

# Converting Colors

XYZ(18.0137, 32.2396, 31.1170)

Have a look what the booklet for  
XYZ(18.0137, 32.2396, 31.1170)  
contains.

<b>XYZ(20.8783, 33.8240, 31.4149)</b> .....	3
<i><b>Conversions</b></i> .....	4
<i><b>Details</b></i> .....	6
<i><b>Harmonies</b></i> .....	12
<i><b>Previews</b></i> .....	24
<i><b>Color Blindness Simulation</b></i> .....	28
<i><b>CSS Examples</b></i> .....	31

# Color

**XYZ(20.8783, 33.8240,  
31.4149)**

# Conversions

## Conversions Part 1

Format	Color
Hex	00B28F
RGB	0, 178, 143
RGB Percent	0%, 70%, 56%
CMY	0.9999, 0.3019, 0.4392
CMYK	1.00, 0.00, 0.20, 0.30
HSL	168°, 100%, 35%
HSV	168°, 100%, 70%
XYZ	20.8783, 33.8240, 31.4149
YIQ	120.7880, -94.8530, -48.6210

# Conversions

## Conversions Part 2

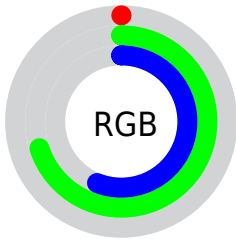
<b>Format</b>	<b>Color</b>
<b>RYB</b>	0, 99, 178
Decimal	45711
CIELab	64.82, -46.69, 7.19
CIELCh	65, 47.238, 171.242
Yxy	33.8240, 0.2424, 0.3928
Android (android.graphics.Color)	4278235791 (0xFF00B28F)
YUV	120.7880, 10.9505, -105.9311
Hunter-Lab	58.1584, -37.6974, 8.6847

# Details

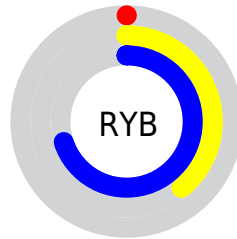
The XYZ color **20.8783, 33.8240, 31.4149** is a dark color, and the websafe version is hex **33CC99**. A complement of this color would be **18.6646, 9.5871, 2.4583**, and the grayscale version is **18.0953, 19.0376, 20.7320**.

A 20% lighter version of the original color is **44.5057, 65.8808, 63.1939**, and **9.1834, 15.2056, 12.8069** is the 20% darker color. If you saturate the color by 10%, you get **20.8788, 33.8251, 31.4144**, and if you desaturate by 10%, it is **21.3945, 34.0598, 32.8459**.

# Distribution



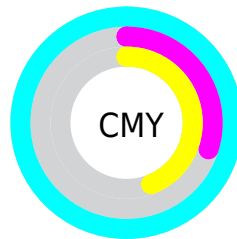
- Red (0%)
- Green (70%)
- Blue (56%)



- Red (0%)
- Yellow (39%)
- Blue (70%)



- Cyan (100%)
- Magenta (0%)
- Yellow (20%)
- Black (30%)




- Cyan (100%)
- Magenta (30%)
- Yellow (44%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 20.8783, 33.8240, 31.4149 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 20.8783, 33.8240, 31.4149 by changing the saturation by 10% instead.




