

POWER CYCLES

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Dear Community,

Welcome to this year's style guide for the 39th Chaos Communication Congress under the motto "Power Cycles."

We understand the motto both literally and as a reference to cyclical shifts in power relations.

The result is not a fixed visual identity, but a dynamic system defined by shifting emphases. Use it, adapt it, and let it evolve.

Nina Bender & Bernd Volmer

This is the main version of the logo.
It is set in our primary font **Kario 39C3**,
a uniwidth variable font.

39C3

WIDTH: CONDENSED (67)

License

Kario is free to use for the 39C3 only.
If you'd like to use the font for commercial use
outside of 39C3, please get in touch with the
font designer, Bernd Volmer, or obtain a
license from his type foundry *Show me Fonts*.

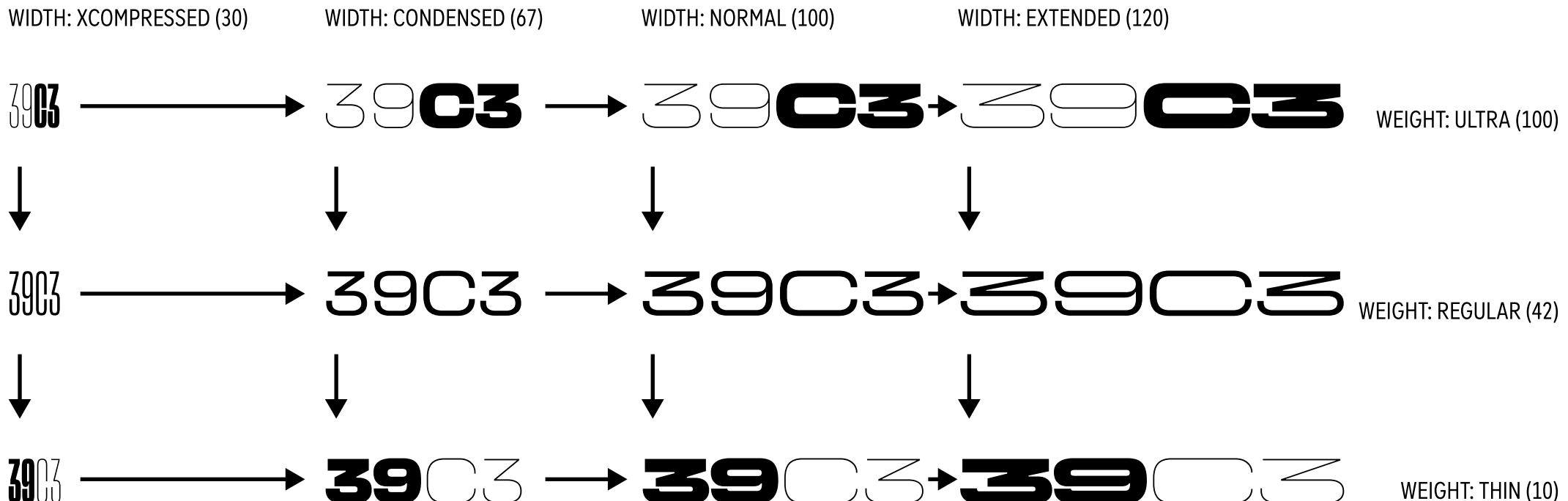
These are its variations.

The logo responds to the font's weight axis: at the thinnest setting (weight 10), "39" appears in *Ultra* and "C3" in *Thin*; at the heaviest setting (weight 100), this is reversed, with "39" in *Thin* and "C3" in *Ultra*.

At the middle weight, all characters appear in the same weight. The transition is smooth and ideal for animations. The logo's width can be adjusted continuously via the font's width axis.

Please note

Kario uses a custom weight axis ranging from 10 (*Thin*) to 100 (*Ultra*), with *Regular* at 42. These values are not mapped to standard CSS font-weight values (e.g., 100–900), as such mapping would require non-linear interpolation between steps (e.g. *Light*, *Medium*, *Bold*), disrupting smooth animated transitions.



It's easter in winter. We got some eggs for you.

The *Kario 39C3* font contains a few easter eggs. Typing "<<CCC" or "<<ccc" activates a special glyph that interpolates from a single "c" to three "c"s.

