

# uStepper Linear Actuator

T8 lead screw



# Introduction

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

Product: **uStepper** Linear Actuator T8

Document revision: 1.0

Author: MGN

Approved by: THO

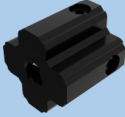
Approval date: November 19th 2019

# Bill Of Materials

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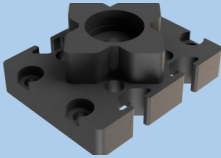
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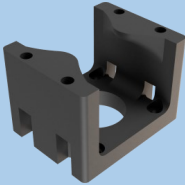
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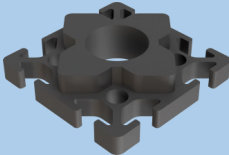
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4

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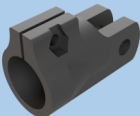
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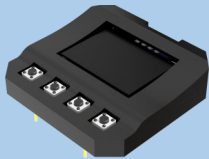
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1 x



# Bill Of Materials

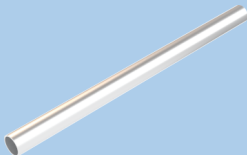
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1 x uStepper Ego Shield S



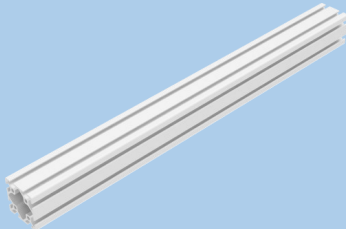
1 x uStepper S w. motor



1 x Tube 15 mm x 460 mm



1 x T8x8 lead screw 500 mm



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



1 x M8x5 coupler



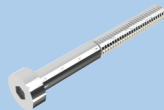
2 x F8-16M Bearing



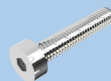
2 x M8 washer



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 8mm collar

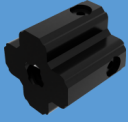


4 x 3.5x8 mm screw

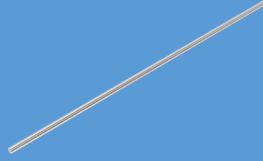
# **Linear Actuator Assembly**

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1

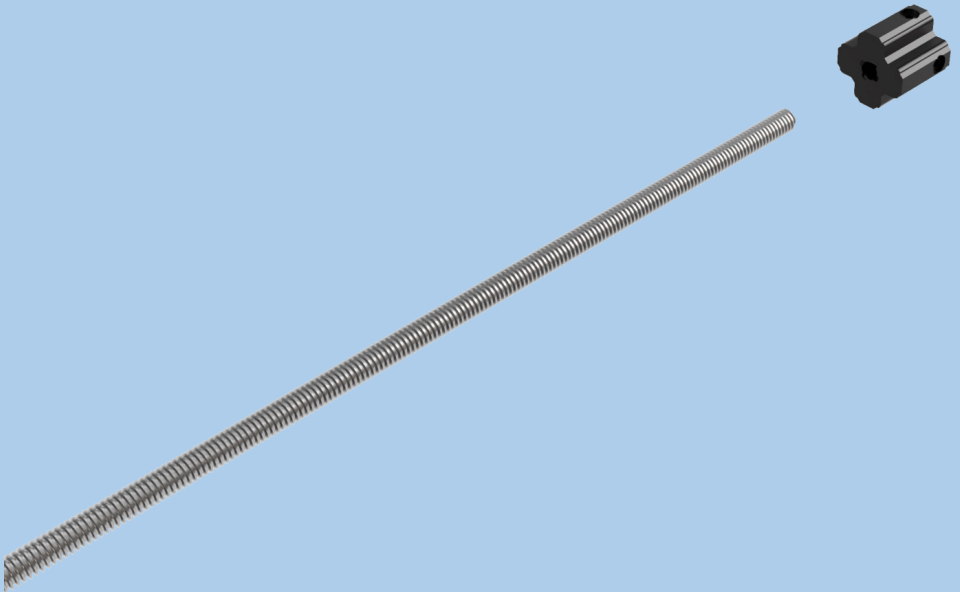


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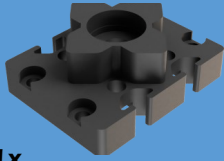


