

# Converting Colors

XYZ(23.9061, 11.9782, 16.7459)

Have a look what the booklet for  
XYZ(23.9061, 11.9782, 16.7459)  
contains.

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# Color

**XYZ(23.9669, 12.0111,  
16.6780)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	BD0071
RGB	189, 0, 113
RGB Percent	74%, 0%, 44%
CMY	0.2588, 0.9999, 0.5569
CMYK	0.00, 1.00, 0.40, 0.26
HSL	324°, 100%, 37%
HSV	324°, 100%, 74%
XYZ	23.9669, 12.0111, 16.6780
YIQ	69.3930, 76.3710, 75.2110

# Conversions

## Conversions Part 2

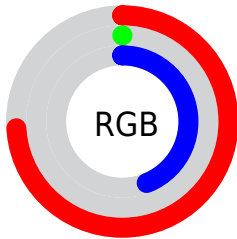
<b>Format</b>	<b>Color</b>
<b>RYB</b>	189, 0, 113
Decimal	12386417
CIELab	41.23, 69.19, -8.33
CIELCh	41, 69.687, 353.134
Yxy	12.0111, 0.4552, 0.2281
Android (android.graphics.Color)	4290576497 (0xFFBD0071)
YUV	69.3930, 21.4983, 104.8953
Hunter-Lab	34.6570, 62.7910, -4.2722

# Details

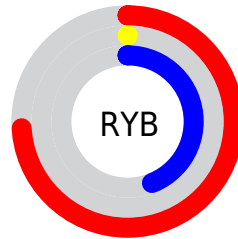
The XYZ color **23.9669, 12.0111, 16.6780** is a dark color, and the websafe version is hex **CC0066**. A complement of this color would be **19.5036, 36.9176, 12.9414**, and the grayscale version is **5.6811, 5.9770, 6.5089**.

A 20% lighter version of the original color is **49.4644, 29.5376, 38.6916**, and **10.1601, 5.1275, 5.4552** is the 20% darker color. If you saturate the color by 10%, you get **23.9661, 12.0107, 16.6740**, and if you desaturate by 10%, it is **24.6448, 12.6530, 19.1047**.

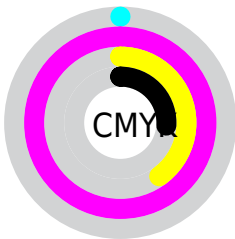
# Distribution



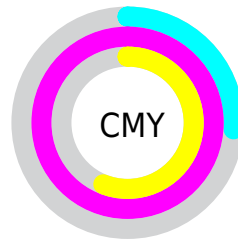
- Red (74%)
- Green (0%)
- Blue (44%)



- Red (74%)
- Yellow (0%)
- Blue (44%)



- Cyan (0%)
- Magenta (100%)
- Yellow (40%)
- Black (26%)




- Cyan (26%)
- Magenta (100%)
- Yellow (56%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 23.9669, 12.0111, 16.6780 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 23.9669, 12.0111, 16.6780 by changing the saturation by 10% instead.



