

[Skip to content](#)

FreestyleLineStyle(ID)

base classes — `bpy_struct`, `ID`

class `bpy.types.FreestyleLineStyle(ID)`

Freestyle line style, reusable by multiple line sets

active_texture

Active texture slot being displayed

TYPE:

`Texture`

active_texture_index

Index of active texture slot

TYPE:

int in [0, 17], default 0

alpha

Base alpha transparency, possibly modified by alpha transparency modifiers

TYPE:

float in [0, 1], default 1.0

alpha_modifiers

List of alpha transparency modifiers

TYPE:

`LineStyleAlphaModifiers` `bpy_prop_collection` of `LineStyleAlphaModifier`, (readonly)

angle_max

Maximum 2D angle for splitting chains

TYPE:

float in [0, 3.14159], default 0.0

angle_min

Minimum 2D angle for splitting chains

TYPE:

float in [0, 3.14159], default 0.0

animation_data

Animation data for this data-block

TYPE:

`AnimData`, (readonly)

caps

Select the shape of both ends of strokes

- `BUTT` Butt – Butt cap (flat).
- `ROUND` Round – Round cap (half-circle).
- `SQUARE` Square – Square cap (flat and extended).

— — —

TYPE:

enum in ['BUTT', 'ROUND', 'SQUARE'], default 'BUTT'

chain_count

Chain count for the selection of first N chains

TYPE:

int in [0, inf], default 10

chaining

Select the way how feature edges are jointed to form chains

- `PLAIN` Plain – Plain chaining.
- `SKETCHY` Sketchy – Sketchy chaining with a multiple touch.

TYPE:

enum in ['PLAIN', 'SKETCHY'], default 'PLAIN'

color

Base line color, possibly modified by line color modifiers

TYPE:

`mathutils.Color` of 3 items in [0, inf], default (0.0, 0.0, 0.0)

color_modifiers

List of line color modifiers

TYPE:

`LineStyleColorModifiers` `bpy_prop_collection` of `LineStyleColorModifier`, (readonly)

dash1

Length of the 1st dash for dashed lines

TYPE:

int in [0, 65535], default 0

dash2

Length of the 2nd dash for dashed lines

TYPE:

int in [0, 65535], default 0

dash3

Length of the 3rd dash for dashed lines

TYPE:

int in [0, 65535], default 0

gap1

Length of the 1st gap for dashed lines

TYPE:

int in [0, 65535], default 0

gap2

Length of the 2nd gap for dashed lines

TYPE:

int in [0, 65535], default 0

int in [0, 65535], default 0

gap3

Length of the 3rd gap for dashed lines

TYPE:

int in [0, 65535], default 0

geometry_modifiers

List of stroke geometry modifiers

TYPE:

`LineStyleGeometryModifiers bpy_prop_collection of LineStyleGeometryModifier`, (readonly)

integration_type

Select the way how the sort key is computed for each chain

- `MEAN` Mean – The value computed for the chain is the mean of the values obtained for chain vertices.
- `MIN` Min – The value computed for the chain is the minimum of the values obtained for chain vertices.
- `MAX` Max – The value computed for the chain is the maximum of the values obtained for chain vertices.
- `FIRST` First – The value computed for the chain is the value obtained for the first chain vertex.
- `LAST` Last – The value computed for the chain is the value obtained for the last chain vertex.

TYPE:

enum in ['MEAN', 'MIN', 'MAX', 'FIRST', 'LAST'], default 'MEAN'

length_max

Maximum curvilinear 2D length for the selection of chains

TYPE:

float in [0, 10000], default 10000.0

length_min

Minimum curvilinear 2D length for the selection of chains

TYPE:

float in [0, 10000], default 0.0

material_boundary

If true, chains of feature edges are split at material boundaries

TYPE:

boolean, default False

node_tree

Node tree for node-based shaders

TYPE:

`NodeTree`, (readonly)

panel

Select the property panel to be shown

- `STROKES` Strokes – Show the panel for stroke construction.
- `COLOR` Color – Show the panel for line color options.
- `ALPHA` Alpha – Show the panel for alpha transparency options.
- `THICKNESS` Thickness – Show the panel for line thickness options.

- **GEOMETRY** Geometry – Show the panel for stroke geometry options.
- **TEXTURE** Texture – Show the panel for stroke texture options.

TYPE:

enum in ['STROKES', 'COLOR', 'ALPHA', 'THICKNESS', 'GEOMETRY', 'TEXTURE'], default 'STROKES'

rounds

Number of rounds in a sketchy multiple touch

TYPE:

int in [1, 1000], default 3

sort_key

Select the sort key to determine the stacking order of chains

- **DISTANCE_FROM_CAMERA** Distance from Camera – Sort by distance from camera (closer lines lie on top of further lines).
- **2D_LENGTH** 2D Length – Sort by curvilinear 2D length (longer lines lie on top of shorter lines).
- **PROJECTED_X** Projected X – Sort by the projected X value in the image coordinate system.
- **PROJECTED_Y** Projected Y – Sort by the projected Y value in the image coordinate system.

