uStepper Linear Actuator

M8 lead screw

Introduction

This document describes the assembly and use of uStepper Linear Actuator and related products.

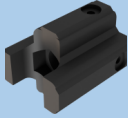**Product: uStepper Linear Actuator M8**

Document revision: 1.0

Author: MGN

Approved by: THO

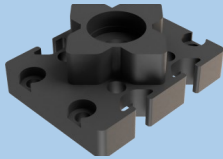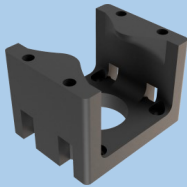**Approval date: November 19th 2019**

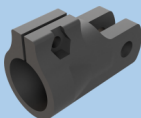# Bill Of Materials

1

1 x

2

1 x

3

1 x
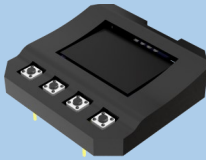
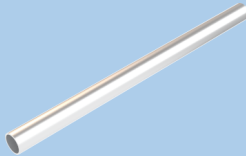**4**

1 x
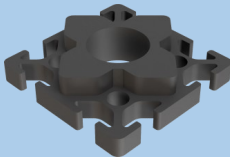
5

1 x

6

1 x

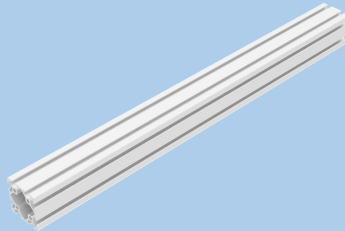# Bill Of Materials

1 x uStepper Ego Shield S

1 x uStepper S w. motor

1 x Tube 15 mm x 460 mm

1 x M8 lead screw x 470 mm

1 x 40x40 I-type slot 5, 450 mm

1 x M8x5 coupler

2 x F8-16M Bearing

4 x M3 x 6 mm

3 x M3 x 10 mm
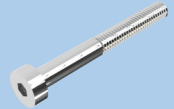
4 x M4 x 35 mm

8 x M5 x 20 mm

1 x M3 SL nut

4 x M4 SL nut

1 x M8 SL nut

2 x M8 nut

4 x 3.5x8 mm screw

Linear Actuator Assembly

1 | 1x   1x   M8   2x
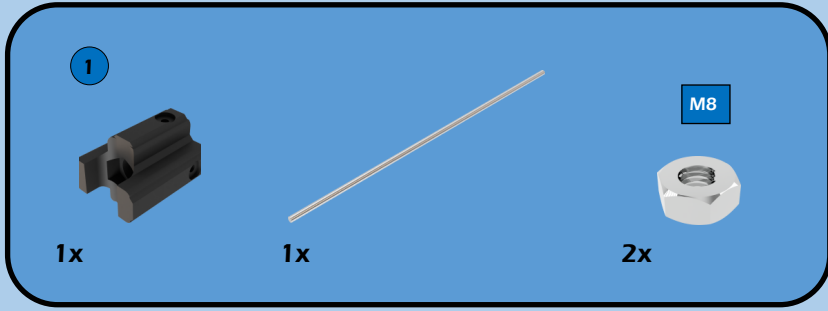
1

Make sure the two M8 nuts sit tight in the plastic slider when screwed onto the M8 rod

M8SL
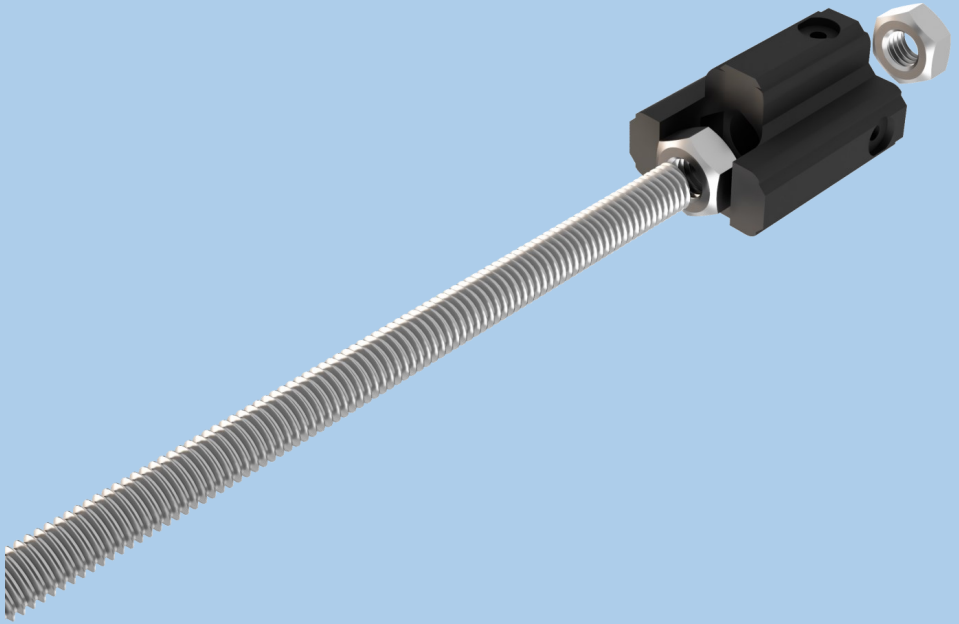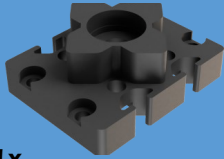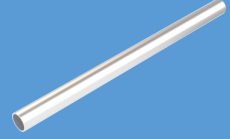
1x   2x   1x   4x   1x

