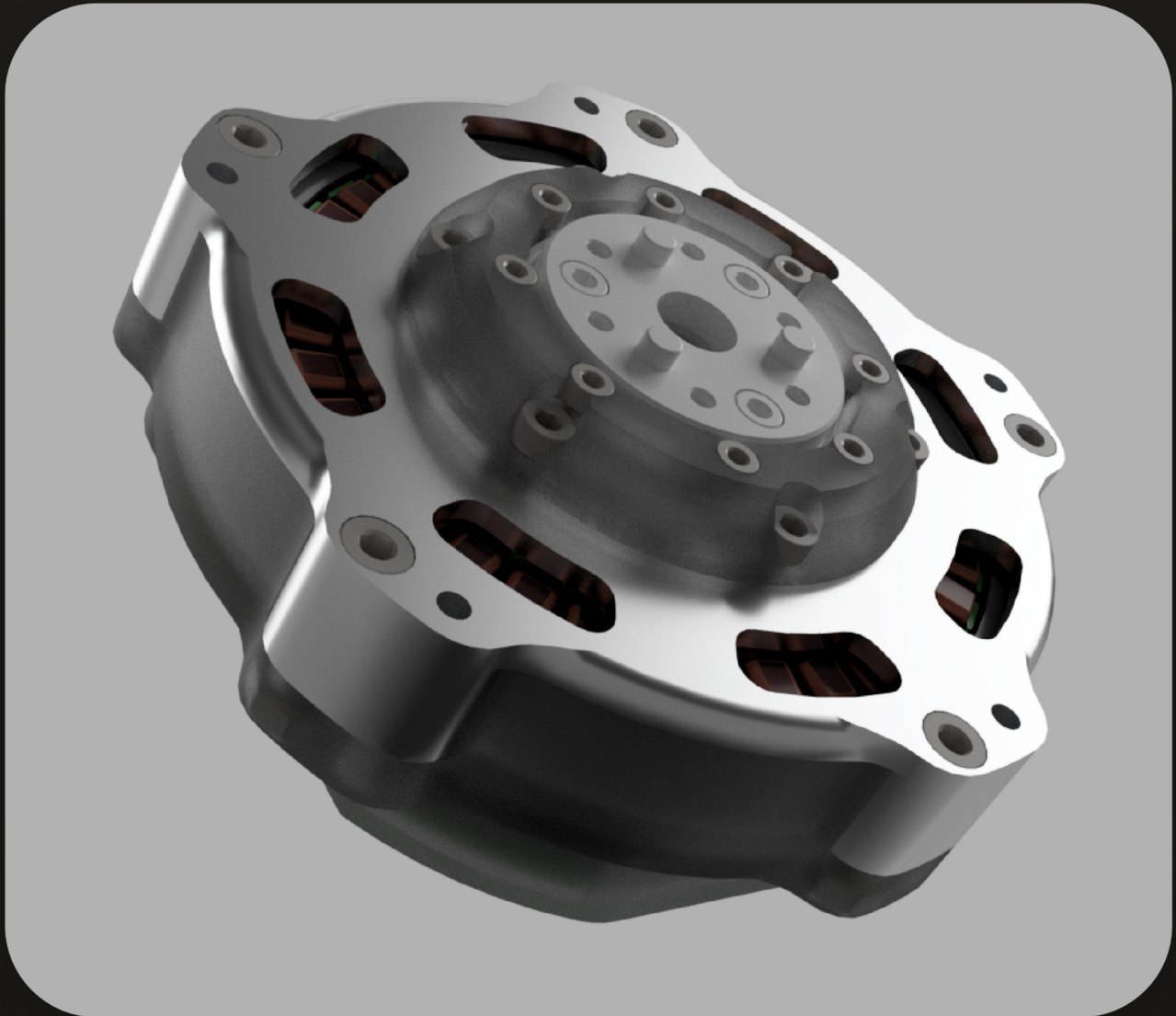




MYO-20

Kinetic Robotics

Easy-to-use actuation with great documentation
and support

WHO WE ARE

Robotics hardware, made approachable.

01

Capable actuators have always come with a tax — thousands of dollars, poor documentation, and a vendor who doesn't reply. That kept good robotics hardware out of reach for many people building amazing robots.

Kinetic Robotics builds the actuator we wished existed: performance you'd expect from significantly more expensive hardware, documentation you'd expect from good software, and a real person on the other end when you're stuck. The Myo-20 is where we start.

LOW COST

A complete unit at \$299 — a fraction of comparable modules.