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1



2



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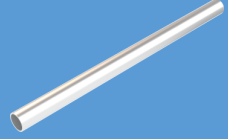
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2x

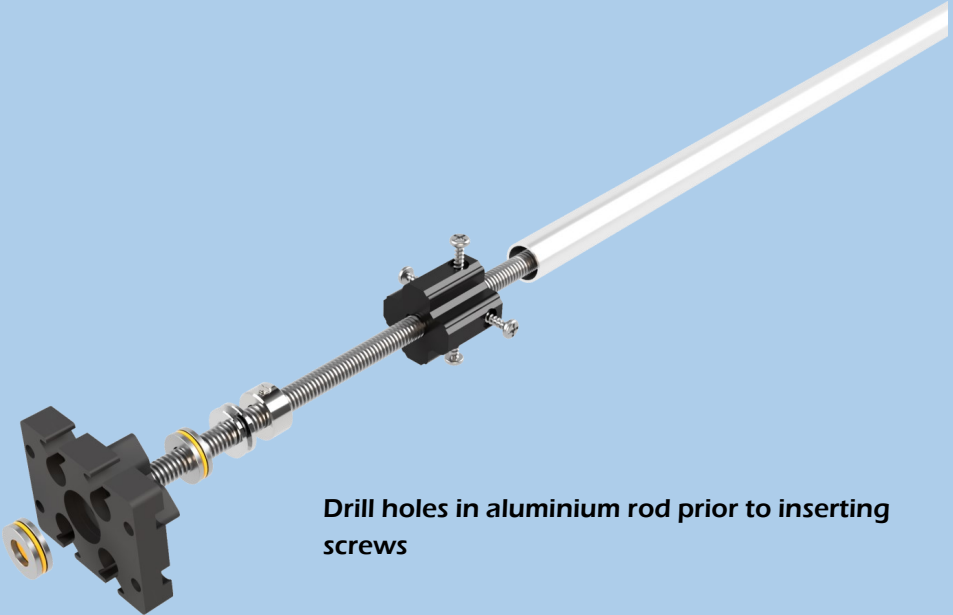


4x



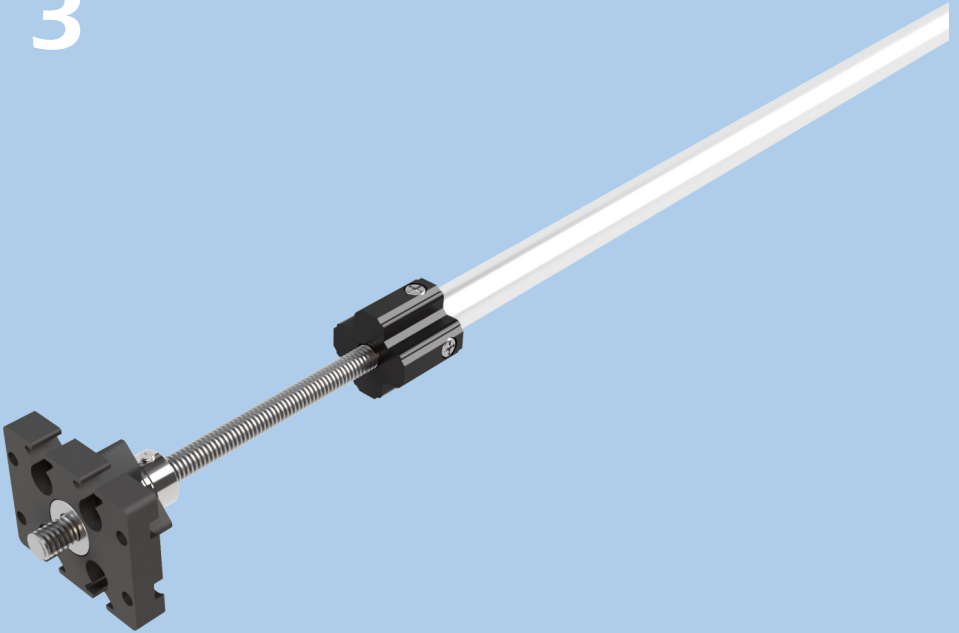
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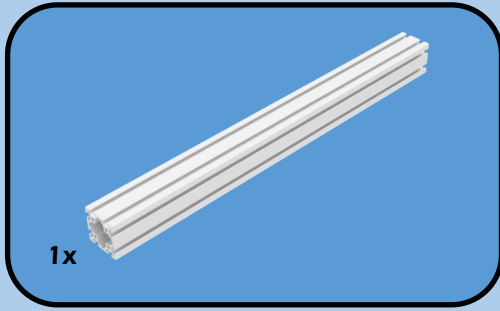


