



# progressbar

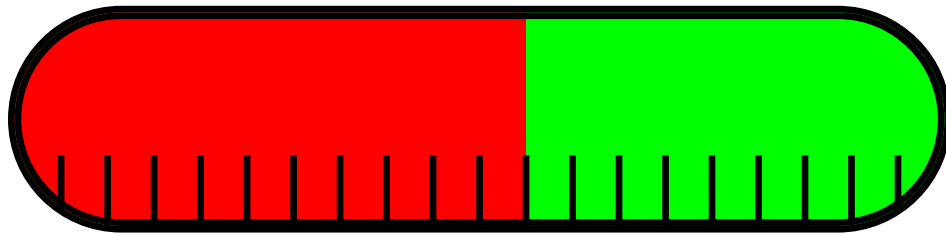
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## Abstract

This package allows you to easily visualize shares of total amounts in the form of a bar. So basically you can convert a number like 0.735 to  using the command `\progressbar{0.735}`.

Of course also a lot of customizations are possible (like this: .



```
\progressbar[width=textwidth, heighta=3cm, filledcolor=
  red, emptycolor=green, borderwidth=5pt, tickwidth
  =2.5pt, roundnessr=0.5, subdivisions=20]{0.55}
```

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## 1 Installation

Make sure the file `progressbar.sty` is placed somewhere, where  $\LaTeX$  can find it. Usually that means, you simply download the package `progressbar` with the  $\LaTeX$ -package-manager of your choice.

### 1.1 Dependencies

You also have to ensure that all packages needed by `progressbar` are present (some package-managers do this for you). The dependencies are:

- `calc`
- `kvsetkeys`
- `kvoptions`
- `tikz`

## 2 How to use progressbar

```
\usepackage{progressbar}
\usepackage[] {progressbar}
```

Like any other package, to use `progressbar`, you have to load it first. You do this with

```
\usepackage{progressbar}
```

or

```
\usepackage [<options>]{progressbar}
```

(You can find an explanation of all options in the section 3.)


Once you have loaded `progressbar`, you can use two different commands, described in the following.

### 2.1 `\progressbar`

```
\progressbar{}
\progressbar[] {}
```


The command

```
\progressbar {<number>}
```

will draw you a progressbar with the share `<number>`. For example `\progressbar{0.666}` gives you this . You would want to use only numbers in the interval  $[0, 1]$ , although other numbers are also possible (but will look just the same as `\progressbar{0}` or `\progressbar{1}`).

If you want one specific progressbar to look different than the others, use

```
\progressbar [<options>]{<number>}
```

instead. This command is just the same as `\progressbar{<number>}` but allows you to manipulate the appearance of the current progressbar. So `\progressbar[width=5cm,height=1,filledcolor=red,emptycolor=blue!30]{0.75}` would look like this: . In this case the options are only changed locally. (You can find an explanation of all options in the section 3.)

## 2.2 `\progressbarchange`

`\progressbarchange{}` In principle, the command `\progressbar{<number>}` uses the options specified with `\usepackage[<options>]{progressbar}` or the default options (if an option was not specified). As described in the previous section (2.1), you can override these options with `\progressbar[<options>]{<number>}`. However, if you want to change the settings for *all* following progressbar, you can use the command

```
\progressbarchange{<options>}
```

So basically

```
\progressbar{0.3}\
\progressbar[roundnessr=0.5,ticksheight=1,tickwidth=1.5pt
]{0.4}\
\progressbar[roundnessr=0.5,ticksheight=1,tickwidth=1.5pt
]{0.5}\
\progressbar[roundnessr=0.5,ticksheight=1,tickwidth=1.5pt
]{0.6}
```

gives you the same as

```
\progressbar{0.3}\
\progressbarchange{roundnessr=0.5,ticksheight=1,tickwidth=1.5
pt}
\progressbar{0.4}\
\progressbar{0.5}\
\progressbar{0.6}
```

However, keep in mind that in the second case the options are changed globally. Therefore, all following progressbars will keep the changed design (as long as you don't call `\progressbarchange{<options>}` with other options again). (You can find an explanation of all options in the section 3.)

## 3 Options

### 3.1 Global and local options

You can set global options when you load the `progressbar` with `\usepackage[options]{progressbar}` and with the command `\progressbarchange{<options>}`. These options affect all following calls of the commands `\progressbar{<number>}` and `\progressbar[<options>]{<number>}`.

However, you can override global options with local options specified with `\progressbar[<options>]{<number>}`.

## 3.2 Options, their defaults and how to change them

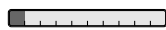
All listed options can be used globally and locally.

You will notice that some of the options are available with the prefix `r` (standing for relative) as well as with the prefix `a` (standing for absolute). I would recommend you to always use those options with the prefix `r`, as using absolute values might not interact too well with the rest of your documents settings. But as long as you know what you are doing, it's up to you.

