

Category	Specifications	Production	Qty	Postprocessing	Where used	Notes
Window	Window Sensor Holder 3D Printed	3D Printed	1	Smoothing	Window Sensor Holder	
Window	Window Right Profile Aluminum 20x20 680mm	Manually	1	Drilled M6. Drilled and tapped M3. Deburred.	Window Profile Right	
Window	Window Left Profile Aluminum 20x20 680mm	Manually	1	Drilled M6 and deburred	Window Profile Left	
Window	Window Front Profile Aluminum 20x20 996mm	Manually	1	Drilled M6 and M4. Deburred.	Window Profile Front	
Window	Window Back Profile Aluminum 20x20 996mm	Manually	1	Drilled M6 and deburred.	Window Profile Back	
Window	Window Handle 192mm	Purchased	1		Handle	
Window	Window Angle Press Fit 20x20	Purchased	4		Corner Connector	
Window	Window Acrylic 1127x876 6mm	Laser Cut	1		Window	
Window	Standoff Aluminum M-F M8 15+8	Purchased	2		Standoff M8 M-F	
Window	Piston Support 3D Printed	3D Printed	2	Smoothed	Piston Support	
Window	Piston 100N Length 250 Travel 80mm	Purchased	2		Piston	
Window	Hinge GN 237-ZD-60-60-A-SW	Purchased	3		Hinge	
Optics/Laser	Second Mirror Holder 25mm	Manually	1	Drilled and tapped M4	Second Mirror Holder	
Optics/Laser	O ring 20mm	Purchased	2		Rubber Ring	
Optics/Laser	Mirror 25mm CO2 Laser	Purchased	3		Mirror	
Optics/Laser	Laser Tube Holder 45-80mm	Purchased	2		Laser Tube Holder	
Optics/Laser	Laser Tube CO2 A1S 70W	Purchased	1		Laser Tube	
Optics/Laser	Laser Pointer Cable	Manually	1		Laser Pointer Cable	
Optics/Laser	Laser Pointer Air Connector	Purchased	1		Laser Pointer Air Connector	
Optics/Laser	Laser Mirror Spacer 3D Printed	3D Printed	1	Smoothed	Mirror Spacer	
Optics/Laser	Laser Lens 20mm Focus 50.8mm	Purchased	1		Lens	
Optics/Laser	Laser Head Mirror 25 Lens 20	Purchased	1		Laser Head	
Optics/Laser	Head Holder Aluminum 6mm	CNC Milled	1	Deburred	Laser Head Support	
Optics/Laser	First Mirror Holder 25mm	Purchased	1	The top and rod need to be glued together.	First Mirror Holder	
Mechanics Y	Y Shaft 25mm 800mm Tapped M12	Purchased	2		Y-linear Shaft	
Mechanics Y	Y Pulley HTD 5M 26T 9mm with setscrews inserted	Manually	1	Enlarge to 12mm. Drill, tap and insert 2x setscrews on the side.	Y Pulley 26-5M-09	
Mechanics Y	Y Pulley HTD 5M 26T 15mm with setscrews inserted	Manually	4	Enlarge to 12mm. Drill, tap and insert 2x setscrews on the side	Y Pulley 26-5M-15	
Mechanics Y	Y Pulley HTD 5M 16T 9mm with setscrews inserted	Manually	1	Enlarge to fit motor shaft. Drill, tap and insert 2x setscrews in the middle of the teeth.	Y-motor Pulley	
Mechanics Y	Y Motor Holder 3D Printed With Inserts	3D Printed	1	Smoothed	Y-motor Spacer	
Mechanics Y	Y Motor Belt HTD 5M 9mm 305T	Purchased	1		Y-motor Belt	
Mechanics Y	Y Linear Bearing SCE25UU	Manually	2	Right Block needs to be drilled and tapped M6	Y-bearing Block Left, Y-bearing Block Right	
Mechanics Y	Y Endstop Holder 3D Printed	3D Printed	1	Smoothed	Y-endstop Sensor Holder	
Mechanics Y	Y Belt HTD 5M 15mm 2300mm	Purchased	2		Y-belt 230 cm	
Mechanics Y	Y Belt Attacher Aluminum 6mm	CNC Milled	4	Deburred	Belt Attacher	