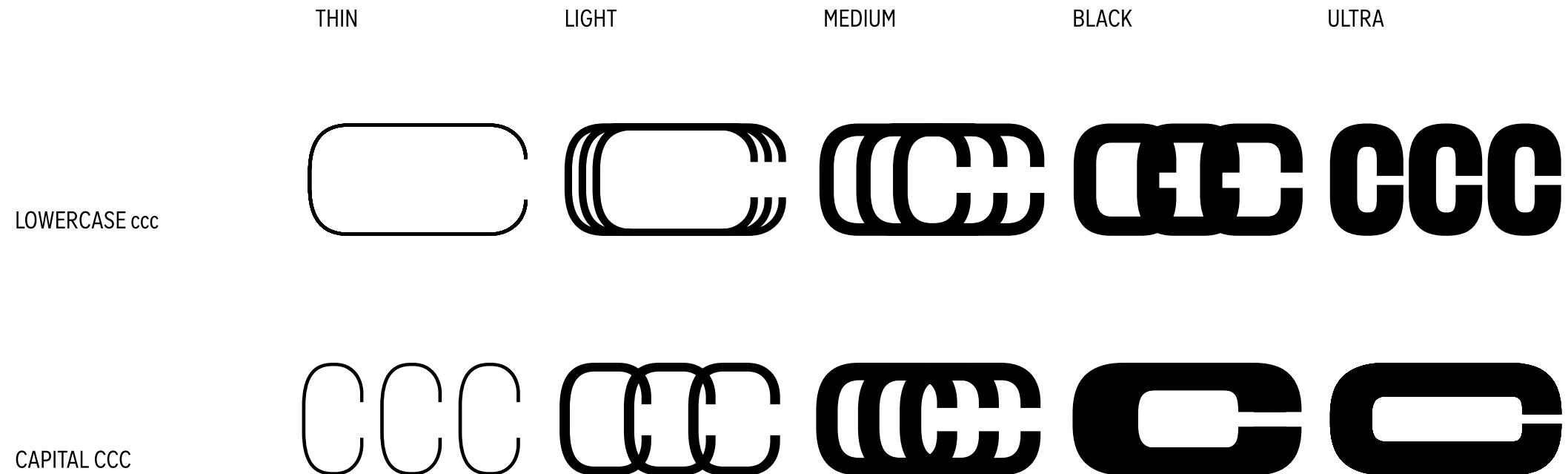
These glyphs are designed with animation in mind, enabling smooth transitions between stages and adding a playful dimension to motion design.

Toggle

There are a couple of toggles (one of the visuals) implemented in the font as ligatures, that can be accessed via

PUA Unicode: E000 or typing "<<toggle"

PUA Unicode: E001 or typing "<<toggle1".



The logo and its variations.

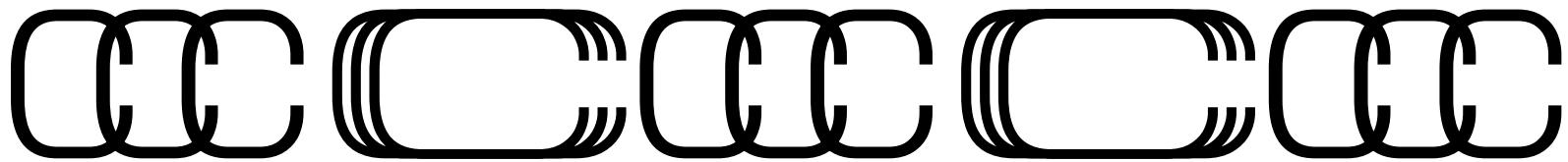
The “<<ccc” and “<<CCC” ligatures share the same width, while the “<<39C3” logo is exactly three times as wide. This consistent proportionality invites playful layouts and smooth animations.

Good to know

The logo is implemented as a ligature in our variable headline font (*Kario 39C3*) and can be accessed by typing “<<39C3”.

You can also access the logo via PUA Unicode: E002 and the CCC ligatures via PUA Unicode: E003 & E004.

Uniwidth



3× the width



Please meet Kario, our headline font. It has two variable axes. Here: The weight axis.

Kario 39C3 offers a variable weight range from *Thin* to *Ultra*, with all weights designed as uniwidth (duplex). This means they share identical proportions—a concept familiar from monospace fonts used in code editors.

