

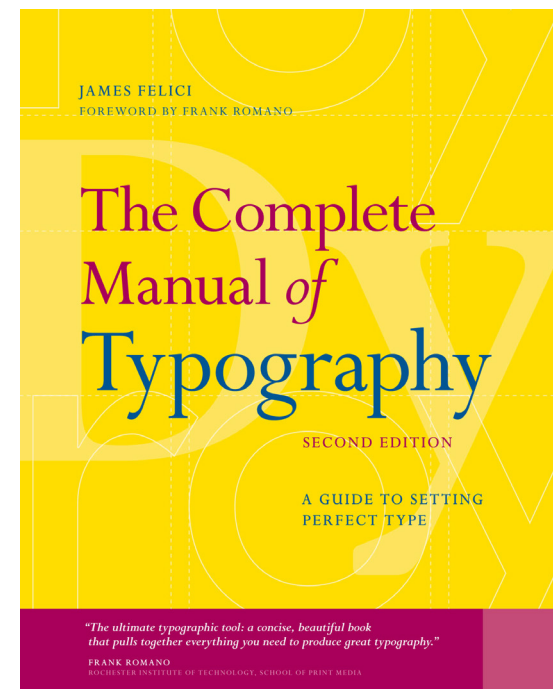
# Measure-pointsize-leading

In the famous book by James Felici «The Complete Manual of Typography, the chapter 9 «Measure, Point Size, and Leading» is devoted to discussing the ratio of column width, size of letters and interlining of text.

It's hard to talk about these variables—measure, point size, and leading— one at a time. They work in concert, and ultimately all three are dependent on the typeface you're working with. Bigger type needs wider measures, and wider measures need more leading. Wider measures, in turn, need larger type. Changing the leading changes everything.

There is no specific mathematical relationship between these three quantities, so that, for example, by setting two parameters, we can calculate the third one. But there is a ratio that allows you to estimate the approximate value of one of the parameters.

As with calculating suitable point sizes for various measures, there are several ways of calculating the appropriate leading. Again, my preference is a numerical approach, based on the relationship between point size and measure. To calculate how much extra lead to add, simply divide the measure (in picas) by the size of the type (in points). Round off the result to the nearest half point. For 11-point type set over a 24-pica measure, then, you would add 2 extra points of lead ( $24 \div 11 = 2.18$ , rounded off to 2), for a setting of 11/13. If the measure is widened to 30 picas, the result of the calculation is 2.5, for a setting of 11/13.5. This formula certainly isn't binding,



but it does get you close to an appropriate leading value.

So, here's a rule of thumb for determining the leading: *take the column width in peaks and divide it by the font size, and then round the result to the nearest half point.*

For example, a 10-point font and a measure of 24 picas: the ratio is 2.4. This is rounded to 2.5, the number is added to the font size in points and we get an leading of 12.5 points.

The main disadvantage of this formula is that other units of measurement are often used to use the measure width, and few people will want to waste time on recalculation. But this can be assigned to the script.

In the Horizontal Unit block, the working unit of measurement is selected, and the program itself counts everything according to the formula given earlier, converting the specified measure width into picas.

Two size input fields: column width and pointsize, the size of the leading will be displayed when the **OK** button is pressed. In the picture, a pica is selected as a unit of measurement

of horizontal dimensions, a column size of 24 pica and a size of 10 pt is entered. The calculated result of leading is displayed in a field that cannot be edited.

And how do the pointsize and the column width relate to each other? Here's what James Felici writes about it.

## Point Size and Measure

Point size and measure are married to each other. Optimal line lengths, for example, are often expressed in terms of how many characters or words will fit within the measure, and this is a function of point size.

A guide that I prefer compares the line length in picas with the type size in points. Because it uses simple math, you don't have to count individual words and characters. In this scheme, a measure (in picas) three times the size of the type (in points) is the absolute outer limit, and it is too long most of the time. Thus, 10-point type shouldn't be set over a measure exceeding 30 picas. The ideal ratio is about 2:1 or 2.5:1, which translates to a measure of 20 to 25 picas for 10-point type. When the ratio approaches 1:1 (10-point type over a 10-pica measure, for example) good type composition becomes almost

impossible. Below a ratio of 1.5:1, you're skating on thin ice.

All these schemes lead you to the same basic relationship between type size and measure, and the clear implication is that the longer the line, the larger the type should be. Standard text sizes for most books, journals, and magazines range from 10-point to 12-point.

So, the second rule of thumb: *the column width in picas should not exceed the tripled value of the pointsize*; the third rule: *the column width in picas should not be equal to or less than the pointsize*; the fourth rule: *the ratio of column width to the pointsize in the range of 1.5–1 should be avoided*.

How is this implemented in the script? The program places a marker before the words Frame width, for the

second and third rules it is an asterisk [\*], for the third plus or minus [ $\pm$ ], and there is a clarification in the tooltip. Plus [+] in place of the marker in the case when the ratio of the column width and the size did not fall within the mentioned restrictions.

