

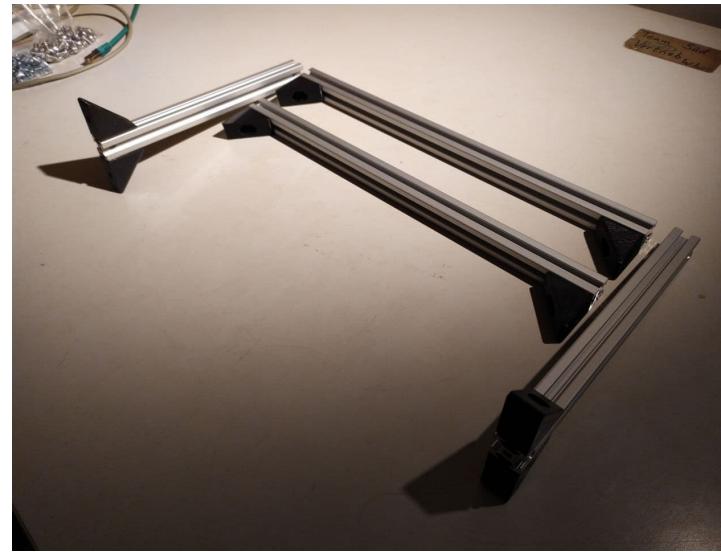
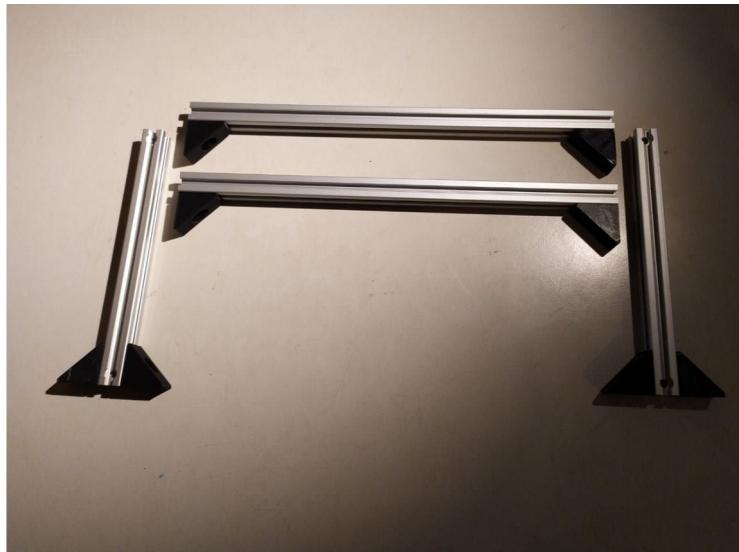
Subassembly-BOM Maker's Mill MM1 Desktop-Fräse V1.02, UniProKit UPKlib V2.06

Rahmen



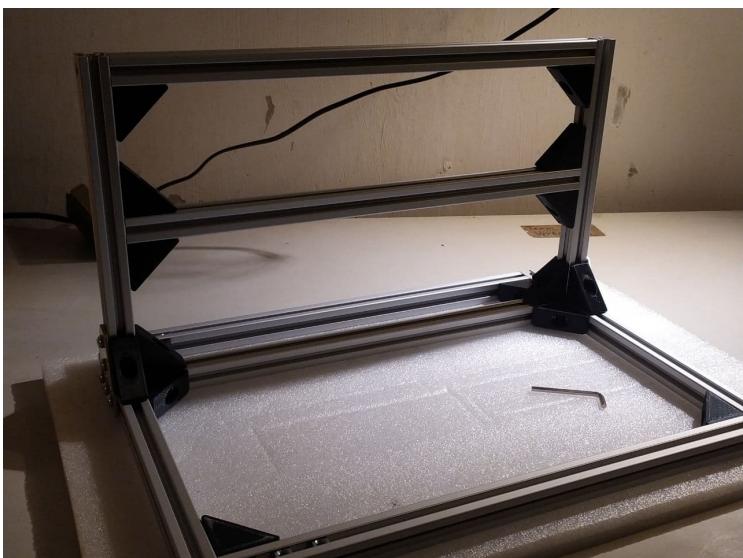
Y-Base

| Name | Bauteil/A.-Nr. | Stück | Funktion |
|-------------|----------------|-------|--|
| Tslot32con | 17092218 | 2 | T-Slot Con, 320x20x20mm |
| Tslot40 | 17092208 | 3 | T-Slot Nut 6, 400x20x20mm |
| RAconnector | 17092313 | 8 | 90° Versteifungswinkel |
| M6nutplate | 17092309 | 45 | für TSlot, Slot6, M6 (for position see table below) |
| M6x25cyl | 17092307 | 4 | 25mm, M6 DIN 7984 |
| M6x12 | 17092304 | 14 | 12mm, M6 ISO 7380 |
| M6x8 | 17092303 | 8 | 8mm, M6 ISO 7380 |
| EndCap1d | 17092315 | 8 | Endkappe (4 at the corners and 4 underneath as machine-feet) |



X-Gantry

| Name | Bauteil/A.-Nr. | Stück | Funktion |
|-------------|----------------|-------|---------------------------|
| Tslot40 | 17092208 | 2 | T-Slot Nut 6, 400x20x20mm |
| Tslot24con | 17092217 | 2 | T-Slot Con, 240x20x20mm |
| RAconnector | 17092313 | 8 | 90° Versteifungswinkel |
| M6nutplate | 17092309 | 17 | für TSlot, Slot6, M6 |
| M6x25cyl | 17092307 | 2 | 25mm, M6 DIN 7984 |
| M6x12 | 17092304 | 22 | 12mm, M6 ISO 7380 |
| M6x8 | 17092303 | 4 | 8mm, M6 ISO 7380 |
| TCon | 17092302 | 2 | Flach, 60x60x4mm |
| M6x8 | 17092303 | 2 | 8mm, M6 ISO 7380 |
| EndCap1d | 17092315 | 2 | Endkappe (on top) |