The weight range

Kario Thin weight: 10

Kario Light weight: 26

Kario Regular weight: 42

Kario Medium weight: 52

Kario Bold weight: 66

Kario Black weight: 82

Kario Ultra weight: 100

Please note

For static headlines, we use the *Ultra* weights of Kario 39C3. Other weights are reserved for animations or for displaying text as images with interpolation. The font is part of the design package and can be downloaded on the Style Guide page.

Here: The width axis.

Kario 39C3 includes a variable width range from super-tight *Compressed* to extra-wide *xExtended*. In print applications, the type is set at maximum size to fill the format, while the font width is adjusted as needed.

The width range

Kario Compressed width: 30

Kario xCondensed width: 56

Kario Condensed width: 67

Kario Narrow width: 80

Kario Regular width: 94

Kario Extended width: 120

Kario xExtended width: 160

Here is an overview of all characters.

Basic Glyphs

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z

Numerals

**0123456789 0123456789
0123456789 0123456789 ½ ¼ ¾ ⅓ ⅔ ⅕ ⅖ ⅗**

Punctuation & Others

Accents

Symbols

We use Officer Sans as our body font.

Officer Sans is a utilitarian neo-grotesque typeface by HvD Fonts, designed for functionality across digital and print. It features narrow proportions, low contrast, and is optimized for compact settings and clear hierarchies.

The font is part of the design package and can be downloaded [on the Style Guide page](#).

The weight range

Officer Light

Officer Regular

Officer Medium

Officer Bold

Officer Heavy

Officer Black

Officer Light Italic

Officer Regular Italic

Officer Medium Italic

Officer Bold Italic

Officer Heavy Italic

Officer Black Italic

Basic Glyphs

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

abcdefghijklmnopqrstuvwxyz

Numerals

0123456789 0123456789

0123456789 **0123456789** **1/2** **1/4** **3/4** **1/8** **3/8** **5/8** **7/8**

Punctuation & Others

Accents

Symbols

We created a poster setter python script for Drawbot to easily type-set signage in *Kario 39C3*.

The screenshot shows a Mac OS X desktop environment. On the left, a terminal window titled "A4-PosterSetter.py" displays a Python script. The script is a DrawBot script for calculating optimal text width based on font metrics like Cap Height and Descender. It includes configuration variables for the font path, paper format, margin, and font size reduction. It defines paper formats for A4 and A3, and tests various widths from 30 to 160 units. The right side of the screen shows the DrawBot application interface, which displays the text "Poster Setter" and provides a list of available widths (30, 50, 100, 120, 160) along with their corresponding font metrics.

```
#!/usr/bin/env python3
# DrawBot Script für variable Fonts mit width axis
# Berechnet die optimale width für maximale Textbreite
# www.

from drawBot import *

# KONFIGURATION - HIER ANPASSEN
FONT_PATH = "/users/berndvolmer/Downloads/Desktop/KarioDuplexVar-Roman.ttf" # Pfad zu deinem variablen Font
INPUT_TEXT = "Poster Setter" # Hier deinen Text eingeben
PAPER_FORMAT = "A4" # "A4" oder "A3"
MARGIN = 40 # Margin in Punkten
FONT_SIZE_REDUCTION = 0.9 # Faktor um Schriftgröße zu reduzieren (0.9 = 10% kleiner)
Y_SHIFT = -30 # Zusätzliche Y-Verschiebung in Punkten (negativ = nach unten)

# Typographische Metriken deines Fonts
CAP_HEIGHT = 700 # Cap Height in Font-Units
DESCENDER = -98 # Descender in Font-Units (negativ)
PAPER_FORMATS = {
    "A4": (842, 595), # A4 Querformat
    "A3": (1190, 842) # A3 Querformat
}

# Test width-Werte
TEST_WIDTHS = [30, 50, 100, 120, 160]

def get_document_dimensions(format_name="A4", margin=50):
    """Document-Dimensionen berechnen"""
    width, height = PAPER_FORMATS[format_name]
    return width - 2*margin, height - 2*margin, margin

def measure_text_width(text, font_path, font_size, width_value):
    """Misst die Textbreite bei gegebener width"""
    # Font mit Variationen laden
    fontPath(font_path)
    fontSize(font_size)
    fontVariations(width=width_value, wght=900, opsz=140)

    return textSize(text)[0]

def calculate_optimal_font_size(text, font_path, available_height, width_value=100):
    """Berechnet die optimale Schriftgröße basierend auf Cap Height und Descender"""
    # Berechne die tatsächliche typographische Höhe
    # Cap Height - Descender (Descender ist negativ, daher Subtraktion)
    typo_height_units = CAP_HEIGHT - DESCENDER # z.B. 700 - (-98) = 798 Units

    # Font mit Variationen laden
    fontPath(font_path)
    fontSize(font_size)
    fontVariations(width=width_value, wght=900, opsz=140)

    return measure_text_width(text, font_path, font_size, typo_height_units)
```

