

# Converting Colors

XYZ(16.5101, 23.8200, 33.8650)

Have a look what the booklet for  
XYZ(16.5101, 23.8200, 33.8650)  
contains.

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# Color

**XYZ(16.4972, 23.7948,  
33.8604)**

# Conversions

## Conversions Part 1

Format	Color
Hex	009599
RGB	0, 149, 153
RGB Percent	0%, 58%, 60%
CMY	0.9999, 0.4157, 0.4000
CMYK	1.00, 0.03, 0.00, 0.40
HSL	182°, 100%, 30%
HSV	182°, 100%, 60%
XYZ	16.4972, 23.7948, 33.8604
YIQ	104.9050, -90.0880, -30.3440

# Conversions

## Conversions Part 2

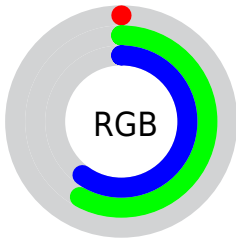
<b>Format</b>	<b>Color</b>
<b>RYB</b>	0, 75, 153
Decimal	38297
CIELab	55.88, -30.93, -11.57
CIELCh	56, 33.019, 200.505
Yxy	23.7948, 0.2225, 0.3209
Android (android.graphics.Color)	4278228377 (0xFF009599)
YUV	104.9050, 23.7108, -92.0017
Hunter-Lab	48.7799, -24.9968, -7.0100

# Details

The XYZ color **16.4972, 23.7948, 33.8604** is a dark color, and the websafe version is hex **009999**. A complement of this color would be **13.1808, 6.8597, 0.6300**, and the grayscale version is **13.3589, 14.0547, 15.3055**.

A 20% lighter version of the original color is **37.0718, 49.8644, 66.7024**, and **6.7660, 9.6947, 14.0850** is the 20% darker color. If you saturate the color by 10%, you get **16.4976, 23.7954, 33.8609**, and if you desaturate by 10%, it is **16.7633, 24.0266, 33.8916**.

# Distribution



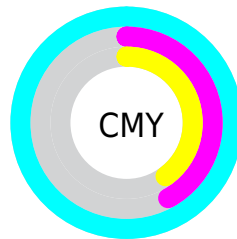
- Red (0%)
- Green (58%)
- Blue (60%)



- Red (0%)
- Yellow (29%)
- Blue (60%)



- Cyan (100%)
- Magenta (3%)
- Yellow (0%)
- Black (40%)



- Cyan (100%)
- Magenta (42%)
- Yellow (40%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 16.4972, 23.7948, 33.8604 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 16.4972, 23.7948, 33.8604 by changing the saturation by 10% instead.



