

# Tesla Bot



**WORLD BUILT BY HUMANS,  
FOR HUMANS**

**FRIENDLY**

**ELIMINATES DANGEROUS,  
REPETITIVE, BORING TASKS**

**HEIGHT  
5'8"**

**CARRY CAPACITY  
45 LBS**

**WEIGHT  
125 LBS**

**DEADLIFT  
150 LBS**

**SPEED  
5 MPH**

**ARM EXTEND LIFT  
10 LBS**



# Technical Details

5'8" | 125 LBS

SCREEN FOR USEFUL INFORMATION

LIGHTWEIGHT MATERIALS

HUMAN-LEVEL HANDS

2 AXIS FEET FOR BALANCING



40 ELECTROMECHANICAL ACTUATORS

ARMS  
12

NECK  
2

TORSO  
2

HANDS  
12

LEGS  
12

FORCE FEEDBACK SENSING



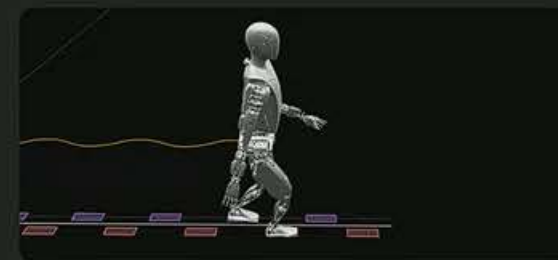
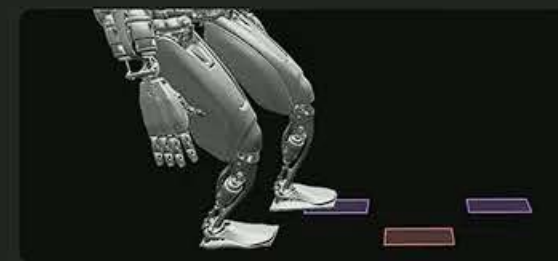
# Locomotion Planning Overview



