

Elu2-Hand

24-2-10

(speed and torque data subject to change)

1a Thumb Opposition

max speed 164 (deg/s)

max torque 0.76 (Nm)

--coupled to palm 'cupping'--

1b. Thumb Adduction

(Carpometacarpal Joint - CMJ)

max speed 83 (deg/s)

max torque 1.66 (Nm)

--coupled from a single actuator--(OR)

1b. Thumb Adduction

(Proximal Interphalangeal Joint - PIPJ)

max speed 83 (deg/s)

max torque 1.66 (Nm)

2a. Index Finger Flexion

(Metacarpophalangeal Joint - MCPJ)

max speed 183 (deg/s)

max torque 0.57 (Nm)

mechanically backdrivable

2b. Index Finger Flexion (PIPJ)

Max speed 112 (deg/s)

Max torque 0.20 (Nm)

mechanically backdrivable

3a. Middle Finger Flexion (MCPJ)

max speed 183 (deg/s)

max torque 0.57 (Nm)

mechanically backdrivable

3b. Middle Finger Flexion (PIPJ)

Max speed 112 (deg/s)

Max torque 0.20 (Nm)

mechanically backdrivable

4a. Ring Finger Flexion (MCPJ)

max speed 76 (deg/s)

max torque 0.30 (Nm)

--coupled from a single actuator-- (OR)

--both mechanically backdrivable--

4b. Ring Finger Flexion (PIPJ)

Max speed 112 (deg/s)

Max torque 0.20 (Nm)

5a. Small Finger Flexion (MCPJ)

max speed 76 (deg/s)

max torque 0.30 (Nm)

--coupled from a single actuator-- (OR)

--both mechanically backdrivable--

5b. Small Finger Flexion (PIPJ)

Max speed 112 (deg/s)

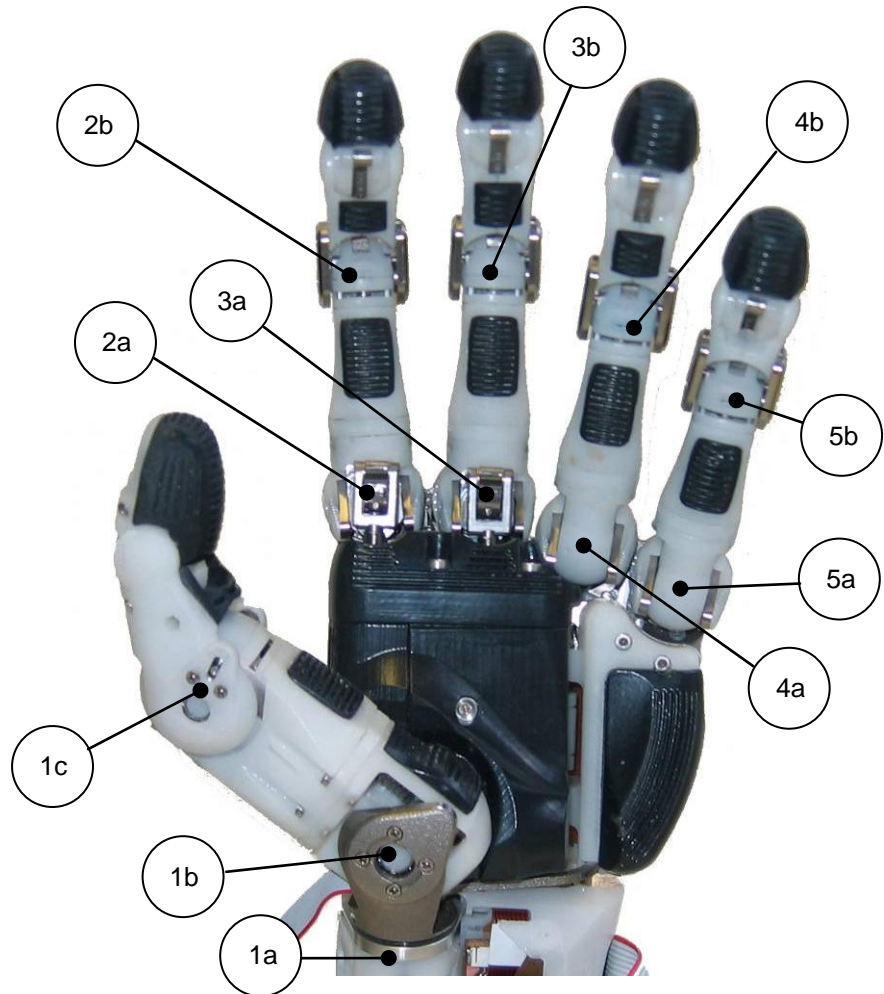
Max torque 0.20 (Nm)

6. Spreading Digits 2-4-5 (not indicated)

max speed 162 (deg/s)

max torque 0.55 (Nm)

compliant spring in series with actuator



Speed ratings are based on nominal motor speed ratings for all motors used.

Torque ratings are based on a 1A input current for movements labelled; 1a, 1b, 1c, 2a, 3a, 6; and a current input of 0.5A for the movements labelled; 2b, 3b, 4a, 4b, 5a, 5b.