

Assembly BOM

ASSEMBLY NAME	ITEM NAME	Dimension	Unit	Material	QUANTITY	Weight	Total weight
Base Assembly	Base	BA001		PLA (40% filling)	1	276.52	276.52
	Base Bearing Support	BA002		PLA (40% filling)	1	35.75	35.75
	Belt Tensioner	SP001		PLA (40% filling)	1	3.73	3.73
	Stepper Motor	Nema 17			1		
	Idler Pulley	Teeth: 20 Bore: 5 Width: 6			1		
	Idler Pulley	Teeth: 80 Bore: 8 Width: 6			1		
	GT2 Timing Pulley Belt	Pitch: 2; Width: 6	mm		1		
	Deep Groove Ball Bearing	3 X 10 X 4	mm		3		
	Deep Groove Ball Bearing	8 X 22 X 7	mm		1		
	Thrust bearing	8 X 16 X 5	mm		1		
	Thrust bearing	90 X 120	mm		1		
	Socket Head Cap Screws	M3 X 10	mm		4		
	Socket Head Cap Screws	M3 X 16	mm		8		
	Nut	M3			5		
	Socket Head shoulder Cap Screws	M6 X 8-50	mm		1		
	Nut	M6			1		
Shoulder Assembly	Shoulder	SA001		PLA (40% filling)	1	553.98	553.98
	Arm Bottom	SA002		PLA (40% filling)	1	234.42	234.42
	Shoulder Cap	SA003		PLA (40% filling)	2	7.28	14.56
	Belt Tensioner	SP001		PLA (40% filling)	1	3.73	3.73
	Shoulder Spacer	SP002		PLA (40% filling)	2	1.31	2.62
	Round Tube	OD: 30 ID: 27 length: 80	mm	Aluminum	1		
	Stepper Motor	Nema 17			1		
	Idler Pulley	Teeth: 20 Bore: 5 Width: 6			1		
	Idler Pulley	Teeth: 80 Bore: 8 Width: 6			1		
	Torsion Spring	ID: 30			1		
	GT2 Timing Pulley Belt	Pitch: 2; Width: 6	mm		1		
	Deep Groove Ball Bearing	8 X 22 X 7	mm		2		
	Socket Head Cap Screws	M4 X 45	mm		1		
	Nut	M4			1		
	Socket Head Cap Screws	M3 X 8	mm		5		
	Socket Head Cap Screws	M3 X 16	mm		8		

	Nut	M3			1		
	Socket Head shoulder Cap Screws	M6 X 8-80	mm		1		
	Nut	M6			1		
Arm Assembly	Arm Top	AA001		PLA (40% filling)	1	271.67	271.67
	Elbow	AA002		PLA (40% filling)	1	92.42	92.42
	Fore Arm Bottom	AA003		PLA (40% filling)	1	28.89	28.89
	Motor Board	AA004		PLA (40% filling)	1	3.36	3.36
	Arm Cap	AA005		PLA (40% filling)	2	6.13	12.26
	Arm Spacer 01	AA006		PLA (40% filling)	1	2.18	2.18
	Arm Spacer 02	AA007		PLA (40% filling)	1	0.92	0.92
	Round Tube	OD: 30 ID: 27 length: 80	mm	Aluminum	1		
	Gear Servo Motor	MG996R			1		
	1910 Series Servo Hub Shaft	Teeth: 25 Dia: 10 Length: 33	mm		1		
	Stepper Motor	Nema 17			1		
	Idler Pulley	Teeth: 20 Bore: 5 Width: 6			1		
	Idler Pulley	Teeth: 80 Bore: 8 Width: 6			1		
	GT2 Timing Pulley Belt	Pitch: 2; Width: 6	mm		1		
	Deep Groove Ball Bearing	8 X 22 X 7	mm		2		
	Thrust bearing	17 X35 X12	mm		1		
	Pan cross head Screws	M4 X 13			4		
	Socket Head Cap Screws	M4 X 20	mm		4		
	Socket Head Cap Screws	M4 X 45	mm		1		
	Socket Head Cap Screws	M4 X 50	mm		1		
	Nut	M4			6		
	Socket Head Cap Screws	M3 X 16	mm		5		
	Socket Head Cap Screws	M3 X 8	mm		8		
	Nut	M3			1		
	Socket Head shoulder Cap Screws	M6 X 8-80	mm		1		
	Nut	M6			1		
	Fore Arm top	WA001		PLA (40% filling)	1	105.14	105.14
	Wrist	WA002		PLA (40% filling)	1	7.90	7.90
	Motor Board	AA004		PLA (40% filling)	1	3.36	3.36
	Gear Servo Motor	MG996R			1		
	Servo Horn		mm		1		
	Deep Groove Ball Bearing	8 X 22 X 7	mm		1		

Wrist Assembly	Socket Head Cap Screws	M4 X 50	mm		1		
	Socket Head Cap Screws	M4 X 16	mm		4		
	Nut	M4			5		
	Socket Head Cap Screws	M3 X 8	mm		4		
	Nut	M3			4		
	Socket Head Cap Screws	M8 X 16	mm		1		
	Nut	M8			1		
Gripper Assembly	Gripper Main Body	GA001		PLA (40% filling)	1	24.46	24.46
	Gripper Cover	GA002		PLA (40% filling)	1	7.84	7.84
	Gripper Gear	GA003		PLA (40% filling)	1	3.66	3.66
	Gripper Gear link 1	GA004		PLA (40% filling)	2	4.83	9.66
	Gripper Gear link 2	GA005		PLA (40% filling)	2	1.33	2.66
	Gripper Gear link 3	GA006		PLA (40% filling)	4	1.83	7.32
	Gripper	GA007		PLA (40% filling)	2	12.51	25.02
	Gear Servo Motor	MG996R			1		
	Socket Head Cap Screws	M4 X 16	mm		4		
	Socket Head Cap Screws	M4 X 30	mm		4		
	Nut	M4			8		
	Socket Head Cap Screws	M3 X 25	mm		4		
	Socket Head Cap Screws	M3 X 16	mm		2		
	Nut	M3			6		
Control board Assembly							
						Total weight	1734.03