**Week 4 (Mechanical Engineer):**

This week two tasks were given:

1-Design joint for humanoid robot

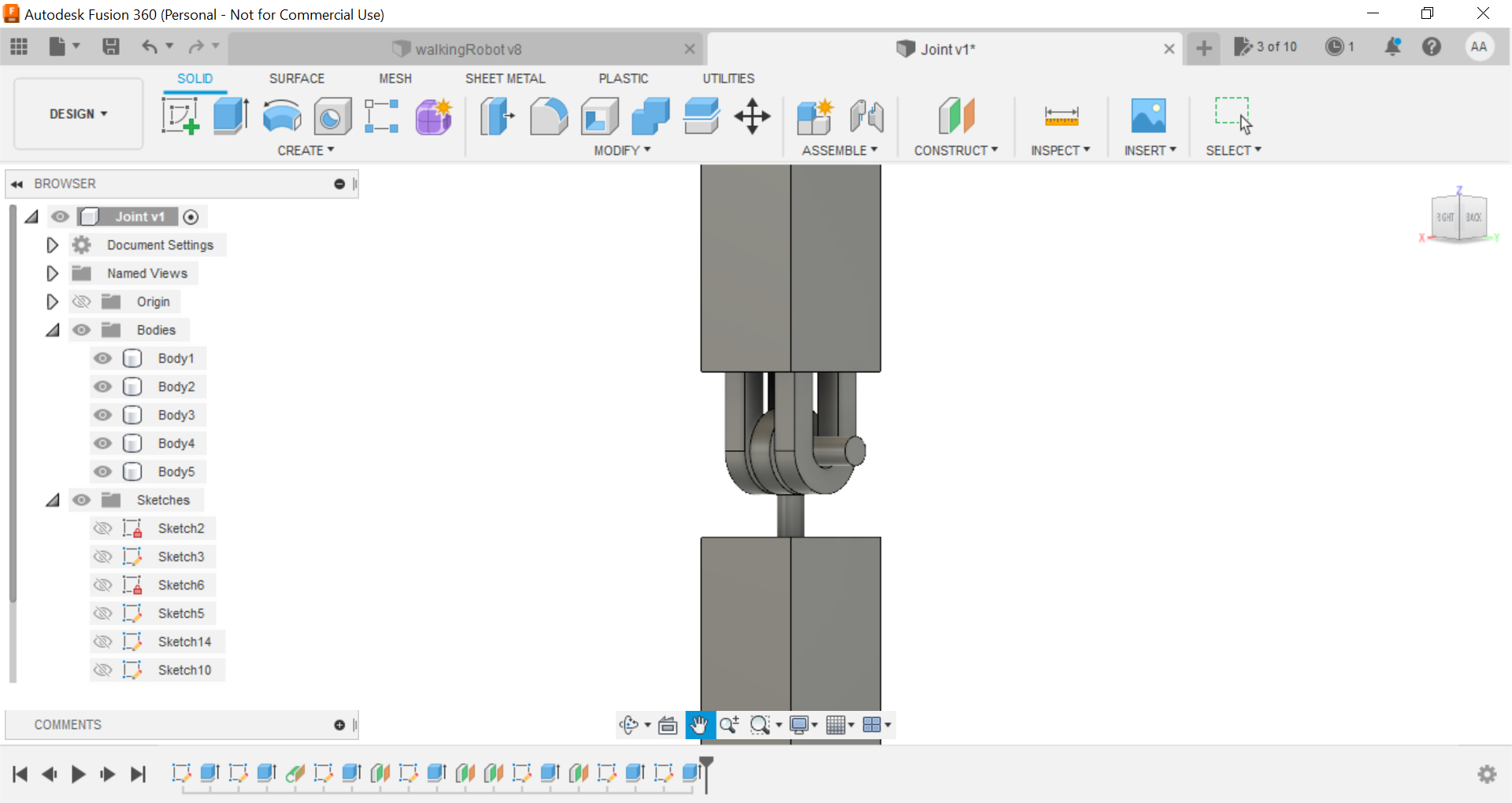
2-Design joint for robot arm

The joint that I designed is suitable for *both* the humanoid and robot arm, I created this design in Fusion 360.