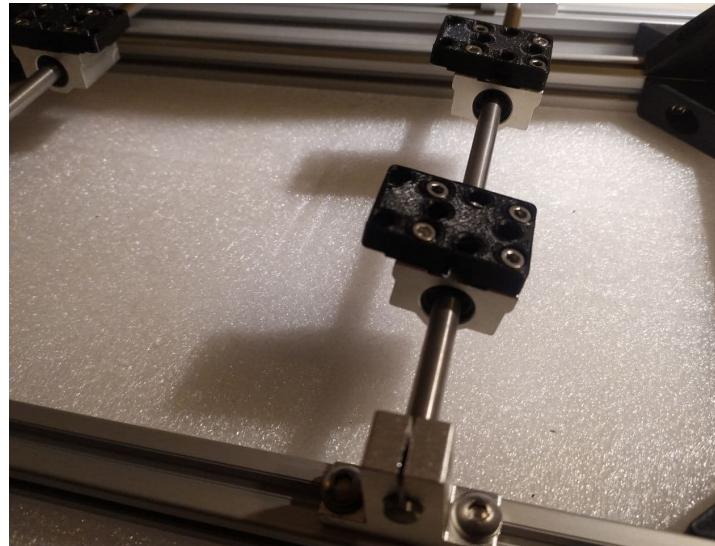


M6-nutplate-positions for y-base

| quantity | view | position | function |
|-----------|--------------|------------|------------------------|
| 4 | front-tslot | topside | 2x2 SK8 |
| 5 | front-tslot | frontside | endplate, endstopmount |
| 2 | front-tslot | backside | 2x1 raconnector |
| 4 | back-tslot | backside | mountplate_small |
| 4 | back-tslot | topside | 2x2 SK8 |
| 2 | back-tslot | frontside | 2x1 raconnector |
| 3 | left-tslot | leftside | tcon |
| 2 | left-tslot | topside | 2x1 raconnector |
| 3 | left-tslot | rightside | 3x1 raconnector |
| 2 | left-tslot | bottomside | 2x1 machinefeet |
| 3 | right-tslot | rightside | tcon |
| 2 | right-tslot | topside | 2x1 raconnector |
| 3 | right-tslot | leftside | 3x1 raconnector |
| 2 | right-tslot | rightside | 2x1 machinefeet |
| 2 | middle-tslot | frontside | 2x1 raconnector |
| 2 | middle-tslot | topside | 2x1 raconnector |
| 45 | | | |

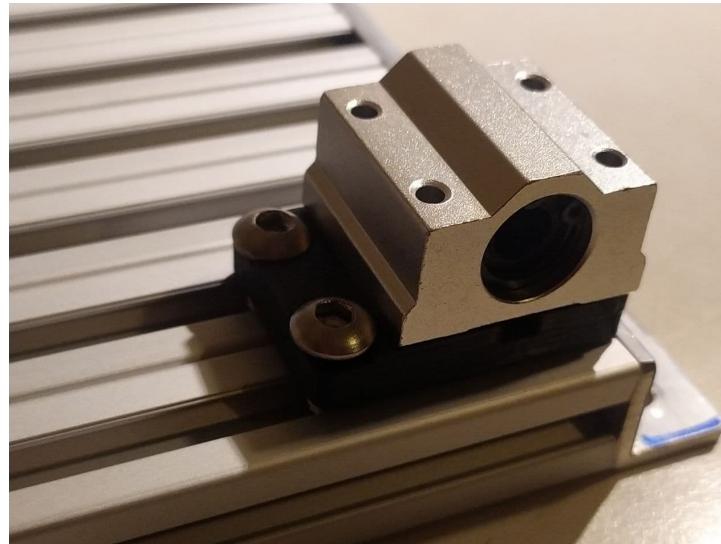
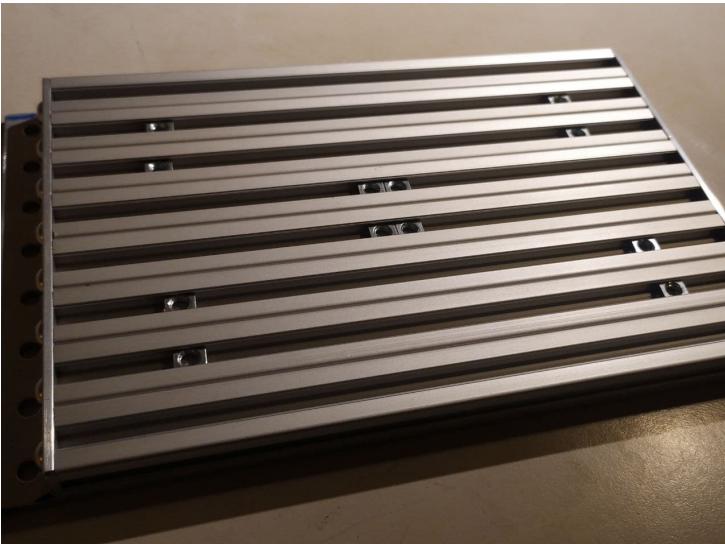
<== the picture shows the older V.05 version of the frame, but the x-gantry-frame should look like in the picture above.