Mechanics Y	Shaft 12mm 150mm	Purchased	1		Y-shaft Right 150	
Mechanics Y	Shaft 12mm 1500mm	Purchased	1		Y-shaft 1500	
Mechanics Y	Shaft 12mm 100mm	Purchased	1		Y-shaft Left 100	
Mechanics Y	Pillow Block 12mm UCPA201 (3)	Purchased	9		Bearing Unit	
Mechanics Y	Cable Chain 25x18 35x23 2000mm	Purchased	1		Y-chain	
Mechanics X	X Belt Attacher Aluminum 6mm	CNC Milled	1	Deburred		
Mechanics X	X Plate Aluminum 8mm	CNC Milled	1	Deburred	X-plate	

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Mechanics X	X Shaft 12mm 35mm	Manually	1	Cut	X-shaft	
Mechanics X	X Motor Pulley HTD 5M 28T 9mm with setscrews inserted	Manually	1	Enlarge to fit motor shaft. Drill, tap and insert setscrews in the middle of the teeth.	X-motor Pulley	
Mechanics X	X Linear Guide HGR15 T 1250mm	Purchased	1		Linear Guide	
Mechanics X	X Left Pulley HTD 5M 28T 9mm	Manually	1	Enlarge to 21mm. Insert and glue 4x Ball Bearing 6801	X-shaft Pulley	
Mechanics X	X Endstop Holder Pom 6mm	Laser Cut	1	Tapped	X-endstop Sensor Holder	
Mechanics X	X Chain Spacer 3D Printed	3D Printed	1	Smoothing	Chain Spacer	
Mechanics X	X Belt HTD 5M 10 2075mm	Purchased	1		X-belt	
Mechanics X	HGR15 Linear Block	Purchased	1		Linear Guide Carriage	
Mechanics X	Cable Chain 15x15 24x20 2000mm	Purchased	1		X-chain	
Mechanics X	Ball Bearing 6801	Purchased	4		X-shaft Pulley*	
Housing	Window Spacer Right Aluminum 3mm	CNC Milled	1	deburring	Spacer Panel Right	
Housing	Window Spacer Left Aluminum 3mm	CNC Milled	1	deburring	Spacer Panel Left	
Housing	Window Spacer Back Aluminum 3mm	CNC Milled	1	deburring	Spacer Panel Back	
Housing	Top Panel Aluminum 3mm	CNC Milled	1	deburring	Top Panel	
Housing	Sub Window Right Aluminum 3mm	CNC Milled	1	deburring	Subpanel Right	
Housing	Sub Window Left Aluminum 3mm	CNC Milled	1	deburring	Subpanel Left	
Housing	Sub Window Front Aluminum 3mm	CNC Milled	1	deburring	Subpanel Front	
Housing	Sub Window Back Aluminum 3mm	CNC Milled	1	deburring	Subpanel Back	
Housing	Separator Panel Aluminum 3mm	CNC Milled	1	deburring	Middle Panel	
Housing	Right Panel Aluminum 3mm	CNC Milled	1	deburring	Right Panel	
Housing	Left Panel Aluminum 3mm	CNC Milled	1	deburring	Left Panel	
Housing	Laser Pointer Switch	Purchased	1		Laser Pointer Switch	
Housing	Laser Panel Aluminum 3mm	CNC Milled	1	deburring	Laser Panel	
Housing	Inner Panel Right Aluminum 3mm	CNC Milled	1	deburring and tapping	Inner Right Panel	
Housing	Inner Panel Left Aluminum 3mm	CNC Milled	1	deburring and tapping	Inner Left Panel	
Housing	Front Support 3D Printed	3D Printed	2	Smoothing	Front Subpanel Holder	
Housing	Front Panel Aluminum 3mm	CNC Milled	1	deburring	Front Panel	
Housing	Front Bracket 30x20x3 200mm	Manually	1	Cut, drilled M8 and deburred	Front Panel Holder	
Housing	Exhaust Adapter 3D Printed	3D Printed	1	Smoothing	Exhaust Adaptor	
Housing	Cover Panel Aluminum 3mm	CNC Milled	1	deburring	Top Back Panel	
Housing	Connecting blocks 20x20	3D Printed	3	Smoothing	Hinge Support	