This design has three parts:

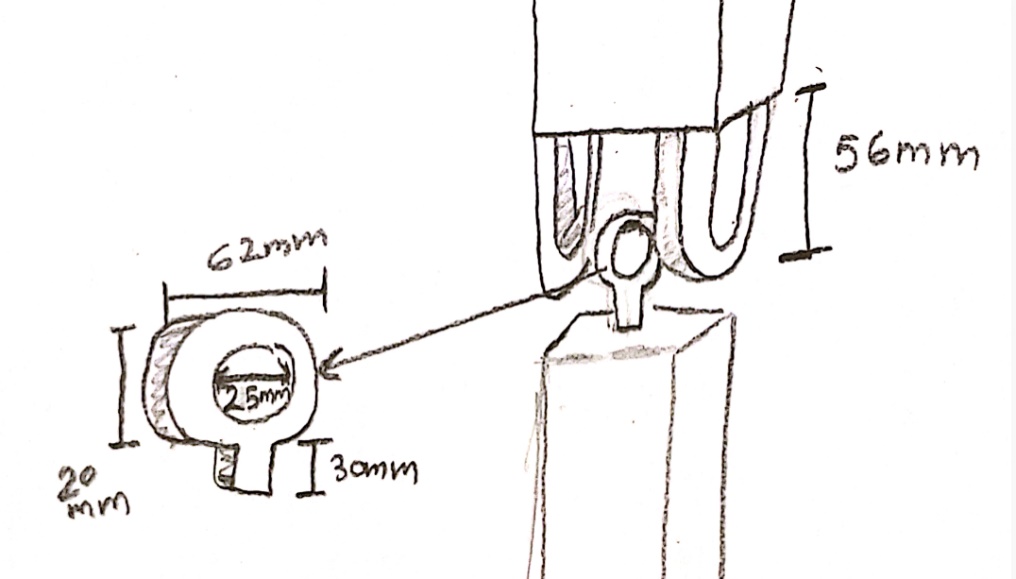
1. Element one (this will have two U shaped parts)
2. Element two (this has the roller bearing)
3. Rod (this will connect both element one and two)

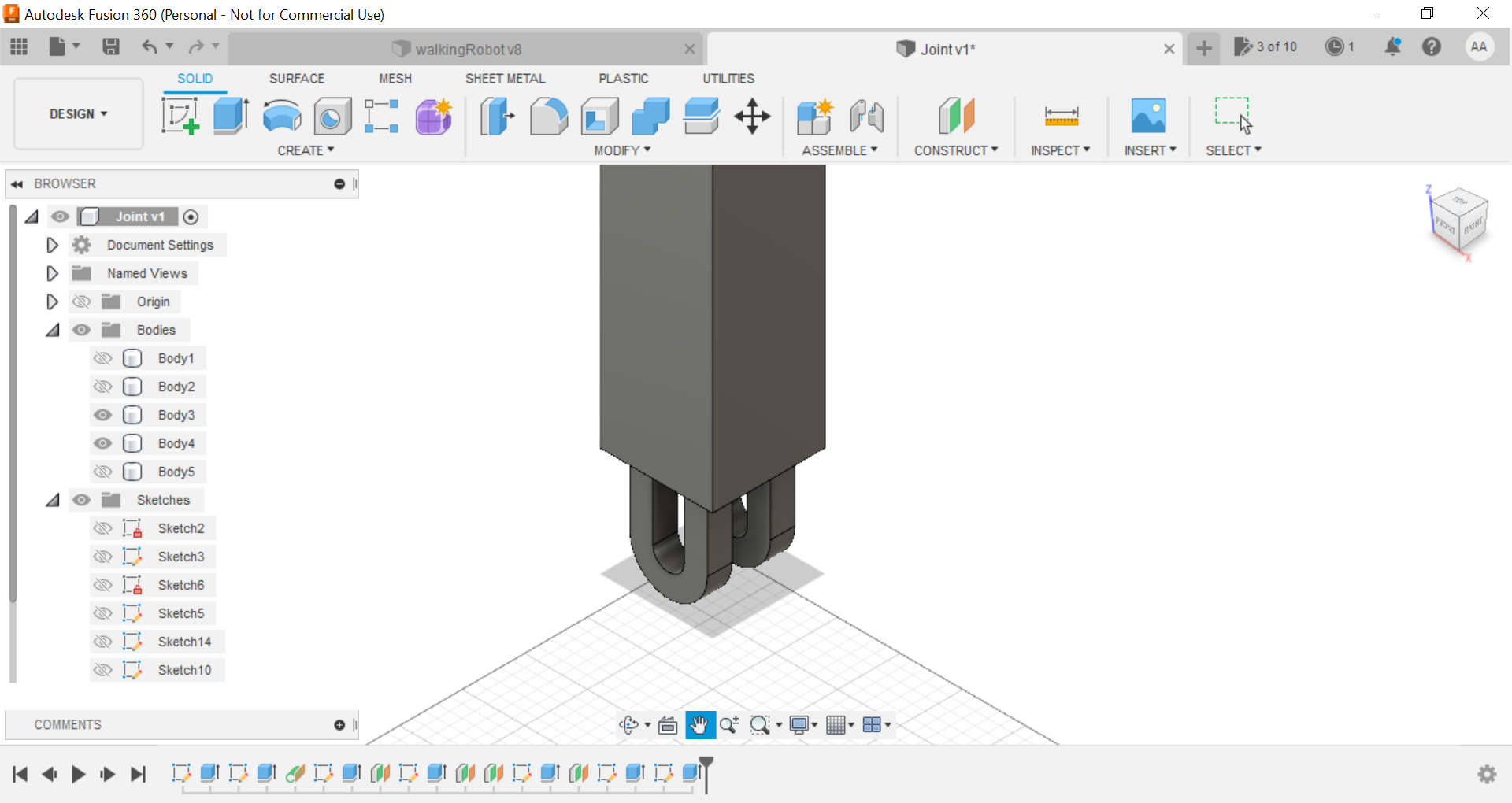
Here are photos of this design:



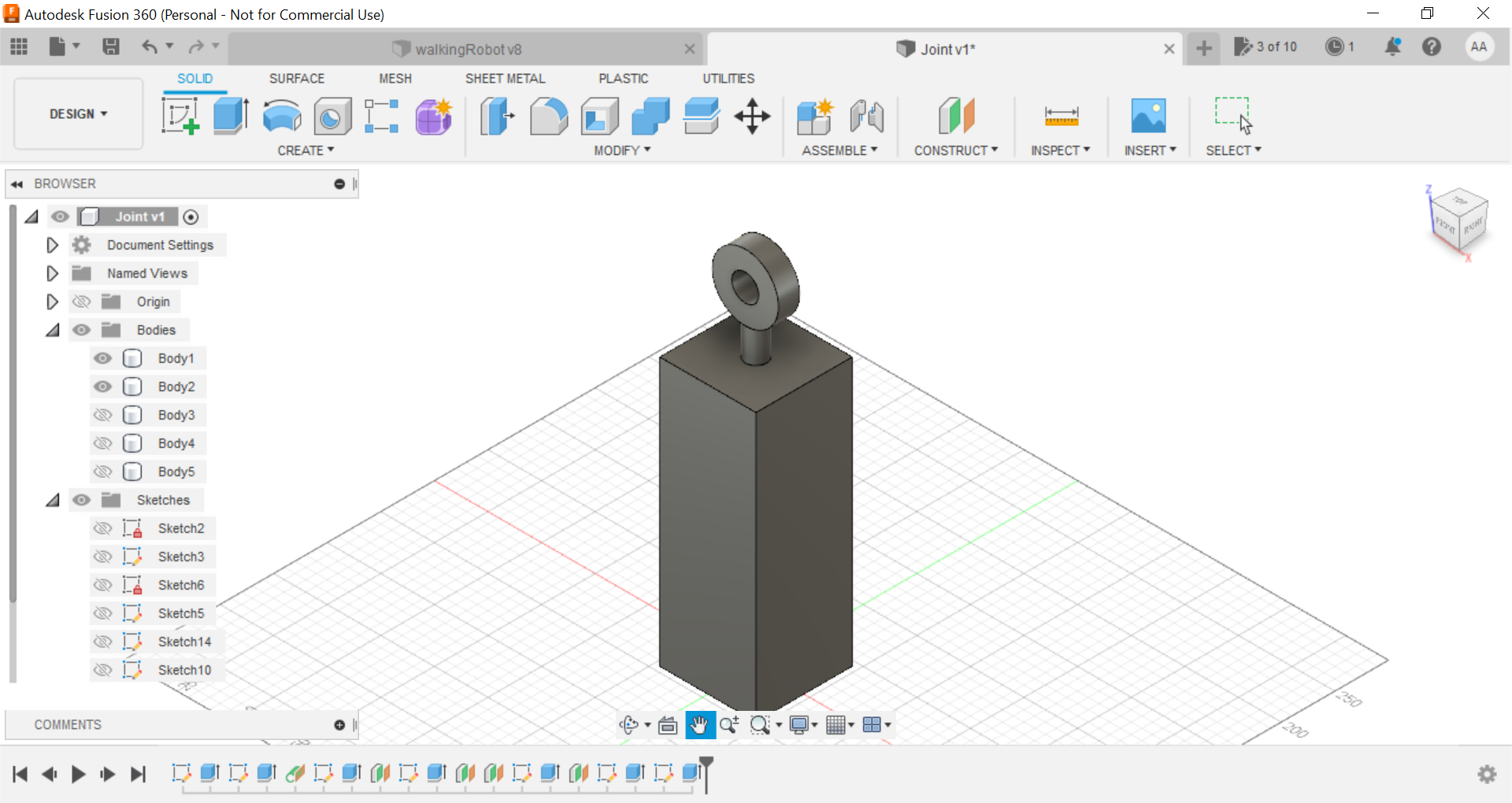
(This is the joint assembled in isometric view)