**Drill holes in aluminium rod prior to inserting screws**

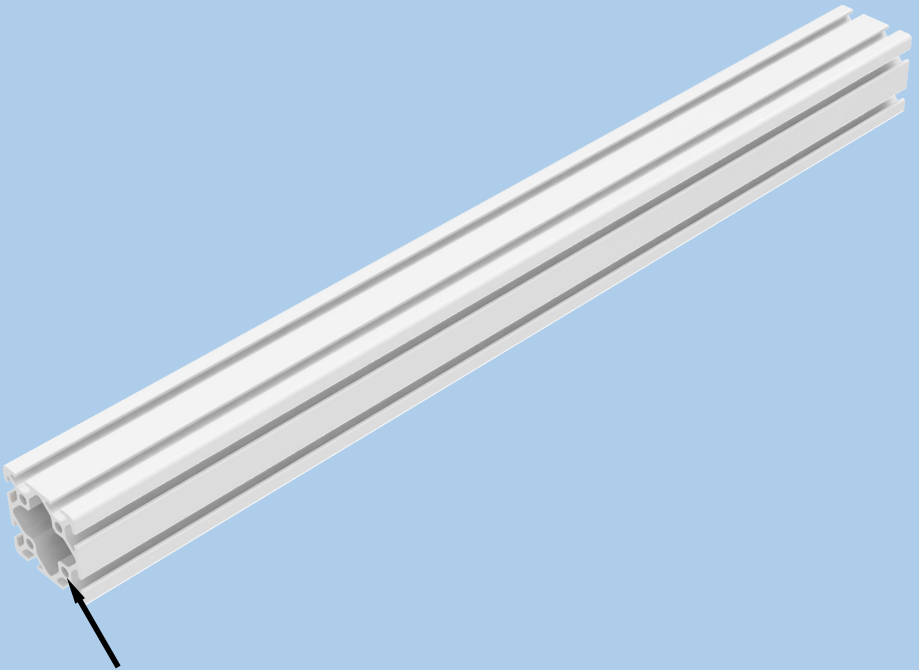
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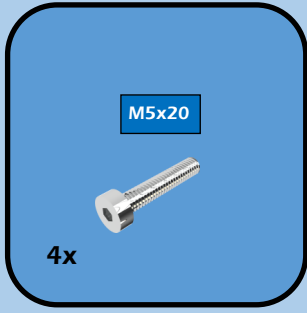