Housing	Bottom Panel Aluminum 3mm	CNC Milled	1	deburring	Bottom Panel	
Housing	Back Panel Aluminum 3mm	CNC Milled	1	deburring	Back Panel	
Frame	Top Aluminum Profile 30x60 Nut 8 1100mm	Manually	2	Cut and tapped	Profile 3060-1100	
Frame	Fillet Aluminum Profile 30x30 Nut 8 1510mm	Manually	1	Tapped	Fillet Profile	
Frame	Bottom Aluminum Profile 30x30 Nut 8 1100mm	Manually	3	Tapped	Profile 30-1100	
Fasteners	T-Nut 8 M8 Ball	Purchased	1		T-nut M8	
Fasteners	T-Nut 8 M6 Ball	Purchased	1		T-nut M6	
Fasteners	T-Nut 6 M3 Ball	Purchased	1		T-nut M3	
Fasteners	Standoff Nylon M-F M3 20+6	Purchased	1		Standoff M3 M-F	
Fasteners	Plastic DIN 7985 M3 8mm	Purchased	1		Plastic Screw M3-8	
Fasteners	ISO 7380 M8 60mm fully threaded	Purchased	2		B-screw M8-60	
Fasteners	ISO 7380 M8 35mm	Purchased	13		B-screw M8-35	
Fasteners	ISO 7380 M8 25mm	Purchased	1		B-screw M8-25	For bottom screw of the Piston Support

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Fasteners	ISO 7380 M8 20mm	Purchased	30		B-screw M8-20	
Fasteners	ISO 7380 M8 16mm	Purchased	8		B-screw M8-16	
Fasteners	ISO 7380 M8 10mm	Purchased	10		B-screw M8-10	
Fasteners	ISO 7380 M8 10mm	Purchased	34		B-screw M8-10	Can be substituted for B-screws M8-12
Fasteners	ISO 7380 M6 30mm	Purchased	11		B-screw M6-30	
Fasteners	ISO 7380 M6 12mm	Purchased	4		B-screw M6-12	
Fasteners	ISO 7380 M6 12mm	Purchased	4		B-screw M6-12	
Fasteners	ISO 7380 M5 20mm	Purchased	4		B-screw M5-20	
Fasteners	ISO 7380 M5 10mm	Purchased	5		B-screw M5-10	
Fasteners	ISO 7380 M4 10mm	Purchased	8		B-screw M4-10	
Fasteners	ISO 7380 M12 20mm	Purchased	4		B-screw M12-20	
Fasteners	ISO 7380 M10 20mm	Purchased	6		B-screw M10-20	
Fasteners	ISO 7380 M10 12mm	Purchased	18		B-screw M10-12	
Fasteners	DIN 985 M8	Purchased	1		Lock Nut M8	
Fasteners	DIN 985 M6	Purchased	1		Lock Nut M6	
Fasteners	DIN 985 M5	Purchased	1		Lock Nut M5	
Fasteners	DIN 985 M4	Purchased	1		Lock Nut M4	
Fasteners	DIN 985 M3	Purchased	1		Lock Nut M3	
Fasteners	DIN 933 M8 150mm fully threaded	Purchased	4		Bed Leg	
Fasteners	DIN 933 M6 12mm	Purchased	1		Hex Screw M6-12	
Fasteners	DIN 912 M6 16mm	Purchased	8		C-screw M6-16	
Fasteners	DIN 912 M5 16mm	Purchased	8		C-screw M5-16	
Fasteners	DIN 912 M5 14mm	Purchased	20		C-screw M5-14	
Fasteners	DIN 912 M4 6mm	Purchased	14		C-screw M4-6	
Fasteners	DIN 912 M4 45mm	Purchased	4		C-screw M4-45	
Fasteners	DIN 912 M4 35mm	Purchased	2		C-screw M4-35	
Fasteners	DIN 912 M4 16mm	Purchased	2		C-screw M4-16	
Fasteners	DIN 912 M4 12mm	Purchased	8		C-screw M4-12	
Fasteners	DIN 912 M4 10mm	Purchased	6		C-screw M4-10	
Fasteners	DIN 912 M3 6mm	Purchased	3		C-screw M3-6	
Fasteners	DIN 912 M3 12mm	Purchased	2		C-screw M3-12	
Fasteners	DIN 912 M3 10mm	Purchased	18		C-screw M3-10	
Fasteners	DIN 9021 M8	Purchased	1		Washer M8 Large	
Fasteners	DIN 7991 M8 40mm	Purchased	6		Countersunk Screw M8-40	
Fasteners	DIN 7991 M8 25mm	Purchased	6		Countersunk Screw M8-25	
Fasteners	DIN 7991 M4 40mm	Purchased	3		Countersunk Screw M4-40	
Fasteners	DIN 125 M8	Purchased	1		Washer M8	
