

## Do Alpha Sizes Have Numerical Equivalents?

By Elizabeth White, [TC]<sup>2</sup>

Alpha sizing may be confusing when compared with numeric sizing. Some brands may only use alpha or numeric sizing while others use both types of sizing. The most common question I hear is which numeric size dimensions should be used for specifying alpha sizes.

The [PS42-70](#) Misses chart will be used to represent a numeric size range. All dimensions are in inches.

TABLE 4. Misses<sup>1</sup>

Size	6	8	10	12	14	16	18	20	22
<b>GIRTH MEASUREMENTS (inches)</b>									
Bust	31½	32½	33½	35	36½	38	40	42	44
Waist	22½	23½	24½	26	27½	29	31	33	35
Hip	33½	34½	35½	37	38½	40	42	44	46

The original grading increment between sets of body dimensions is 1" from size 6 to size 10, 1½" from size 10 to size 16, and 2" from size 16 to size 22 as illustrated in the following chart:

<b>Numeric Size</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b>14</b>	<b>16</b>	<b>18</b>	<b>20</b>	<b>22</b>
Bust	31.5	32.5	33.5	35	36.5	38	40	42	44
Waist	22.5	23.5	24.5	26	27.5	29	31	33	35
Hip	33.5	34.5	35.5	37	38.5	40	42	44	46

Numeric Grading Increment	1"	1"	1.5"	1.5"	1.5"	2"	2"	2"
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Then, we can overlay a possible alpha sizing scheme:

<b>Alpha Size</b>	<b>S</b>		<b>M</b>		<b>L</b>		<b>XL</b>		<b>2XL</b>
<b>Numeric Size</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b>14</b>	<b>16</b>	<b>18</b>	<b>20</b>	<b>22</b>
Bust	31.5	32.5	33.5	35	36.5	38	40	42	44
Waist	22.5	23.5	24.5	26	27.5	29	31	33	35
Hip	33.5	34.5	35.5	37	38.5	40	42	44	46

There are several ways this question is worded.

1. Are the alpha size dimensions between the numeric size dimensions?  
That would mean that alpha size S is size 7, M is size 11, etc.
2. Are the alpha size dimensions the same as for the smaller numeric size?  
Size S would be 6, size M would be the 10, etc.
3. Are the alpha size dimensions the same as for the larger numeric size? In this case, S is size 8, M is size 12, L is size 16, XL is size 20, and 2XL is size 22.

### Question 1 Response

The first question presumes that the alpha size is the average of the two numeric sizes. For size XL (Extra Large), this would be the body dimensions:

Bust – 41”  
 Waist – 32”  
 Hip – 43”

However, the alpha size XL using this set of body dimensions may not be large enough to accommodate the size 20 body since the dimensions are not as large as the ones for size 20. If the garment is designed to closely fit the body, this strategy will probably not work. The amount of ease in the pattern, the garment style, and the manufacturing tolerance will determine if the garment is large enough to fit the size 20 body.

**Question 2 Response**

The second question may be due to size range decisions such that garments are made as small as size 6. With alpha sizing, the smallest size may still be a 6, but with a label of S. That convention may be continued with M as 10 and L as 14. But for XL and 2XL, there may be a shift toward the larger sizes such that XL is a size 20. Since only size 22 is left in the size range for 2XL, the size label is the only change for alpha sizing. This would be the resulting size chart.

Alpha Size	S		M		L		XL		2XL
Numeric Size	6	8	10	12	14	16	18	20	22
Bust	31.5	32.5	33.5	35	36.5	38	40	42	44
Waist	22.5	23.5	24.5	26	27.5	29	31	33	35
Hip	33.5	34.5	35.5	37	38.5	40	42	44	46
Alpha Grading Increment	2"		3"		5.5"		2"		

Notice that this strategy produces 2” grading between S and M dimensions, 3” grading between M and L, 5½” grading between L and XL, and 2” grading between XL and 2XL. This is quite different from the original numerical grading scheme of 1”, 1½”, and 2”. These incremental grades can be distorted when switching to alpha sizing and are magnified by inconsistency in size choice. The customer may notice this difference when trying on garments in the retail environment. Since the L to XL grade is more than the grade from S to L, the customer may be left with the impression that a size is missing between L and XL.

Merely relabeling size 6 as size S is not accurate if size S should fit both sizes 6 and 8. This is also true for sizes M and L as the size M is not large enough for size 12 and size L is not large enough for size 14. Size XL will fit size 20 as it is made to fit that set of dimensions, as size 2XL will fit size 22. Size XL will be large enough for size 18. But extra ease will yield a different appearance and fit on the body compared to size XL on a size 20 body.

If the size 16 customer tries to fit into the size L garment and there is not enough ease to fit or the appearance is noticeably different, doubt over the alpha to numeric size correlation may cause higher returns and dissatisfaction with the brand.

### Question 3 Response

The third question considers the need for the garment to be large enough to fit both of the numeric sizes within an alpha size label. If sizes SML and XL are really numeric sizes 8, 12, 16, and 20, the garments will be large enough for both sets of numeric size dimensions covered by the alpha labels. As previously mentioned, the smaller sized body within an alpha size label will be able to put on the alpha sized garment, but there will be extra ease as compared to fit on the larger sized body. This would be the resulting size chart:

Alpha Size	S		M		L		XL		2XL
Numeric Size	6	<b>8</b>	10	<b>12</b>	14	<b>16</b>	18	<b>20</b>	<b>22</b>
Bust	31.5	32.5	33.5	35	36.5	38	40	42	44
Waist	22.5	23.5	24.5	26	27.5	29	31	33	35
Hip	33.5	34.5	35.5	37	38.5	40	42	44	46

Alpha Grading Increment	2.5"	3"	4"	2"
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This chart exhibits characteristics of a previous chart in that the grade between the L and XL sizes is approximately twice the grade between the other sizes. Because of this discrepancy and its possible detrimental effect on customer size prediction and buying behavior, brands may choose dimensions such that the alpha sizes do not correlate exactly with the numeric sizes. One option is to change the grading increment between sizes so that the alpha grading increment is more consistent. This is one option for a revised size chart, using the 1½" grade from numeric size 10 up to a new size 24. The range of body dimensions is the same as for the original chart.

Alpha Size	S		M		L		XL		2XL	
Numeric Size	6	<b>8</b>	10	<b>12</b>	14	<b>16</b>	18	<b>20</b>	22	<b>24</b>
Bust	31.5	32.5	33.5	35	36.5	38	39.5	41	42.5	44
Waist	22.5	23.5	24.5	26	27.5	29	30.5	32	33.5	35
Hip	33.5	34.5	35.5	37	38.5	40	41.5	43	44.5	46

Alpha Grading Increment	2.5"	3"	3"	3"
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The grading increment is not exactly the same between all sizes, but it is more consistent than the previous example. It is also approximately double the original grading increments. This is reasonable considering there are only ½ the number of sizes.

### Conclusion

Depending on how closely a garment is intended to fit the body and whether the customer expects consistency in size labels and fit, the answer to this question can vary. The most commonly chosen response is number 3 since it allows individual alpha size labels to accommodate the intended numeric size label dimensions, even though there will be variance in garment ease. If a brand plans

to offer both numeric and alpha size labels, the original size dimensions may be determined so that there is only a size relabeling difference between numeric and alpha size labels.

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