Text: 'Poster Setter'
Format: A4
Margin: 40pt

Verfügbare Breite: 762.0pt
Verfügbare Höhe: 515.0pt
Optimale Schriftgröße: 588.8pt
Width 30: Textbreite = 615.0pt
Width 50: Textbreite = 1629.1pt
Width 100: Textbreite = 3611.6pt
Width 120: Textbreite = 4365.4pt
Width 160: Textbreite = 5907.5pt

Messungen:
Width 30: 615.0pt
Width 50: 1629.1pt
Width 100: 3611.6pt
Width 120: 4365.4pt
Width 160: 5907.5pt

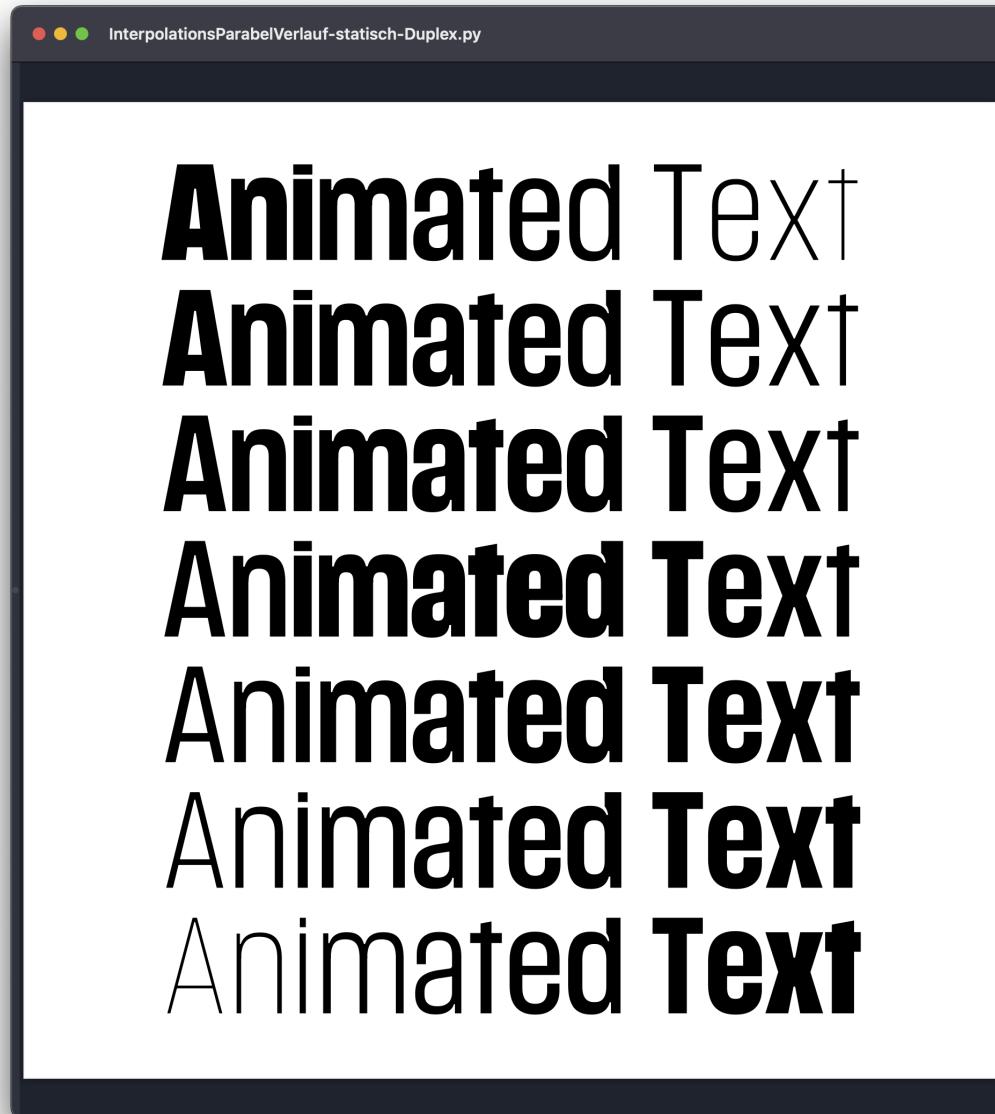
Disclaimer

The script is a rough **draft** and can definitely be improved. We ask you to consider it a starting point. Feel free to create your own code. The script is part of the design package.

