

# Converting Colors

XYZ(38.8591, 19.9890, 3.7903)

Have a look what the booklet for  
XYZ(38.8591, 19.9890, 3.7903)  
contains.

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# Color

**XYZ(38.7408, 19.9274,  
3.8120)**

# Conversions

## Conversions Part 1

Format	Color
Hex	F70028
RGB	247, 0, 40
RGB Percent	97%, 0%, 16%
CMY	0.0314, 0.9997, 0.8431
CMYK	0.00, 1.00, 0.84, 0.03
HSL	350°, 100%, 48%
HSV	350°, 100%, 97%
XYZ	38.7408, 19.9274, 3.8120
YIQ	78.4130, 134.3720, 64.8040

# Conversions

## Conversions Part 2

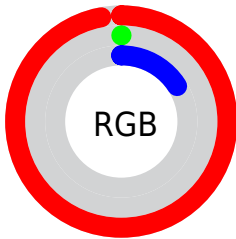
Format	Color
<a href="#">RYB</a>	247, 0, 40
Decimal	16187432
CIELab	51.76, 78.67, 51.39
CIELCh	52, 93.971, 33.154
Yxy	19.9274, 0.6200, 0.3189
Android (android.graphics.Color)	4294377512 (0xFF70028)
YUV	78.4130, -18.9376, 147.8508
Hunter-Lab	44.6401, 76.7905, 26.1851

# Details

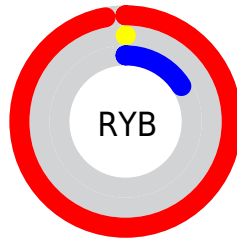
The XYZ color **38.7408, 19.9274, 3.8120** is a dark color, and the websafe version is hex **FF0033**. The color can be described as dark saturated red. A complement of this color would be **44.5319, 71.0297, 70.4370**, and the grayscale version is **7.3438, 7.7262, 8.4139**.

A 20% lighter version of the original color is **47.0525, 30.1325, 12.3530**, and **18.8224, 9.7033, 0.8809** is the 20% darker color. If you saturate the color by 10%, you get **38.7395, 19.9268, 3.8069**, and if you desaturate by 10%, it is **39.5346, 20.7931, 6.3033**.

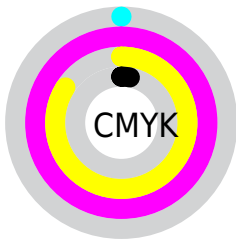
# Distribution



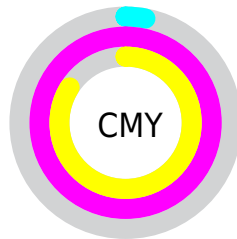
- Red (97%)
- Green (0%)
- Blue (16%)



- Red (97%)
- Yellow (0%)
- Blue (16%)



- Cyan (0%)
- Magenta (100%)
- Yellow (84%)
- Black (3%)




- Cyan (3%)
- Magenta (100%)
- Yellow (84%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 38.7408, 19.9274, 3.8120 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 38.7408, 19.9274, 3.8120 by changing the saturation by 10% instead.