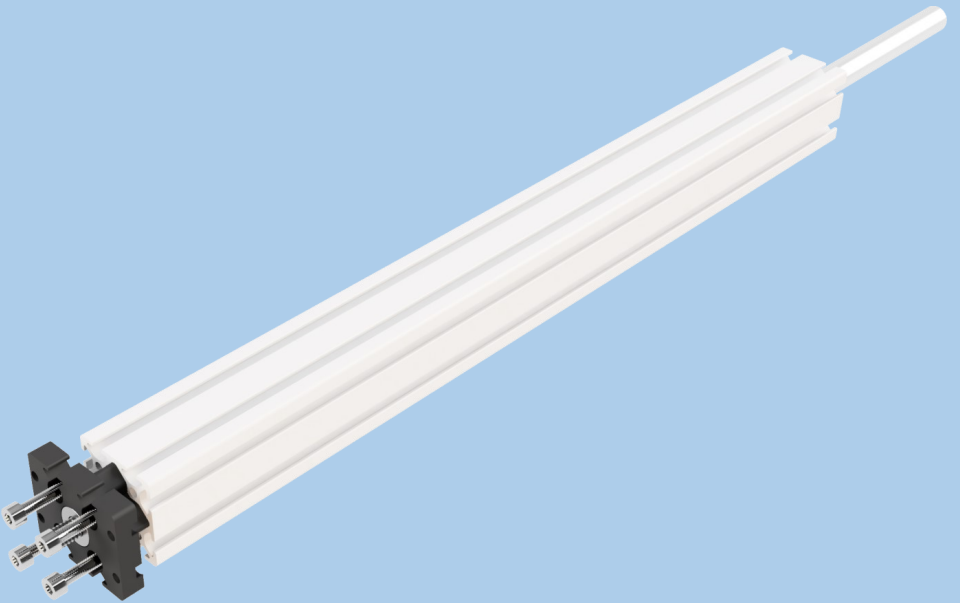
4



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



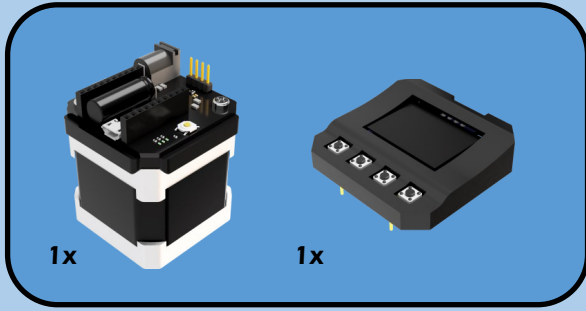
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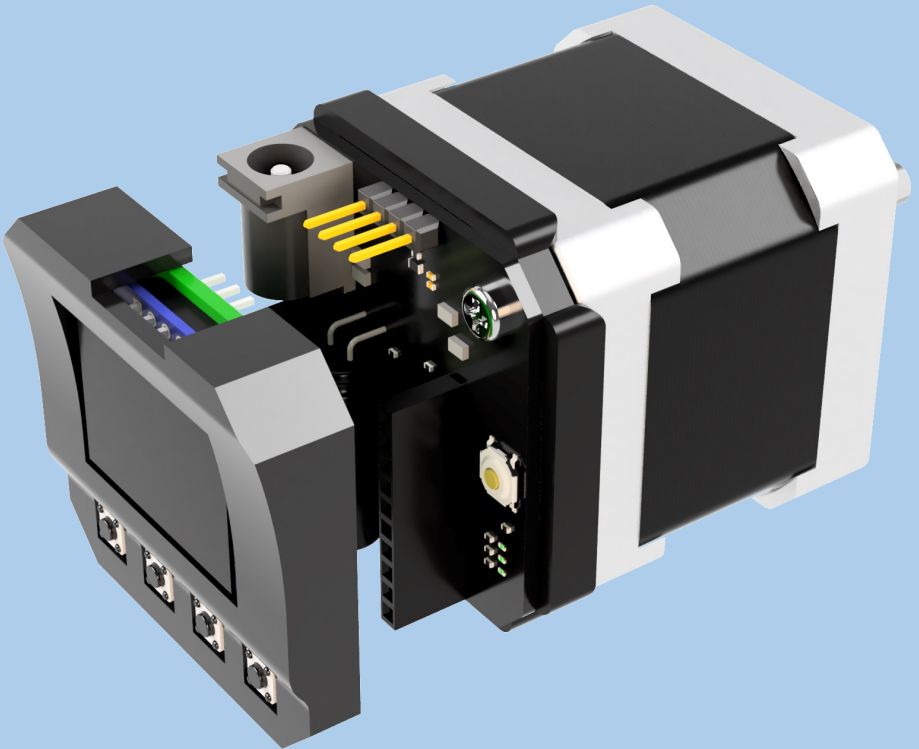


