

# Converting Colors

$Y_{xy}(20.3356, 0.6156, 0.3165)$

Have a look what the booklet for  
Yxy(20.3356, 0.6156, 0.3165)  
contains.

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**Color**

**Yxy(20.3292, 0.6160, 0.3167)**

# Conversions

## Conversions Part 1

Format	Color
Hex	F9002D
RGB	249, 0, 45
RGB Percent	98%, 0%, 18%
CMY	0.0235, 0.9999, 0.8236
CMYK	0.00, 1.00, 0.82, 0.02
HSL	349°, 100%, 49%
HSV	349°, 100%, 98%
XYZ	39.5415, 20.3292, 4.3200
YIQ	79.5810, 133.9590, 66.7830

# Conversions

## Conversions Part 2

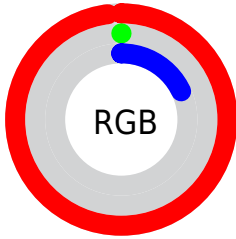
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	249, 0, 45
Decimal	16318509
CIE <sub>Lab</sub>	52.21, 79.26, 49.39
CIE <sub>LCh</sub>	52, 93.386, 31.926
Yxy	20.3292, 0.6160, 0.3167
Android (android.graphics.Color)	4294508589 (0xFFFF9002D)
YUV	79.5810, -17.0484, 148.5805
Hunter-Lab	45.0879, 77.6382, 25.8808

# Details

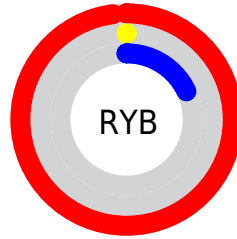
The Yxy color **20.3292, 0.6160, 0.3167** is a dark color, and the websafe version is hex **FF0033**. The color can be described as dark saturated red. A complement of this color would be **72.1167, 0.2413, 0.3885**, and the grayscale version is **7.9544, 0.3127, 0.3290**.

A 20% lighter version of the original color is **30.3984, 0.5190, 0.3331**, and **9.9451, 0.6401, 0.3300** is the 20% darker color. If you saturate the color by 10%, you get **20.3295, 0.6160, 0.3167**, and if you desaturate by 10%, it is **21.2191, 0.5884, 0.3092**.

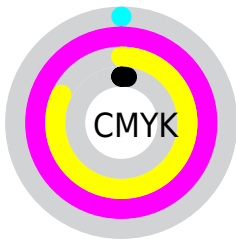
# Distribution



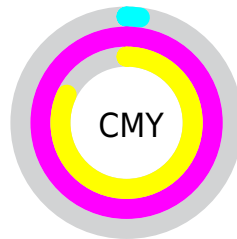
- Red (98%)
- Green (0%)
- Blue (18%)



- Red (98%)
- Yellow (0%)
- Blue (18%)



- Cyan (0%)
- Magenta (100%)
- Yellow (82%)
- Black (2%)




- Cyan (2%)
- Magenta (100%)
- Yellow (82%)


# Brightness & Saturation Gradients

These gradients show how the Yxy color 20.3292, 0.6160, 0.3167 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 Yxy color 20.3292, 0.6160, 0.3167 by changing the saturation by 10% instead.