2

Optional: Drill 2mm holes in aluminium rod prior to inserting screws

3

1x

4

Use M5 Tap to make thread in the 4 holes at both ends of the profile

M5x20

4x

5

M3x6

1x   4x

6

1x　　　**1x**

7

M3x10

1x

2x

8

M4x35

M4SL

4x

4x

9
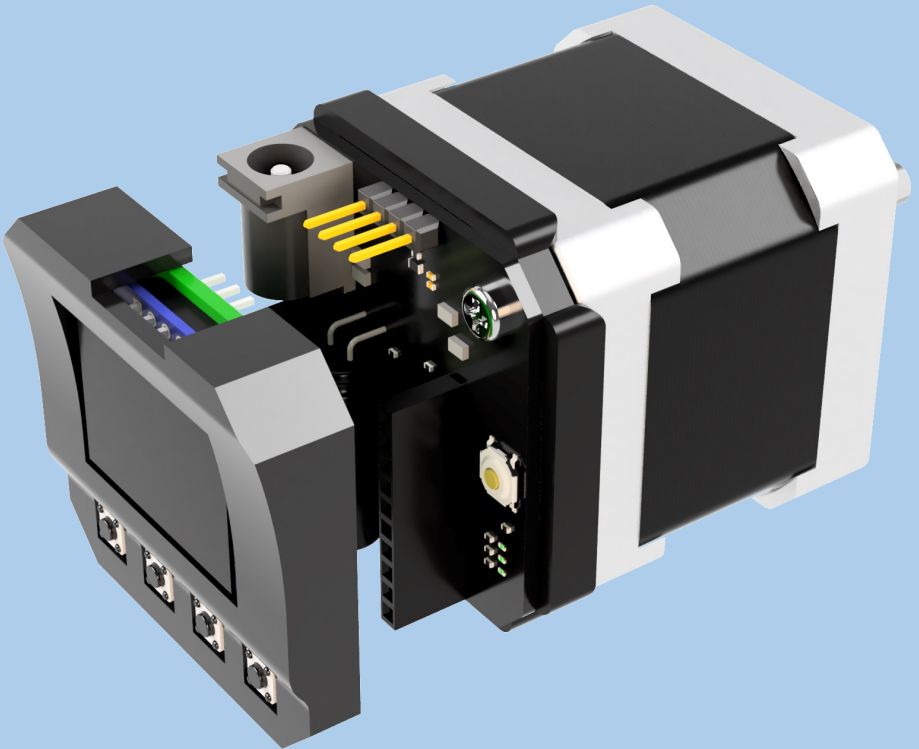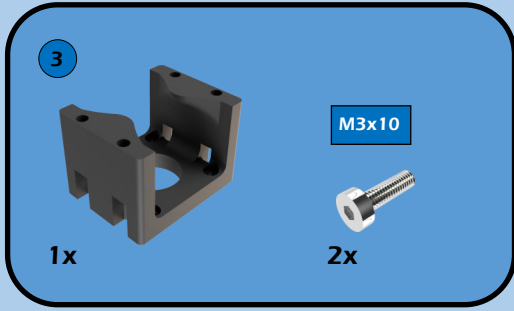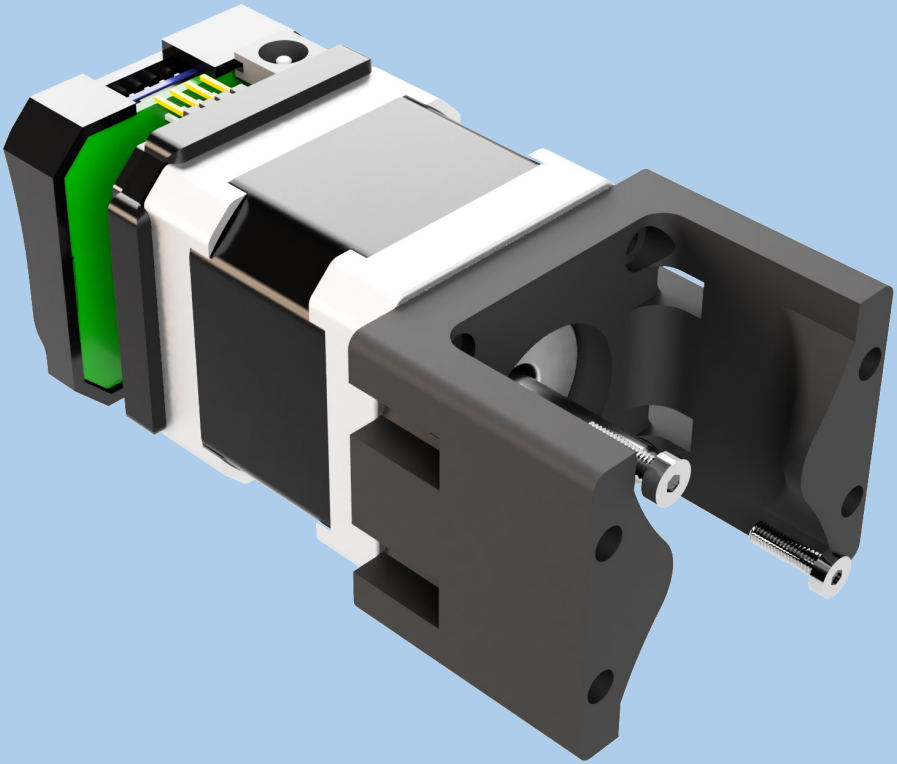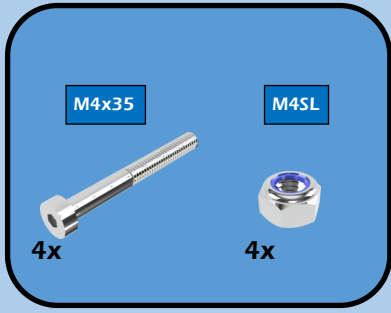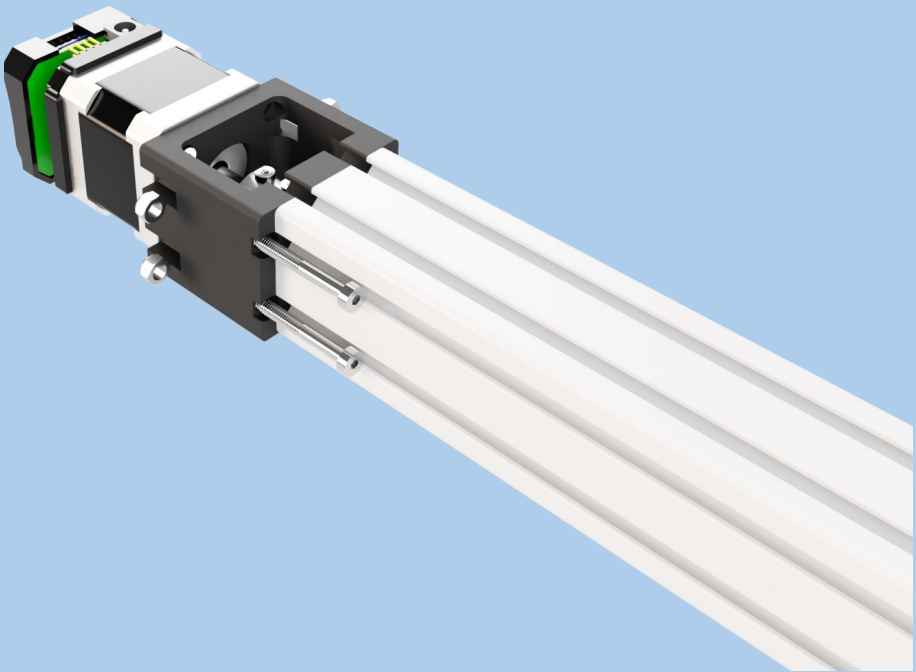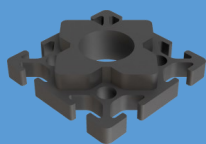
M5x20
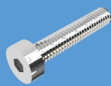
1x   4x