Fasteners	DIN 125 M6	Purchased	1		Washer M6	
Fasteners	DIN 125 M4	Purchased	1		Washer M4	
Fasteners	DIN 125 M3	Purchased	1		Washer M3	
Fasteners	DIN 439 M8	Purchased	1			
Electronics	Wire Connector 3 slots	Purchased	5		Connector 3 slots	
Electronics	Wire Connector 2 slots	Purchased	4		Connector 2 slots	
Electronics	Window Sensor PS-3150 with cable 2x0.25 160cm ground shield	Manually	1	Cable extension. Join shield to GND. Crimped.	Window Sensor	
Electronics	Window Magnet PS-3150	Purchased	1		Window Magnet	

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Electronics	USB Cable outside 2m or more	Purchased	1		USB Cable	
Electronics	USB Cable Inside	Purchased	1		USB Cable Inside	
Electronics	U-wire Fixer 3D printed	3D Printed	2		U-wire Fixer	
Electronics	Stepper Motor Driver DM556T	Purchased	2		Motor Driver	
Electronics	Stepper Motor 24HS39-4204D with cable 4x0.5mm - 85cm (Y) & 163cm (X)	Manually	2	Cable extension. Labeled (X/Y, A+, A-, B+, B-) and crimped.	X-motor, Y-motor	
Electronics	Power Plug 48x28x27mm M4 with Mains Cable AC 3x1.5 13cm	Manually	1	Crimp the Mains Cable to the Power Plug.	Power Plug	
Electronics	Power Cord (computer style)	Purchased	1		Power Cable	
Electronics	Motor Power Supply RSP-500-48A	Purchased	1		Motor Power Supply	
Electronics	Logic Power Supply LRS-100-24	Purchased	1		Logic Power Supply	
Electronics	Logic Power Cable AC 3x1.5 128cm combined with Earth Cable 1x1.5 15cm	Manually	1		Logic Power Supply Cable	
Electronics	Led Strip 24V Warm White 40cm with cable 2x0.75 - 110cm (Right) & 40cm (Left)	Manually	2	Cable extension	LED strip	
Electronics	Laser Power Supply	Purchased	1		Laser Power Supply	
Electronics	Laser Logic Cable 3x0.25 128cm grounded shield	Manually	1	Join shield to GND. Crimped.	Laser Logic Cable	
Electronics	Laser high voltage wire with protect connector	Manually	1		Laser (+) Cable	
Electronics	Laser Controller PCB	Manually	1	Prepared and flashed	Controller PCB	
Electronics	Laser connector (screw terminal mammut) 2 pos	Manually	1	Cut part of the plastic cover to fit laser tube connector.	Laser Attachment	
Electronics	Laser (-) Cable 1x0.5 160cm	Manually	1		Laser (-) Cable	
Electronics	Inductive Probe LJ12A3-4-Z/AY with cable 3x0.5mm grounded shield - 120cm (Y) & 330cm (X)	Manually	2	cable extension. Join shield to GND.	X-endstop Sensor	
Electronics	Fuse 6.3A 5x20mm	Purchased	2		Fuse	
Electronics	Expansion Driver TB6600	Purchased	1		Small Motor Driver	
Electronics	Expansion Driver Power Cable 2x1mm grounded shielded 45cm	Manually	1	Join shield to GND. Crimped.	Expansion Driver Power Cable	
Electronics	Emergency Button With Key AS22-B142	Purchased	1		Emergency Button	
Electronics	Emergency Button Cable AC 2x1/1.5mm 160cm	Manually	1	Crimped.	Emergency Button Cable	
Electronics	Driver Power Cable Extension 2x1mm grounded shield 15cm	Manually	1	Join shield to GND. Crimped.	Motor Driver Power Cable Extension	
Electronics	Driver Power Cable 2x1mm grounded shield 75cm	Manually	1	Join shield to GND. Crimped.	Motor Driver Power Cable	