The dimensions of the joint are as follows:

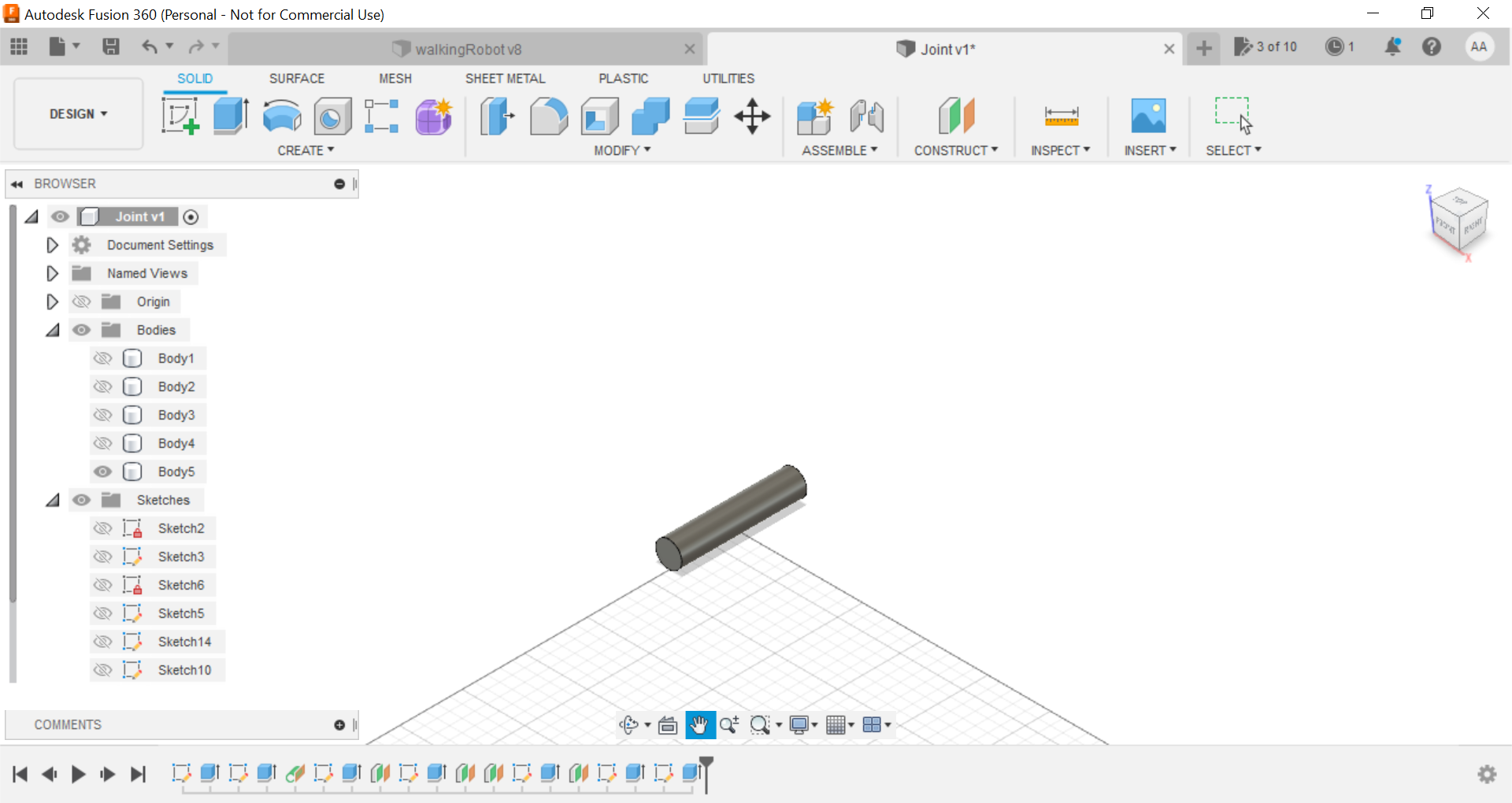