 38.7408, 19.9274,  
3.8120


 38.7408, 19.9274,  
3.8120


332.0134,  
251.5218, 146.1123


 26.7380, 12.3423,  
1.5228


 72.5388, 43.2954,  
13.5738


 17.5121, 6.9772,  
0.2348


 95.0647, 59.8471,  
21.8835


 10.6978, 3.4479,  
0.0000


 121.8289, 80.1565,  
33.0370

 5.9298, 1.3698,  
0.0000

 153.1969,  
104.6079, 47.4530

 2.8427, 0.1943,  
0.0000

 189.5340,  
133.5857, 65.5500

 1.0711, 0.0000,  
0.0000

 231.2055,

 0.0008, 0.0000,

167.4744, 87.7465

0.0000

278.5769,  
206.6583, 114.4611

0.0000, 0.0000,  
0.0000

38.7408, 19.9274,  
3.8120

38.7408, 19.9274,  
3.8120

38.7395, 19.9268,  
3.8069

39.5346, 20.7931,  
6.3033

40.9761, 22.6102,  
10.0703

43.2215, 25.6556,  
15.2749

46.3708, 30.0982,  
22.0463

50.5091, 36.0803,  
30.4990

■ 55.7113, 43.7265,  
40.7365

■ 62.0453, 53.1487,  
52.8539

■ 69.5730, 64.4491,  
66.9396

■ 78.3519, 77.7219,  
83.0761

# Harmonies

## Analogous

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



43.6890, 19.9274, 18.9425



38.7408, 19.9274, 3.8120



28.4549, 19.9274, 0.3768

# Triad

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



38.7408, 19.9274, 3.8120



6.8628, 19.9274, 5.6011



19.9641, 19.9274, 127.2154

# Complementary

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



38.7408, 19.9274, 3.8120



44.5319, 71.0297, 70.4370

# 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.



11.8254, 19.9274, 109.9675



38.7408, 19.9274, 3.8120



5.9219, 19.9274, 24.7075

# Square

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



38.7408, 19.9274, 3.8120



10.5979, 19.9274, 0.7383



7.3868, 19.9274, 64.7782



30.8019, 19.9274, 101.6852



# Rectangle

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



38.7408, 19.9274, 3.8120



21.2045, 19.9274, 0.0000



7.3868, 19.9274, 64.7782



16.8435, 19.9274, 126.2616

# Sweetspot

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



38.7412, 19.9287, 3.8123



66.6499, 57.0561, 56.7161



42.1994, 19.8163, 89.5958



13.6184, 11.2466, 10.9093



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.



38.7412, 19.9287, 3.8123



41.6444, 21.4218, 4.0595



41.4037, 25.8659, 2.8123



16.6084, 16.5262, 17.6845



20.5218, 10.5522, 2.1904



1.8349, 0.9399, 0.3571



# Inverse Universe

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



38.7412, 19.9287, 3.8123



41.6444, 21.4218, 4.0595



30.1883, 33.5139, 92.8727



16.6084, 16.5262, 17.6845



20.5218, 10.5522, 2.1904



1.8349, 0.9399, 0.3571



# Previews

## White Background



This preview shows how the XYZ color 38.7408, 19.9274, 3.8120 looks on a white 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



# Black Background



This preview shows how the XYZ color 38.7408, 19.9274, 3.8120 looks on a black 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

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

**XYZ 38.7408, 19.9274, 3.8120**

## **Background**



This preview shows how black text looks on a background with the XYZ color 38.7408, 19.9274, 3.8120.



This preview shows how white text looks on a background with the XYZ color 38.7408, 19.9274,



# 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

38.7408, 19.9274, 3.8120

### Protanopia

18.7403, 20.4407, 7.8082

### Deuteranopia

20.6283, 20.2457, 3.0790

# Trichromacy



## Original Color

38.7408, 19.9274, 3.8120

## Protanomaly

21.9183, 15.4781, 5.4468

## Deuteranomaly

23.8775, 16.0298, 2.4974

# Monochromacy



## Original Color

38.7408, 19.9274, 3.8120

## Achromatopsia

7.2414, 7.6185, 8.2966

## Achromatomaly

12.7135, 8.1403, 5.7517

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 38.7408, 19.9274, 3.8120 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(247, 0, 40)` looks like.

```
.text, #text, p{  
    color:rgb(247, 0, 40)  
}
```

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(247, 0, 40) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(247, 0, 40) }
```

## Border

The CSS property to change the border of an element to XYZ 38.7408, 19.9274, 3.8120 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(247, 0, 40) }
```

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

```
.border{ border-color:rgb(247, 0, 40) }
```

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

Here you see how a box with a 4 pixel rgb(247, 0, 40) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(247, 0, 40); -webkit-box-  
shadow:4px 4px 4px 4px rgb(247, 0, 40);  
box-shadow:4px 4px 4px 4px rgb(247, 0, 40)  
}
```



# Background

The CSS property to change the background color of an element to XYZ 38.7408, 19.9274, 3.8120 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(247, 0, 40) }
```

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

```
.background{ background-color: rgb(247, 0,  
40) }
```

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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