Drawbot

Drawbot is a free application that uses Python and has a visual output.
→ drawbot.com

Another script creates interpolations that can be used as a base for animations or as visual.



The screenshot shows a Drawbot interface window titled "InterpolationsParabelVerlauf-statisch-Duplex.py". The window has a toolbar at the top with icons for Run, Comment, Uncomment, Indent, and Dedent. Below the toolbar is a code editor with the Python script. To the right of the code editor is a preview area displaying the visual output of the script.

```
# === EDITIERBARE EINSTELLUNGEN ===
fontPath = "/Users/berndvolmer/Downloads/Desktop/KarioDuplexVar-Roman.ttf"
word = "Animated Text"
numLines = 7
minWeight = 10
maxWeight = 100
widthValue = 76
canvasWidth = 1000
canvasHeight = 1000
margin = 50
# <<< Text- und Hintergrundfarbe (RGB 0-1)
backgroundColor = (1,1,1) # #171717
textColor = (0,0,0) # #5affff
# <<< Zeilenabstand (1.0 = 100% der finalen Fontgröße)
lineSpacingFactor = 0.92
# <<< Vertikaler optischer Ausgleich (in Units, nach oben verschieben)
verticalOffset = 17
# === DRAWBOT SETUP ===
newPage(canvasWidth, canvasHeight)
fill(*backgroundColor)
rect(0, 0, canvasWidth, canvasHeight)
# === HILFSFUNKTION: Textbreite für eine bestimmte Zeile mit korrektem Weight-Verlauf messen ===
def getLineWidth(text, size, lineIndex):
    font(fontPath)
    fontSize(size)
    total = 0
    midIndex = (len(text) - 1) / 2
    startWeight = maxWeight - (maxWeight - minWeight) / (numLines - 1) * lineIndex
    endWeight = minWeight + (maxWeight - minWeight) / (numLines - 1) * lineIndex
    for charIndex, char in enumerate(text):
        if lineIndex == 0:
            weight = startWeight + (endWeight - startWeight) / (len(text) - 1) * charIndex
        elif lineIndex == numLines - 1:
            weight = startWeight + (endWeight - startWeight) / (len(text) - 1) * charIndex
        else:
            baseWeight = startWeight + (endWeight - startWeight) / (len(text) - 1) * charIndex
            distToMid = abs(charIndex - midIndex)
            maxBoost = (maxWeight - minWeight) / 2
            weight = baseWeight + (distToMid / maxBoost) * (maxWeight - baseWeight)
```

Disclaimer

The script is a rough **draft** and can definitely be improved. We ask you to consider it a starting point. Feel free to create your own code. The script is part of the design package.

Drawbot

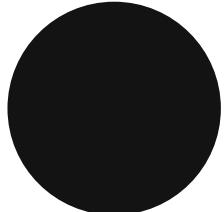
Drawbot is a free application that uses Python and has a visual output.
→ drawbot.com

These are the colors.

The four colors in the left column are the **main colors**. They can be used in limited **combinations** (see the slide after the next).

The **two additional colors** are used for a better distinction of the various wristbands. They should be used very sparingly throughout the conference.

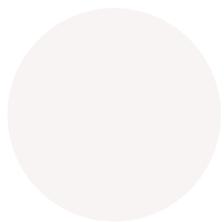
Never ever mix the colors! We always use one color + dark (either positive or negative).