Electronics	Driver Logic Cable 4x0.5mm grounded shield 45cm	Manually	1	Join shield to GND. Crimped.	Driver Logic Cable	
Electronics	Controller Power Cable 2x1mm grounded shield 75cm	Manually	1	Join shield to GND. Crimped.	Controller Power Cable	
Electronics	Controller GND Cable 1x0.75 100cm grounded shield	Manually	1	Join shield to GND. Crimped.	Controller GND Cable	
Electronics	Chiller Connector 3 Pole with cable 2x0.5mm 25cm	Manually	1	Fixed to Chiller Connector. 1 (brown wire) and 3 (green wire) poles of the connector. Crimped.	Chiller Sensor Connector	
Electronics	Cable Duct 25x40 700mm	Purchased	2	Cut	Cable Duct	
Electronics	C-wire Fixer 3D Printed	3D Printed	2	Smoothed	C-wire Fixer	
Electronics	AC Power Cable 3x1.5 50cm	Manually	1	Crimped.	Motor Power Supply Cable	
Electronics	AC Power Cable 3x1.5 22cm	Manually	1	Crimped.	Laser Power Supply Cable	
Electronics	Chiller Cable 2x0.25 200cm with 2x female connectors	Manually	1		Chiller Cable	
Bed	Aluminum Profile 40x40 Nut 8 700mm	Manually	2	Tapped on the ends. Drilled and tapped to fit Bed Legs	Profile 40-700	
Bed	Tesa Double Side Tape 50mm 5m	Purchased	1		Double-sided Tape, Double-sided Tape	
Bed	Bed Lamella Aluminum 35x40x0.8	Purchased	27	Deburred.	Bed Lamella	

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Bed	Bed Bracket 37x37x4 1150mm	Manually	2	Drilled.	Angle Profile	
Bed	Bed Adjuster 3D Printed	3D Printed	4	Smoothing	Bed Adjuster	
Air/Water	Water Pipe Outside diameter 9mm 200cm	Purchased	1		Water Tube Outside	
Air/Water	Water Pipe Inside Silicon 1m 10x7mm	Purchased	1		Water Tube Inlet Inside, Water Tube Outlet Inside	
Air/Water	Water Connector 9-9mm Screw 11.7mm	Purchased	2		Water Connector	
Air/Water	Water Chiller CW-3000	Purchased	1		Chiller	
Air/Water	Radial Fan Adapter 3D Printed	3D Printed	1		Radial Fan*	
Air/Water	Radial Fan 150mm 150W Neverest RV-B	Manually	1	2x Radial Fan Adapter attached with silicon.	Radial Fan	
Air/Water	Hose Clamps 80mm	Purchased	3		Hose Clamps	
Air/Water	Hose Clamps 13mm	Purchased	4		Small Clamps	
Air/Water	Filter Adapter 3D Printed	3D Printed	1		Air Filter*	
Air/Water	Exhaust hose 80mm 3m	Purchased	3	cut	Exhaust Hose	
Air/Water	Air Y Splitter Press Fit 6-6mm	Purchased	1		Pipe Splitter	
Air/Water	Air pump Hailea ACO-318	Purchased	1		Air Compressor	
Air/Water	Air pipe adapter 6-10mm with pipe 10mm	Manually	1		Air Compressor Adapter	
Air/Water	Air pipe 6x4mm 5m	Purchased	1	cut	Head Air tube, Laser Pointer Air Tube, Merging Air Pipe, Air Tube Outside	
Air/Water	Air Filter Airmex AM03 or similar	Manually	1	Filter adapter attached with silicon and screws	Air Filter	
Air/Water	Air Connector Press Fit 6-6mm	Purchased	1		Air Connector	
Accessories	Safety Sticker set	Purchased	1		Safety Stickers	
Accessories	Foot switch	Purchased	1		Foot Switch	
Accessories	Focus Tool Acrylic 6mm	Laser Cut	2		Focus Tool	
Accessories	Cable Ties Package 2.5x140mm 100 pieces	Purchased	1		Cable Ties	