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.

MA-Stemm		Screws and nuts:			
Micham 10 2 mm level height 1		diameter , length	quantity	Description	Link
Malemm		M4x10mm	20	DIN 912 / ISO 4762 (hexagon socket head cap)	
Machemis			10	1 2 11	
March Marc					
Modern					
MATCHISM MATCHISM					
Month Mont					
Marchan 10					
Martinam 10 Per heep pilitips		M2x10mm		DIN 912 / ISO 4762 (hexagon socket head cap)	
MATS/DIPM 30 ON 1972 / 26 0 470 (Design recode had opp)		M3x16mm	10	DIN 912 / ISO 4762 (hexagon socket head cap)	
Modelform		M3x6mm	10	Pan head phillips	
MAL-15mm		M3x12mm	30	DIN 912 / ISO 4762 (hexagon socket head cap)	
Met form			10		
MAX-16mm					
MAC-00mm 10 DR 927 (\$10.0 Fire 20 thread provided band coal)					
Mane in building instructions 2 Transfer dozen head					
Carbones:					
Name in building instructions Type Secretary 1		M3x15mm	2	Tapered screw head	
Carebox 2011		Gearboxes:			
Careboan 10-1	Name in building instructions	Туре	quantity	Description	Link
Careboan 10-1	Gearbox 20:1	Nema 17 20:1 EG precision planetary	2	Link	Link
Manual in building instructions Type					
Name in building instructions Type Quantity Description Unix					
Seppor Nome 17 16Nom 424-22-00mm	Name to building to the office			December 1	1:-1-
Separa Name of 240Nom 42424-00mm 3			quantity		
September Name of the Name		*	1		
Mane in building instructions	Stepper 2	Nema 17 45Ncm,42x42x40mm		Link	Link
Name in building instructions Type quantity Description Link Joint 2 belt HTD3 396 1 6 mm width — Joint 2 belt HTD3 392 1 6 mm width Link Joint 4 belt HTD3 246 5 6 mm width Link Joint 5 belt HTD3 246 5 6 mm width Link Name in building instructions Type quantity Description Link Searing 2 SNE NEGOURNE 3 am hole shall, M4 sow holes Link Searing 3 NSE NEGOURNE 1 SNE NEGOURNE Link Searing 3 NSE NEGOURNE 2 Description Link Tensi	Stepper 3	Nema 17 65Ncm,42x42x60mm	2	Link	<u>Link</u>
Name in building instructions Type quantity Description Link Joint 2 belt HTD3 396 1 6 mm width — Joint 2 belt HTD3 392 1 6 mm width Link Joint 4 belt HTD3 246 5 6 mm width Link Joint 5 belt HTD3 246 5 6 mm width Link Name in building instructions Type quantity Description Link Searing 2 SNE NEGOURNE 3 am hole shall, M4 sow holes Link Searing 3 NSE NEGOURNE 1 SNE NEGOURNE Link Searing 3 NSE NEGOURNE 2 Description Link Tensi		Belts:			
Samit bell	Name in building instructions		quantity	Description	Link
Joint 2 bett			1		
June Built June			1		Cial.
Second S					
Mane in building instructions Type			1	1 11	
Name in building instructions Type	Joint 5 belt	HTD3 246	1	6 mm width	Link
James Jame		Pulleys:			
A	Name in building instructions	Туре	quantity	Description	Link
Manual Institutions Type Quantity Description Link	J4 pulley, J5 pulley	HTD3M 12 tooth 5mm bore 10mm width	2		Link
Mare in building instructions Type quantity Description Unix		HTD3M 15 tooth 5mm bore 10mm width	1		
Name in building instructions Type	o i paney				Little
Shaft coupler Shaft couple		Micerianical Stair.			
