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Caplex® PRO-004

The PRO-004 is a single degree-of-freedom, tethered, robotic pylon capable of exhibiting a wide range of programmable axial stiffness behaviors. It can be used to simulate and evaluate custom designs, or emulate the function of commercially-available shock-absorbing pylons. PRO-004 features standard prosthetic pyramid adapters and can be paired with Caplex® PRO ankle-foot prostheses or commercially-available prosthetic feet. PRO-004 is suitable for prosthetic foot users, either people with amputation or people without amputation using a bent-knee adapter.

PROPERTY

SPECIFICATION

Active degree of freedom	Axial extension	
Force sensor	Inline load cell for axial load measurement	
Displacement sensor	String potentiometer	
Range of motion	Total	14 mm (0.55 in)
	Controllable	8 mm (0.31 in)
Device weight (without tether)	Worn weight	1 kg (2.22 lb)
Device dimensions	Length	10 cm (3.94 in)
	Width	12.0 cm (4.74 in)
	Min compressed height	8.2 cm (3.19 in) (without pyramid adapters)
	Max extended height	9.6 cm (3.78 in) (without pyramid adapters)
Usage limits	Max body weight	119.30 kg (263 lb)
	@ walking speed	1.25 m/s (3.3 mph)

PRO-004

Technical Specifications

1) Signal
Cable Connector
(Obscured)

2) Load cell

3) Outer Housing
Structure

4) Inner Housing
Structure

5) String Potentiometer
(Obscured)

6) Rope Pulley

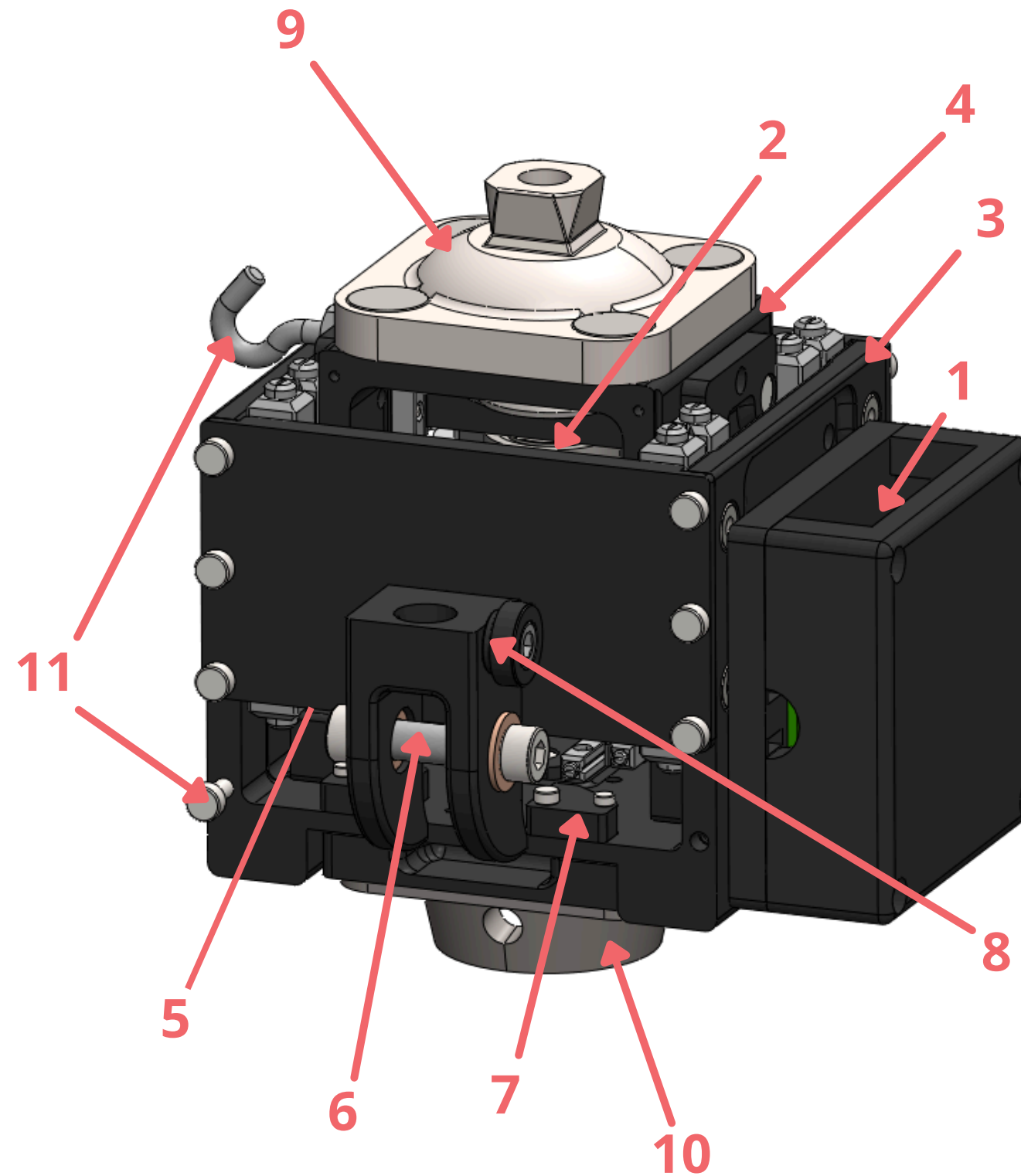
7) Hard Stop

8) Bowden Cable
Termination

9) Top Pyramid Adapter
(Plug Pictured, Receptacle
Optional)

