

R is the part of Red in the color to convert.

G is the part of Green in the color to convert.

B is the part of Blue in the color to convert.

M_{axR} is the possible maximum of R (generally 100 or 255)

M_{axG} is the possible maximum of G (generally 100 or 255)

M_{axB} is the possible maximum of B (generally 100 or 255)

R' , G' , B' , C' , M' , Y' and K' are internal variables that mustn't be displayed.

C is the part of Cyan in the converted color.

M is the part of Magenta in the converted color.

Y is the part of Yellow in the converted color.

K is the part of black in the converted color.

M_{axC} is the possible maximum of C (generally 100, 1 or 255).

M_{axM} is the possible maximum of M (generally 100, 1 or 255).

M_{axY} is the possible maximum of Y (generally 100, 1 or 255).

M_{axK} is the possible maximum of K (generally 100, 1 or 255).

$$R' = \frac{R}{M_{axR}}$$

$$G' = \frac{G}{M_{axG}}$$

$$B' = \frac{B}{M_{axB}}$$

$$K' = 1 - \max(R', G', B')$$

$$C' = \frac{1-R'-K'}{1-K'}$$

$$M' = \frac{1-G'-K'}{1-K'}$$

$$Y' = \frac{1-B'-K'}{1-K'}$$

$$C = C' \times M_{axC}$$

$$M = M' \times M_{axM}$$

$$Y = Y' \times M_{axY}$$

$$K = K' \times M_{axK}$$