

material	#	Price	Notes
Hardware store		14,5	the items below are comprised in this price
gray cement	2kg		
M4x1m threaded rods	2		
M8x1m threaded rods	6		5 are actually required but you might lose a bit when cutting
M8 nuts	60		
35.7*50mm with 8 or 12mm shaft 12V DC motor (high RPM)	1	6,69	
coupler clamp stepper servo motor coupling D20L25 5x8x25mm	3	6	You should use rigid couplers not the springy ones
28BYJ-48 12V 4 Phase DC Gear Stepper Motor + ULN2003 Driver Board	3	8,49	
sd reader	1	1,31	
8mm*20cm rods	5	13,01	you will have to cut one in half or buy 4 20mm and 2 10mm
M3 hex socket screw and washer set	1	6	
LM8 LM8UU linear bearing	12	10,14	
Arduino nano	1	3	
3.17 to 3.17mm coupler	1	2,65	the price is for 5
PWM Motor speed controller	1	10	You could easily either skip this or get a way cheaper one
PLA	2kg	25	It should take you less than 2 spools but more than 1, in bundles of 2 spools I can easily find them for 25€ on amazon
DC-DC step down module (12V to 5V)	1	1,79	
limit switches 12x6mm	3	1,71	this is the price for 10 on aliexpress
relay module	1	1,11	
12V 10 amp PSU (you should be fine with a bit more than 5)	1	15	I used a PC power supply, you can easily find them even for free
Bike Quick Release Skewer Springs	3	1,79	I've also tested stiffer springs with no improvement so these are the best to install and easiest to find
Strong Crystal Fishing Line PE Nylon 0.6mm	1 spool	1,59	
heatset inserts	150	7,35	
T8 lead screw 20cm lead 8mm	2	6,14	
T8 lead screw 10cm lead 8mm	2	2,51	
T8 anti backlash nut lead 8mm	3	3,64	
ball bearing 608ZZ	3	2,69	the price is for 10
tot		152,11	euros
PCB making supplies	#	Price	Notes
0.1mm engraving bits	10	8,42	I suggest using the ones with a spiralized point, they are more expensive
0.8mm drilling bits	10	2,69	
Copperclad boards 7x10cm FR10	10	3,69	
Solder mask	10cc	2,9	
UV nail curing machine		5	
printable transparent sheets		10	
tot		32,7	