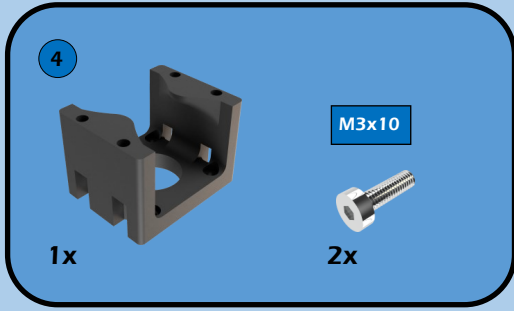
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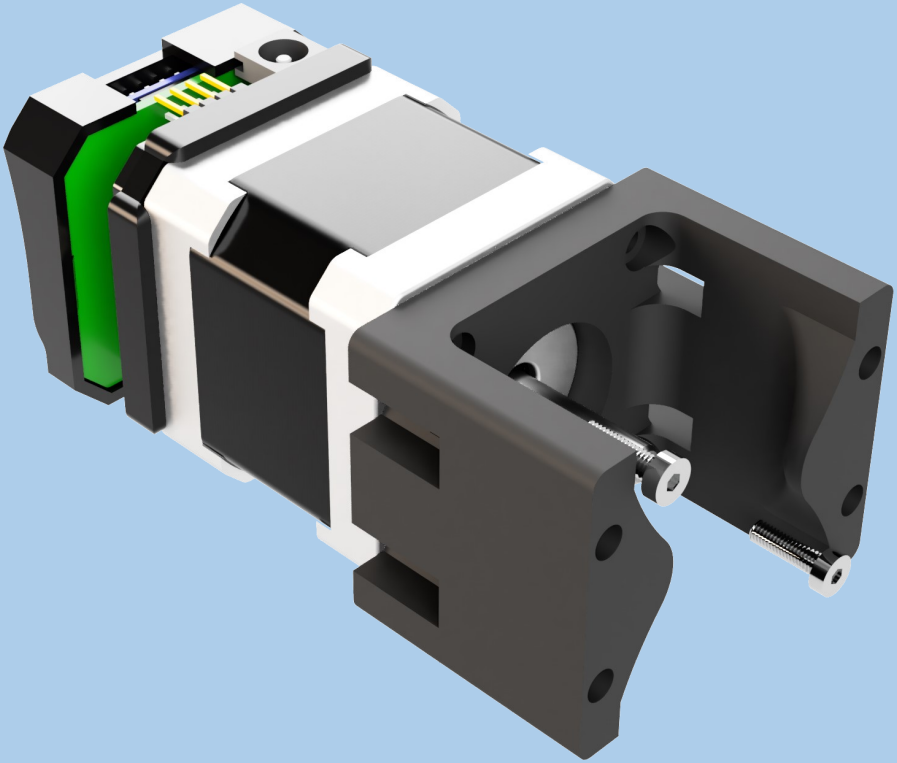


