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	quantity	Description	Link
	M4x10mm	20	DIN 912 / ISO 4762 (hexagon socket head cap)	
	M3x8mm	10	2 mm head height	
	M3x8mm	50	DIN 912 / ISO 4762 (hexagon socket head cap)	
	M3x14mm	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)	
	<u> </u>	10		
	M2x10mm		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	Туре	quantity	Description	Link
Gearbox 20:1	Nema 17 20:1 EG precision planetary	2	<u>Link</u>	<u>Link</u>
Gearbox 10:1	Nema 17 10:1 EG precision planetary	1	Link	Link
	Motors:			
Name in building instructions			Description	Link
Name in building instructions	Туре	quantity	Description	Link
Stepper 1	Nema 17 16Ncm,42x42x20mm	1	Link	Link
Stepper 2	Nema 17 45Ncm,42x42x40mm	3	<u>Link</u>	<u>Link</u>
Stepper 3	Nema 17 65Ncm,42x42x60mm	2	Link	<u>Link</u>
	Belts:			
Name in building instructions	Туре	quantity	Description	Link
Joint 1 belt	HTD3 396	1	6 mm width	Link
		1		
Joint 3 belt	HTD3 342	1	6 mm width	<u>Link</u>
Joint 4 belt	HTD3 201	1	6 mm width	<u>Link</u>
Joint 5 belt	HTD3 246	1	6 mm width	<u>Link</u>
	Pulleys:			
Name in building instructions	Туре	quantity	Description	Link
J4 pulley, J5 pulley	HTD3M 12 tooth 5mm bore 10mm width	2		Link
J1 pulley	HTD3M 15 tooth 5mm bore 10mm width	1		Link
o i pulley		1		LIIK
	Mechanical stuff:			
Name in building instructions	Туре	quantity	Description	Link
Name in building instructions Shaft coupler		quantity 3	Description 8 mm hole shaft, M4 screw holes	Link Link
	Туре			
Shaft coupler	Type Shaft coupler Bearings:			
Shaft coupler  Name in building instructions	Type Shaft coupler Bearings: Type	3	8 mm hole shaft, M4 screw holes Description	<u>Link</u> Link
Shaft coupler  Name in building instructions  Bearing 1	Type Shaft coupler Bearings: Type AXK3552	quantity	8 mm hole shaft, M4 screw holes  Description  35X52X4, needs to have top and bottom plate	Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2	Type 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 Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3	Type 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 Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing	Type 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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3	Type Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4	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 Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing	Type 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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing	Type 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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board	3 quantity 1 5 4 20 20 quantity 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	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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  Drivers from the links are tested. Use any other at own risk: Link1	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 Ball bearing 3x10x4 Electronics: Type PAROL control board	3 quantity 1 5 4 20 20 quantity 1 6 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  Drivers from the links are tested. Use any other at own risk: Link1  Needed only if your control board has no drivers!	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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  Drivers from the links are tested. Use any other at own risk: Link1	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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 5 4 20 20 quantity 1 6 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  Drivers from the links are tested. Use any other at own risk: Link1  Needed only if your control board has no drivers!	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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	3 quantity 1 5 4 20 20 quantity 1 6 2 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  Drivers from the links are tested. Use any other at own risk: Link1 Needed only if your control board has no drivers!  12mm 3-6V	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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	3 quantity 1 5 4 20 20 quantity 1 6 2 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  Drivers from the links are tested. Use any other at own risk: Link1 Needed only if your control board has no drivers!  12mm 3-6V	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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	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  Drivers from the links are tested. Use any other at own risk: Link1  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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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	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  Drivers from the links are tested. Use any other at own risk: Link1  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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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 SV 40mm Power connector - male + female Gripper connector (electric) Power supply	3 quantity 1 5 4 20 20 quantity 1 6 2 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  Drivers from the links are tested. Use any other at own risk: Link1  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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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 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 Drivers from the links are tested. Use any other at own risk: Link1 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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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 - maile + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1	3 quantity 1 5 4 20 20 quantity 1 6 2 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  Privers from the links are tested. Use any other at own risk: Link1  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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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 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 Drivers from the links are tested. Use any other at own risk: Link1 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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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 - maile + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1	3 quantity 1 5 4 20 20 quantity 1 6 2 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  Privers from the links are tested. Use any other at own risk: Link1  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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 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 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 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  Drivers from the links are tested. Use any other at own risk: Link1  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	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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 SV 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 6 2 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 Drivers from the links are tested. Use any other at own risk: Link1 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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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 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 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  Drivers from the links are tested. Use any other at own risk: Link1 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	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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	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 Privers from the links are tested. Use any other at own risk: Link1 