

This file contains all the parts you need to build PAROL6 robot!			
Most items have links where you can buy the item, and some of them are affiliate links.			
Items like screws, belts and bearings can be bought locally or from many other vendors.			
Screws and nuts:			
diameter, length			
M4x10mm	20	DIN 912 / ISO 4762 (hexagon socket head cap)	Link
M3x8mm	10	2 mm head height	
M3x8mm	50	DIN 912 / ISO 4762 (hexagon socket head cap)	
M3x4mm	30	DIN 912 / ISO 4762 (hexagon socket head cap)	
M3 nut	10	DIN 912 / ISO 4762 (hexagon socket head cap)	
M3x25mm	10	DIN 912 / ISO 4762 (hexagon socket head cap)	
M2x10mm	10	DIN 912 / ISO 4762 (hexagon socket head cap)	
M3x16mm	10	DIN 912 / ISO 4762 (hexagon socket head cap)	
M3x6mm	10	Pan head phillips	
M3x12mm	30	DIN 912 / ISO 4762 (hexagon socket head cap)	
M3x35mm	10	DIN 912 / ISO 4762 (hexagon socket head cap)	
M4x16mm	30	DIN 912 / ISO 4762 (hexagon socket head cap)	
M4x14mm	10	DIN 912 / ISO 4762 (hexagon socket head cap)	
M4x50mm	10	DIN 912 / ISO 4762 (hexagon socket head cap)	
M3x15mm	2	Tapered screw head	
Gearboxes:			
Name in building instructions			
For cheaper gearbox options you can use MG series planetary gearboxes. They have bigger backlash but are cheaper.			
Gearbox 20:1		Link	Aliexpress Link
Gearbox 10:1		Link	Aliexpress Link
Motors:			
Name in building instructions			
Stepper 1		Link	Aliexpress Link
Stepper 2		Link	Aliexpress Link
Stepper 3		Link	Aliexpress Link
Bolts:			
Name in building instructions			
Joint 1 belt		HTD3 396	Link
Joint 3 belt		HTD3 342	Link
Joint 4 belt		HTD3 201	Link
Joint 5 belt		HTD3 246	Link
Pulleys:			
Name in building instructions			
J4 pulley, J5 pulley		HTD3M 12 tooth 5mm bore 10mm width	Link
J1 pulley		HTD3M 15 tooth 5mm bore 10mm width	Link
Mechanical stuff:			
Name in building instructions			
Shaft coupler		Shaft coupler	Link
Bearings:			
Name in building instructions			
Bearing 1		AXK3552	Link
Bearing 2		NSK HR32906J	Link
Bearing 3		NSK HR32907J	Link
Tension bearing		Ball bearing 3x8x4	Link
Tension bearing		Ball bearing 3x10x4	Link
Electronics:			
Name in building instructions			
PAROL control board	1	source-robotics.com	Link
		Drivers from the links are tested. Use any other at own risk: Link1	Link2
TMC5160	6	TMC5160	Link
Thermal paste	2	Needed only if your control board has no drivers!	Link
On/Off button	1	12mm 3-6V	Link
JST PH 2.0mm 200mm 4PIN	1	For power button	Link
Noctua NF-A4x20 5V 40mm	1		
Power connector - male + female	1	GX16 2PIN	Link
Gripper connector (electric)	1	M8 sensor Female 4 pin	Link
Power supply	1	Any 24V 5A supply	Link
Limit switches	3	Type ZW12-3	Link
Inductive sensor 1	1	4mm NPN NO - alternative link	Link
Inductive sensor 2	1	GX-F8A	Link
Inductive sensor 3	1	M5_NPN NO - alternative link	Link
Estop	1	Any NC estop	Link
Cable gland for estop	1	PG7 type	Link
M3 brass insert	4	M3, 6mm lenght	Link
Pneumatic connector - robot	4	4 mm type PM	Link
Pneumatic Gripper	1	MHZ2-16D	Link
Pneumatic gripper connector	2	PC4 - M5	Link
Pneumatic tube	5 meters	1 meter, 4x2.5mm	Link
x30 connector female	1	used to deliver power to PAROL6 PCB	Link
StLink	1	Use link! Pin order needs to be: SWCLK,SWDIO,GND,3V3,5V	Link
USB B cable	1	Comms to the PC	
5/2 solenoid air valve	1	4mm tube connectors, 5/2, 24V	Link
Vacuum gripper			
Name in building instructions			
Suction cup gripper	1		Link
Vacuum generator	1		Link
4mm to 6mm coupler	1		Link