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.