Dark

Muted Black

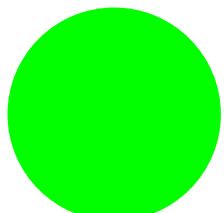
#141414 RGB: 20,20,20
CMYK: 0/0/0/100



Neutral

Natural

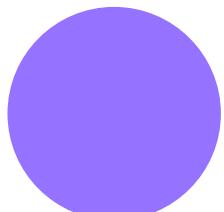
#faf5f5 RGB: 250, 245, 245
CMYK: 0/0/0/0



Primary

Neon Green

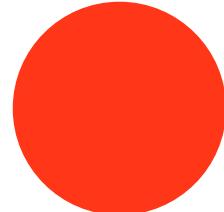
#00ff00 RGB: 0, 255, 0
Pantone 802



Secondary

Electric Violet

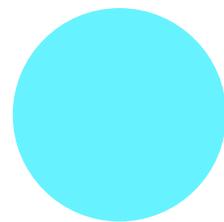
#9673ff RGB: 150, 115, 255
Pantone 528



Additional #01

Neon Orange

#ff3719 RGB: 255, 55, 25
Pantone 804



Additional #02

Neon Blue

#66f2ff RGB: 102, 242, 255
Pantone 801

Please note

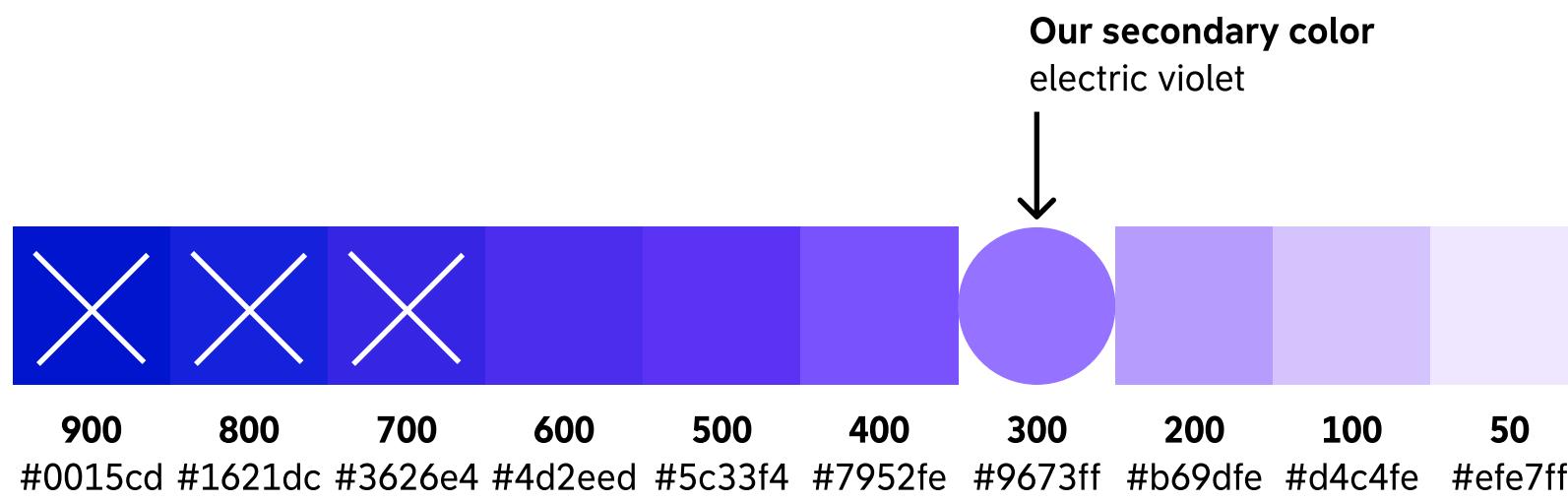
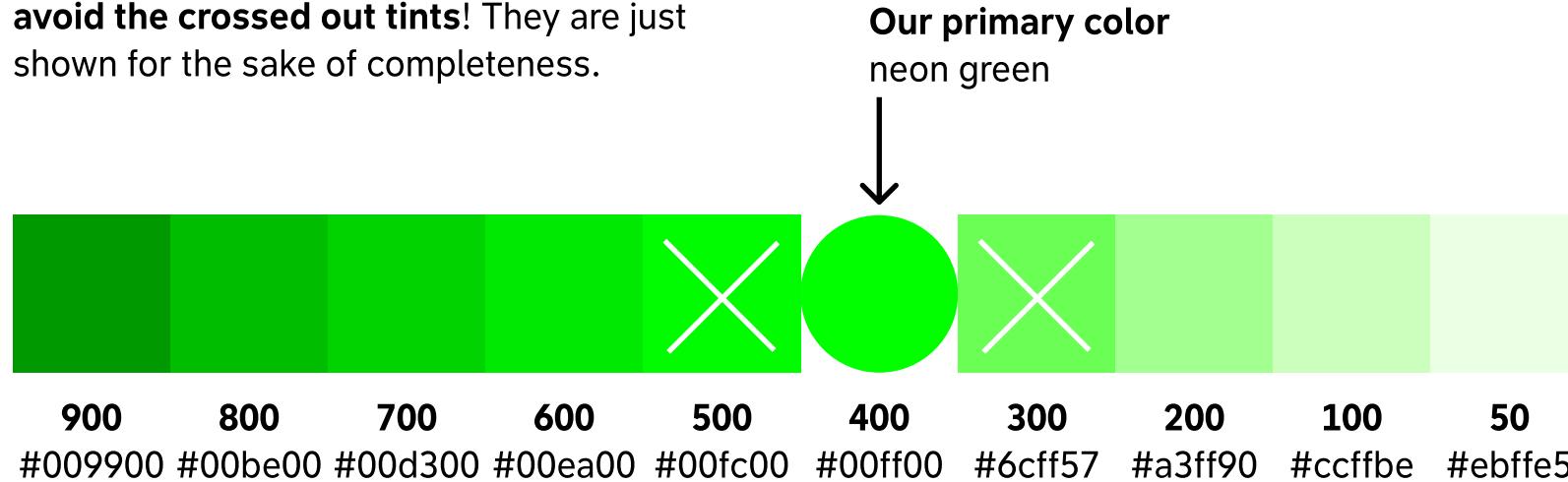
We do not provide CMYK values for the neon colors and the electric violet on purpose.