10
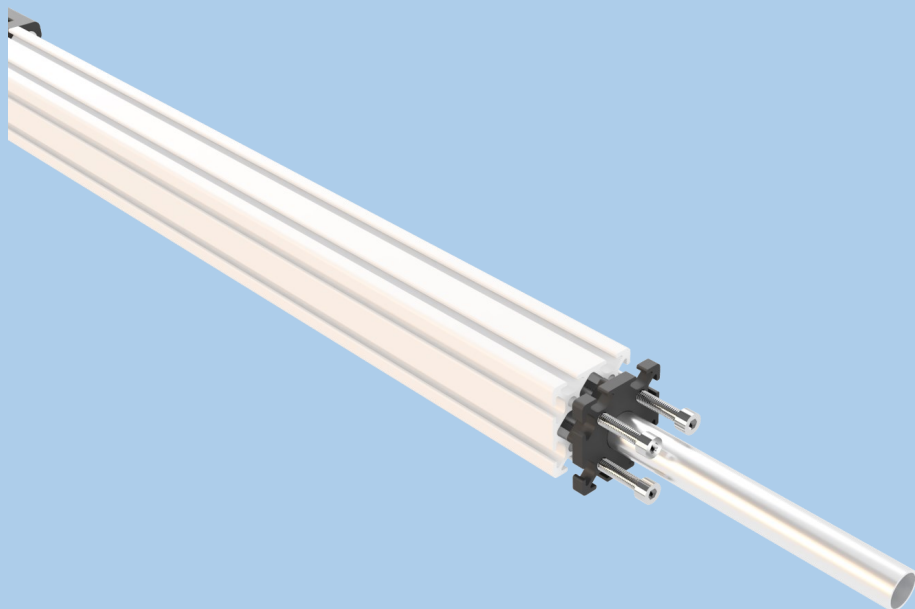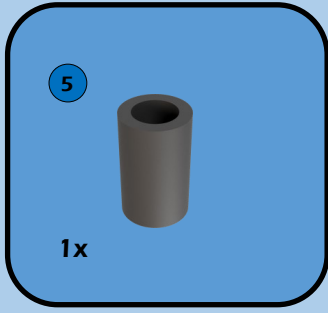
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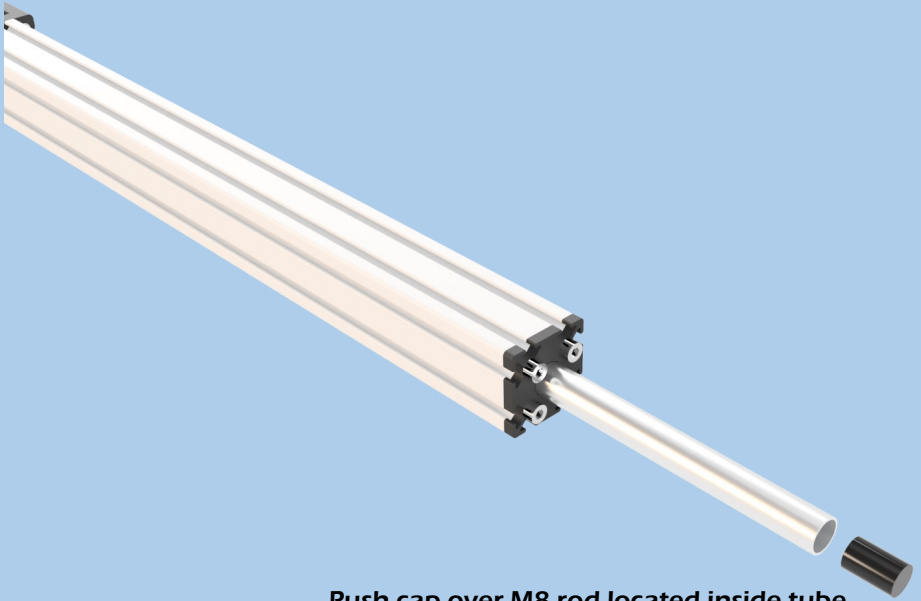
Push cap over M8 rod located inside tube