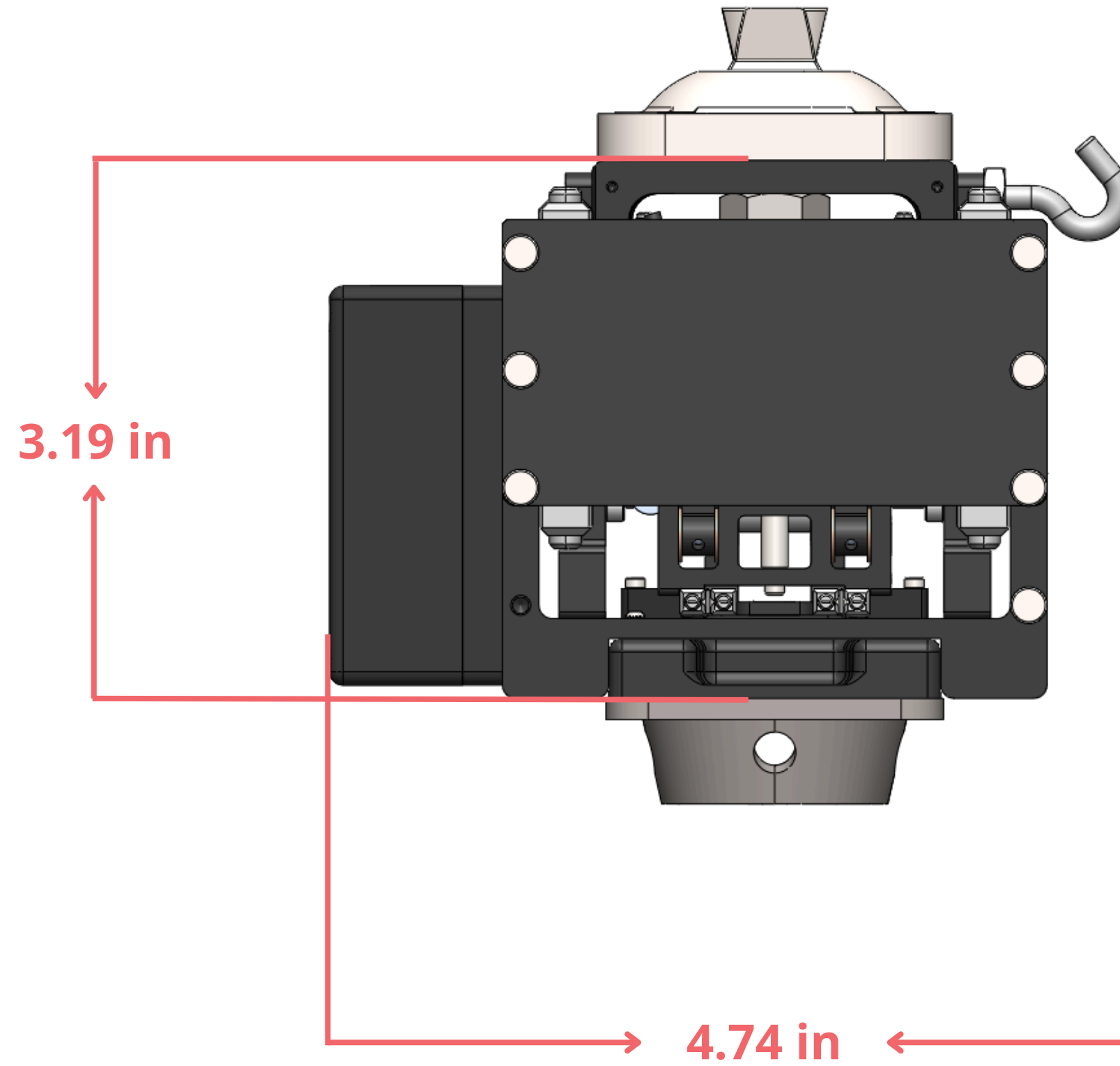
10) Bottom Pyramid
Adapter
(Receptacle Pictured, Plug
Optional)

11) Rubber Band Attachment
Points and Rubber Band



All measurements based on full compression

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