XChange V1.0 - Belt Lengths

How to Determine if You Need a Different Belt

You may need to replace your X axis drive belt in order to use XChange on your 3D printer, if the belt tabs on XChange are significantly longer or shorter than the ones currently in use on your machine.

Below is a chart of the belts that we've personally tested on some popular machines. Note that lengths in this chart represent the belt length **between** the ferrules (terminations). We'll update it as we confirm new lengths, and receive input from you!

XChange V1.0 Belt Lengths (between ferrules)	Ender-3	Ender-3 Pro	Ender-3 V2	Ender-5	Ender-5 Pro	CR-10/S	CR-10 V2	CR-6 SE	Ender-6 *
MGN12H Linear Rail	75.5 cm	75.5 cm	77 cm	98 cm	98 cm	92.7 cm	92.5 cm	81 cm	STOCK BELT
V-Slot Wheel Adapter	STOCK BELT	STOCK BELT	STOCK BELT	STOCK BELT	STOCK BELT	STOCK BELT	91.5 cm	76.5 cm	-

*Printable Ender-6 belt adapter needed

Measuring Custom Belt Length

If you don't see your printer listed above, don't worry, there are a couple of options. The simplest is to just install XChange, and cut a piece of belt to the appropriate length. You can terminate the ends by folding the end of the belt over itself to make a loop, then securely fastening with zip ties:

Belt Length Calculator

You can alternatively use our spreadsheet to measure and calculate the specific length you'll need for your installation, depending on your X axis linear motion. If you provide this information to us at the time of placing your order, we can custom cut and pre-terminate a high quality belt for you.
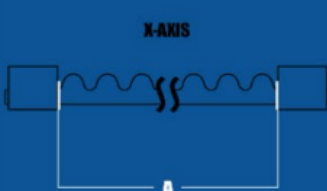
Note: Belt length calculator spreadsheet is downloadable, and .XLSX format. You can upload to and open in a free Google Drive account if you don't have Microsoft Excel:

https://drive.google.com/file/d/1cvCTFK-Esp-tSwJrwVX8-UBtqmJn4-DE/view?fbclid=IwAR2g0_gTKEJ3KOB2KAV8z5jwOyWP7XqPSdIrfIx4m0zpmXq84z3A_1f53CU
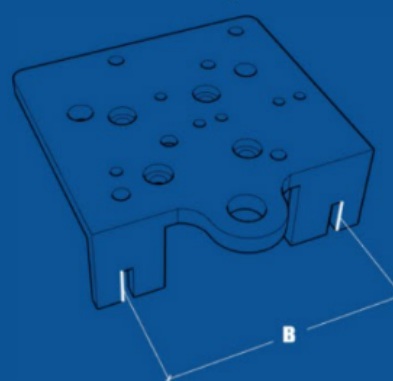

XCHANGE BELT LENGTH CALCULATOR

WARNING! Follow the directions carefully. Failure to measure or calculate belt length correctly may result in belts that do not fit correctly. We can not accept returns due to improperly measured or miscalculated belt lengths. *Sample values are based on Creality Ender-3 Pro.*
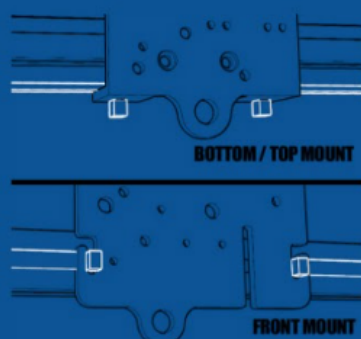
REF. A - Measuring Belt Between Ferrules

X-AXIS

A

REF. B - Measuring Belt Slots (Outer Surface)

B

REF. C - Belt Mounting Options

BOTTOM / TOP MOUNT

FRONT MOUNT

			Notes
A	Existing x-axis belt length in **cm** (between ferrules / belt ends)	91.00 cm	Measure BETWEEN ferrules, in CENTIMETERS.
B	Distance (in **mm**) between belt slots on your existing gantry plate	53.00 mm	Measure in MILLIMETERS.
C	How will your belt mount to your x-axis carriage plate?	Front ▾	See Reference Images
D	How will you mount the XChange master assembly?	MGN12H Linear Rail ▾	

New Belt Needed?	*Probably*	
XChange Belt Length:	**927.00 mm**	<< PROVIDE ONLY THIS NUMBER TO US!
Difference:	17.00 mm	(If this is +/- 5.2mm or more , we suggest a new belt.)