M3 SL

M3x10

6

1x

1x

1x
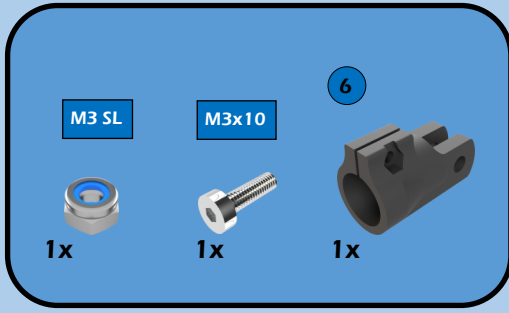
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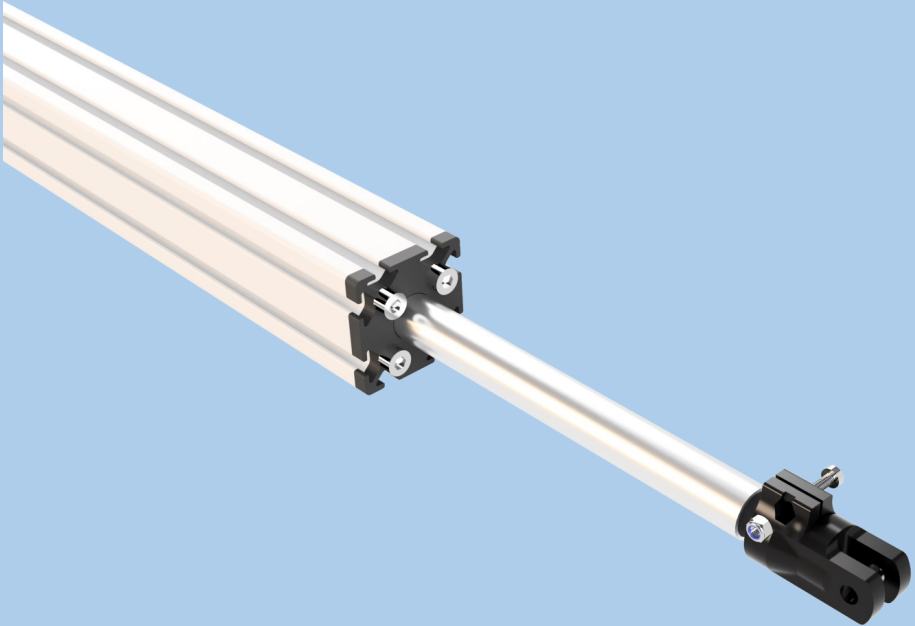
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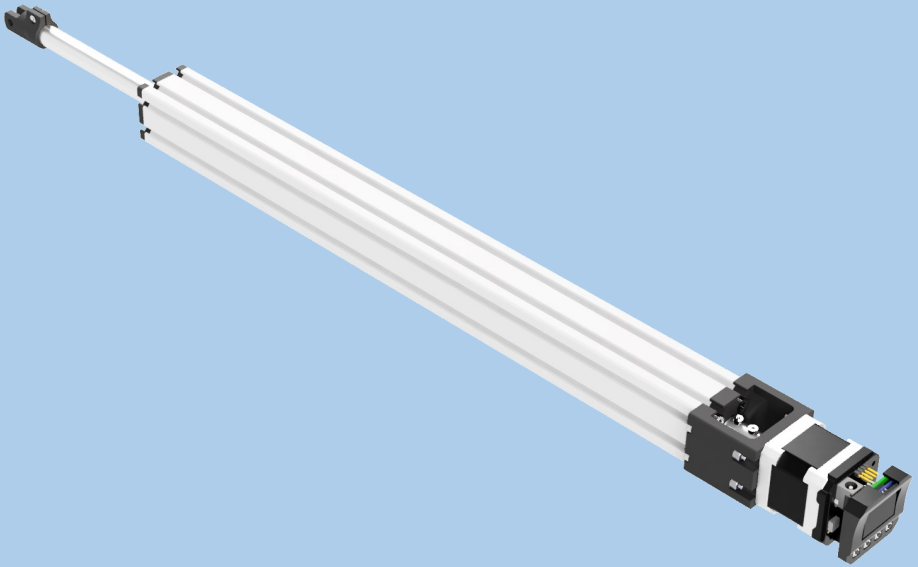
Using uStepper & Ego Shield