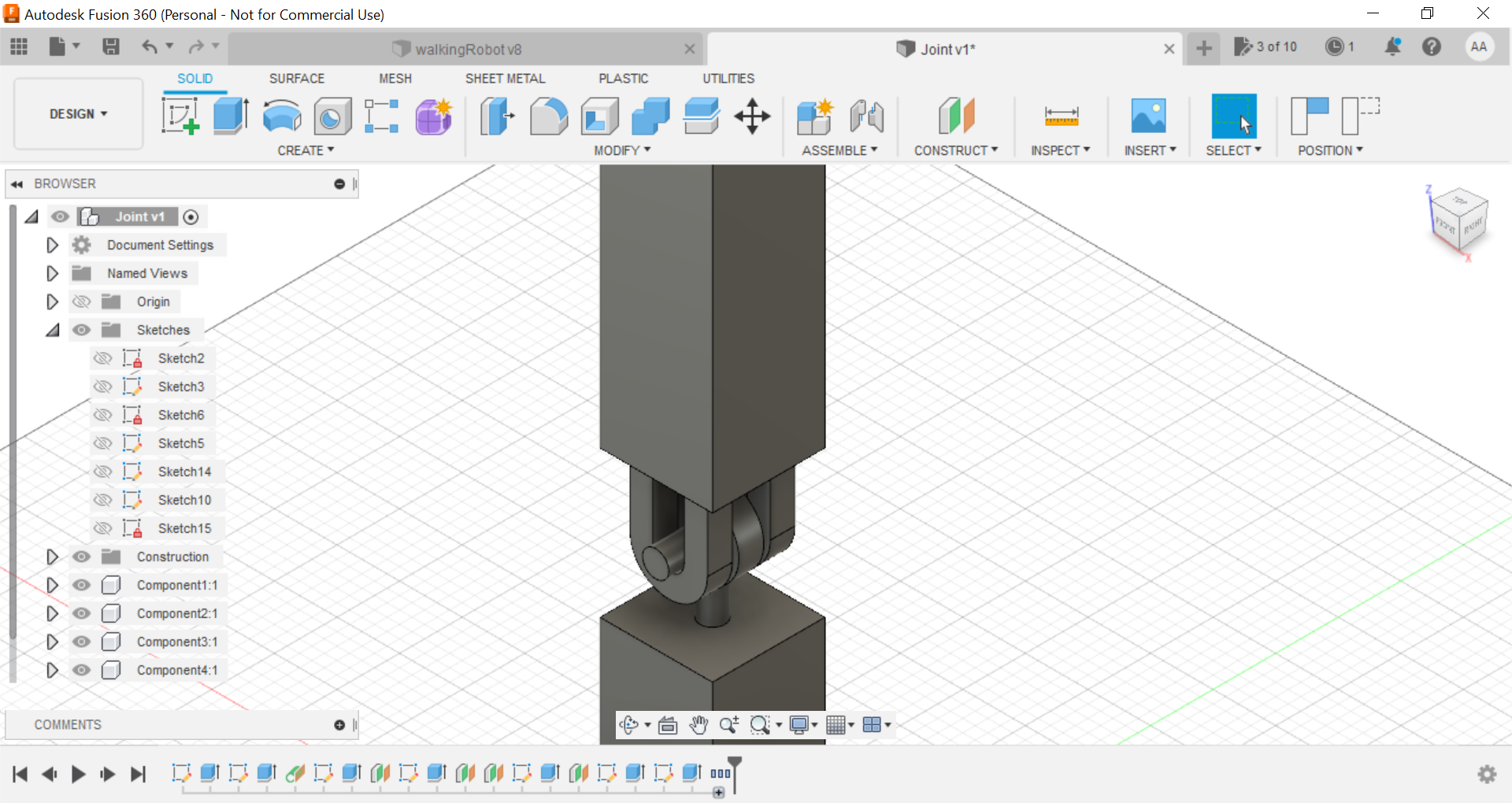
(This is element one with two U shaped parts attached to its base)