Locomotion Planner



Reference Trajectories



# Actuator Portfolio – Six Unique Designs



20Nm | 0.55kg



110Nm | 1.62kg



180Nm | 2.26kg



500N | 0.36kg



3900N | 0.93kg



8000N | 2.20kg

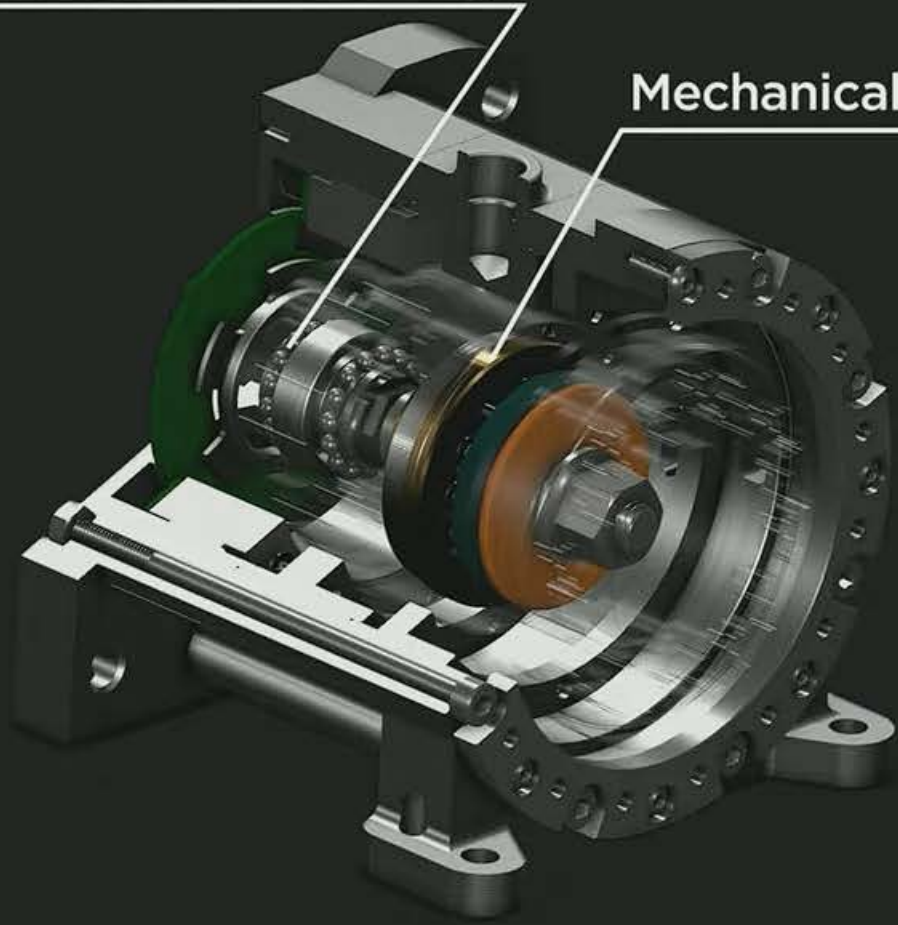