Rearings: Name in building instructions Type	Name in building instructions	Time	au antitu	Description	Link
Name in building instructions Type					
Bearing 1		Shaft coupler			
Bearing 2	Shaft coupler	Shaft coupler Bearings:	3	8 mm hole shaft, M4 screw holes	<u>Link</u>
Bearing 3	Shaft coupler	Shaft coupler Bearings:	3	8 mm hole shaft, M4 screw holes	<u>Link</u>
Tension bearing	Shaft coupler Name in building instructions	Shaft coupler Bearings: Type	3 quantity	8 mm hole shaft, M4 screw holes Description	<u>Link</u>
Tension bearing Ball bearing 3x10x4 20 Used for belt tension Unix	Shaft coupler Name in building instructions Bearing 1	Shaft coupler Bearings: Type AXK3552	quantity	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate	Link Link
Tension bearing Ball bearing 3x10x4 20 Used for belt tension Unix	Shaft coupler Name in building instructions Bearing 1 Bearing 2	Shaft coupler Bearings: Type AXK3552 NSK HR32906J	quantity 1 5	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3	Link Link Link
	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J	quantity 1 5	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2	Link Link Link Link Link
Name in building instructions	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4	quantity 1 5 4 20	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension	Link Link Link Link Link Link Link
PAROL control board Source-robotics.com Naeded only if your control board has no drivers! YOU NEED. EACHTY THESE DRIVERS! Any other will destroy your control board.	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4	quantity 1 5 4 20	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension	Link Link Link Link Link Link Link
Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control. board! Thermal paste 2 Needed only if your control board has no drivers! Link	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics:	quantity 1 5 4 20 20	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension	Link Link Link Link Link Link Link Link
TMC5160 6	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type	quantity 1 5 4 20 20	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description	Link Link Link Link Link Link Link Link
Thermal paste 2 Needed only if your control board has no drivers! Link	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type	quantity 1 5 4 20 20	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description source-robotics.com	Link Link Link Link Link Link Link Link
On/Off button	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board	3	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description source-robotics.com Needed only if your control board has no drivers! YOU NEED. EXACTLY THESE DRIVERS! Any other will destroy your control.	Link Link Link Link Link Link Link Link
JST PH 2.0mm 200mm 4PIN	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160	3 quantity 1 5 4 20 20 quantity 1 6	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board!	Link Link Link Link Link Link Link Link
Noctua NF-A4x20 5V 40mm	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste	3 quantity 1 1 5 4 20 20 quantity 1 1 6 2 2	8 mm hole shaft, M4 screw holes Description Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers!	Link Link Link Link Link Link Link Link
Power connector - male + female	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste	3 quantity 1 1 5 4 20 20 quantity 1 1 6 2 2	8 mm hole shaft, M4 screw holes Description Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers!	Link Link Link Link Link Link Link Link
Power connector - male + female	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXX(3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button	3 quantity 1 1 5 4 20 20 quantity 1 1 6 2 2	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V	Link Link Link Link Link Link Link Link
Gripper connector (electric) 1 M8 sensor Female 4 pin Link	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN	3 quantity 1 1 5 4 20 20 quantity 1 1 6 2 2	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V	Link Link Link Link Link Link Link Link
Power supply	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Ellectronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm	3 quantity 1 5 4 20 20 quantity 1 6 2 2 1 1 1 1 1	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERSI Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V For power button	Link Link Link Link Link Link Link Link
Limit switches 3 Type ZW12-3 Link	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2. Omm 200mm 4PIN Noctua NF-A4x20 5V 40mm Power connector - male + female	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V For power button GX16 2PIN	Link Link Link Link Link Link Link Link
Inductive sensor 1	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm Power connector - male + female Gripper connector (electric)	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 1 1 1	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin	Link Link Link Link Link Link Link Link
Inductive sensor 2	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXX(3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5- W 40mm Potwar Connector - wale + female Gripper connector (electric) Power supply	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin Any 24V 5A supply	Link Link Link Link Link Link Link Link
Inductive sensor 3	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm Power connector - male + female Gripper connector (electric) Power supply Limit switches	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 3	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin Any 24V 5A supply Type ZW12-3	Link Link Link Link Link Link Link Link
Estop	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm Power connector - male + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1	3 quantity 1 5 4 20 20	8 mm hole shaft, M4 screw holes Description Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin Any 24V 5A supply Type ZW12-3 4mm NPN NO	Link Link Link Link Link Link Link Link