DOCUMENTED

A full, public command reference — read it before you buy.

SUPPORTED

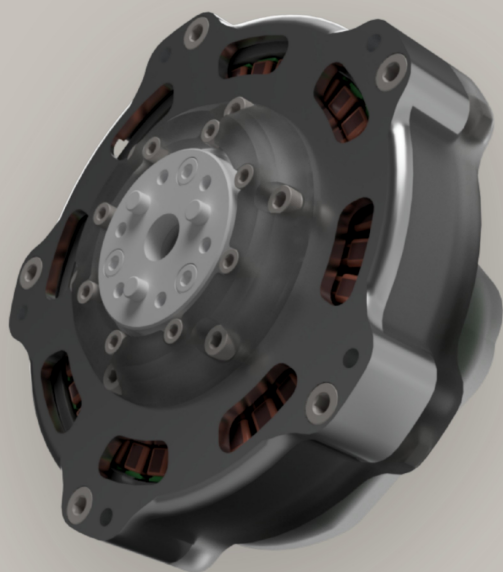
A person answers, plus a 30-day money-back guarantee.

ANATOMY

Meet Myo-20.

A compact quasi-direct-drive actuator — motor, planetary gearset, encoder and driver in one housing. Mount one part and get a working joint, not a bill of materials to integrate yourself.

02



- 01 Geared output flange**
20 N·m at the joint, 15 arc-min backlash, 8:1 reduction.
- 02 Stator & windings**
Tightly wound for torque density; highly backdrivable.
- 03 Closed-loop encoder**
Position and torque feedback.
- 04 On-board electronics**
Driver plus integrated electrostatic discharge protection.

20N·m

PEAK TORQUE

15'