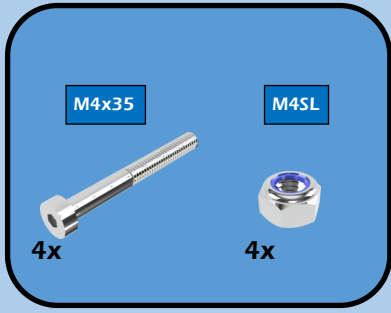
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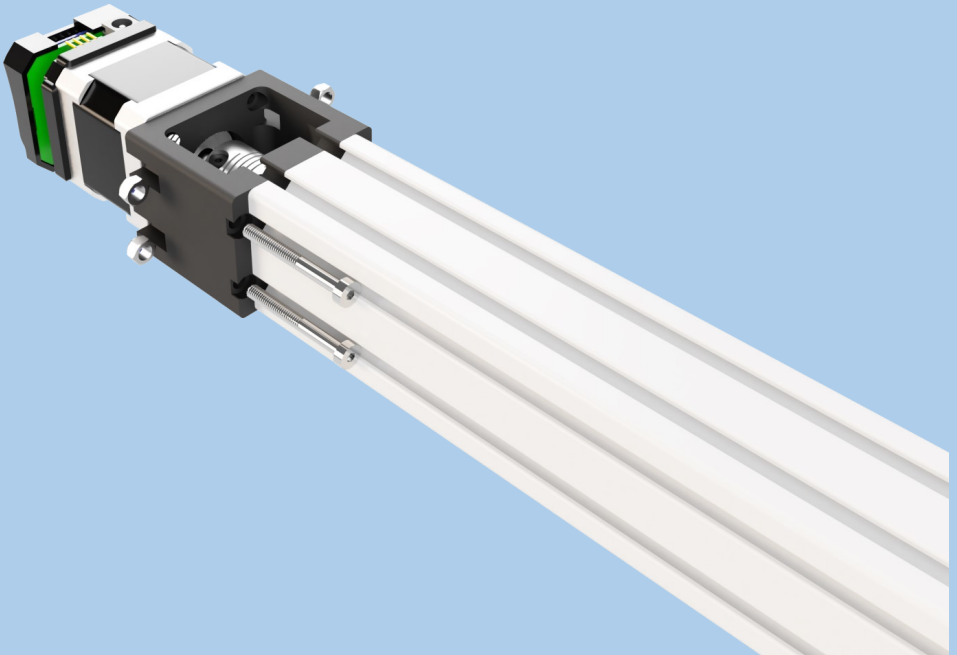


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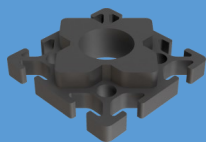




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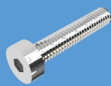


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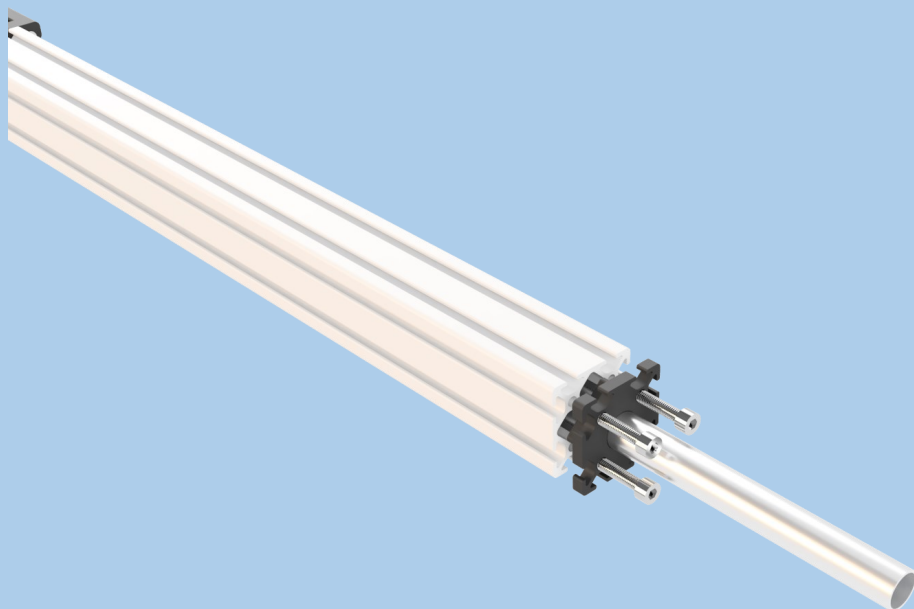
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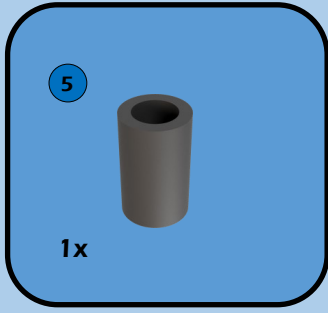
M5x20