Y-Achse



Y-Achse

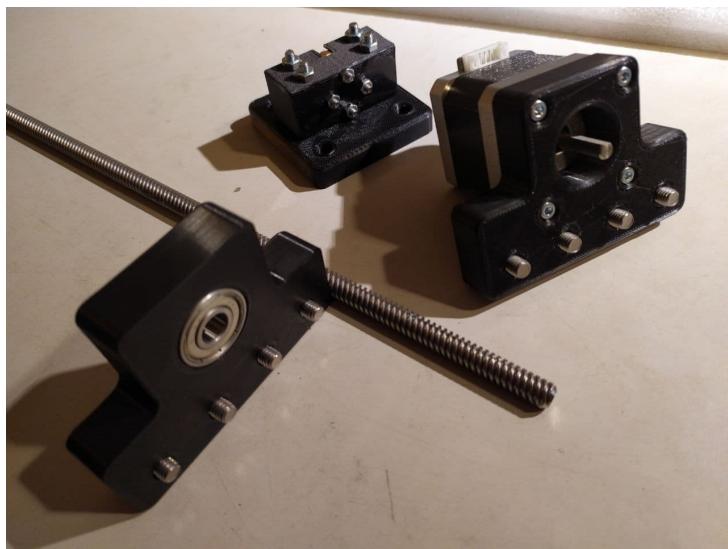
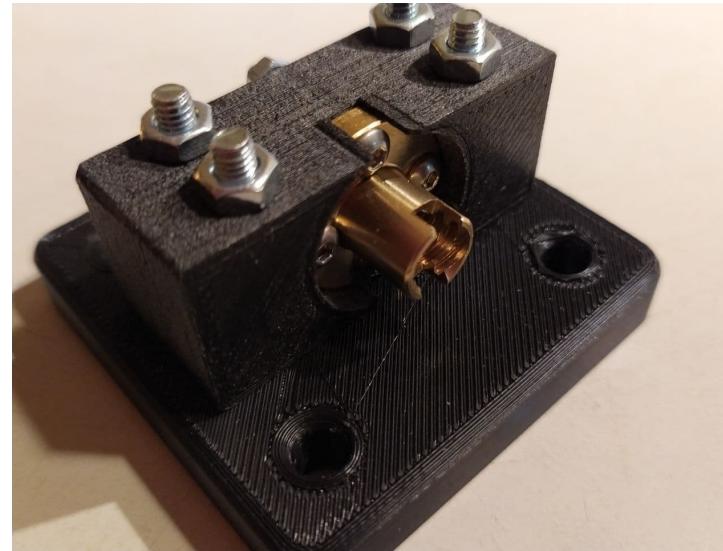
| Name | Bauteil/A.-Nr. | Stück | Funktion |
|-----------------|----------------|-------|---------------------------------|
| Shaft8x320 | 21011003 | 2 | Welle, 8x320mm |
| SK8 | 19082008 | 4 | Lagerbock, 8mm |
| SC8UU | 19082002 | 4 | LM8UU-Block |
| LM8UU | 19082206 | 4 | LM8UU Linearbearing |
| M6x12 | 17092304 | 12 | 12mm, M6 ISO 7380 |
| M6wash | 17092310 | 4 | 6.4x12x1.6, DIN 125 |
| Tslot24 | 17092206 | 8 | T-Slot Nut 6, 240x20x20mm |
| Angle16 | 17092228 | 2 | L-Profil, 160x20x20mm |
| M6x8 | 17092303 | 16 | 8mm, M6 ISO 7380 |
| SC8UU-adapter2g | 21090301 | 4 | SC8UU-UPK-Adapter f. MM1 u. MF1 |
| M6nutplate | 17092309 | 18 | für TSlot, Slot6, M6 |
| M4x10cyl | 21090302 | 16 | 10mm, M4 ISO 4762 |
| M6x12 | 17092304 | 8 | 12mm, M6 ISO 7380 |

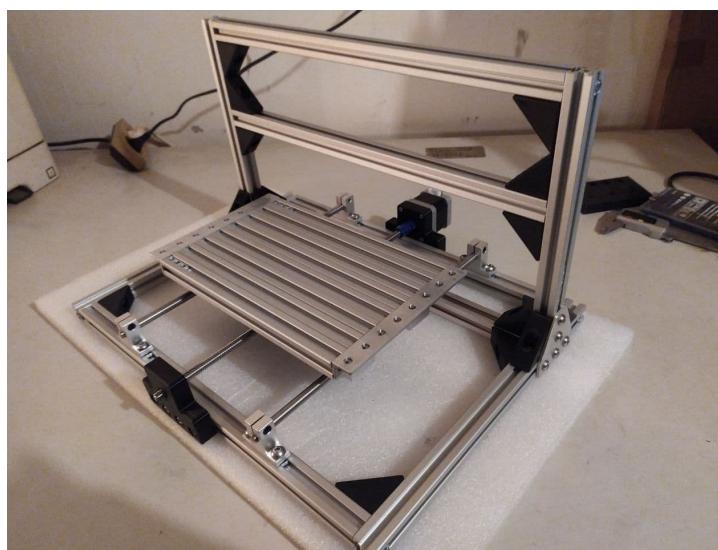
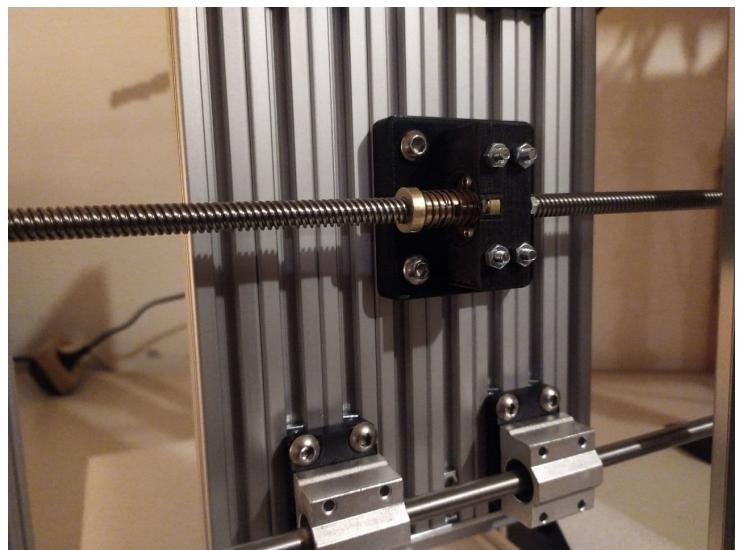
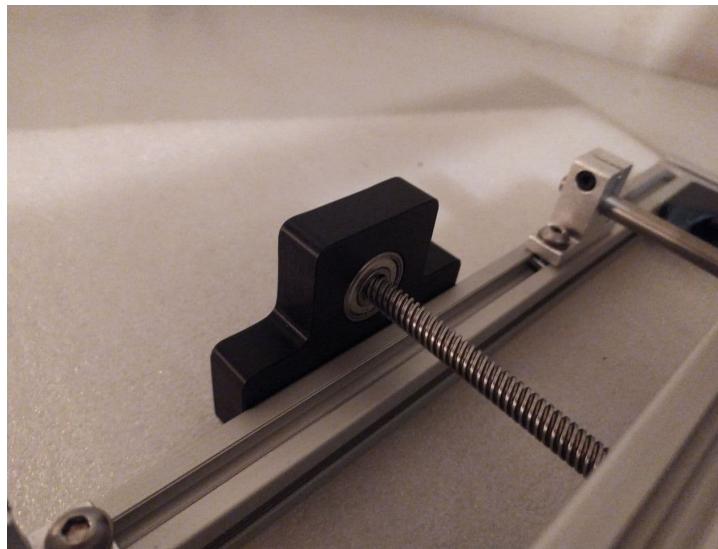
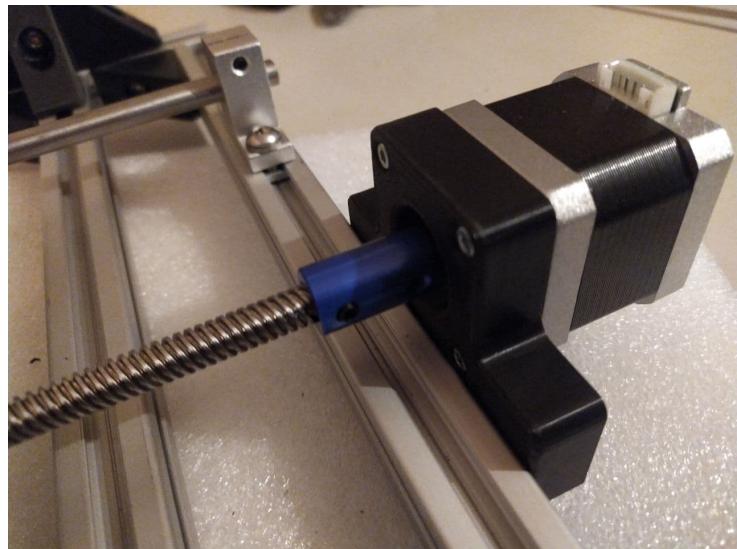


