type

## Inherited Properties

- [bpy\\_struct.id\\_data](#)
- [NodeSocket.name](#)
- [NodeSocket.label](#)
- [NodeSocket.identifier](#)
- [NodeSocket.description](#)
- [NodeSocket.is\\_output](#)
- [NodeSocket.hide](#)
- [NodeSocket.enabled](#)
- [NodeSocket.show\\_expanded](#)
- [NodeSocket.hide\\_value](#)
- [NodeSocket.pin\\_gizmo](#)
- [NodeSocket.node](#)
- [NodeSocket.type](#)
- [NodeSocket.display\\_shape](#)
- [NodeSocket.bl\\_idname](#)

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

[Skip to content](#)

# NodeSocketGeometry(NodeSocketStandard)

base classes — [bpy\\_struct](#), [NodeSocket](#), [NodeSocketStandard](#)

**class** `bpy.types.NodeSocketGeometry(NodeSocketStandard)`

Geometry socket of a node

## links

List of node links from or to this socket.

## TYPE:

[NodeLinks](#)

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_ma_get_subclass(id, default=None)`

## PARAMETERS:

**id** (*str*) – The RNA type identifier.

## RETURNS:

The RNA type or default when not found.

## RETURN TYPE:

[bpy.types.Struct](#) subclass

**classmethod** `bl_ma_get_subclass_py(id, default=None)`

## PARAMETERS:

**id** (*str*) – The RNA type identifier.

## RETURNS:

The class or default when not found.

## RETURN TYPE:

type

## Inherited Properties

- [bpy\\_struct.id\\_data](#)
- [NodeSocket.name](#)
- [NodeSocket.label](#)
- [NodeSocket.identifier](#)
- [NodeSocket.description](#)
- [NodeSocket.is\\_output](#)
- [NodeSocket.hide](#)
- [NodeSocket.enabled](#)
- [NodeSocket.link\\_limit](#)
- [NodeSocket.is\\_linked](#)
- [NodeSocket.is\\_unavailable](#)
- [NodeSocket.is\\_multi\\_input](#)
- [NodeSocket.show\\_expanded](#)
- [NodeSocket.hide\\_value](#)
- [NodeSocket.pin\\_gizmo](#)
- [NodeSocket.node](#)
- [NodeSocket.type](#)
- [NodeSocket.display\\_shape](#)
- [NodeSocket.bl\\_idname](#)
- [NodeSocket.bl\\_label](#)
- [NodeSocket.bl\\_subtype\\_label](#)
- [NodeSocket.links](#)
- [NodeSocketStandard.links](#)

## Inherited Functions

- [bpy\\_struct.as\\_pointer](#)
- [bpy\\_struct.driver\\_add](#)
- [bpy\\_struct.driver\\_remove](#)
- [bpy\\_struct.get](#)
- [bpy\\_struct.id\\_properties\\_clear](#)
- [bpy\\_struct.id\\_properties\\_ensure](#)
- [bpy\\_struct.id\\_properties\\_ui](#)
- [bpy\\_struct.is\\_property\\_hidden](#)
- [bpy\\_struct.is\\_property\\_overridable\\_library](#)
- [bpy\\_struct.is\\_property\\_readonly](#)
- [bpy\\_struct.is\\_property\\_set](#)
- [bpy\\_struct.items](#)
- [bpy\\_struct.keyframe\\_delete](#)
- [bpy\\_struct.keyframe\\_insert](#)
- [bpy\\_struct.keys](#)
- [bpy\\_struct.path\\_from\\_id](#)
- [bpy\\_struct.path\\_resolve](#)
- [bpy\\_struct.pop](#)
- [bpy\\_struct.property\\_overridable\\_library\\_set](#)
- [bpy\\_struct.property\\_unset](#)
- [bpy\\_struct.type\\_recast](#)
- [bpy\\_struct.values](#)
- [NodeSocket.draw](#)
- [NodeSocket.draw\\_color](#)
- [NodeSocket.draw\\_color\\_simple](#)
- [NodeSocket.bl\\_rna\\_get\\_subclass](#)
- [NodeSocket.bl\\_rna\\_get\\_subclass\\_py](#)
- [NodeSocketStandard.draw](#)
- [NodeSocketStandard.draw\\_color](#)
- [NodeSocketStandard.draw\\_color\\_simple](#)
- [NodeSocketStandard.bl\\_rna\\_get\\_subclass](#)
- [NodeSocketStandard.bl\\_rna\\_get\\_subclass\\_py](#)



# NodeSocketImage(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketImage(NodeSocketStandard)`

Image socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

`Image`

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketInt(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketInt(NodeSocketStandard)`

Integer number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

`int` in `[-inf, inf]`, default `0`

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketIntFactor(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketIntFactor(NodeSocketStandard)`

Integer number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

`int` in `[0, inf]`, default `1`

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketIntPercentage(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketIntPercentage(NodeSocketStandard)`

Integer number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

`int` in `[0, inf]`, default 100

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`



# NodeSocketIntUnsigned(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketIntUnsigned(NodeSocketStandard)`

Integer number socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

`int` in `[0, inf]`, default `0`

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

`id (str)` – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketMaterial(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketMaterial(NodeSocketStandard)`

Material socket of a node

## **default\_value**

Input value used for unconnected socket

## **TYPE:**

`Material`

## **links**

List of node links from or to this socket.