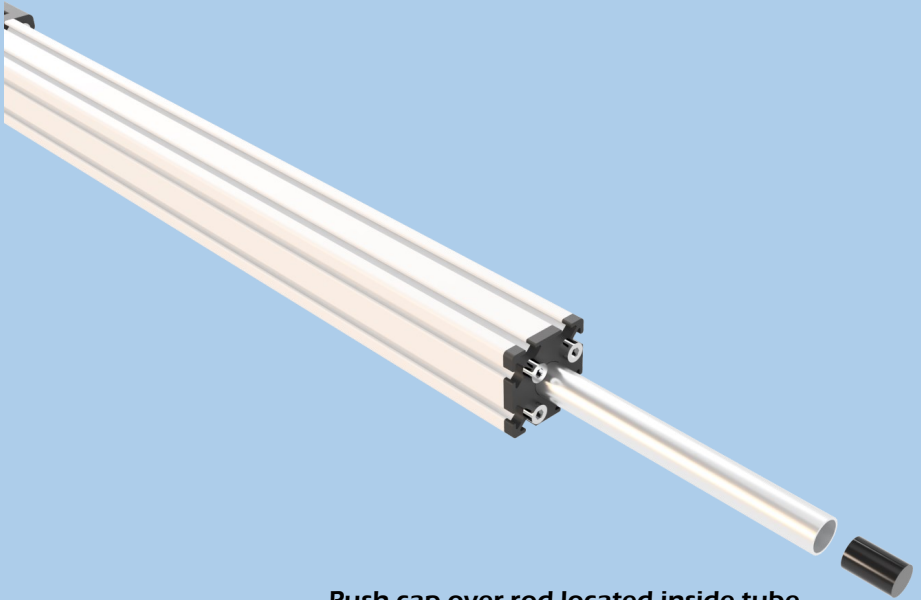
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10



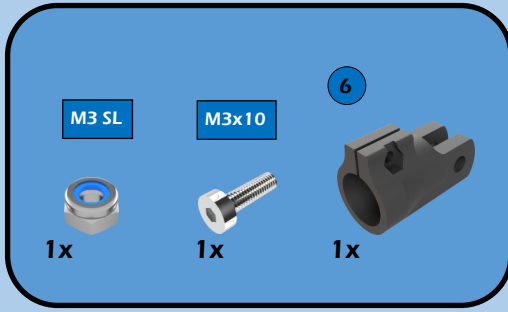


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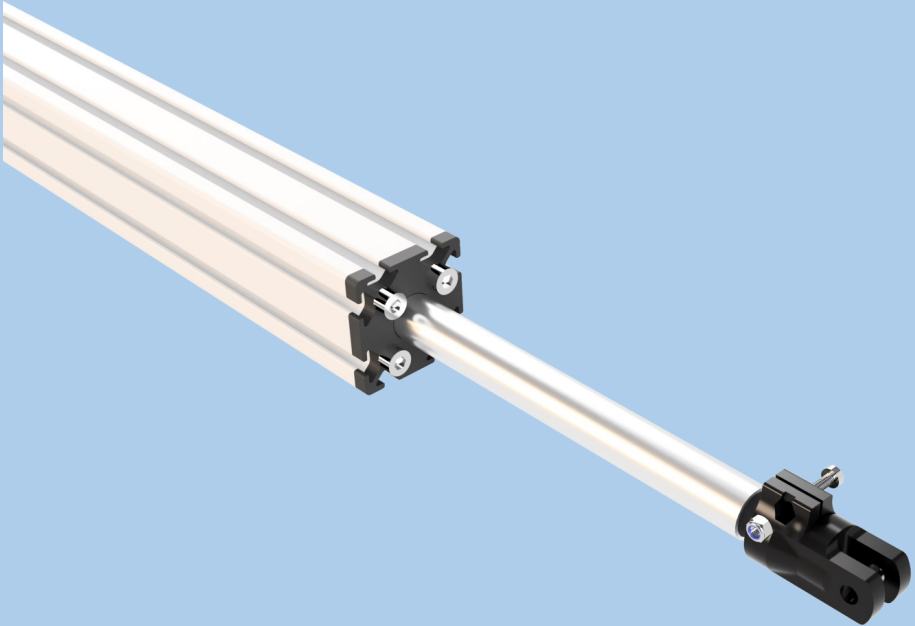


