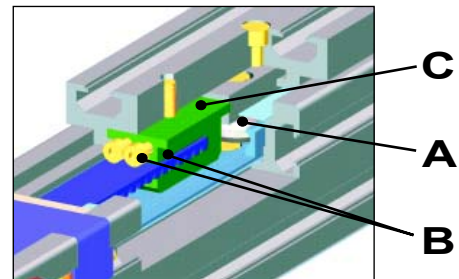
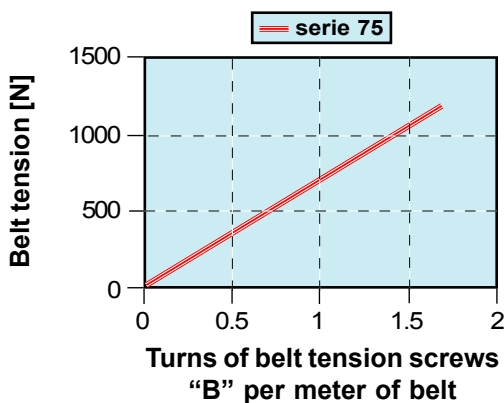
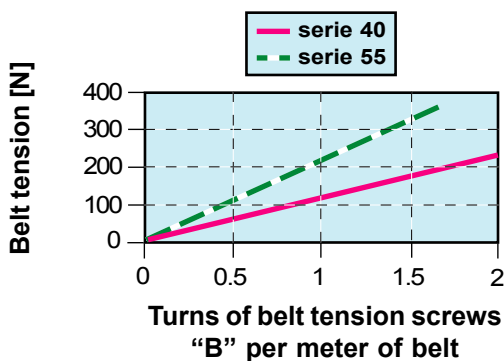


BELT TENSIONING

The **UNILINE** linear units are all supplied with standard belt tension suitable for most applications. See table below for values.

The belt tension system located at the trolley's end allows different belt tension settings according to technical requirements. For variation please follow procedure below (the reference values are the standard ones).

1. Decide the needed belt tension variation.
2. The number of turns that the tension screws "B" must be turned for the required belt tension variation can be found in the charts below.
3. Calculate the length of the belt (in meters), with the formula:
 $L = 2 \times \text{stroke (m)} + 0.515$ (for "40" size units);
 $L = 2 \times \text{stroke (m)} + 0.630$ (for "55" size units);
 $L = 2 \times \text{stroke (m)} + 0.792$ (for "75" size units);
 $L = 2 \times \text{stroke (m)} + 0.920$ (for "ED75" units).
4. Multiply the numbers of turns (step 2) by the belt length in meters (step 3).
5. Loosen the set-screw "C".
6. Turn the belt tension screws "B" to the value obtained in step 4
7. Fasten the set-screw "C".



Belt tensioning values

40 series	55 series	75 series	ED75
160 N	220 N	800 N	1000 N

Note: the forces applied on the belt must **never** exceed the belt tension value otherwise the repeatability of position and belt resistance cannot be guaranteed. In case higher tension values are required we suggest contacting our Application Engineering department.

Example:

To increase the belt tension from 220 N to 330 N for a A55-1070:

1. Variation = $330 - 220 = 110$ N.
2. From the chart we find the value of 0.5 turns, which will increase the belt tension by 110 N for every meter of belt.
3. From the formula of step 3, the belt length (in meters) is:
 $L = 2 \times \text{stroke (m)} + 0.630 = 2 \times 1.070 + 0.630 = 2.77$ m.
4. The total number of turns is therefore $0.5 \times 2.77 = 1.4$ turns .
5. Loosen the set-screw "C".
6. Turn the belt tension screws "B" 1.4 turns, using an external reference to obtain a precise setting.
7. Fasten the set-screw "C".