■ 16.4972, 23.7948,  
33.8604

■ 16.4972, 23.7948,  
33.8604

■ 225.4712,  
271.7814, 334.2593

■ 9.9697, 15.1815,  
22.5099

■ 37.0098, 49.6951,  
66.8479

■ 5.4410, 8.9468,  
14.0301

■ 51.7256, 67.7509,  
89.3220

■ 2.5457, 4.7065,  
8.0026

■ 69.9015, 89.7230,  
116.3411

■ 0.9183, 2.0761,  
4.0088

■ 91.9030, 115.9958,  
148.3236

■ 0.0000, 0.6511,  
1.6302

■ 118.0953,  
146.9536, 185.6881

■ 0.0000, 0.0000,  
0.3122

■ 148.8439,

■ 0.0000, 0.0000,

182.9809, 228.8532

0.0000

184.5141,  
224.4620, 278.2374

■ 16.4972, 23.7948,  
33.8604

■ 16.4972, 23.7948,  
33.8604

■ 16.4976, 23.7954,  
33.8609

■ 16.7633, 24.0266,  
33.8916

■ 17.1784, 24.3350,  
33.9292

■ 17.8117, 24.7562,  
33.9771

■ 18.6907, 25.3044,  
34.0366

■ 19.8390, 25.9918,  
34.1088

■ 21.2772, 26.8289,  
34.1946

■ 23.0241, 27.8256,  
34.2949

■ 25.0969, 28.9905,  
34.4105

■ 27.5115, 30.3319,  
34.5421

# Harmonies

## Analogous

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



16.2079, 23.7948, 22.6404



16.4972, 23.7948, 33.8604



18.3221, 23.7948, 45.3992

# Triad

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



16.4972, 23.7948, 33.8604



28.6675, 23.7948, 41.4370



23.8301, 23.7948, 10.3810

# Complementary

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



16.4972, 23.7948, 33.8604



13.1808, 6.8597, 0.6300

# 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.



27.5338, 23.7948, 12.9887



16.4972, 23.7948, 33.8604



30.5238, 23.7948, 29.4769

# Square

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



16.4972, 23.7948, 33.8604



25.2448, 23.7948, 50.5475



30.0873, 23.7948, 19.3105



20.1768, 23.7948, 10.9500



# Rectangle

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



16.4972, 23.7948, 33.8604



20.2880, 23.7948, 50.7427



30.0873, 23.7948, 19.3105



25.1161, 23.7948, 10.8798

# Sweetspot

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



16.4979, 23.7957, 33.8610



41.0267, 49.7149, 61.4056



11.4058, 22.7886, 3.8713



8.7812, 10.8196, 13.5431



72.9764, 76.7769, 83.6100



11.9732, 12.5967, 13.7178



# Same Dimension

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



16.4979, 23.7957, 33.8610



29.5224, 42.5693, 60.6327



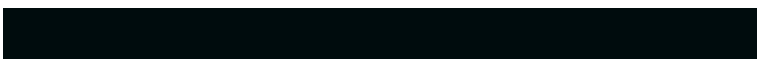
8.1964, 7.1926, 31.0938



6.3707, 6.9988, 7.9441



13.6387, 19.6741, 27.9863



0.2076, 0.3016, 0.4196



# Inverse Universe

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



18.5623, 8.9429, 29.1825



33.2307, 16.0100, 52.2017



15.9376, 12.3733, 1.5489



6.4542, 6.3209, 7.7722



15.3429, 7.3914, 24.1287



0.2313, 0.1113, 0.3706



# Previews

## White Background



This preview shows how the XYZ color 16.4972, 23.7948, 33.8604 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 16.4972, 23.7948, 33.8604 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

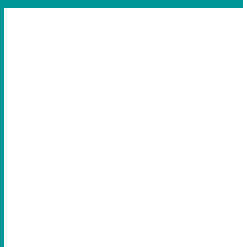
If you want to check with other color combinations, try the [Color Contrast Checker](#).

**XYZ 16.4972, 23.7948, 33.8604**

## **Background**



This preview shows how black text looks on a background with the XYZ color 16.4972, 23.7948, 33.8604.



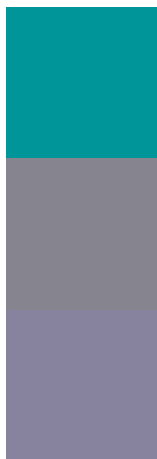
This preview shows how white text looks on a background with the XYZ color 16.4972, 23.7948,



# 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

16.4972, 23.7948, 33.8604

### Protanopia

22.8821, 23.4722, 29.3112

### Deuteranopia

24.0601, 23.5505, 35.1759



## Tritanopia

17.2884, 23.9000, 36.9597

# Trichromacy



## Original Color

16.4972, 23.7948, 33.8604

## Protanomaly

18.1013, 22.2148, 30.9376

## Deuteranomaly

18.7842, 22.2701, 34.7610

## Tritanomaly

16.8727, 23.7157, 35.5866

# Monochromacy



## Original Color

16.4972, 23.7948, 33.8604

## Achromatopsia

13.4271, 14.1263, 15.3836

## Achromatomaly

12.6650, 16.2732, 20.8859

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 16.4972, 23.7948, 33.8604 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(0, 149, 153)` looks like.

```
.text, #text, p{  
    color:rgb(0, 149, 153)  
}
```

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(0, 149, 153) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(0, 149, 153) }
```

## Border

The CSS property to change the border of an element to XYZ 16.4972, 23.7948, 33.8604 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(0, 149, 153) }
```



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

```
.border{ border-color:rgb(0, 149, 153) }
```

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

Here you see how a box with a 4 pixel rgb(0, 149, 153) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(0, 149, 153); -webkit-box-  
shadow:4px 4px 4px 4px rgb(0, 149, 153);  
box-shadow:4px 4px 4px 4px rgb(0, 149,  
153) }
```

# Background

The CSS property to change the background color of an element to XYZ 16.4972, 23.7948, 33.8604 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(0, 149, 153) }
```

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

```
.background{ background-color: rgb(0, 149,  
153) }
```

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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