

Caplex PRO-002

The PRO-002 (rev 3) is a tethered prosthetic foot with high torque output comparable to PRO-001 that includes adjustable foot length, heel stiffness, and worn weight. It can accommodate a wide range of user foot sizes (approximately shoe sizes 26cm to 29cm).

PROPERTY	SPECIFICATION	
Active degree of freedom	Forefoot actuated by cable	
Force sensor	Inline load cell for forefoot torque applied, accurate within +/- 1%	
Angle sensor	Quadrature encoder with 4096 cycles per revolution	
Heel String Potentiometer Sensor	25 mm total range	
Range of motion	Plantarflexion: 30 degrees Dorsiflexion: 30 degrees	
Forefoot specs	Forefoot A - 182 Nm 6.51 inches from axis	
Maximum torque & axial length (Plantarflexion)	Forefoot B - 168 Nm 6.01 inches from axis	
	Forefoot C - 154 Nm 5.51 inches from axis	
	Forefoot D - 140 Nm 5.01 inches from axis	
Passive degree of freedom	Heel is a compliant fiberglass bar	Heel 1 - 55 N/mm
Vertical stiffness		Heel 2 - 70 N/mm
		Heel 3 - 115 N/mm
Device weight (without tether)	Worn weight	1.088 kg (2.40 lb)
		+ 0.10 kg (0.22 lb) per added weight
Device dimensions	Length	27.4 cm (10.8 in)
	Width	8.10 cm (3.19 in)
	Total height	23.3 cm (9.19 in)
Usage limits	Body weight @ walking speed	119.295 kg (263 lb) 1.25 m/s (3.3 mph)



Swappable Forefoot Lengths



Modular Weight



1) DB-15 Signal Cable Connector

2) Limit switch

3) Load cell

4) Forefoot axis

5) Heel spring
(Heel 3 shown)

6) Heel pad adapter

7) Swappable forefoot (Size A shown)

8) Weights (0.2 Kg)

9) Bowden cable termination
(obscured in this view)

