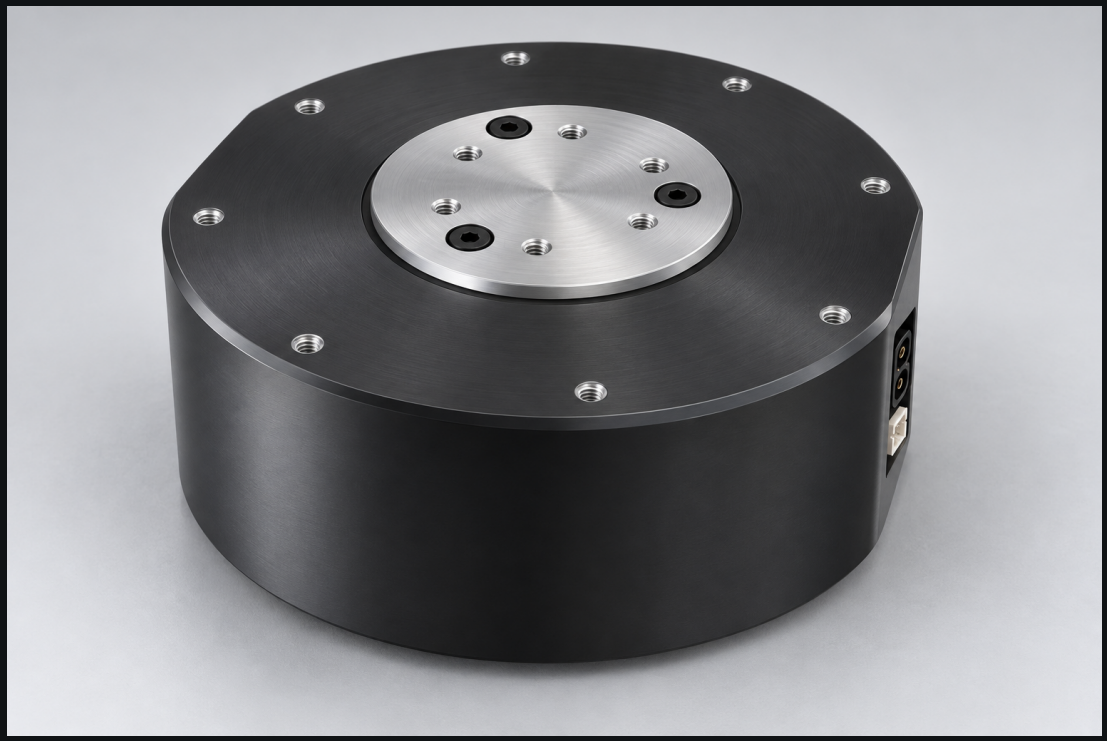
Motion starts here.

Six actuator formats. From finger joints to full-size robotic systems.



MF1 / MS-36 / MP-24

MP-45 / ML-150 / ML-360

Custom control
Vector-level control

ACTUATOR FAMILY

A joint for every scale.

Select by torque, speed, envelope and application.

MF1

MICRO / FINGER

Ø20 × 19 mm

0.55 Nm peak / 0.35 Nm rated

~120 rpm no-load

MS-36

DISTAL

Ø57 × 55 mm

~24–30 Nm peak / 8–10 Nm rated

~130 rpm no-load

MP-24

MID / FAST

Ø97 × 32.5 mm

~20–24 Nm peak / 7 Nm rated

~830 rpm no-load

MP-45

MID

Ø97 × 40.5 mm

~45 Nm peak / 15–18 Nm rated

~520 rpm no-load

ML-150

LEG

Ø125 × 50 mm

~150 Nm peak / 50 Nm rated

~220 rpm no-load

ML-360

HEAVY

Ø125 × ~80 mm

~330–360 Nm peak / 110 Nm rated

~90–95 rpm no-load

MF1

MICRO / FINGER

Every finger and thumb joint.