 20.3292, 0.6160,  
0.3167


 20.3292, 0.6160,  
0.3167

253.6917, 0.4527,  
0.3425


 12.6346, 0.6546,  
0.3023


 43.9684, 0.5568,  
0.3319


 7.1774, 0.7028,  
0.2805


 60.6818, 0.5342,  
0.3358


 3.5733, 0.7555,  
0.2445

 81.1702, 0.5151,  
0.3384

 1.4379, 0.8108,  
0.1892

 105.8181, 0.4988,  
0.3401

 0.2444, 0.9243,  
0.0757

 135.0098, 0.4848,  
0.3412

 0.0000, 1.0000,  
0.0000

 169.1297, 0.4727,

 0.0000, 0.0000,

0.3419

0.0000

208.5622, 0.4621,  
0.3423

■ 20.3292, 0.6160,  
0.3167

■ 20.3292, 0.6160,  
0.3167

■ 20.3295, 0.6160,  
0.3167

■ 21.2191, 0.5884,  
0.3092

■ 23.0761, 0.5513,  
0.3038

■ 26.1815, 0.5091,  
0.3017

■ 30.7071, 0.4671,  
0.3026

■ 36.7974, 0.4287,  
0.3056

■ 44.5791, 0.3956,  
0.3099

■ 54.1660, 0.3680,  
0.3148

■ 65.6618, 0.3455,  
0.3197

■ 79.1625, 0.3273,  
0.3245

# Harmonies

## Analogous

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



20.3292, 0.5203, 0.2394



20.3292, 0.6160, 0.3167



20.3292, 0.5845, 0.4049

# Triad

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



20.3292, 0.6160, 0.3167



20.3292, 0.2185, 0.6166



20.3292, 0.1187, 0.1210

# Complementary

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



20.3292, 0.6160, 0.3167



72.1167, 0.2413, 0.3885

# 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.



20.3292, 0.0843, 0.1441



20.3292, 0.6160, 0.3167



20.3292, 0.1218, 0.4031

# Square

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



20.3292, 0.6160, 0.3167



20.3292, 0.3455, 0.6311



20.3292, 0.0825, 0.2228



20.3292, 0.1987, 0.1312



# Rectangle

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



20.3292, 0.6160, 0.3167



20.3292, 0.5200, 0.4800



20.3292, 0.0825, 0.2228



20.3292, 0.1032, 0.1245

# Sweetspot

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



20.3305, 0.6160, 0.3167



57.1196, 0.3681, 0.3147



19.5876, 0.2741, 0.1283



11.2612, 0.3791, 0.3127



0.0000, 0.0000, 0.0000



21.4041, 0.3127, 0.3290



# Same Dimension

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



20.3305, 0.6160, 0.3167



21.4575, 0.6163, 0.3169



25.7145, 0.5951, 0.3656



17.2764, 0.3265, 0.3247



10.8963, 0.6127, 0.3149



1.0227, 0.5823, 0.2981



# Inverse Universe

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



20.3305, 0.6160, 0.3167



21.4575, 0.6163, 0.3169



35.6509, 0.1945, 0.2201



17.2764, 0.3265, 0.3247



10.8963, 0.6127, 0.3149



1.0227, 0.5823, 0.2981



# Previews

## White Background



This preview shows how the Yxy color 20.3292, 0.6160, 0.3167 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

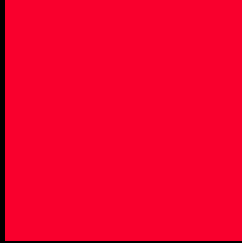
Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the Yxy color 20.3292, 0.6160, 0.3167 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](#).

**Yxy 20.3292, 0.6160, 0.3167**

## Background



This preview shows how black text looks on a background with the Yxy color 20.3292, 0.6160, 0.3167.



This preview shows how white text looks on a background with the Yxy color 20.3292, 0.6160, 0.3167.

# 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

20.3292, 0.6160, 0.3167

### Protanopia

20.7799, 0.3908, 0.4256

### Deuteranopia

20.8657, 0.4626, 0.4560



## Tritanopia

20.5303, 0.6348, 0.3342

# Trichromacy



## Original Color

20.3292, 0.6160, 0.3167



## Protanomaly

15.5501, 0.5017, 0.3531



## Deuteranomaly

16.4743, 0.5556, 0.3725



## Tritanomaly

20.3079, 0.6322, 0.3295

# Monochromacy



## Original Color

20.3292, 0.6160, 0.3167



## Achromatopsia

8.0220, 0.3127, 0.3290



## Achromatomaly

8.4356, 0.4731, 0.3028

# CSS Examples

## Text

The CSS property to change the color of the text to Yxy 20.3292, 0.6160, 0.3167 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(249, 0, 45)` looks like.

```
.text, #text, p{  
    color:rgb(249, 0, 45)  
}
```

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(249, 0, 45) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(249, 0, 45) }
```

## Border

The CSS property to change the border of an element to Yxy 20.3292, 0.6160, 0.3167 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(249, 0, 45) }
```

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

```
.border{ border-color:rgb(249, 0, 45) }
```

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

Here you see how a box with a 4 pixel rgb(249, 0, 45) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(249, 0, 45); -webkit-box-  
shadow:4px 4px 4px 4px rgb(249, 0, 45);  
box-shadow:4px 4px 4px 4px rgb(249, 0, 45)  
}
```



# Background

The CSS property to change the background color of an element to Yxy 20.3292, 0.6160, 0.3167 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(249, 0, 45) }
```

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

```
.background{ background-color: rgb(249, 0,  
45) }
```

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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