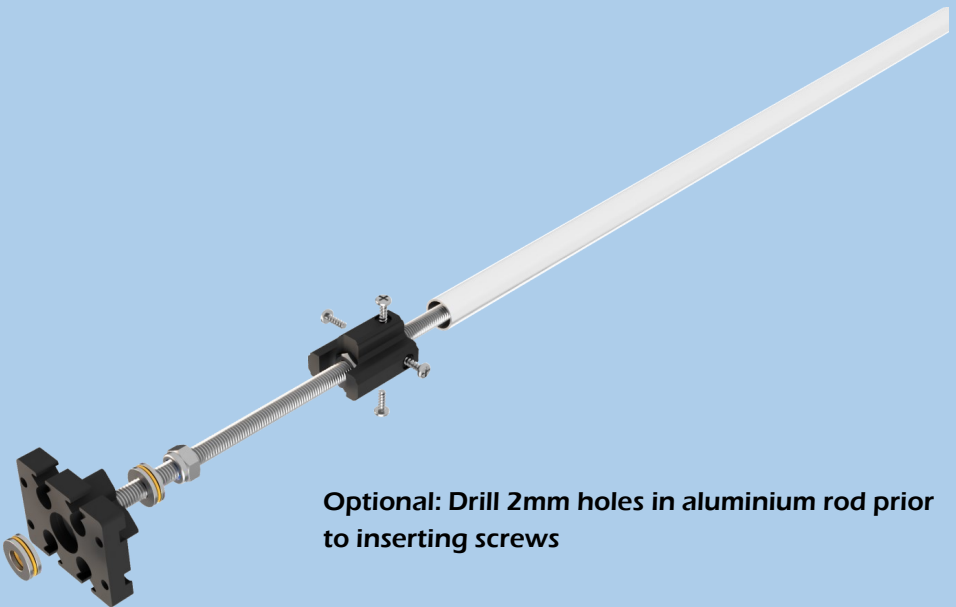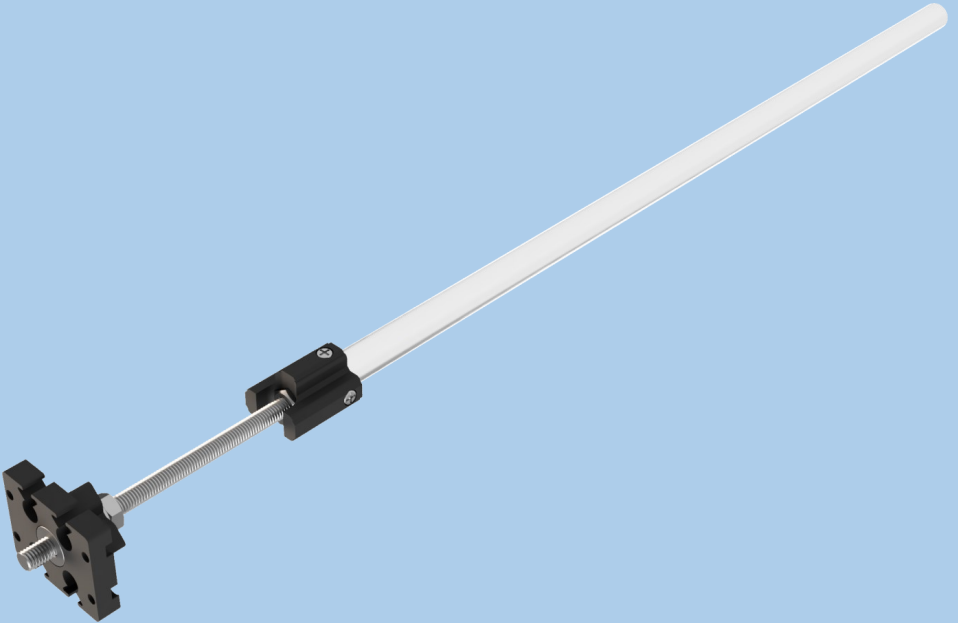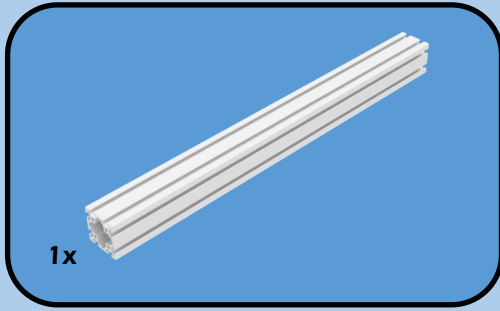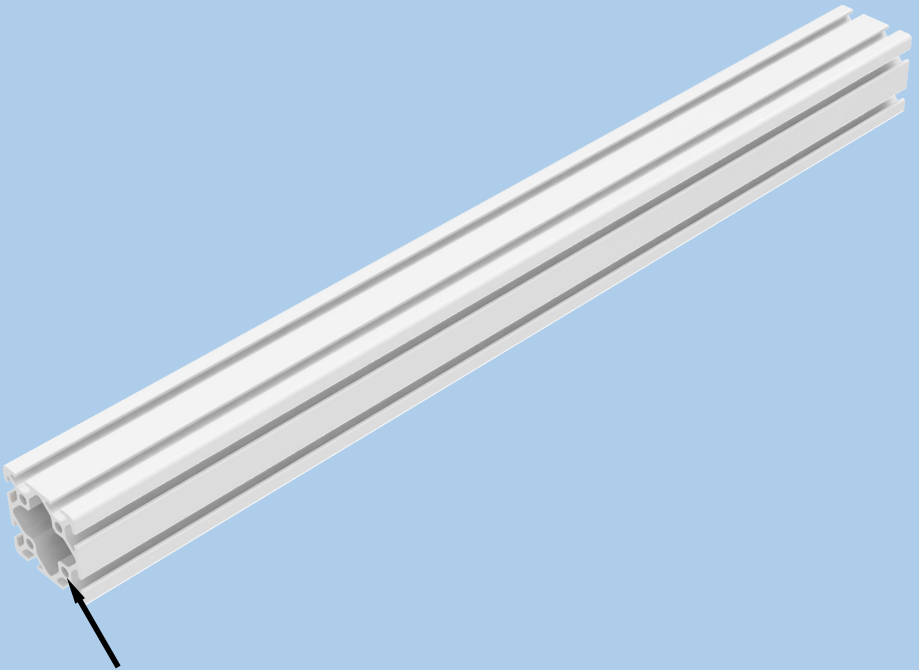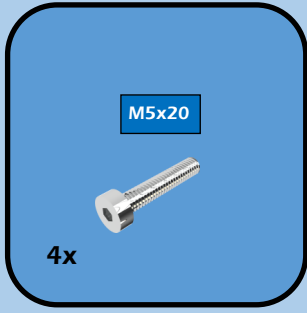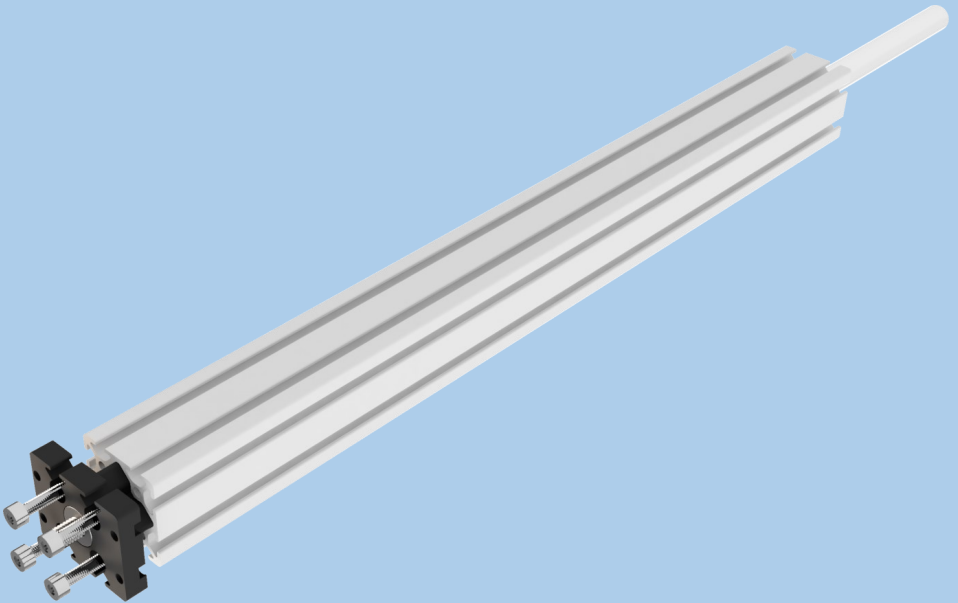