Estop	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm Power connector - male + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1	3 quantity 1 5 4 20 20	8 mm hole shaft, M4 screw holes Description Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin Any 24V 5A supply Type ZW12-3 4mm NPN NO	Link Link Link Link Link Link Link 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 x130 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 Comms to the PC	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin Any 24V 5A supply Type ZW12-3 4mm NPN NO GX-F8A	Link Link Link Link Link Link Link Link
M3 brass insert 4 M3, 6mm lenght Link	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXX(3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm Powar connector - male + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1 Inductive sensor 2 Inductive sensor 2	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin Any 24V 5A supply Type ZW12-3 4mm NPN NO GX-F8A M5, NPN NO	Link Link Link Link Link Link Link Link
Pneumatic connector - robot 4 4 mm type PM Link	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm Power connector - male + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1 Inductive sensor 2 Inductive sensor 3 Estop	3 quantity 1 5 4 20 20 quantity 1 1 6 2 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control. Doard! Needed only if your control board has no drivers! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin Any 24V 5A supply Type ZW12-3 4mm NPN NO GX-F8A M5, NPN NO Any NC estop	Link Link Link Link Link Link Link Link
Pneumatic Gripper 1 MHZ2-16D Link	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm Power connector - male + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1 Inductive sensor 2 Inductive sensor 3 Estop Cable gland for estop	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 mm hole shaft, M4 screw holes Description Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERSI Any other will destroy your control board! Needed only if your control board has no drivers! Your ontrol board! Needed only if your control board has no drivers! Source-robotics.com Needed only if your control board has no drivers! SAACTLY THESE DRIVERSI Any other will destroy your control board! Needed only if your control board has no drivers! Sample Source-robotics.com SAACTLY THESE DRIVERSI Any other will destroy your control board! Needed only if your control board has no drivers! Sample Source-robotics.com SAACTLY THESE DRIVERSI Any other will destroy your control board! Needed only if your control board has no drivers! SAMPLAN SOURCE S	Link Link Link Link Link Link Link Link
Pneumatic gripper connector 2 PC4 - M5 Link	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXX3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm Power connector - male + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1 Inductive sensor 1 Inductive sensor 3 Estop Cable gland for estop M3 brass insert	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin Any 24V 5A supply Type ZW12-3 4mm NPN NO GX-F8A M5, NPN NO Any NC estop PG7 type M3, 6mm lenght	Link Link Link Link Link Link Link Link
Pneumatic tube 5 meters 1 meter, 4x2.5mm Link	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXX(3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm Power connector - male + female Gripper connector (electric) Power supply Limt switches Inductive sensor 1 Inductive sensor 2 Inductive sensor 3 Estop Cable gland for estop M3 brass insert Pneumatic connector - robot	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 4 4	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin Any 24V 5A supply Type ZW12-3 4mm NPN NO GX-F8A M5, NPN NO Any NC estop PG7 type M3, 6mm lenght 4 mm lenght 4 mm type PM	Link Link Link Link Link Link Link Link
xt30 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	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AxK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm Power connector - male + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1 Inductive sensor 3 Estop Cable gland for estop M3 brass insert Pneumatic Coripper Pneumatic Coripper Pneumatic Gripper	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 4 4 4 1	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin Any 24V 5A supply Type ZW12-3 4mm NPN NO GX-F8A M5, NPN NO Any NC estop PG7 type M3, 6mm lenght 4 mm type PM MHZ2-16D	Link Link Link Link Link Link Link Link
xt30 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	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AxK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm Power connector - male + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1 Inductive sensor 2 Inductive sensor 3 Estop Cable gland for estop M3 brass insert Pneumatic Coripper Pneumatic Gripper Pneumatic Gripper	3 quantity 1 5 4 20 20 20 quantity 1 1 6 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin Any 24V 5A supply Type ZW12-3 4mm NPN NO GX-F8A M5, NPN NO Any NC estop PG7 type M3, 6mm lenght 4 mm type PM MHZ2-16D	Link Link Link Link Link Link Link Link
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5/2 solenoid air vaive 1 4mm tube connectors, 5/2, 24V <u>Link</u>	Shaft coupler Name in building instructions Bearing 1 Bearing 2 Bearing 3 Tension bearing Tension bearing	Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x8x4 Electronics: Type PAROL control board TMC5160 Thermal paste On/Off button JST PH 2.0mm 200mm 4PIN Noctua NF-A4x20 5V 40mm Powar connector - male + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1 Inductive sensor 2 Inductive sensor 3 Estop Cable gland for estop M3 brass insert Pneumatic connector - robot Pneumatic Gripper Pneumatic Gripper Pneumatic Gripper Pneumatic tube X30 connector female Stlink	3 quantity 1 5 4 20 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 mm hole shaft, M4 screw holes Description 35X52X4, needs to have top and bottom plate Joint 5, 4 and 3 Joint 1 and 2 Used for belt tension Used for belt tension Description Source-robotics.com Needed only if your control board has no drivers! YOU NEED EXACTLY THESE DRIVERS! Any other will destroy your control board! Needed only if your control board has no drivers! 12mm 3-6V For power button GX16 2PIN M8 sensor Female 4 pin Any 24V 5A supply Type ZV12-3 4mm NPN NO GX-F8A M5, NPN NO Any NC estop PG7 type M3, 6mm lenght 4 mm type PM MH-Z2-16D PC4 - M5 I meter, 4x2.5mm used to deliver power to PAROL6 PCB Use link! Pin order needs to be: SWCLK,SWDIO,GND,3V3,5V	Link Link Link Link Link Link Link Link
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