Y-Trapezgewinde-Antrieb

Y-Trapezgewinde-Antrieb

| Name | Bauteil/A.-Nr. | Stück | Funktion |
|------------------------------|----------------|-------|--|
| Nutblock1h | 19070623 | 1 | Spindelmutterblock |
| M3x20cyl | 19082011 | 4 | 20mm, M3 ISO 4762 |
| M3nut | 19081701 | 4 | M3 Mutter |
| M4x35cyl | 19082014 | 4 | 35mm, M4 ISO 4762 |
| M4nut | 19070613 | 4 | M4 Nut |
| Nutblockadapter | 21090303 | 1 | Adapter für Spindelmutterblock an UPK |
| Trapezoidal_nut_AntiB | 21090304 | 1 | Trapezspindelmutter, 8mm, Antibacklash |
| Trapezoidal_nut_AntiB-spring | 21090305 | 1 | Feder f. Antibacklash-Trapezmutter 8mm |
| Trapezoidal-thread_320 | 21090306 | 1 | Trapezspindel, 8mm |
| Mountplate_small1b | 21090307 | 1 | Stepper-Montageplatte |
| 608ZZ_Ball_Bearing | 19082001 | 1 | Kugellager, 8mm innen |
| M6x16 | 17092305 | 8 | 16mm, M6 ISO 7380 |
| Endplate_small1b | 21090308 | 1 | Endlager. lose |
| Nema17_40con | 19082022 | 1 | Steppermotor, NEMA17, 0.42 Nm |
| M3x16cyl | 19082010 | 4 | 16mm, M3 ISO 4762 |
| Rigidcoupler-5-8 | 21090309 | 1 | starre Wellenkupplung |
| M4x4lockscrew | 21090310 | 4 | M4x4 Madenschraube |





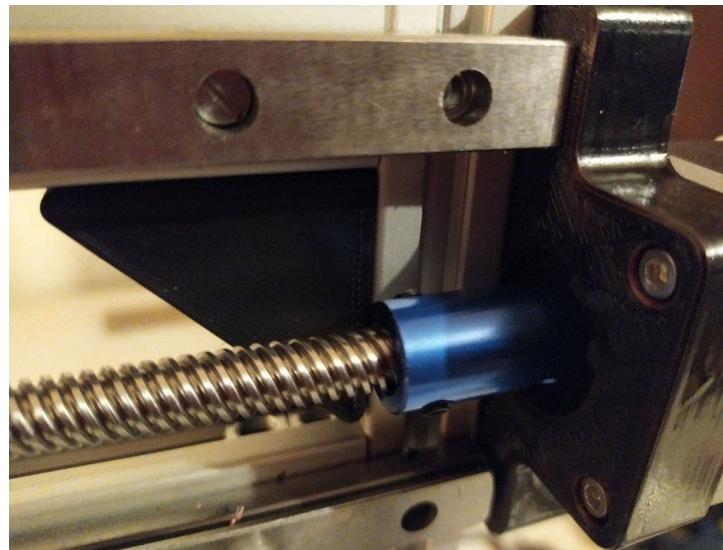
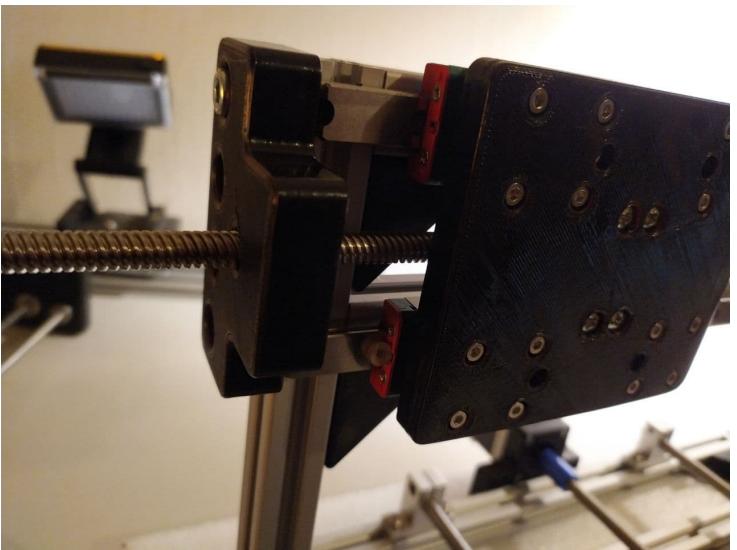
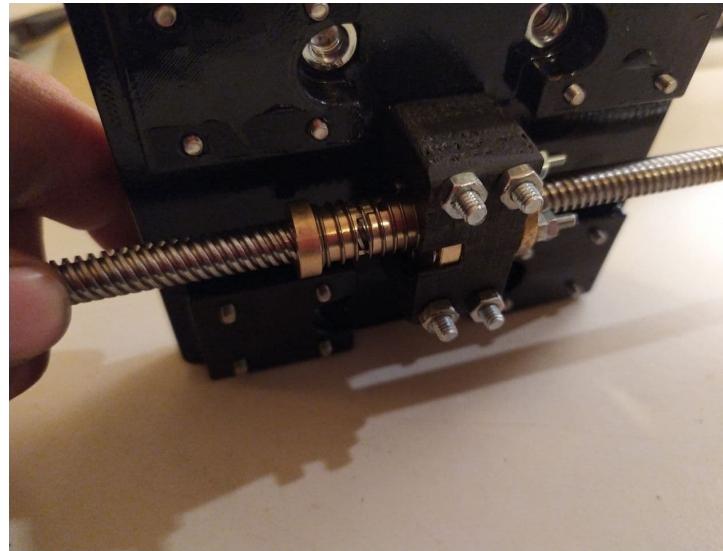
X-Achse, MGN12H

| Name | Bauteil/A.-Nr. | Stück | Funktion |
|------|----------------|-------|----------|
|------|----------------|-------|----------|