 20.8783, 33.8240,  
31.4149


 20.8783, 33.8240,  
31.4149


249.3750,  
319.3466, 322.8554


 13.1470, 22.7584,  
20.6539


 44.3777, 65.6599,  
62.9799


 7.6076, 14.4152,  
12.6825


 60.8766, 87.1990,  
84.6210


 3.8946, 8.4100,  
7.0821


 81.0286, 112.9980,  
110.7258

 1.6427, 4.3584,  
3.4343

 105.1993,  
143.4414, 141.7130

 0.4200, 1.8760,  
1.3204

 133.7539,  
178.9136, 178.0010

 0.0000, 0.5339,  
0.0784

 167.0578,

 0.0000, 0.0000,

219.7989, 220.0083

0.0000

205.4764,  
266.4818, 268.1537

■ 20.8783, 33.8240,  
31.4149

■ 20.8783, 33.8240,  
31.4149

■ 20.8788, 33.8251,  
31.4144

■ 21.3945, 34.0598,  
32.8459

■ 22.1405, 34.4123,  
34.3305

■ 23.2026, 34.9268,  
35.8739

■ 24.6216, 35.6243,  
37.4783

■ 26.4319, 36.5225,  
39.1457

■ 28.6638, 37.6370,  
40.8779

■ 31.3447, 38.9820,  
42.6766

■ 34.4995, 40.5704,  
44.5433

■ 38.1514, 42.4139,  
46.4793

# Harmonies

## Analogous

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



22.9911, 33.8240, 18.0053



20.8783, 33.8240, 31.4149



21.4351, 33.8240, 52.1328

# Triad

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



20.8783, 33.8240, 31.4149



37.1233, 33.8240, 83.9290



41.0505, 33.8240, 14.6627

# Complementary

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



20.8783, 33.8240, 31.4149



18.6646, 9.5871, 2.4583

# 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.



45.9433, 33.8240, 24.8575



20.8783, 33.8240, 31.4149



43.4629, 33.8240, 65.6039

# Square

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



20.8783, 33.8240, 31.4149



30.1982, 33.8240, 87.6323



46.8834, 33.8240, 42.8310



34.1814, 33.8240, 10.8288



# Rectangle

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



20.8783, 33.8240, 31.4149



23.2837, 33.8240, 67.4480



46.8834, 33.8240, 42.8310



43.0190, 33.8240, 17.2446

# Sweetspot

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



20.8792, 33.8253, 31.4157



56.5616, 70.5492, 77.2132



16.6352, 32.2102, 5.3409



12.0637, 15.3954, 16.8026



86.6293, 91.1408, 99.2523



17.0014, 17.8868, 19.4787



# Same Dimension

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



20.8792, 33.8253, 31.4157



37.7780, 61.3043, 56.5289



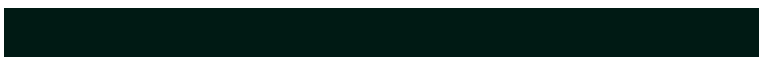
15.3204, 17.7825, 44.7460



8.6696, 9.6023, 10.5197



14.9609, 24.2103, 22.5946



0.4890, 0.7691, 0.8074



# Inverse Universe

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



18.6646, 9.5871, 2.4583



33.7809, 17.3585, 4.1171



19.6529, 12.0493, 1.2904



8.5624, 8.5317, 9.1941



13.3723, 6.8665, 1.8547



0.4408, 0.2241, 0.1640



# Previews

## White Background



This preview shows how the XYZ color 20.8783, 33.8240, 31.4149 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

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 20.8783, 33.8240, 31.4149 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

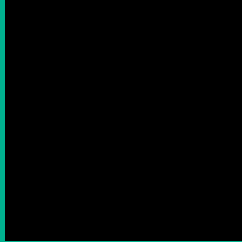
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

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

**XYZ 20.8783, 33.8240, 31.4149**

## **Background**



This preview shows how black text looks on a background with the XYZ color 20.8783, 33.8240, 31.4149.



This preview shows how white text looks on a background with the XYZ color 20.8783, 33.8240,



# 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

20.8783, 33.8240, 31.4149

### Protanopia

31.5704, 33.4422, 26.6208

### Deuteranopia

33.9470, 33.3018, 33.0725



## **Tritanopia**

25.0836, 33.8071, 51.6578

# Trichromacy



## Original Color

20.8783, 33.8240, 31.4149



## Protanomaly

23.5451, 31.3318, 28.0992



## Deuteranomaly

24.5669, 30.9758, 32.2879



## Tritanomaly

23.0514, 33.5145, 43.2842

# Monochromacy



## Original Color

20.8783, 33.8240, 31.4149



## Achromatopsia

18.1737, 19.1202, 20.8219



## Achromatomaly

16.6960, 22.5088, 24.2335

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 20.8783, 33.8240, 31.4149 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, 178, 143)` looks like.

```
.text, #text, p{  
    color:rgb(0, 178, 143)  
}
```

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, 178, 143) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(0, 178, 143) }
```

## Border

The CSS property to change the border of an element to XYZ 20.8783, 33.8240, 31.4149 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, 178, 143) }
```



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

```
.border{ border-color:rgb(0, 178, 143) }
```

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

Here you see how a box with a 4 pixel `rgb(0, 178, 143)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(0, 178, 143); -webkit-box-  
shadow:4px 4px 4px 4px rgb(0, 178, 143);  
box-shadow:4px 4px 4px 4px rgb(0, 178,  
143) }
```

# Background

The CSS property to change the background color of an element to XYZ 20.8783, 33.8240, 31.4149 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(0, 178, 143) }
```

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

```
.background{ background-color: rgb(0, 178,  
143) }
```

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](#).

Hey! You found this booklet interesting? Support Converting Colors with the new Membership Option!

The pro membership hides all ads, plus gives you double the colors in the color bucket, and more awesome pro features!

**[Learn more, Memberships starting at \\$2.50/m!](#)**

**Follow me  
on Twitter!**

@ConvertingColor