**Push cap over rod located inside tube**

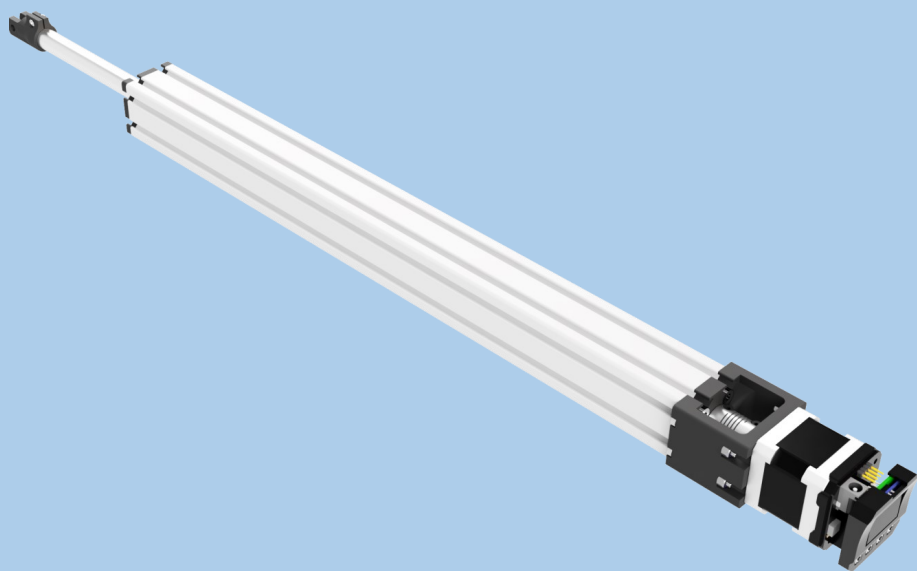




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# Using uStepper & Ego Shield

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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](http://www.uStepper.com) and our YouTube channel !

# Disclaimer

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## 1 Disclaimers and Limitation of Liability

1.1 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 mounting or interfacing with uStepper products This also includes damage to stepper motors (both electrical and mechanical) or any other 3rd party hardware connected to or interfacing with any uStepper products. Most stepper motor cases are made of aluminum, and care must be taken when preparing the mountings for uStepper.

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.

1.4 To the extent permitted by law, uStepper ApS and/or ON Development IVS will not be liable for any indirect or consequential loss or damage, of any kind, (including without limitation loss of business, opportunity, data, profits) arising out of or in connection with the use of any products (including, but not limited to, hardware and software), developed, produced or sold by uStepper ApS and/or ON Development IVS (or any individuals affiliated with either of the two companies).

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2.2 You agree to indemnify and hold uStepper ApS and/or ON Development IVS and its employees and agents harmless from and against all liabilities, legal fees, damages, losses, costs and other expenses in relation to any claims or actions brought against uStepper ApS and/or ON Development IVS arising out of any breach by you of these Terms and Conditions or other liabilities arising out of your use of products (including, but not limited to, hardware and software) developed, produced or sold by uStepper ApS and/or ON Development IVS (or any individuals affiliated with either of the two companies).

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If any of these Terms and Conditions should be determined to be invalid, illegal or unenforceable for any reason by any court of competent jurisdiction then such Term or Condition shall be severed and the remaining Terms and Conditions shall survive and remain in full force and effect and continue to be binding and enforceable.