X-Achse, MGN12H

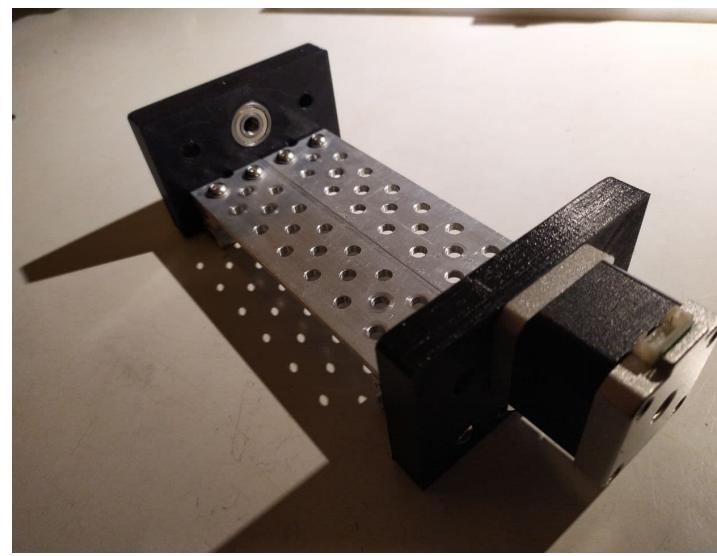
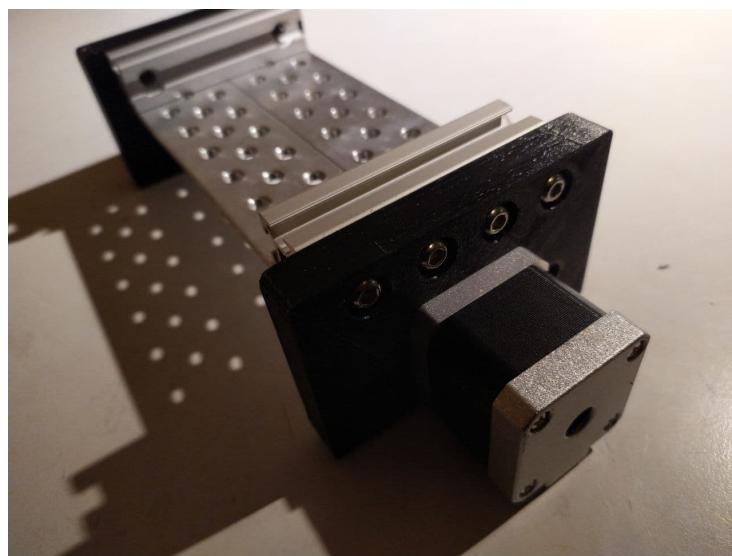
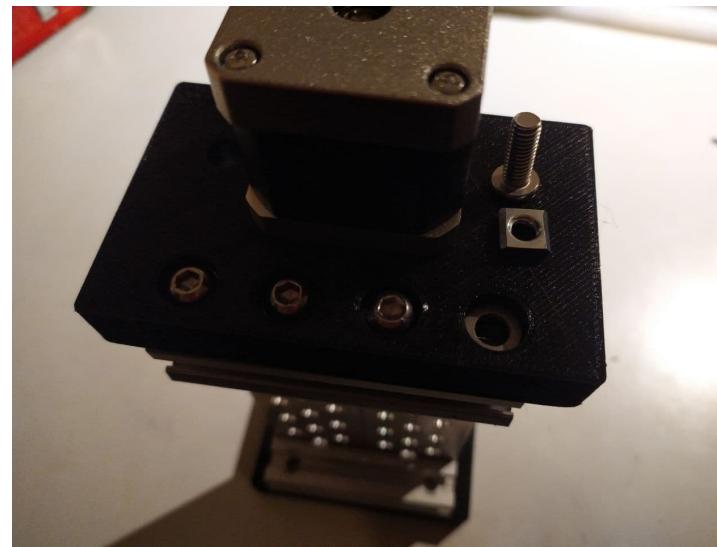
| | | | |
|------------------------------|----------|----|--|
| Mountplate_mgn12c | 21032801 | 1 | Stepper-Montageplatte f. mgn12 |
| Endplate_mgn12 | 21032802 | 1 | Loslager-Platte f. mgn12 |
| 608ZZ_Ball_Bearing | 19082001 | 1 | Kugellager |
| M6x40cyl | 19082015 | 2 | 40mm, M6 ISO 4762 |
| M6x16 | 17092305 | 5 | 16mm, M6 ISO 7380 |
| | | | |
| Mgn12h-block | 21032804 | 4 | carriage for MGN12H-rails |
| Mgn12h-rail-435 | 21032805 | 2 | 435mm MGN12H-rail |
| M3x8cyl | 21032807 | 32 | 8 mm, M3 ISO 4762 |
| Hammermutter-m3 | 21032803 | 32 | Hammermutter, M3, Slot6 |
| Nutblock1i | 21032808 | 1 | Spindelmutterblock mit Senkmuttern |
| M3x30cyl | 21032809 | 4 | 30 mm, M3 ISO 4762 |
| M4x30cyl | 19082013 | 4 | 30mm, M4 ISO 4762 |
| M4nut | 19070613 | 4 | M4 Nut |
| Trapezoidal_thread_480 | 19082006 | 1 | Trapezspindel, 8mm |
| Trapezoidal_nut_AntiB | 21090304 | 2 | Trapezspindelmutter, 8mm, Antibacklash |
| Trapezoidal_nut_AntiB-spring | 21090305 | 2 | Feder f. Antibacklash-Trapezmutter 8mm |
| | | | |
| M3x16cyl | 19082010 | 4 | 16mm, M3 ISO 4762 |
| Nema17_40con | 19082022 | 1 | Steppermotor, NEMA17, 0.42 Nm |
| Rigidcoupler-5-8 | 21090309 | 1 | starre Wellenkupplung |
| M4x4lockscrew | 21090310 | 4 | M4x4 Madenschraube |
| | | | |
| Carriageplate-mgn12b | 21032810 | 1 | Schlittenplatte f. MGN12 |
| M3x16cyl | 19082010 | 16 | 16mm, M3 ISO 4762 |
| M6nut | 17092308 | 4 | 5.6x10mm, M6 DIN934 |