## **TYPE:**

`NodeLinks`

## Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

## **PARAMETERS:**

**id** (*str*) – The RNA type identifier.

## **RETURNS:**

The RNA type or default when not found.

## **RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

## **PARAMETERS:**

**id** (*str*) – The RNA type identifier.

## **RETURNS:**

The class or default when not found.

## **RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketMatrix(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketMatrix(NodeSocketStandard)`

Matrix value socket of a node

## links

List of node links from or to this socket.

## TYPE:

`NodeLinks`

## Note

Takes  $O(\text{len}(\text{nodetree.links}))$  time.

(readonly)

**classmethod** `bl_ma_get_subclass(id, default=None)`

## PARAMETERS:

**id** (*str*) – The RNA type identifier.

## RETURNS:

The RNA type or default when not found.

## RETURN TYPE:

`bpy.types.Struct` subclass

**classmethod** `bl_ma_get_subclass_py(id, default=None)`

## PARAMETERS:

**id** (*str*) – The RNA type identifier.

## RETURNS:

The class or default when not found.

## RETURN TYPE:

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketMenu(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketMenu(NodeSocketStandard)`

Menu socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

enum in [], default “

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`



# NodeSocketObject(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketObject(NodeSocketStandard)`

Object socket of a node

**default\_value**

Input value used for unconnected socket

**TYPE:**

`Object`

**links**

List of node links from or to this socket.

**TYPE:**

`NodeLinks`

Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The RNA type or default when not found.

**RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

**PARAMETERS:**

**id** (*str*) – The RNA type identifier.

**RETURNS:**

The class or default when not found.

**RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`

# NodeSocketRotation(NodeSocketStandard)

base classes — `bpy_struct`, `NodeSocket`, `NodeSocketStandard`

**class** `bpy.types.NodeSocketRotation(NodeSocketStandard)`

Rotation value socket of a node

## **default\_value**

Input value used for unconnected socket

## **TYPE:**

`mathutils.Euler` rotation of 3 items in `[-inf, inf]`, default `(0.0, 0.0, 0.0)`

## **links**

List of node links from or to this socket.

## **TYPE:**

`NodeLinks`

## Note

Takes `O(len(nodetree.links))` time.

(readonly)

**classmethod** `bl_rna_get_subclass(id, default=None)`

## **PARAMETERS:**

**id** (*str*) – The RNA type identifier.

## **RETURNS:**

The RNA type or default when not found.

## **RETURN TYPE:**

`bpy.types.Struct` subclass

**classmethod** `bl_rna_get_subclass_py(id, default=None)`

## **PARAMETERS:**

**id** (*str*) – The RNA type identifier.

## **RETURNS:**

The class or default when not found.

## **RETURN TYPE:**

type

## Inherited Properties

- `bpy_struct.id_data`
- `NodeSocket.name`
- `NodeSocket.label`
- `NodeSocket.identifier`
- `NodeSocket.description`
- `NodeSocket.is_output`
- `NodeSocket.hide`
- `NodeSocket.enabled`
- `NodeSocket.show_expanded`
- `NodeSocket.hide_value`
- `NodeSocket.pin_gizmo`
- `NodeSocket.node`
- `NodeSocket.type`
- `NodeSocket.display_shape`
- `NodeSocket.bl_idname`

- `NodeSocket.link_limit`
- `NodeSocket.is_linked`
- `NodeSocket.is_unavailable`
- `NodeSocket.is_multi_input`
- `NodeSocket.bl_label`
- `NodeSocket.bl_subtype_label`
- `NodeSocket.links`
- `NodeSocketStandard.links`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `NodeSocket.draw`
- `NodeSocket.draw_color`
- `NodeSocket.draw_color_simple`
- `NodeSocket.bl_rna_get_subclass`
- `NodeSocket.bl_rna_get_subclass_py`
- `NodeSocketStandard.draw`
- `NodeSocketStandard.draw_color`
- `NodeSocketStandard.draw_color_simple`
- `NodeSocketStandard.bl_rna_get_subclass`
- `NodeSocketStandard.bl_rna_get_subclass_py`