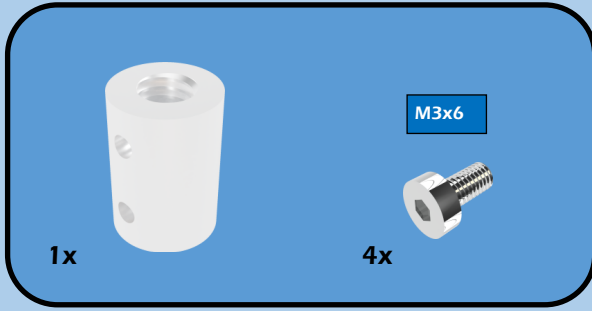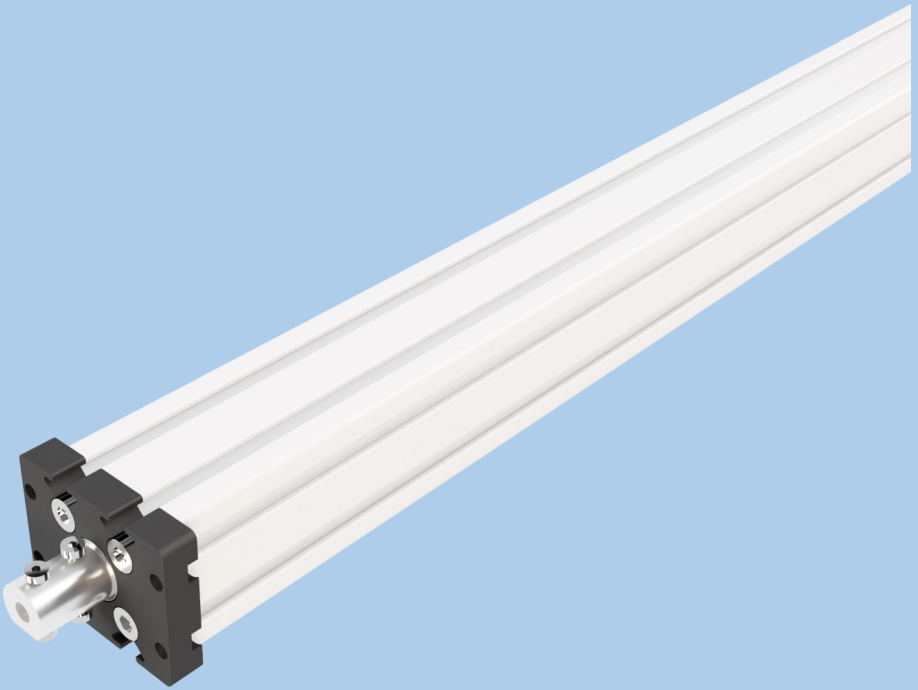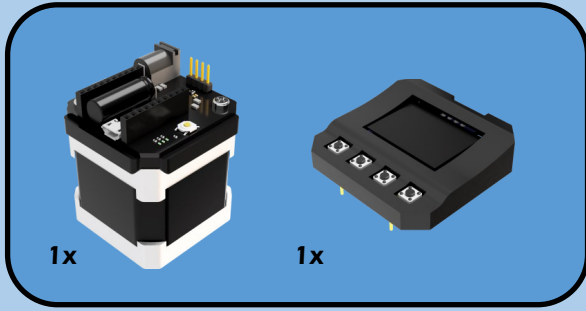To get started with using the linear actuator with uStepper S and Ego Shield S load the Ego Shield Teach example sketch and/or follow the instructions below !

