Sixi

Robot Arm

MARGINALLY CLEVER
R O B O T S

What is it?

Sixi 3 is a robot arm designed for ease of use, maintenance, and versatility. The primary components are six identical *actuators* that can be interchangeably swapped, replaced, or combined in new and exciting ways.
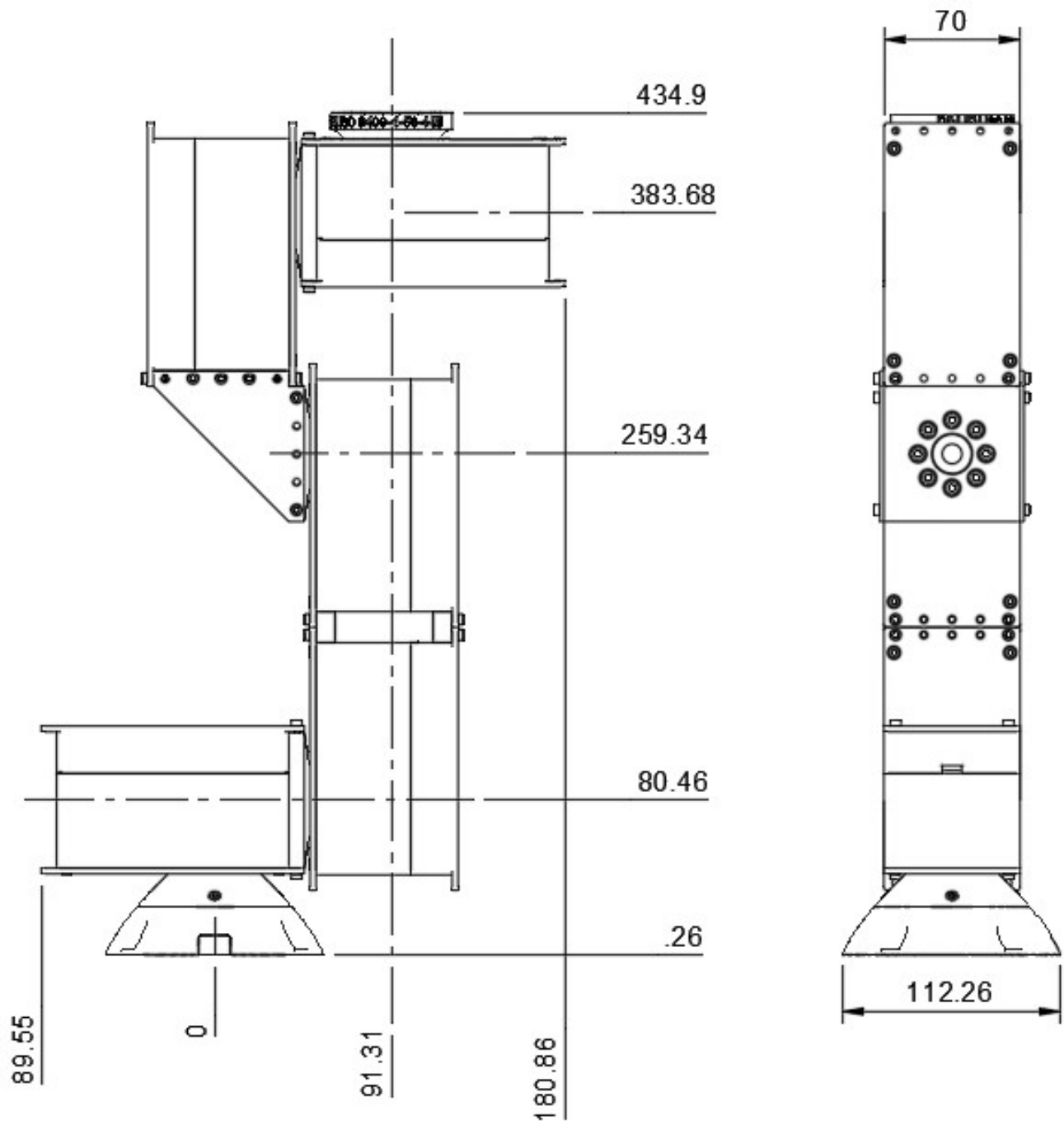
Where do I learn more?