Custom control
Vector-level control

PEAK TORQUE

0.55 Nm

RATED TORQUE

0.35 Nm

NO-LOAD SPEED

~120 rpm

FORM FACTOR / OD × LENGTH

Ø20 × 19 mm

MASS

~34 g

MOTOR

M20 micro axial-flux

MS-36

DISTAL

Wrists, neck and small elbows.

Custom control
Vector-level control

PEAK TORQUE

~24–30 Nm

RATED TORQUE

8–10 Nm

NO-LOAD SPEED

~130 rpm

FORM FACTOR / OD × LENGTH

Ø57 × 55 mm

MASS

~350 g

MOTOR

M46 (Ø46 × 10 stator)

MP-24

MID / FAST

Small-robot shoulders, elbows and wrist roll; quadrupeds.

Custom control
Vector-level control

PEAK TORQUE

~20–24 Nm

RATED TORQUE

7 Nm

NO-LOAD SPEED

~830 rpm

FORM FACTOR / OD × LENGTH

Ø97 × 32.5 mm

MASS

~630 g

MOTOR

M81 (Ø81 × 8 stator)

MP-45

MID

Ankles, waist roll/pitch and quadruped knees.

Custom control
Vector-level control

PEAK TORQUE

~45 Nm

RATED TORQUE

15–18 Nm

NO-LOAD SPEED

~520 rpm

FORM FACTOR / OD × LENGTH

Ø97 × 40.5 mm

MASS

~850 g

MOTOR

M81 (Ø81 × 15 stator)

ML-150

LEG

Small-robot hips and knees; full-size shoulders, elbows and ankles.

Custom control
Vector-level control

PEAK TORQUE

~150 Nm

RATED TORQUE

50 Nm

NO-LOAD SPEED

~220 rpm

FORM FACTOR / OD × LENGTH

Ø125 × 50 mm

MASS

~1.3 kg

MOTOR

M110 (Ø110 × 20 stator)

ML-360

HEAVY

Full-size hips, waist and knees.

Custom control
Vector-level control

PEAK TORQUE

~330–360 Nm

RATED TORQUE

110 Nm

NO-LOAD SPEED

~90–95 rpm

FORM FACTOR / OD × LENGTH

Ø125 × ~80 mm

MASS

≤2.2 kg

MOTOR

M110 (Ø110 × 20 stator)

Compare the six SKUs.

SKU	Peak / rated torque	No-load speed	OD × length	Mass
MF1	0.55 / 0.35 Nm	~120 rpm	Ø20 × 19 mm	~34 g
MS-36	~24–30 / 8–10 Nm	~130 rpm	Ø57 × 55 mm	~350 g
MP-24	~20–24 / 7 Nm	~830 rpm	Ø97 × 32.5 mm	~630 g
MP-45	~45 / 15–18 Nm	~520 rpm	Ø97 × 40.5 mm	~850 g
ML-150	~150 / 50 Nm	~220 rpm	Ø125 × 50 mm	~1.3 kg
ML-360	~330–360 / 110 Nm	~90–95 rpm	Ø125 × ~80 mm	≤2.2 kg

Control around your application.

01

Custom control

02

Vector-level control

Define the control requirements alongside the joint’s mechanical output, motion profile and electrical interfaces.

Discuss your application with the Maiden Robotics engineering team.

Built around your robot.

Configure the actuator around your joint requirements.

01 / TORQUE PROFILE

Peak and rated load requirements, speed and duty cycle.

02 / HOLDING

Holding torque, powered operation and power-loss behavior.

03 / BRACKETS & FIT

Mounting envelope, bracket requirements and output interface.

04 / ELECTRICAL

Power requirements, connectors, communications and control.

Share your joint requirements, integration envelope and expected quantity.

Your next machine starts at the joint.

Discuss requirements with the Maiden Robotics engineering team.

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DESIGNED AND MANUFACTURED IN INDIA