TYPE:

enum in ['DISTANCE_FROM_CAMERA', '2D_LENGTH', 'PROJECTED_X', 'PROJECTED_Y'], default 'DISTANCE_FROM_CAMERA'

sort_order

Select the sort order

- **DEFAULT** Default – Default order of the sort key.
- **REVERSE** Reverse – Reverse order.

TYPE:

enum in ['DEFAULT', 'REVERSE'], default 'DEFAULT'

split_dash1

Length of the 1st dash for splitting

TYPE:

int in [0, 65535], default 0

split_dash2

Length of the 2nd dash for splitting

TYPE:

int in [0, 65535], default 0

split_dash3

Length of the 3rd dash for splitting

TYPE:

int in [0, 65535], default 0

split_gap1

Length of the 1st gap for splitting

TYPE:

int in [0, 65535], default 0

split_gap2

Length of the 2nd gap for splitting

TYPE:

int in [0, 65535], default 0

split_gap3

Length of the 3rd gap for splitting

TYPE:

int in [0, 65535], default 0

split_length

Curvilinear 2D length for chain splitting

TYPE:

float in [0, 10000], default 100.0

texture_slots

Texture slots defining the mapping and influence of textures

TYPE:

`LineStyleTextureSlots` bpy_prop_collection of `LineStyleTextureSlot`, (readonly)

texture_spacing

Spacing for textures along stroke length

TYPE:

float in [0.01, 100], default 1.0

thickness

Base line thickness, possibly modified by line thickness modifiers

TYPE:

float in [0, 10000], default 3.0

thickness_modifiers

List of line thickness modifiers

TYPE:

`LineStyleThicknessModifiers` bpy_prop_collection of `LineStyleThicknessModifier`, (readonly)

thickness_position

Thickness position of silhouettes and border edges (applicable when plain chaining is used with the Same Object option)

- `CENTER` Center – Silhouettes and border edges are centered along stroke geometry.
- `INSIDE` Inside – Silhouettes and border edges are drawn inside of stroke geometry.
- `OUTSIDE` Outside – Silhouettes and border edges are drawn outside of stroke geometry.
- `RELATIVE` Relative – Silhouettes and border edges are shifted by a user-defined ratio.

TYPE:

enum in ['CENTER', 'INSIDE', 'OUTSIDE', 'RELATIVE'], default 'CENTER'

thickness_ratio

A number between 0 (inside) and 1 (outside) specifying the relative position of stroke thickness

TYPE:

float in [0, 1], default 0.5

use_angle_max

Split chains at points with angles larger than the maximum 2D angle

TYPE:

boolean, default False

use_angle_min

Split chains at points with angles smaller than the minimum 2D angle

TYPE:

boolean, default False

use_chain_count

Enable the selection of first N chains

TYPE:

boolean, default False

use_chaining

Enable chaining of feature edges

TYPE:

boolean, default True

use_dashed_line

Enable or disable dashed line

TYPE:

boolean, default False

use_length_max

Enable the selection of chains by a maximum 2D length

TYPE:

boolean, default False

use_length_min

Enable the selection of chains by a minimum 2D length

TYPE:

boolean, default False

use_nodes

Use shader nodes for the line style

TYPE:

boolean, default False

use_same_object

If true, only feature edges of the same object are joined

TYPE:

boolean, default True

use_sorting

Arrange the stacking order of strokes

TYPE:

boolean, default False

use_split_length

Enable chain splitting by curvilinear 2D length

TYPE:

boolean, default False

use_split_pattern

Enable chain splitting by dashed line patterns

TYPE:

boolean, default False

use_texture

Enable or disable textured strokes

TYPE:

boolean, default True

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`
- `ID.name`
- `ID.name_full`
- `ID.id_type`
- `ID.session_uid`
- `ID.is_evaluated`
- `ID.original`
- `ID.users`
- `ID.use_fake_user`
- `ID.use_extra_user`
- `ID.is_embedded_data`
- `ID.is_missing`
- `ID.is_runtime_data`
- `ID.is_editable`
- `ID.tag`
- `ID.is_library_indirect`
- `ID.library`
- `ID.library_weak_reference`
- `ID.asset_data`
- `ID.override_library`
- `ID.preview`

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`
- `ID.rename`
- `ID.evaluated_get`
- `ID.copy`
- `ID.asset_mark`
- `ID.asset_clear`
- `ID.asset_generate_preview`
- `ID.override_create`
- `ID.override_hierarchy_create`
- `ID.user_clear`
- `ID.user_remap`
- `ID.make_local`
- `ID.user_of_id`
- `ID.animation_data_create`
- `ID.animation_data_clear`
- `ID.update_tag`
- `ID.preview_ensure`
- `ID.bl_rna_get_subclass`
- `ID.bl_rna_get_subclass_py`

References

- `bpy.context.line_style`
- `BlendData.linestyles`
- `BlendDataLineStyle.new`
- `BlendDataLineStyle.remove`
- `FreestyleLineSet.linestyle`