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# **well-schematics documentation**

**Mar 02, 2020**



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`well-schematics` is a package to help with making schematic diagrams of the construction of boreholes and wells in matplotlib.

This project is based at [GitHub](#).



# CHAPTER 1

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## Installation

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well-schematics can be installed from PyPI:

```
$ pip install well-schematics
```

And updated from PyPI:

```
$ pip install -U well-schematics
```

The well-schematics PyPI package will install a Python module `well_schematics`:

```
>>> import well_schematics as ws
```



# CHAPTER 2

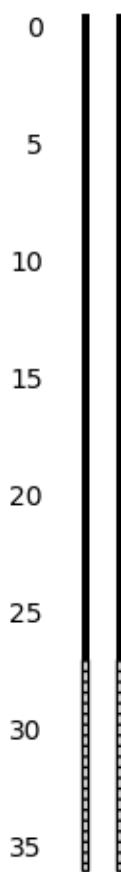
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## Examples

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```
import well_schematics as ws

ws.plot_single_diameter_well(
    [
        {"type": "casing", "top": -0.5, "bottom": 27},
        {"type": "screen", "top": 27, "bottom": 36},
    ]
)
```



# CHAPTER 3

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## well\_schematics developer API

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### 3.1 Groundwater resources

```
well_schematics.plot_single_diameter_well(segments,      ax=None,      tight_layout=True,
                                             depth_tick_markers=False,  pipe_width=0.08,
                                             hatch_density=3)
```

Draw casing in a well which is a single diameter construction.

#### Parameters

- **segments** (*sequence of dicts*) – each dict should be in the form `{"type": <str>, "top": <float>, "bottom": <float>}`. The “type” should be either “casing”, “pipe”, “blank”, or “sump”, or a production zone type (either “screen”, “slotted casing” or “open hole”). “top” and “bottom” are the top and bottom of each segment.
- **ax** (*matplotlib.Axes*) – to draw in
- **tight\_layout** (*bool*) – run `tight_layout()` on `ax.figure` to rearrange things to fit.
- **depth\_tick\_markers** (*bool*) – show tick markers for the vertical depth axis. Labels will always appear.
- **pipe\_width** (*float*) – width of pipe
- **hatch\_density** (*int*) – density of screen hatching

Returns: a list of the artists created.



# CHAPTER 4

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## Indices and tables

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## Index

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### P

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