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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 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 connector - robot	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  Drivers from the links are tested. Use any other at own risk: Link1  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	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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 SV 40mm Power connector - male + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1 Inductive sensor 2 Inductive sensor 2 Inductive sensor 3 Estop Cable gland for estop M3 brass insert Pneumatic Coripper	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 4 4 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  Drivers from the links are tested. Use any other at own risk: Link1  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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 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 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 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  Drivers from the links are tested. Use any other at own risk: Link1  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	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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 SV 40mm Power connector - male + female Gripper connector (electric) Power supply Limit switches Inductive sensor 1 Inductive sensor 2 Inductive sensor 2 Inductive sensor 3 Estop Cable gland for estop M3 brass insert Pneumatic Coripper	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 4 4 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  Drivers from the links are tested. Use any other at own risk: Link1  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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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 1 Inductive sensor 3 Estop Cable gland for estop M3 brass insert Pneumatic connector - robot Pneumatic gripper connector Pneumatic gripper personnector Pneumatic gripper connector	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  Privers from the links are tested. Use any other at own risk: Link1  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  PC4 - M5  1 meter, 4x2.5mm	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 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 Cripper Pneumatic Gripper Pneumatic Gripper Pneumatic Gripper Pneumatic Ube xt30 connector female	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  Drivers from the links are tested. Use any other at own risk: Link1  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  PC4 - M5  I meter, 4x2.5mm  used to deliver power to PAROL6 PCB	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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 Ornm 200mm 4PIN Noctua NF-A4x20 SV 40mm Power connector - male + female Gripper connector (electric) Power supply Limit switches Inductive sensor 2 Inductive sensor 1 Inductive sensor 2 Inductive sensor 3 Estop Cable gland for estop M3 brass insert Pneumatic Gripper Pneumatic Gripper Pneumatic Gripper Pneumatic ubbe X130 connector female Stiink	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 2 5 meters 1 1 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  Drivers from the links are tested. Use any other at own risk: Link1  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  PC4 - M5  1 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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type Shaft coupler Bearings: Type AXX3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 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 SV 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 Gripper Pneumatic Gripper Pneumatic Gripper Pneumatic Gripper Pneumatic Gripper Pneumatic Ubbe Xt30 connector female Stlink USB B cable	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 2 5 meters 1 1 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 Drivers from the links are tested. Use any other at own risk: Link1 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 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 Comms to the PC	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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-Ax20 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 Pneumatic connector - robot Pneumatic Gripper Pneumatic gripper connector Pneumatic gripper connector Pneumatic gripper connector Pneumatic ube xi30 connector female Stiink USB B aable 5/2 solenoid air valve	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 2 5 meters 1 1 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  Drivers from the links are tested. Use any other at own risk: Link1  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  PC4 - M5  1 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
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type Shaft coupler Bearings: Type AXX3552 NSK HR32906J NSK HR32907J Ball bearing 3x8x4 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 SV 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 Gripper Pneumatic Gripper Pneumatic Gripper Pneumatic Gripper Pneumatic Gripper Pneumatic Ubbe Xt30 connector female Stlink USB B cable	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 2 5 meters 1 1 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  Drivers from the links are tested. Use any other at own risk: Link1  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  MH-IZZ-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  Comms to the PC  4mm tube connectors, 5/2, 24V	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing	Type 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-Ax20 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 Pneumatic connector - robot Pneumatic Gripper Pneumatic gripper connector Pneumatic gripper connector Pneumatic gripper connector Pneumatic ube xi30 connector female Stiink USB B aable 5/2 solenoid air valve	3 quantity 1 5 4 20 20 quantity 1 6 2 1 1 1 1 1 1 1 1 1 2 5 meters 1 1 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  Drivers from the links are tested. Use any other at own risk: Link1  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  MH-IZZ-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  Comms to the PC  4mm tube connectors, 5/2, 24V	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing  Name in building instructions	Type Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Sall bearing 3x8x4 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 Pneumatic Gripper Pneumatic Usbe xt30 connector female Stlink USB B cable 5/2 solenoid air valve Vacuum gripper	3 quantity 1 5 4 20 20 quantity 1 6 6 2 1 1 1 1 1 1 1 1 1 1 1 2 5 meters 1 1 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  Drivers from the links are tested. Use any other at own risk: Link1  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  MH-IZZ-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  Comms to the PC  4mm tube connectors, 5/2, 24V	Link Link Link Link Link Link Link Link
Shaft coupler  Name in building instructions  Bearing 1  Bearing 2  Bearing 3  Tension bearing  Tension bearing  Name in building instructions	Type Shaft coupler Bearings: Type AXK3552 NSK HR32906J NSK HR32907J Sall bearing 3x8x4 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 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 Gripper Pneumatic Gripper Pneumatic Gripper Pneumatic Gripper Pneumatic Gripper Pneumatic tube xx30 connector female Stlink USB B cable 52's Solenoid air valve Vacuum gripper Type	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  Drivers from the links are tested. Use any other at own risk: Link1  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  MH-IZZ-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  Comms to the PC  4mm tube connectors, 5/2, 24V	Link Link Link Link Link Link Link Link