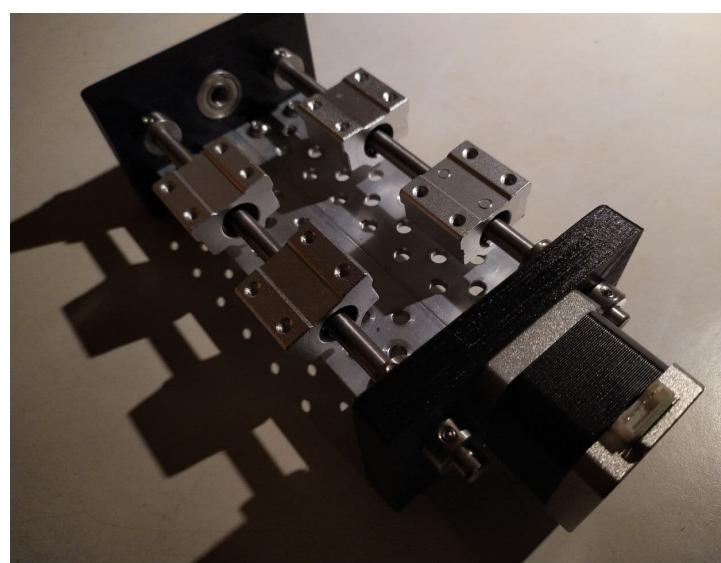
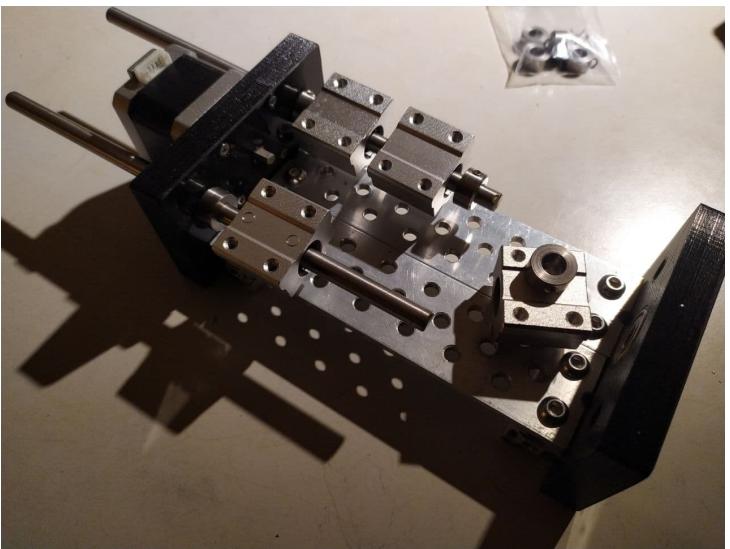
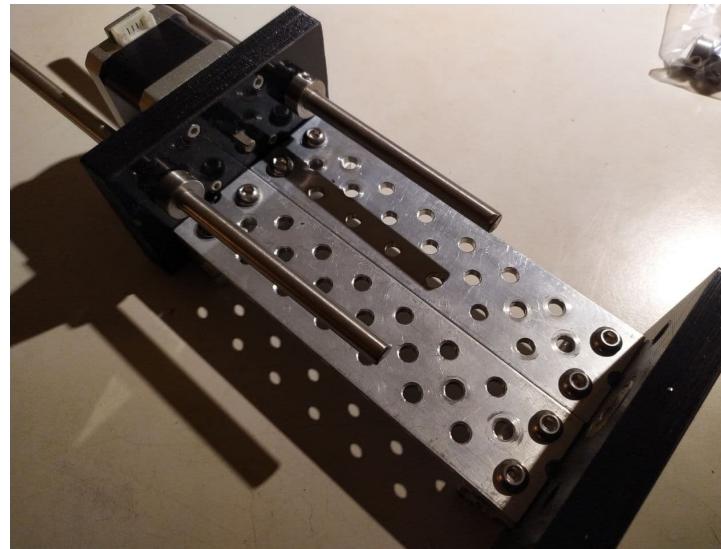


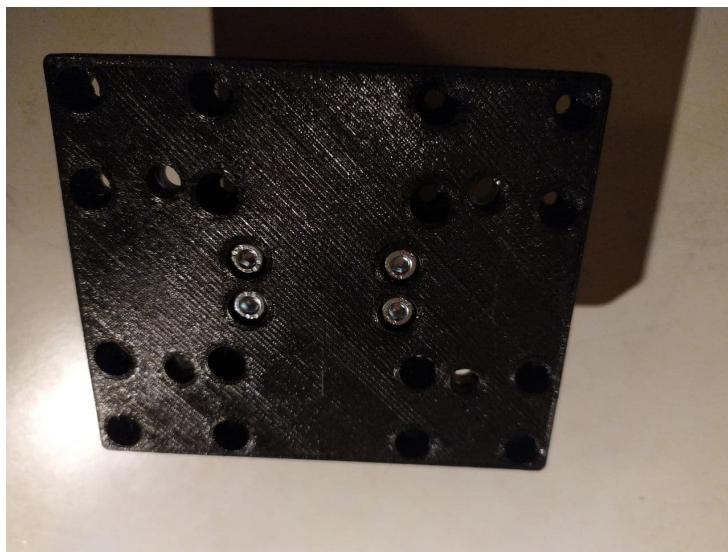
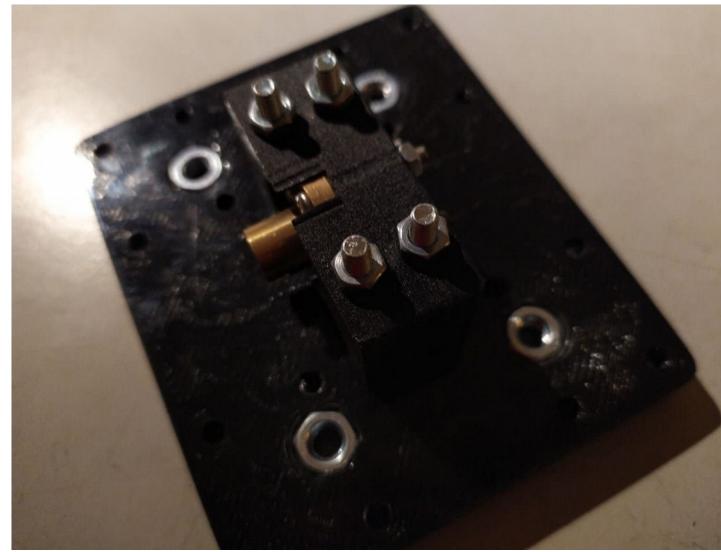