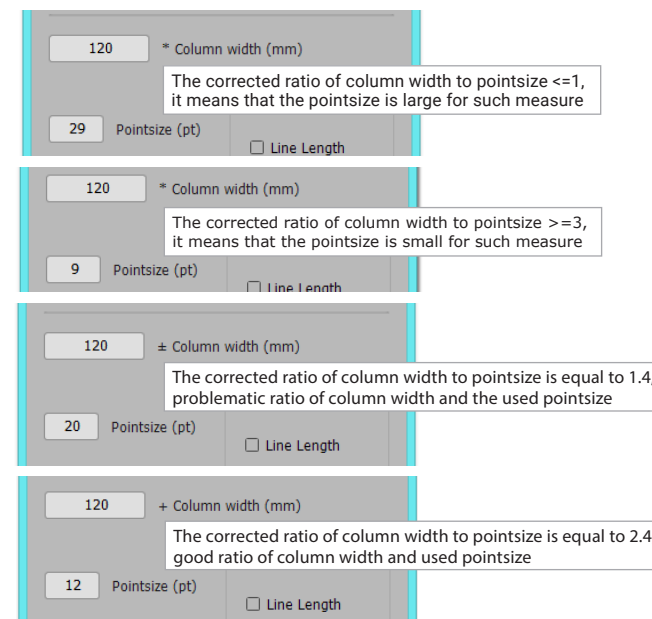
In all messages The corrected ratio... means that the program recalculates the column width from the current units of measurement into picas, and then calculates this ratio.

## Number of letters in the line

That's the rule from Felici's book:

27 characters is the minimum line length, 40 the optimum, and 70 the maximum.

And this line length spread can also be correlated with the selected column width and size.



As soon as the value of the pointsize is determined, the **Line length** checkbox becomes available. When you click on it, a window will open to get information about the options for the length of the string with the selected size:

String length options with the selected size 11 pt

0.523 the average ratio of the character width to the pointsize ☐

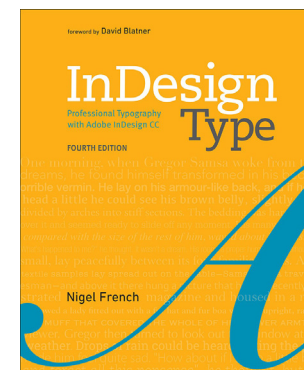
27 70 minimum | maximum number of letters in a column

The length of the string with these values (pica) 12p11.331 | 33p6.710

The average ratio of the character width to the pointsize is different for all fonts, and it is necessary to put the value for the font used in this field. Put the cursor in the text and check the box in the first line, the average width characters of the StringOfLetters will be calculated (see the program text). This value divided by the pointsize and placed in this field.

By default, the minimum and maximum number of letters here are from Felici's book. You can enter your values in these fields, and when you click on the red cross in the header of the window, the line length of used pintsize will be displayed above the **Line length** checkbox.

There is also another interesting book: Nigel French. InDesign Type, and this book offers more practical, in my opinion, the minimum and maximum numbers of characters in the column: 40 and 90.



#### LINE LENGTH

Bears Ears National Monument is a United States National Monument located in San Juan County in southeastern Utah, established by President Barack Obama by presidential proclamation on December 28, 2016. The monument's original size was 1,351,849 acres, which was reduced to 201,876 acres by President Donald Trump on December 4, 2017.

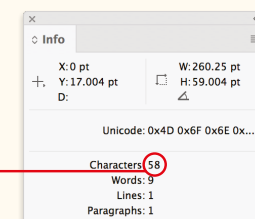
Too narrow

Bears Ears National Monument is a United States National Monument located in San Juan County in southeastern Utah, established by President Barack Obama by presidential proclamation on December 28, 2016. The monument's original size was 1,351,849 acres, which was reduced to 201,876 acres by President Donald Trump on December 4, 2017.

Acceptable

Bears Ears National Monument is a United States National Monument located in San Juan County in southeastern Utah, established by President Barack Obama by presidential proclamation on December 28, 2016. The monument's original size was 1,351,849 acres, which was reduced to 201,876 acres by President Donald Trump on December 4, 2017.

Too wide



It is important here that as a result, in the main window of the program there will be such recommendations for choosing the column size — based on the used pointsize. The width of the column and the leading will be easier to determine.

## Try it!

The program will not solve all the questions for us, but it will definitely help us quickly find the right values. And you can explain to yourself and others why the column width and interlining are exactly like this.

However, most likely, no one will ask. They will take it for granted. If this upsets you, then may be the words of Jan Tschichold from the work “The Form of the Book:” will comfort you:

“To remain nameless and without specific appreciation, yet to have been of service to a valuable work and to the small number of visually sensitive readers — this, as a rule, is the only compensation for the long, and indeed never-ending, indenture of the typographer.”

Its help me sometimes.

Mikhail Ivanyushin  
dotextok@gmail.com  
<https://shop.dotextok.ru/en/>  
07.12.2021