 23.9669, 12.0111,  
16.6780


 23.9669, 12.0111,  
16.6780


265.0967,  
204.4788, 245.2907


 15.4337, 6.7512,  
9.8457


 49.4312, 29.5153,  
38.5543


 9.2126, 3.3070,  
5.1925


 67.0931, 42.5285,  
54.4354


 4.9383, 1.2940,  
2.2999


 88.5285, 58.8948,  
74.1698

 2.2455, 0.1366,  
0.7312

 114.1028, 78.9988,  
98.1761

 0.7666, 0.0000,  
0.0000

 144.1815,  
103.2248, 126.8728

 0.0000, 0.0000,  
0.0000

 179.1298,

131.9572, 160.6784

219.3130,  
165.5804, 200.0116

■ 23.9669, 12.0111,  
16.6780

■ 23.9669, 12.0111,  
16.6780

■ 23.9661, 12.0107,  
16.6740

■ 24.6448, 12.6530,  
19.1047

■ 25.5837, 13.7583,  
21.7994

■ 26.8663, 15.4908,  
24.7937

■ 28.5342, 17.9328,  
28.1055

■ 30.6230, 21.1541,  
31.7502

■ 33.1639, 25.2157,  
35.7421

■ 36.1850, 30.1729,  
40.0940

■ 39.7120, 36.0759,  
44.8181

■ 43.7689, 42.9716,  
49.9256

# Harmonies

## Analogous

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



21.0371, 12.0111, 37.7383



23.9669, 12.0111, 16.6780



22.8239, 12.0111, 4.9334

# Triad

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



23.9669, 12.0111, 16.6780



8.0215, 12.0111, 0.4901



6.5401, 12.0111, 50.1271

# Complementary

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



23.9669, 12.0111, 16.6780



19.5036, 36.9176, 12.9414

# 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.



4.6305, 12.0111, 27.2631



23.9669, 12.0111, 16.6780



5.2936, 12.0111, 2.5034

# Square

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



23.9669, 12.0111, 16.6780



12.6123, 12.0111, 0.1332



4.2530, 12.0111, 10.0374



10.2982, 12.0111, 64.3809



# Rectangle

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



23.9669, 12.0111, 16.6780



20.0316, 12.0111, 1.8090



4.2530, 12.0111, 10.0374



5.7115, 12.0111, 42.6399

# Sweetspot

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



23.9672, 12.0118, 16.6782



64.5171, 53.5584, 71.4050



12.1361, 5.1958, 48.5073



13.3644, 10.6768, 14.6345



90.7827, 95.5105, 104.0109



18.6292, 19.5994, 21.3438



# Same Dimension

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



23.9672, 12.0118, 16.6782



42.8016, 21.4626, 29.2218



21.1035, 10.8663, 1.5981



9.7631, 9.6295, 11.1414



16.1638, 8.0967, 11.4220



0.6647, 0.3298, 0.6135



# Inverse Universe

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



23.9672, 12.0118, 16.6782



42.8016, 21.4626, 29.2218



25.4635, 39.3015, 44.3253



9.7631, 9.6295, 11.1414



16.1638, 8.0967, 11.4220



0.6647, 0.3298, 0.6135



# Previews

## White Background



This preview shows how the XYZ color 23.9669, 12.0111, 16.6780 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

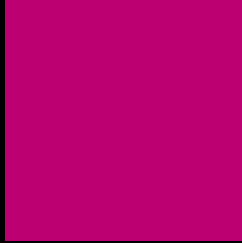
Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the XYZ color 23.9669, 12.0111, 16.6780 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

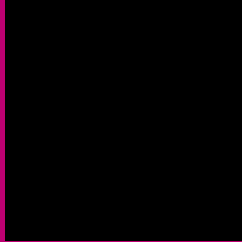
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

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

**XYZ 23.9669, 12.0111, 16.6780**

## **Background**



This preview shows how black text looks on a background with the XYZ color 23.9669, 12.0111, 16.6780.



This preview shows how white text looks on a background with the XYZ color 23.9669, 12.0111,



# 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

23.9669, 12.0111, 16.6780

### Protanopia

13.7133, 12.7998, 35.9303

### Deuteranopia

12.8879, 12.6951, 15.1357



## Tritanopia

21.4391, 12.3883, 3.8460

# Trichromacy



## Original Color

23.9669, 12.0111, 16.6780

## Protanomaly

13.9591, 9.1719, 27.4202

## Deuteranomaly

14.7459, 9.8463, 15.3107

## Tritanomaly

21.7946, 11.7600, 6.9156

# Monochromacy



## Original Color

23.9669, 12.0111, 16.6780

## Achromatopsia

5.6565, 5.9511, 6.4808

## Achromatomaly

9.3504, 5.9680, 9.2534

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 23.9669, 12.0111, 16.6780 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(189, 0, 113)` looks like.

```
.text, #text, p{  
    color:rgb(189, 0, 113)  
}
```

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(189, 0, 113) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(189, 0, 113) }
```

## Border

The CSS property to change the border of an element to XYZ 23.9669, 12.0111, 16.6780 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(189, 0, 113) }
```



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

```
.border{ border-color:rgb(189, 0, 113) }
```

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

Here you see how a box with a 4 pixel rgb(189, 0, 113) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(189, 0, 113); -webkit-box-  
shadow:4px 4px 4px 4px rgb(189, 0, 113);  
box-shadow:4px 4px 4px 4px rgb(189, 0,  
113) }
```

# Background

The CSS property to change the background color of an element to XYZ 23.9669, 12.0111, 16.6780 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(189, 0, 113) }
```

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

```
.background{ background-color: rgb(189, 0,  
113) }
```

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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