

# Converting Colors

XYZ(23.8595, 12.2616, 2.8539)

Have a look what the booklet for  
XYZ(23.8595, 12.2616, 2.8539)  
contains.

<b>XYZ(23.8871, 12.2757, 2.8607)</b> .....	3
<b><i>Conversions</i></b> .....	4
<b><i>Details</i></b> .....	6
<b><i>Harmonies</i></b> .....	12
<b><i>Previews</i></b> .....	24
<b><i>Color Blindness Simulation</i></b> .....	28
<b><i>CSS Examples</i></b> .....	31

# Color

**XYZ(23.8871, 12.2757,  
2.8607)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	C70025
RGB	199, 0, 37
RGB Percent	78%, 0%, 15%
CMY	0.2196, 0.9998, 0.8549
CMYK	0.00, 1.00, 0.81, 0.22
HSL	349°, 100%, 39%
HSV	349°, 100%, 78%
XYZ	23.8871, 12.2757, 2.8607
YIQ	63.7190, 106.7270, 53.6950

# Conversions

## Conversions Part 2

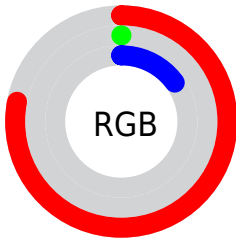
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	199, 0, 37
Decimal	13041701
CIE <sub>Lab</sub>	41.65, 67.04, 39.94
CIE <sub>LCh</sub>	42, 78.034, 30.787
Yxy	12.2757, 0.6121, 0.3146
Android (android.graphics.Color)	4291231781 (0xFFC70025)
YUV	63.7190, -13.1725, 118.6414
Hunter-Lab	35.0367, 60.3824, 19.6847

# Details

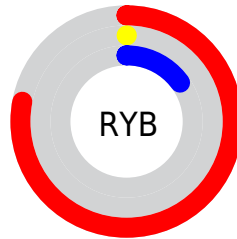
The XYZ color **23.8871, 12.2757, 2.8607** is a dark color, and the websafe version is hex **CC0033**. The color can be described as dark washed red. A complement of this color would be **26.9490, 43.4568, 41.1691**, and the grayscale version is **4.8424, 5.0946, 5.5480**.

A 20% lighter version of the original color is **45.9717, 28.2252, 11.2086**, and **10.1533, 5.2342, 0.4752** is the 20% darker color. If you saturate the color by 10%, you get **23.8864, 12.2754, 2.8579**, and if you desaturate by 10%, it is **24.4494, 12.8992, 4.5939**.

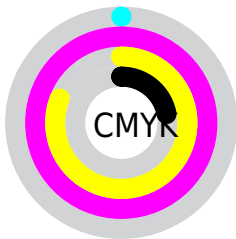
# Distribution



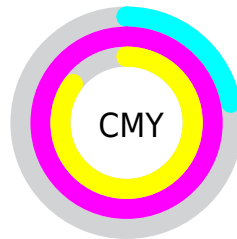
- Red (78%)
- Green (0%)
- Blue (15%)



- Red (78%)
- Yellow (0%)
- Blue (15%)



- Cyan (0%)
- Magenta (100%)
- Yellow (81%)
- Black (22%)




- Cyan (22%)
- Magenta (100%)
- Yellow (85%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 23.8871, 12.2757, 2.8607 changes by changing the brightness by 10 percent. The first figure shows a shift by +10% for each color and the second figure -10%.

Similar to the brightness gradients but the following saturation gradients show a change of the XYZ color 23.8871, 12.2757, 2.8607 by changing the saturation by 10% instead.





 23.8871, 12.2757,  
2.8607


 23.8871, 12.2757,  
2.8607


264.7003,  
206.2220, 134.5662


 15.3742, 6.9317,  
1.0240


 49.3019, 29.9963,  
11.2827


 9.1704, 3.4194,  
0.0000


 66.9345, 43.1416,  
18.7051


 4.9105, 1.3544,  
0.0000

 88.3377, 59.6562,  
28.8264

 2.2291, 0.1828,  
0.0000

 113.8769, 79.9245,  
42.0652

 0.7580, 0.0000,  
0.0000

 143.9174,  
104.3309, 58.8401

 0.0000, 0.0000,  
0.0000

 178.8245,

133.2596, 79.5695

218.9637,  
167.0952, 104.6720

23.8871, 12.2757,  
2.8607

23.8871, 12.2757,  
2.8607

23.8864, 12.2754,  
2.8579

24.4494, 12.8992,  
4.5939

25.3933, 14.0837,  
7.0767

26.8194, 16.0123,  
10.3991

28.7845, 18.7826,  
14.6302

31.3373, 22.4770,  
19.8316

■ 34.5209, 27.1683,  
26.0593

■ 38.3743, 32.9219,  
33.3652

■ 42.9332, 39.7975,  
41.7973

■ 48.2309, 47.8506,  
51.4010

# Harmonies

## Analogous

The Analogous color harmony consists of three colors that are next to each other on the color wheel.



26.4709, 12.2757, 12.9385



23.8871, 12.2757, 2.8607



17.8966, 12.2757, 0.2589

# Triad

The Triadic color harmony groups three colors that are evenly spaced from another and form a triangle on the color wheel.