`height`      `default=1`

The progressbars height as a fraction of the `textheight`<sup>1</sup>.

```
\progressbar[height=1]{0.1} A progressbar that has the same
height as the text\\
\progressbar[height=0.5]{0.9} A progressbar that has half the
height
```



A progressbar that has the same height as the text

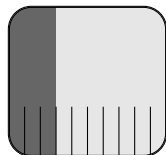


A progressbar that has half the height

`heighta`      `default=unused`

With this option you can define the progressbars height absolutely.

```
\progressbar[heighta=2cm]{0.3} A progressbar that has the
height 2~cm\\
\progressbar[heighta=10pt]{0.7} A progressbar that has the
height 10~pt\\
\progressbar[heighta=\heightof{a} + 0.8pt]{0.42} A progressbar
whose upper border starts at the same height as the letter
"a"
```



A progressbar that has the height 2 cm



A progressbar that has the height 10 pt



A progressbar whose upper border starts at the same height as the letter "a"<sup>2</sup>

`roundnessr`      `default=0.15`



`progressbar` allows rounded corners. With this option you can set them as a fraction of the progressbars height. You would not want to use numbers higher than 0.5.

```
\progressbar[roundnessr=0.25]{0.8} More rounder corners than
the default\\
\progressbar[roundnessr=0.5]{0.5} In fact no more corners --
complete roundness
```

---

<sup>1</sup>I used the capital letter "P" as a reference for the `textheight`



<sup>2</sup>The `\heightof` command and the possibility of adding is provided by the package `calc`

 More rounder corners than the default  
 In fact no more corners – complete roundness

**roundnessa**      default=unused  
 You can also define the corners radius as absolute values.

```



\progressbar[roundnessa=2pt]{0} Rounded corners radius 2~pt\\
\progressbar[roundnessa=0cm]{1} No rounded corners
  
```

 Rounded corners radius 2 pt  
 No rounded corners

**width**            default=6em  
 The width of the progressbar.
 

```


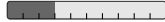
\progressbar[width=5cm]{0.123} Width: 5~cm\\
\progressbar[width=20em]{0.785} Width: 20~em
  
```

 Width: 5 cm  
 Width: 20 em

**borderwidth**    default=0.8pt  
 The linewidth of the progressbars border.
 

```



\progressbar[borderwidth=2pt]{0.6} Borderwidth: 2~pt\\
\progressbar[borderwidth=0.025em]{0.3} Borderwidth: 0.025~em
  
```

 Borderwidth: 2 pt  
 Borderwidth: 0.025 em

**subdivisions**    default=10  
 As you may have noticed, (by default) the progressbar also has ticks. Those ticks splits the progressbar in multiple subdivisions. You can define the number of subdivisions with `subdivisions=<number>`. Therefore the number of ticks is `<number> - 1`.
 

```



\progressbar[subdivisions=3]{0.666667} 3 subdivisions and 2
ticks\\
\progressbar[subdivisions=15]{0.466667} 15 subdivisions and 14
ticks
  
```

 3 subdivisions and 2 ticks  
 15 subdivisions and 14 ticks

**tickwidth**        default=0.4pt  
 The linewidth of the ticks.
 

```



\progressbar[tickwidth=1mm]{0.55} Tickwidth: 1~mm\\
\progressbar[tickwidth=0.1pt]{0.4} Tickwidth: 0.1~pt
  
```

 Tickwidth: 1 mm  
 Tickwidth: 0.1 pt

**ticksheight**     default=0.33  
 The height of the ticks as a fraction of the total progressbars height.
 

```

\progressbar[ticksheight=0.1]{0.22} Ticksheight: 10 ~\% of the
total height\\
\progressbar[ticksheight=1]{0.88} Ticks are end-to-end
  
```

		Ticksheight: 10 % of the total height
		Ticks are end-to-end
<code>linecolor</code>	<code>default=black</code>	
<code>tickscolor</code>	<code>default=black</code>	
<code>emptycolor</code>	<code>default=black!10</code>	
<code>filledcolor</code>	<code>default=black!60</code>	

These options should be self-explaining. Just use `xcolor-color-definitions` (use color names or the syntax `<color-name>!<number between 0 and 100>`) for brighter colors).

```
\progressbar[linecolor=blue,tickscolor=orange,emptycolor=
yellow,filledcolor=red]{0.6}
```



## 4 Changelog

2014/05/04 v.1.0b~4 version control for kvoptions updated (for unknown reason required version didn't exist)  
2013/01/06 v.1.0b~3 replaced `\progressbar@LoadFile@IfExist` with `\RequirePackage`  
2012/02/18 v.1.0b~2 added version control for kvoptions  
2010/10/02 v1.0b first release - all basic functionality

## 5 Acknowledgment

A big shoutout to the pros from <http://www.mrunix.de/> (it's german). They helped me a lot and made `progressbar` possible.

I also want to thank Robin Schneider (<https://ypid.wordpress.com/>) and Heiko Oberdiek who called my attention to the problems with `\progressbar@LoadFile@IfExist`.

## 6 Contact

If you have any question concerning `progressbar` or if you miss a feature, please write me a mail: [mails4me@gmx.at](mailto:mails4me@gmx.at).