Z-Achse

| Name | Bauteil/A.-Nr. | Stück | Funktion |
|------------------------------|----------------|-------|--|
| Z-Achse | | | |
| Mountplate3d | 21040802 | 1 | Motorplatte links |
| Endplate1b_sunken | 21031301 | 1 | Loslager-Platte versenkt |
| 608ZZ_Ball_Bearing | 19082001 | 1 | Kugellager |
| M6wash | 17092310 | 8 | 6.4x12x1.6, DIN 125 |
| M6x16 | 17092305 | 8 | 16mm, M6 ISO 7380 |
| M6nutplate | 17092309 | 16 | für TSlot, Slot6, M6 |
| Flat16 | 17092239 | 2 | Flach, 160x40x4mm |
| Tslot8 | 17092203 | 2 | T-Slot Nut 6, 80x20x20mm |
| M6x8 | 17092303 | 12 | 8mm, M6 ISO 7380 |
| EndCap1d | 17092315 | 4 | Endkappe |
| Carriageplate | 19070624 | 1 | Schlittenplatte |
| M6nut | 17092308 | 4 | 5.6x10mm, M6 DIN934 |
| SC8UU | 19082002 | 4 | LM8UU-Block |
| LM8UU | 19082206 | 4 | LM8UU Linearbearing |
| M4x10cyl | 21090302 | 16 | 10mm, M4 ISO 4762 |
| Shaft8x210 | 20092405 | 2 | Welle, 210mm (Sondergröße) |
| Adjustring8mm | 21031001 | 8 | Stellring |
| M3x16cyl | 19082010 | 4 | 16mm, M3 ISO 4762 |
| Nema17_40con | 19082022 | 1 | Steppermotor, NEMA17, 0.42 Nm |
| Trapezoidal_nut_AntiB | 21090304 | 1 | Trapezspindelmutter, 8mm, Antibacklash |
| Trapezoidal_nut_AntiB-spring | 21090305 | 1 | Feder f. Antibacklash-Trapezmutter 8mm |
| Trapezoidal_thread_160 | 20092406 | 1 | Trapezspindel, 160x8mm |
| Nutblock1h | 19070623 | 1 | Spindelmutterblock |
| M3x20cyl | 19082011 | 4 | 20mm, M3 ISO 4762 |
| M3nut | 19081701 | 4 | M3 Mutter |
| M4x30cyl | 19082013 | 4 | 30mm, M4 ISO 4762 |
| M4nut | 19070613 | 4 | M4 Nut |
| M4x4lockscrew | 21090310 | 4 | M4x4 Madenschraube |
| Rigidcoupler-5-8 | 21090309 | 1 | starre Wellenkupplung |



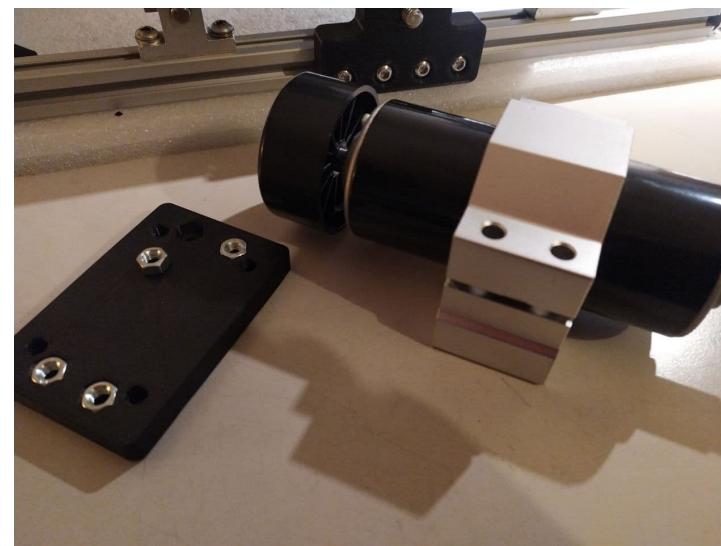
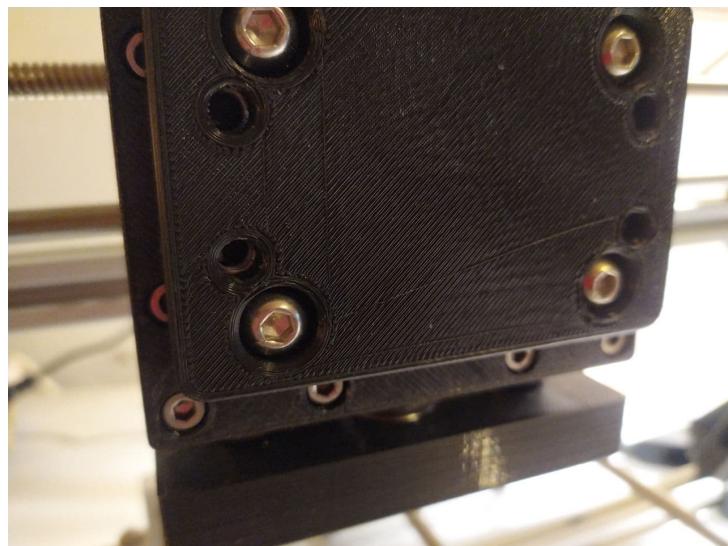