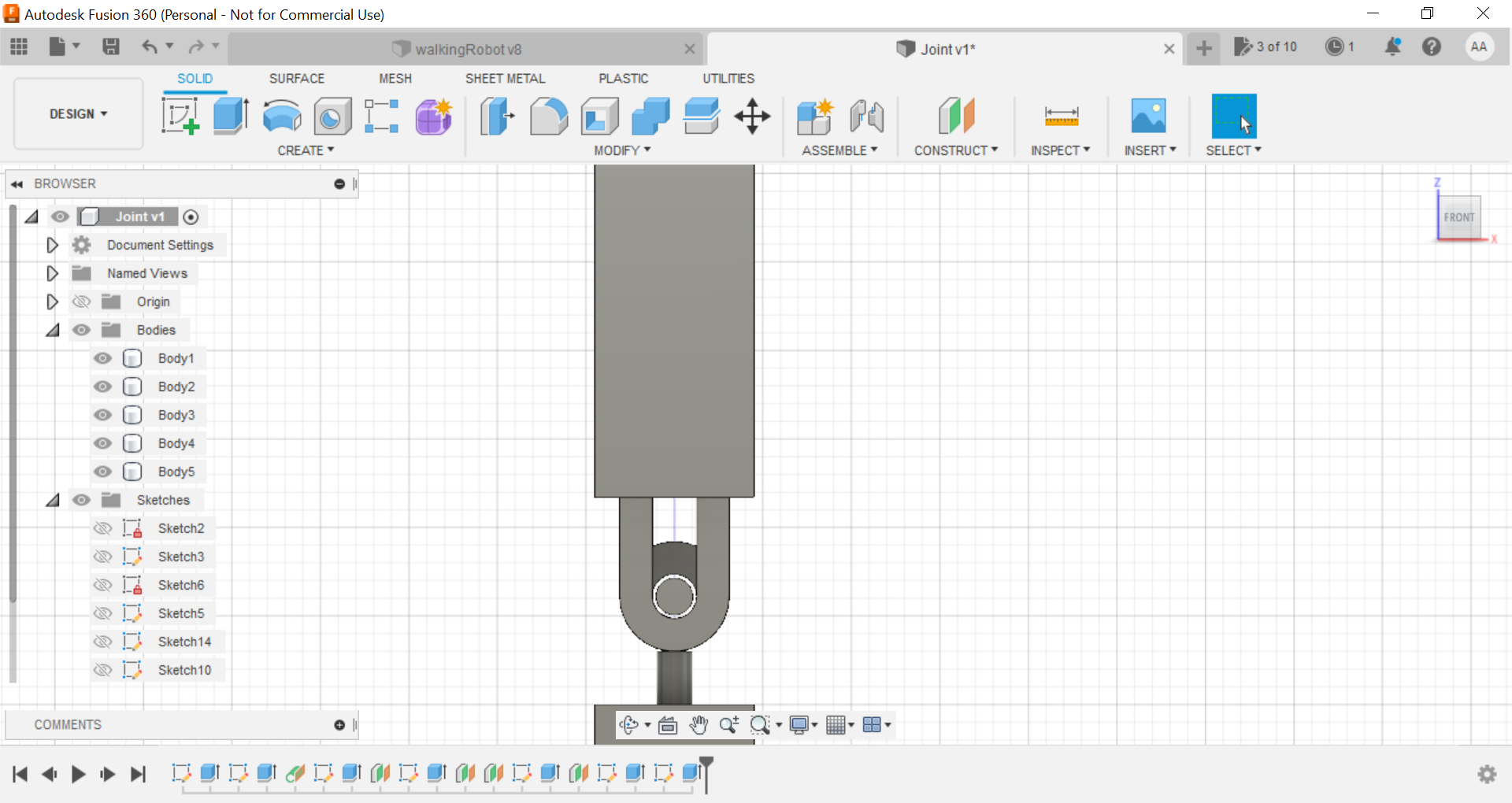
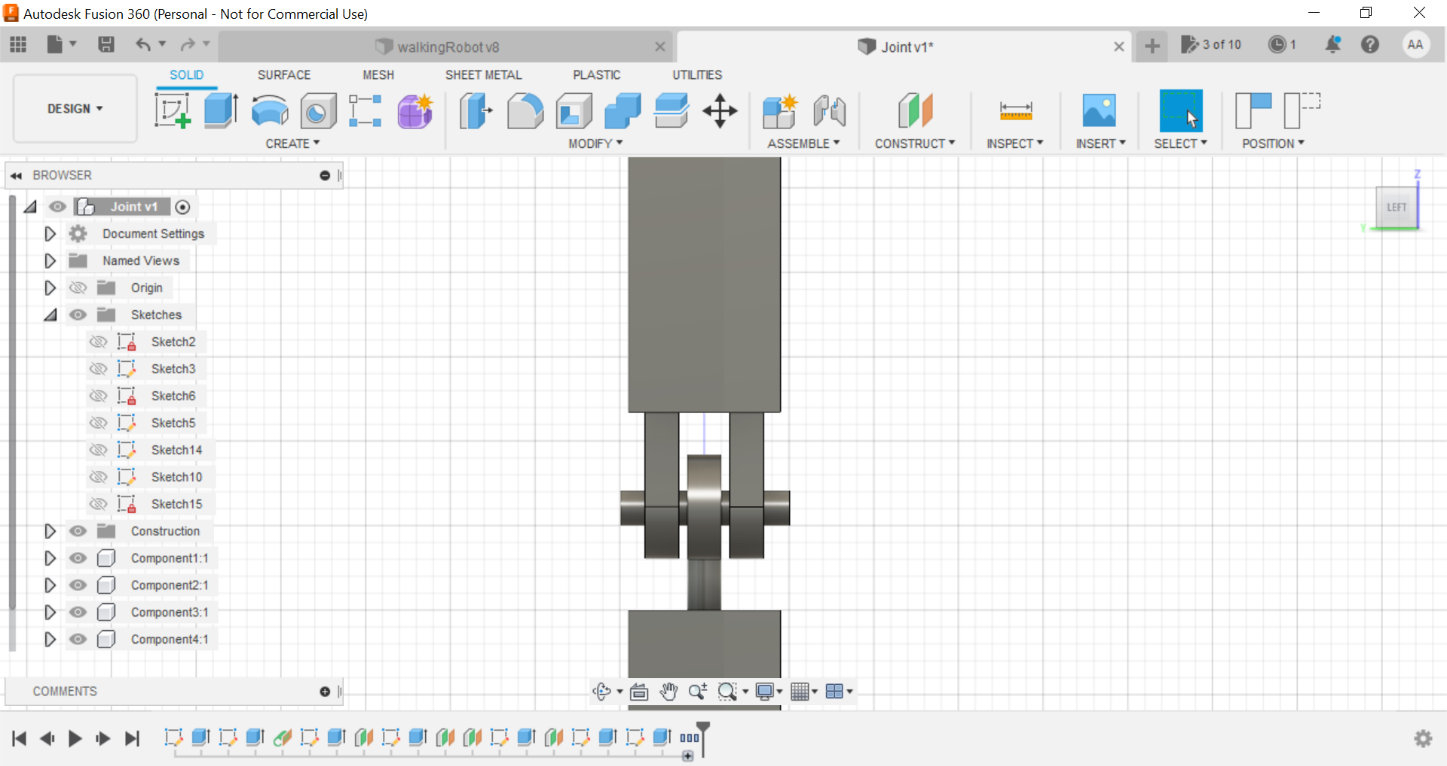
(Element two with the roller bearing)



(This is the rod that will connect element one and two)



(Isometric view)



(Front view) (Side view)