ARC-MIN BACKLASH

8:1

REDUCTION

\$299

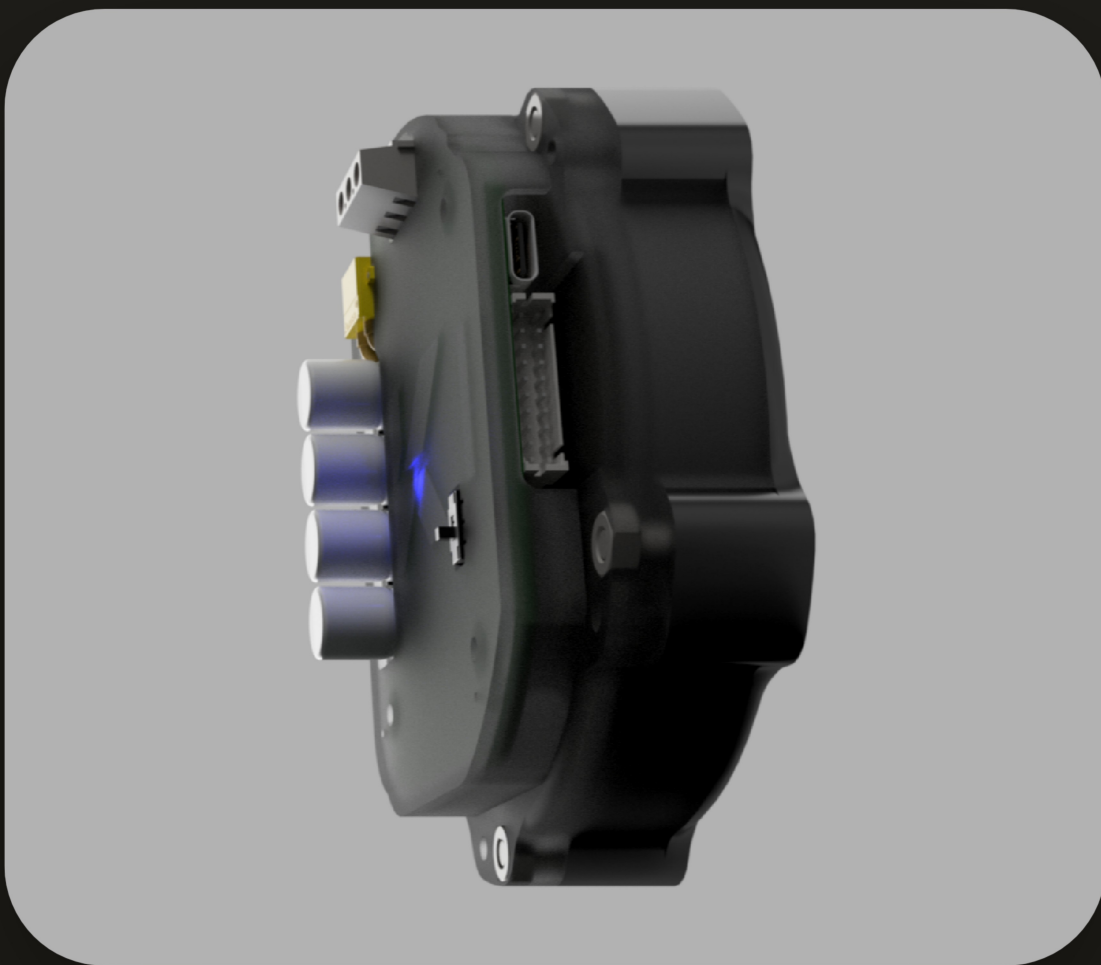
COMPLETE UNIT

CONTROL & CONNECTIVITY

Power in, CAN out.

03

Communicate over CAN FD, UART or USB-C, with position, velocity and torque control available from the start. Daisy-chain multiple joints on one bus.



INTERFACES

CAN FD

USB-C

UART

24-48 V DC

CONTROL MODES

Position

Velocity

Torque

SPECIFICATIONS

The complete datasheet.

04

First-run targets, estimated on prototype hardware.

Reduction	8:1 planetary	Gearbox backlash	15 arc-min
Continuous torque	7.5 N·m	Overall diameter	Ø106.08 mm
Peak torque	20 N·m	Height with board	51.87 mm
Continuous speed	110 rpm	Output flange	Ø34 mm
Maximum speed	320 rpm	Housing mounting	5 × M4
Bus voltage	24–48 V DC	Max axial load	800 N
Continuous current	7 A	Max radial load	900 N
Peak current	25 A	Working temperature	–20 to +80 °C

WHERE IT FITS

Against the alternatives.

05

Representative figures for the 20 N·m size band — not specific competitor products.

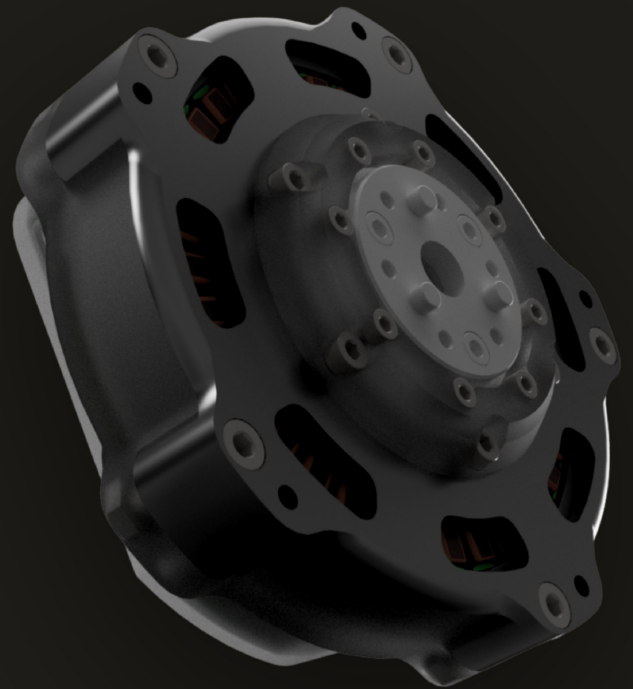
CHARACTERISTIC	Myo-20	HARMONIC	QDD MODULE	HOBBY SERVO
Peak torque	20 N·m	20–40 N·m	15–25 N·m	5–12 N·m
Backlash	15 arc-min	< 1 arc-min	10–20 arc-min	30–120 arc-min
Backdrivable	Yes — high	Effectively no	Yes — high	No
Torque sensing	Phase current	Needs sensor	Phase current	None
Interface	CAN FD • USB-C	EtherCAT	CAN / CAN FD	PWM / serial
Driver & discharge	On board	External	Usually external	Included
Documentation	Public, full	Datasheet only	Varies	Minimal
Indicative price	\$299	\$1,500–4,000	\$400–900	\$80–250

Myo-20 doesn't chase a harmonic drive's sub-arc-minute precision — it isn't built for that. Against other QDD modules it matches reduction, backlash and backdrivability, with driver and discharge on board, below the usual class price.

THE FINISH LINE

The actuator we wished existed.

\$299 for the complete Myo-20 — actuator and control board together. Read the full docs and reserve one from the first production run online.



WEB

kineticrobotic.com

DOCS

kineticrobotic.com/docs

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