Shop: https://www.marginallyclever.com/products/sixi-3/
Installation: https://mcr.dozuki.com/
Software: https://github.com/marginallyclever/robot-overlord/releases
Blog: https://marginallyclever.com/
Forum: https://discord.gg/QtvHqAv8yp

Specifications

Sixi 3	5 axis	6 axis
Packaged dimensions	300 x 300 x 100	
Packaged weight	10	12
Installed weight	4.7	5.6
Reach	350	450
Payload	2	1.5
Max velocity	5 (degrees/s)	
Power supply	12v 6a, external	
Mounting	Table top	
Connectivity	USB mini	
Operating temperature	2022-05-30	
Ingress Protection Rating	IP40	
Range of motion J0	+/-170	
Range of motion J1	+/-90	
Range of motion J2	+/-135	
Range of motion J3	+/-170	
Range of motion J4	+/-180	+/-170
Range of motion J5	--	+/-180
Wrist connector type	DIN EN ISO 9409-1-50-4-M6	
Communication protocol	gcode	
Control loop	open	
Limit switches	no	

default dimensions are mm, degrees, and kilograms.

5 axis

6 axis
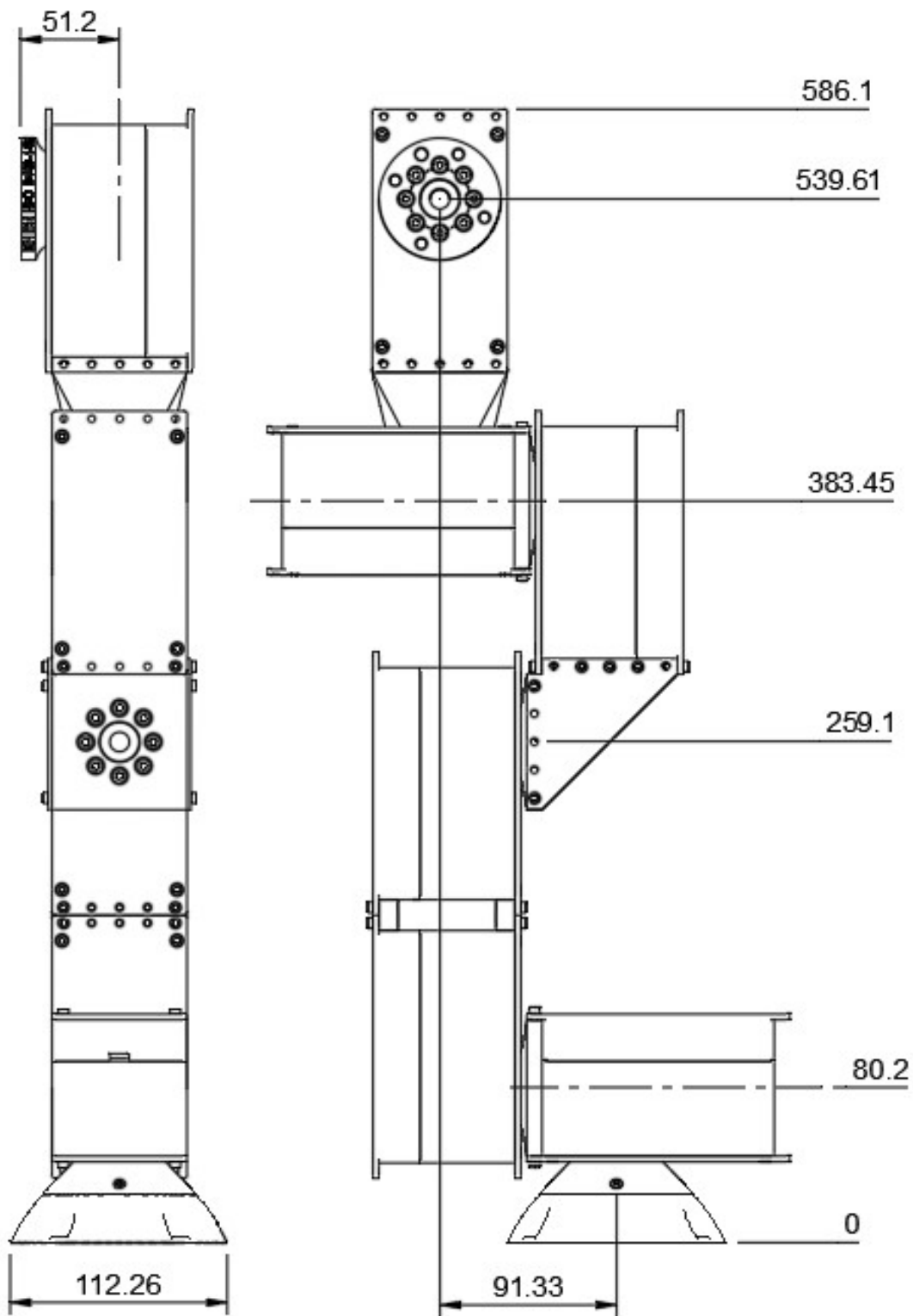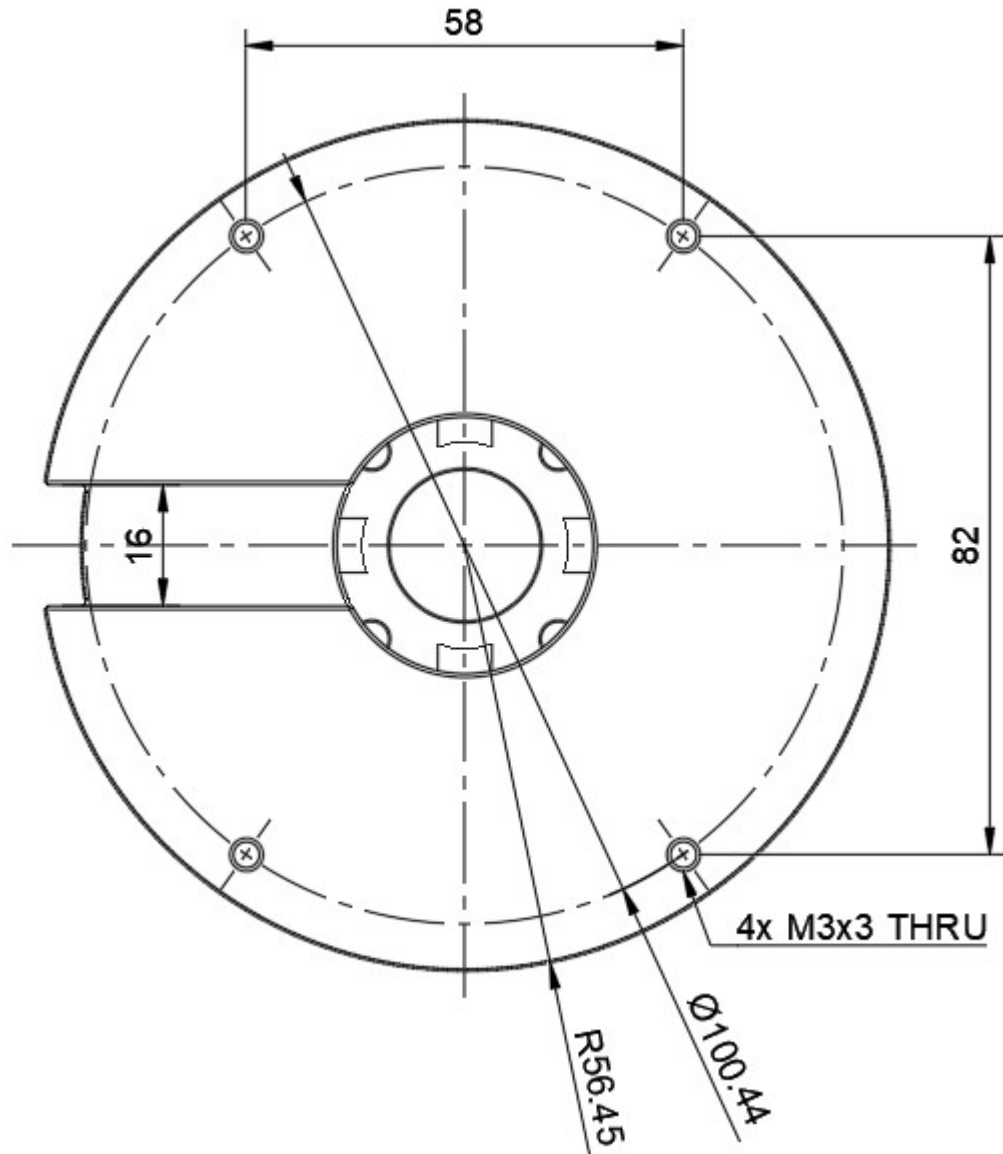
51.2