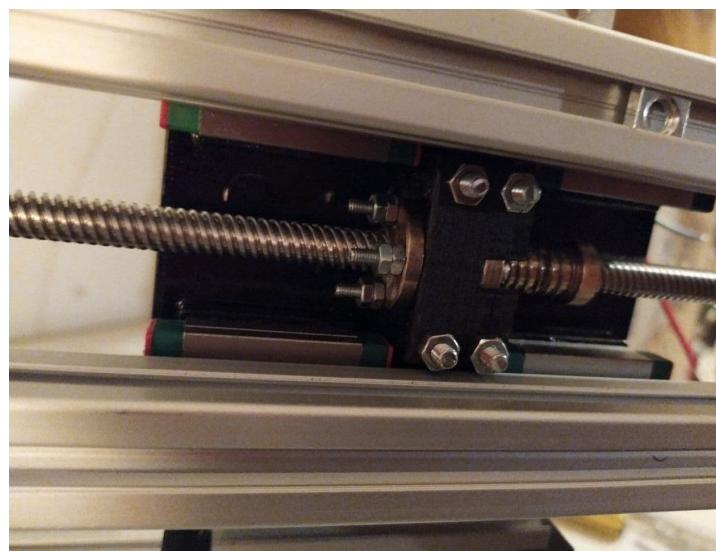
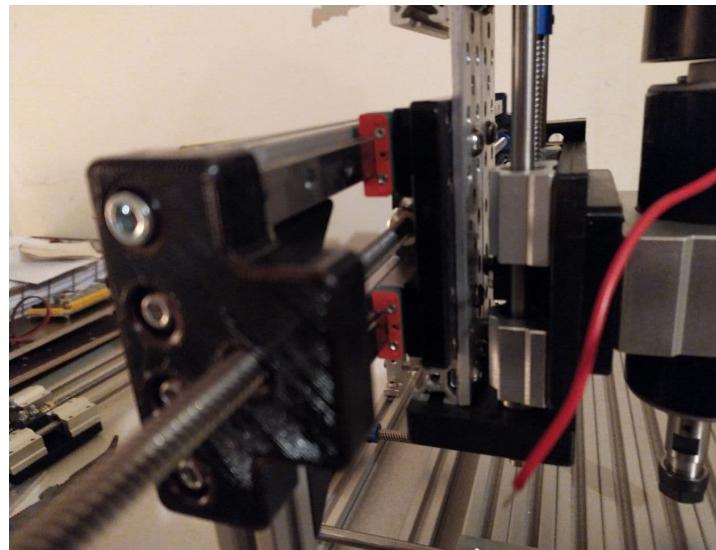
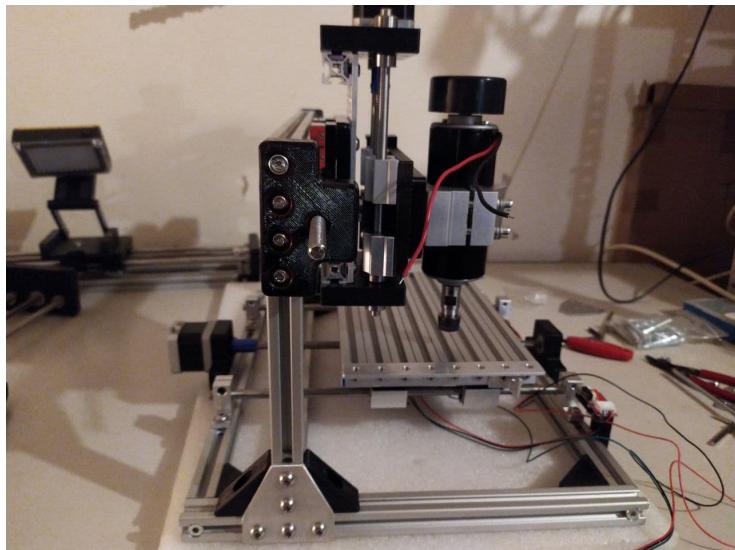


| Name | Bauteil/A.-Nr. | Stück | Funktion |
|------|----------------|-------|----------|
|------|----------------|-------|----------|

Spindel

| | | | |
|------------------------|----------|---|--|
| Spindelmount_adapter1c | 21031005 | 1 | Adapter für Spindel-Klemme |
| M6nut | 17092308 | 4 | 5.6x10mm, M6 DIN934 |
| M6x12 | 17092304 | 8 | 12mm, M6 ISO 7380 |
| M6x65cyl | 21031002 | 4 | 65mm, M6 ISO 7380 |
| spindelmount52mm | 21031003 | 1 | Halter für 500W-Spindel, 52mm |
| spindel500w | 21031004 | 1 | 500W, 100V, 12000 rpm, 0.5 Nm, 1.08 Kg |





Steuerung

| Name | Bauteil/A.-Nr. | Stück | Funktion |
|------|----------------|-------|----------|
|------|----------------|-------|----------|

Elektronik

| | | | |
|---------------------|----------|----|--|
| Endstopmount1b | 21031006 | 3 | Halter f. Limitswitches |
| Endstopswitch1b | 19082020 | 3 | Limit Switch |
| M6x8 | 17092303 | 2 | 8mm, M6 ISO 7380 |
| 3.5x16ws | 18081701 | 4 | WoodScrew |
| M3x10cyl | 19070615 | 4 | 10mm, M3 ISO 4762 |
| M3nut | 19081701 | 8 | M3 Mutter |
| Ctrlmount2g | 21031010 | 1 | Elektronik-Platte |
| M6x12 | 17092304 | 4 | 12mm, M6 ISO 7380 |
| M6nutplate | 17092309 | 8 | für TSlot, Slot6, M6 |
| Ks0288cncshield | 21031007 | 1 | Arduino kompatible Steuerung |
| M3nut | 19081701 | 12 | M3 Mutter |
| M3x16cyl | 19082010 | 4 | 16mm, M3 ISO 4762 |
| Pololu-A4988 | 19082019 | 3 | Treiber f. Steppermotor |
| Motor-4of8pol | 19082026 | 3 | Kabel f. Steppermotor, 4-pol |
| Endstop-3pol | 19082027 | 3 | Kabel f. Endswitch, 3-pol |
| Ramps-usb2B | 19082023 | 1 | USB 2.0 Typ B Kabel |
| ps500wspindel | 21031008 | 1 | PowerSupply 500w-Spindel |
| M3x10cyl | 19070615 | 6 | 10mm, M3 ISO 4762 |
| M3nut | 19081701 | 6 | M3 Mutter |
| revctrl500wspindel | 21031009 | 1 | wth118-1a 2w 4k7 |
| cabel220v | 21031011 | 1 | 220V AC-Kabel mit Stecker |
| cabel20awg | 21031012 | 1 | Kabel 0.75mm ² , awg20 |
| terminalstrip1.5qmm | 21031013 | 1 | Lüsterklemme 1.5 mm ² , 16A |
| Ps12V8A | 19082028 | 1 | PowerSupply 12V |
| revctrl-holder | 21040801 | 1 | Holder f. revctrl500wspindel |
| M3x16cyl | 19082010 | 4 | 16mm, M3 ISO 4762 |