Mounting uStepper

To see how you mount uStepper S to your stepper motor correctly, please visit the product sheet by pressing **THIS LINK** or scanning the **QR** code here on the right !

Mounting and using Ego Shield

To see how you mount the Ego Shield and what functionality comes with it please visit the product sheet on **THIS LINK** or scan the **QR** coder here on the right !

Video Tutorials

On our YouTube channel you will find video tutorials on how to mount uStepper S, setting it up in the Arduino IDE and programming it. You will also find a tutorial for using the Ego Shield with the linear actuator !

Mounting uStepper S   **Programming uStepper S**   **Using Ego Shield**

For further info visit www.uStepper.com and our YouTube channel !

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1.2 uStepper ApS and/or ON Development IVS (or any individuals affiliated with either of the two companies) can not be held responsible for any damage inflicted upon assembly of the uStepper Robot Arm. This includes damage to 3D printed parts, which must be considered to be of prototyping quality compared to injection moulded parts. Care must be taken while assembling 3D printed parts, and use of excessive force may lead to damage of the parts.

1.3 By using the uStepper products (including, but not limited to, hardware and software) you acknowledge that uStepper ApS and/or ON Development IVS (or any individuals affiliated with either of the two companies) can not be held responsible for any personal injuries and/or damage to any 3rd party hardware that may occur when using the uStepper products.

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