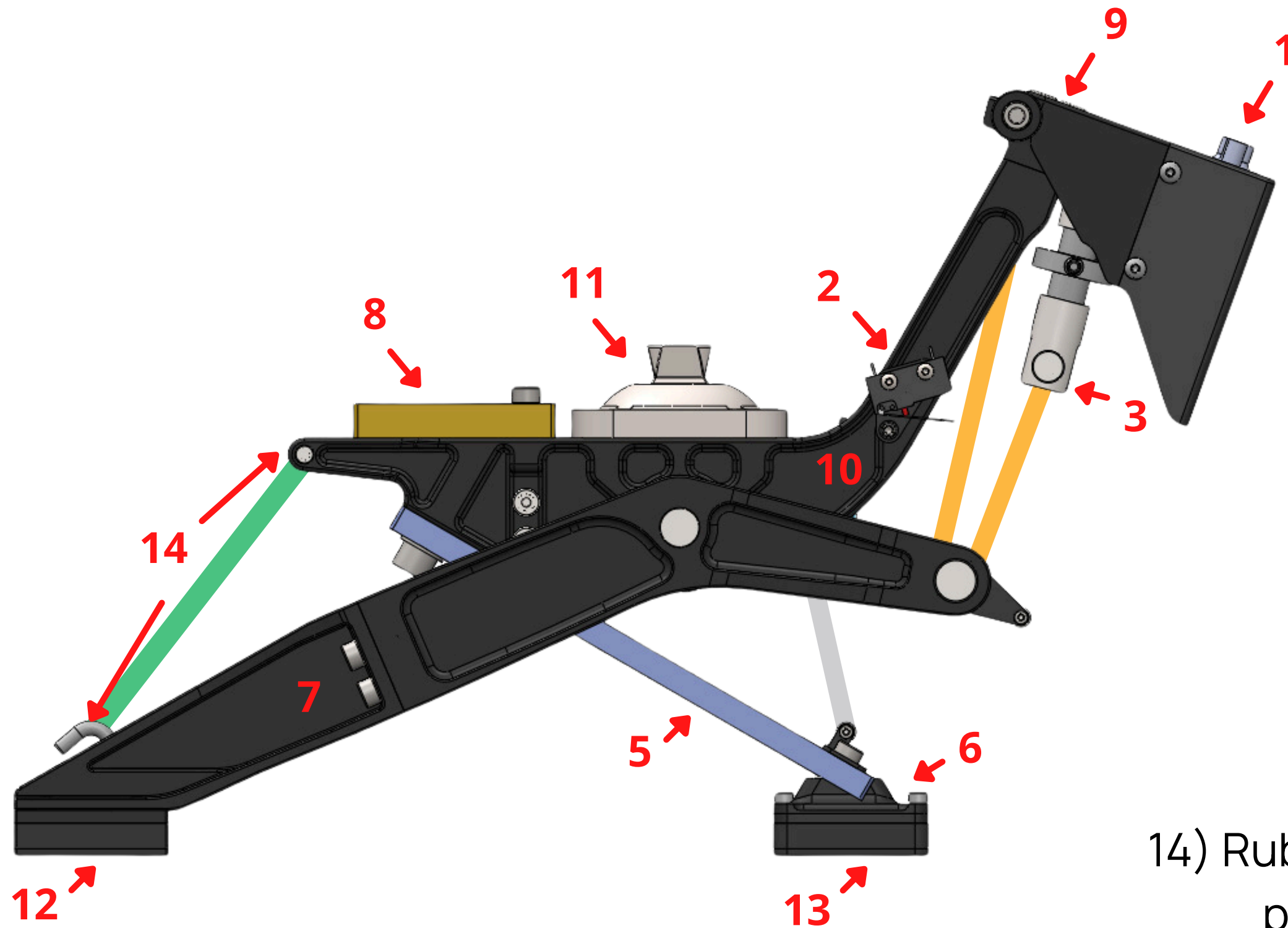
10) Upper structure

11) Pyramid adapter

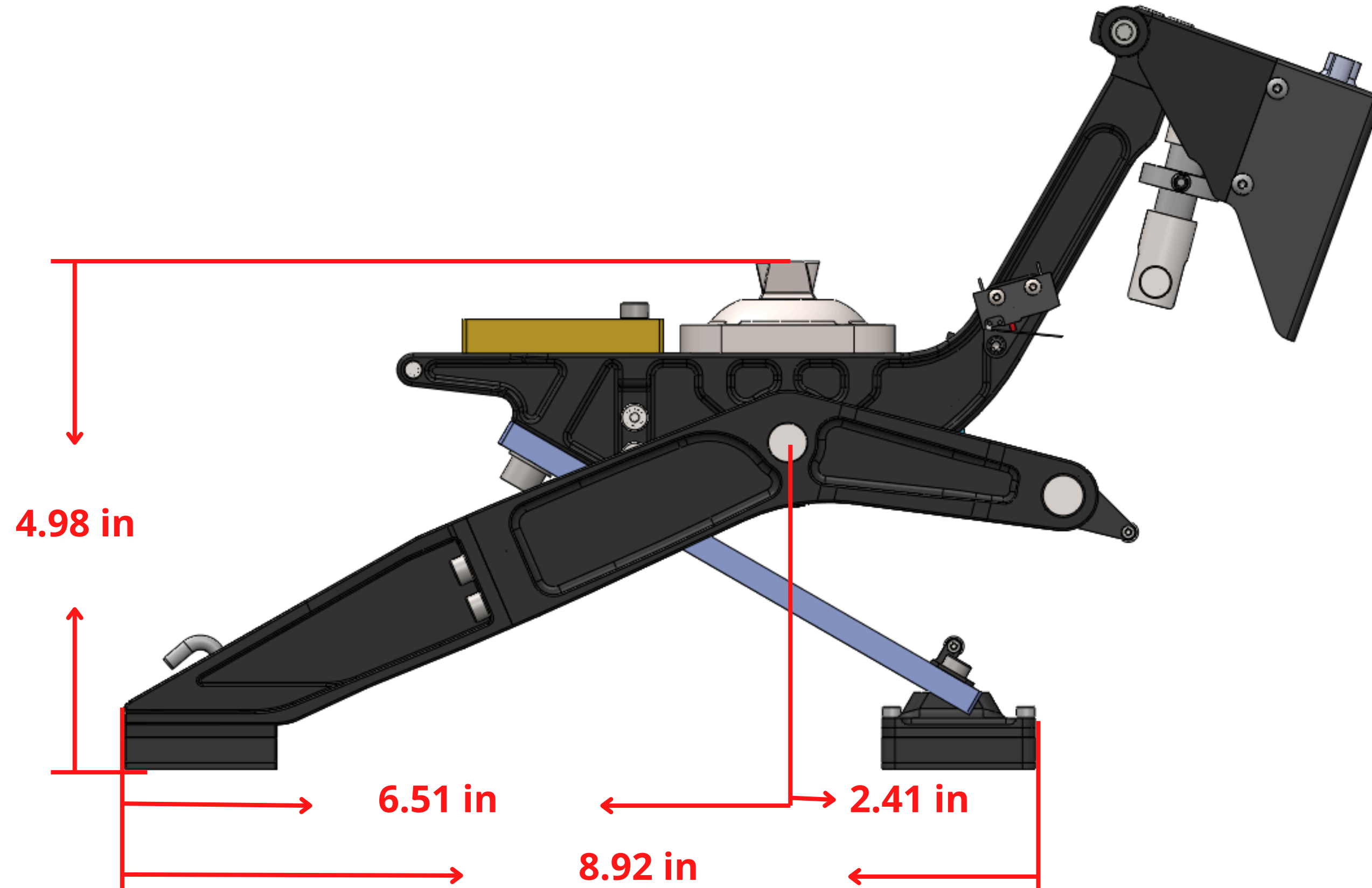
12) Toe pad

13) Heel pad

14) Rubber band attachment points and rubber band



All measurements based on Forefoot A



All measurements based on Forefoot A