Please only use them for digital assets or when printing with Pantone colors.

For all other purposes we recommend printing in b/w on neon-colored paper or keeping the design completely b/w.

These are the color tints for UI needs.

We prepared you these tints especially for UI needs (think of e.g. hover states). **Please avoid the crossed out tints!** They are just shown for the sake of completeness.

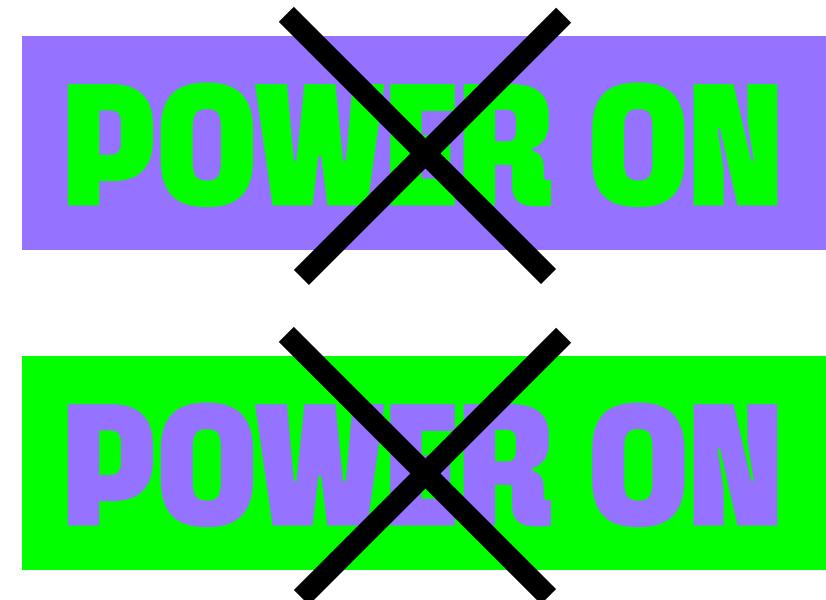


Good to know
We created
variables for the
tints in a .json file.
You can find it in the
design package.

Color combinations are limited.



If you use color think of **switching power on/off**
– we never mix the colors together, but limit
ourselves to a combination of one color + dark.



Reminder

You are missing the **additional colors** in this overview? We only use them in the rare cases where we need more distinction that is possible with these three color combinations (e.g. for the entrance wristbands).

We have a minimalist set of visual elements,
but loads of options to use them.