586.1

539.61

383.45

259.1

80.2

112.26

91.33

0

Mounting to a table top

58

82

16

4x M3x3 THRU

R56.45

Ø100.44

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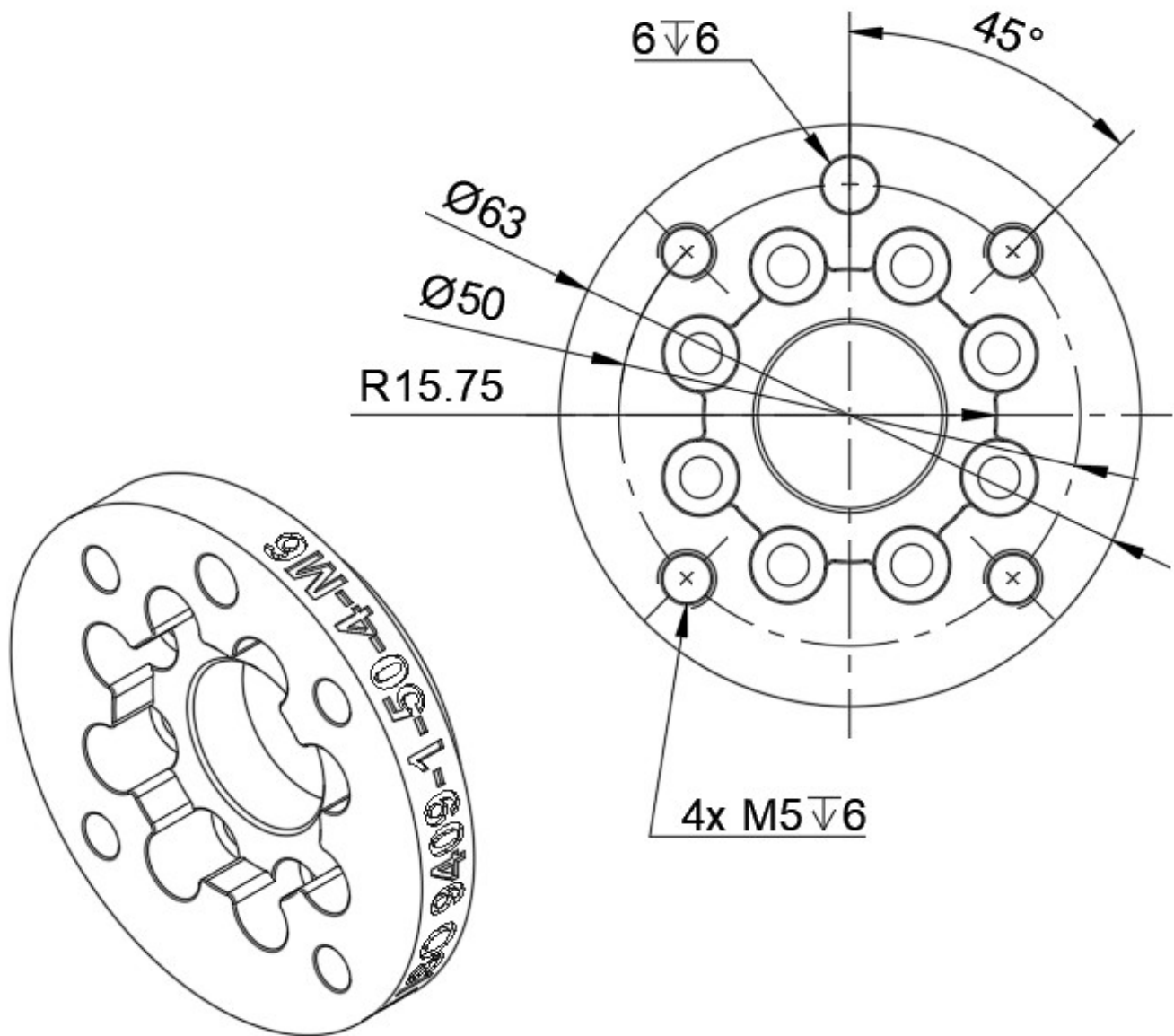
Mounting Method

Mount with four (4) M3 socket head cap screws.

Option A, place the base on a table and mark the holes. Remove base and drill though. Add washers and nylock nuts to secure in place.

Option B, add washers and affix to two pieces of aluminum extrusion such as 15x15mm OpenBeam. Clamp extrusion to a table.

Wrist mount hole pattern

6⊽6

Ø63

Ø50

R15.75

45°

4x M5⊽6

Conforms to international standard DIN EN ISO 9409-1-50-4-M6.

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