# Actuator Configuration



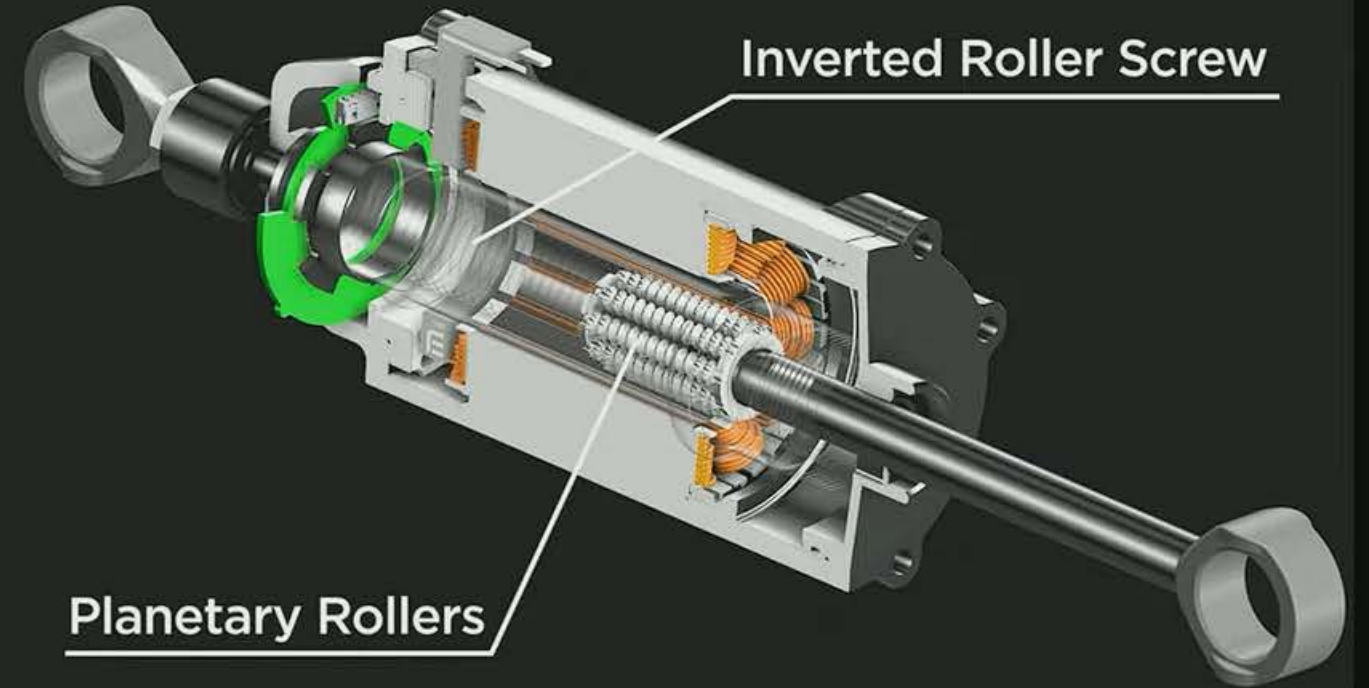
Angular Contact Ball Bearings

Mechanical Clutch

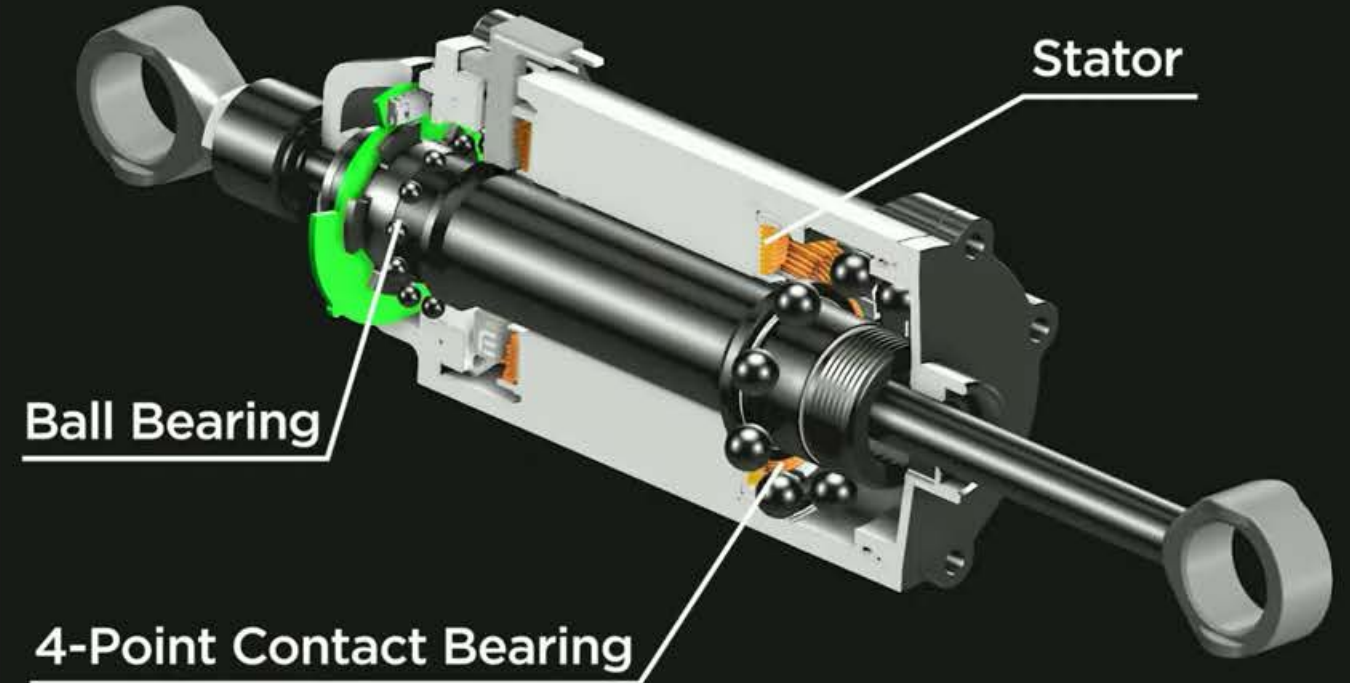
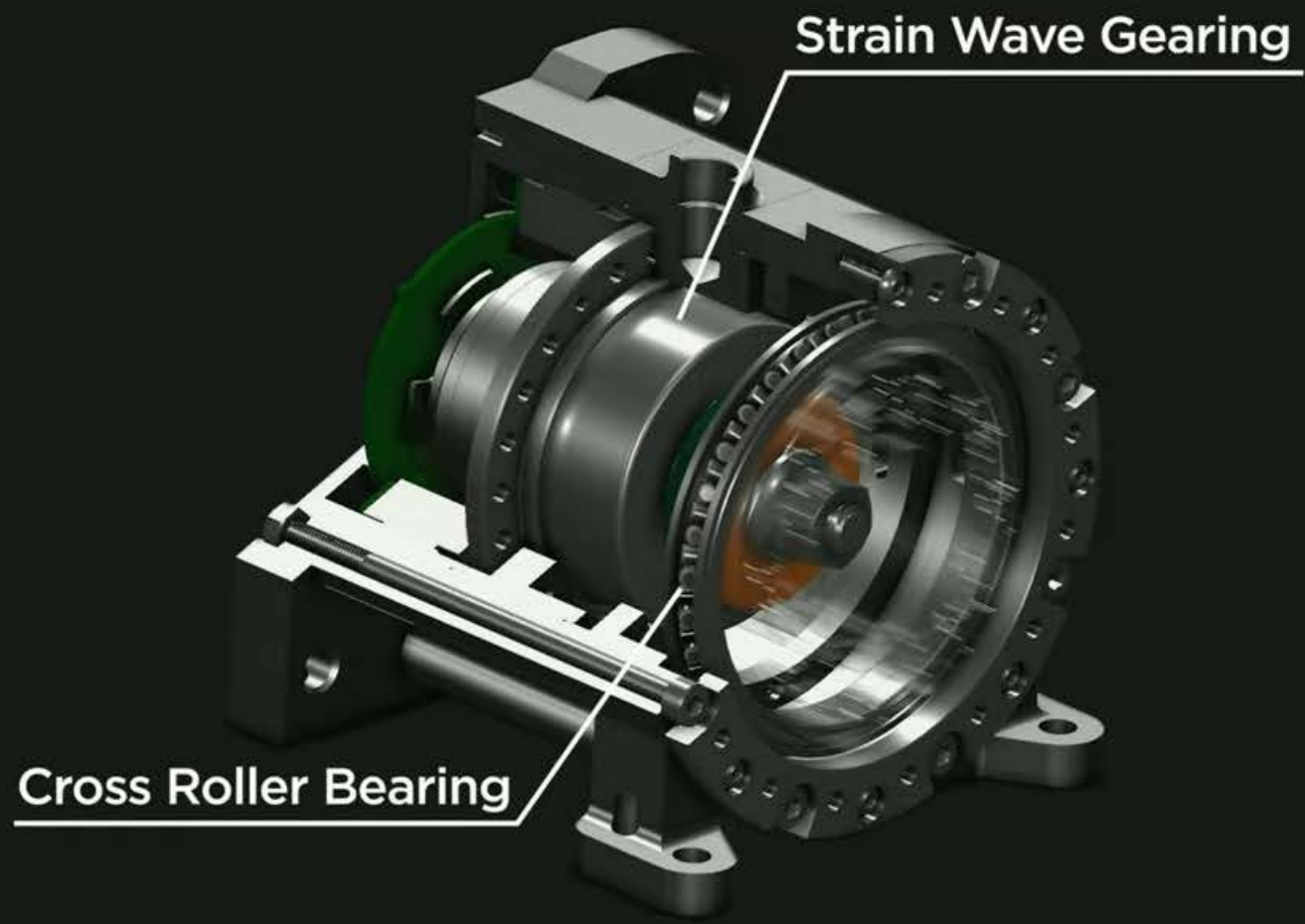


Inverted Roller Screw

Planetary Rollers



# Actuator Configuration



# Actuator Configuration