23.8871, 12.2757, 2.8607



4.4631, 12.2757, 3.1371



11.8193, 12.2757, 76.0180

# Complementary

The Complementary color scheme is a pair of colors which are on the opposite of each other on the color wheel.



23.8871, 12.2757, 2.8607



26.9490, 43.4568, 41.1691

# Split Complementary

Split-complementary colors differ from the complementary color scheme. The scheme consists of three colors, the original color and two neighbors of the complement color.



7.0832, 12.2757, 63.9694



23.8871, 12.2757, 2.8607



3.7667, 12.2757, 13.8031

# Square

The Square scheme is like the rectangle color scheme, but the four colors are evenly spaced on the color wheel.



23.8871, 12.2757, 2.8607



6.8974, 12.2757, 0.3338



4.5432, 12.2757, 36.8210



18.2466, 12.2757, 62.7495



# Rectangle

The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



23.8871, 12.2757, 2.8607



13.5175, 12.2757, 0.0000



4.5432, 12.2757, 36.8210



9.9948, 12.2757, 74.7407

# Sweetspot

The Sweet Spot groups the original color and five complimentary colors.



23.8874, 12.2765, 2.8609



66.8534, 57.1375, 57.7881



24.6485, 11.5166, 54.9562



13.6651, 11.2653, 11.1553



0.0000, 0.0000, 0.0000



20.3446, 21.4041, 23.3091



# Same Dimension

The Same Dimension uses a secret algorithm to generate beautiful new colors.



23.8874, 12.2765, 2.8609



41.7606, 21.4682, 4.6713



25.1549, 15.3455, 1.6374



10.7130, 10.6686, 11.4720



15.3836, 7.9030, 1.9642



0.7535, 0.3842, 0.2249



# Inverse Universe

The Inverse Universe completely reimagines the original color for something new.



23.8874, 12.2765, 2.8609



41.7606, 21.4682, 4.6713



19.5871, 22.6795, 57.3776



10.7130, 10.6686, 11.4720



15.3836, 7.9030, 1.9642



0.7535, 0.3842, 0.2249



# Previews

## White Background



This preview shows how the XYZ color 23.8871, 12.2757, 2.8607 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail



# Black Background



## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

If you want to check with other color combinations, try the [Color Contrast Checker](#).

**XYZ 23.8871, 12.2757, 2.8607**

## **Background**



This preview shows how black text looks on a background with the XYZ color 23.8871, 12.2757, 2.8607.



This preview shows how white text looks on a background with the XYZ color 23.8871, 12.2757,



# Color Blindness Simulation

Color vision deficiency is a very complex topic, and I could not describe the different causes any better than Wikipedia does, so if you want to learn more, you should check out their [article about color blindness](#).

## Dichromacy



### Original Color

23.8871, 12.2757, 2.8607

### Protanopia

11.8478, 12.9278, 5.8739

### Deuteranopia

13.0615, 12.9283, 2.4688



## Tritanopia

23.5050, 12.4384, 1.1620

# Trichromacy



## Original Color

23.8871, 12.2757, 2.8607

## Protanomaly

13.5644, 9.6479, 4.1649

## Deuteranomaly

14.9921, 10.1844, 2.1529

## Tritanomaly

23.4810, 12.2742, 1.5123

# Monochromacy



## Original Color

23.8871, 12.2757, 2.8607

## Achromatopsia

4.8732, 5.1269, 5.5832

## Achromatomaly

8.2688, 5.3629, 4.0894

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 23.8871, 12.2757, 2.8607 is called "color". The color property can be set on classes, ids or directly on the HTML element.

This example shows how text in the color `rgb(199, 0, 37)` looks like.

```
.text, #text, p{  
  color:rgb(199, 0, 37)  
}
```

If you want to add a text shadow in that color use the text-shadow property, you can generate a text shadow directly with our [CSS Text Shadow Generator](#).

Here you see how black text with a 4 pixel rgb(199, 0, 37) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(199, 0, 37) }
```

## Border

The CSS property to change the border of an element to XYZ 23.8871, 12.2757, 2.8607 is called "border". The border property can be set on classes, ids or directly on the HTML element.

This example shows the color as border, it can be applied via the CSS property "border" or "border-color".

```
.border, #border, table{ border:4px solid rgb(199, 0, 37) }
```



If only the border color should be changed use the property border-color.

```
.border{ border-color:rgb(199, 0, 37) }
```

If you want to add a box shadow in that color use:

Here you see how a box with a 4 pixel rgb(199, 0, 37) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(199, 0, 37); -webkit-box-  
shadow:4px 4px 4px 4px rgb(199, 0, 37);  
box-shadow:4px 4px 4px 4px rgb(199, 0, 37)  
}
```

# Background

The CSS property to change the background color of an element to XYZ 23.8871, 12.2757, 2.8607 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(199, 0, 37) }
```

If only the background color should be changed can be used:

```
.background{ background-color: rgb(199, 0,  
37) }
```

This example shows the color as background, it is applied via the CSS property "background".

To optimize and compress your CSS code, you can use our [online CSS compressor and optimizer](#) based on csstidy. If you want to create a linear or radial gradient as background or border, check our [CSS Gradient Generator](#).

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