The font | Our main player

POWER CYCLES

The font variation on two axes | Its super power

POWER CYCLES

POWER CYCLES POWER CYCLES

Toggle | The extra

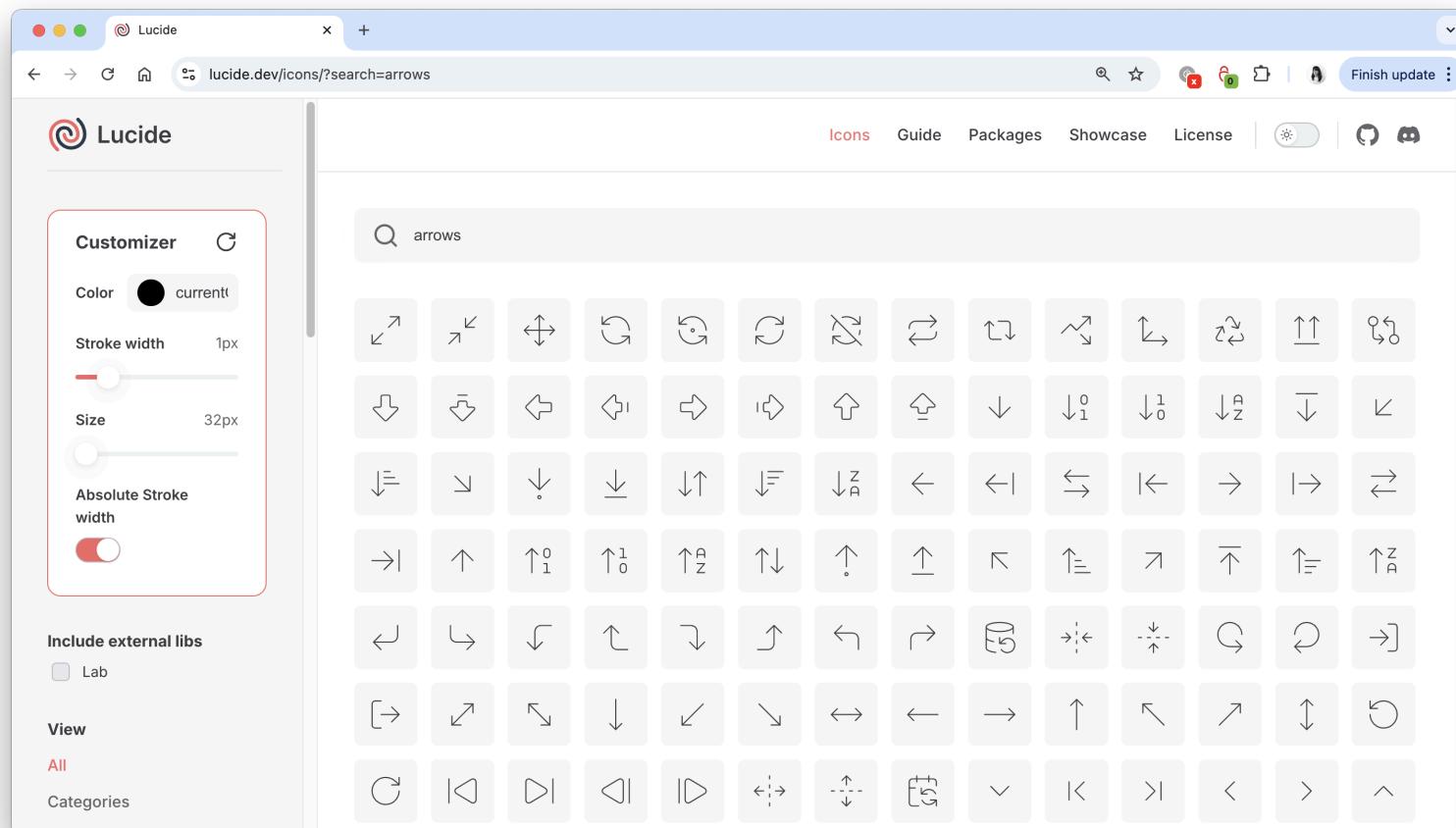


Assets

You can download all assets including the logo and visual on the Style Guide page.

Repetition | The more, the merrier

Need icons? Please use the open source icon set Lucide. It offers more than 1,600 icons.



How to use it

[lucide.dev](#) has a lot of customization options. You can find several icon libraries [here](#).

Stroke width

Please use the absolute stroke width setting when exporting various sizes. Match the stroke width with your font weight.

Good to know

Consider contributing to the project and add the icons you are missing. Lucide offers a guide on the design principles [here](#).

39C30
POWER CYCLES

39C300

POWER CYCLES