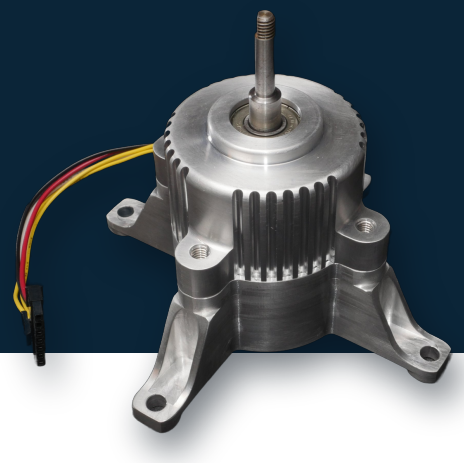
MOTORS · 75 W HEATSINK BLDC PLATFORM

Aslan **M20 Pro BLDC Motor**

A 75 W brushless DC motor in a machined aluminum heatsink housing, built for the cooling, pumping, and actuation work that keeps a platform running.



75 W	0.35 N·m	2,000 rpm	24 VDC
RATED CONTINUOUS	CONTINUOUS TORQUE	AT RATED TORQUE	RATED VOLTAGE

DESIGN INTENT

Built for the work around the platform rather than on the propeller: moving air through electronics bays, driving coolant and fuel pumps, and turning geared positioners. The machined aluminum housing carries integral cooling fins and a four arm mounting base, and the continuous rating is published against a defined heatsink condition, not an ideal bench.

ELECTRICAL CHARACTERISTICS

- Torque constant of **0.0854 N·m/A** (12.10 oz·in/A) with **6.35 Vrms/krpm** back EMF
- Motor constant of **0.0741 N·m/√W** (10.50 oz·in/√W) for strong continuous torque per watt of copper loss
- **1.30 Ω** resistance and **0.50 mH** inductance, line to line
- **0.2 A** no load current at 24 VDC, **5.0 A** rated continuous

THERMAL & MECHANICAL

- Machined aluminum housing with **integral radial cooling fins**
- Four arm mounting base with through holes, plus **threaded bosses** on the housing for alternate mounting
- Shielded **precision ball bearings** front and rear
- Threaded output shaft with flat for direct mounting of impellers, fans, and couplings

APPLICATIONS

- **Thermal management:** fans and blowers for electronics bays, battery enclosures, and shelters
- **Fluid systems:** coolant and fuel transfer pumps on ground, surface, and generator platforms
- **Pointing and stabilization:** geared gimbals, pan tilt heads, and antenna positioners
- **Actuation:** robotic and UGV actuators, winches, mast and hatch drives
- **Industrial:** factory automation, metrology, and test stands

INTEGRATION & CUSTOM

- Flying lead harness with **multi pin connector**
- **Custom winding, shaft, and connector** variants
- **Anodized finishes and custom colors** on request

SPECIFICATIONS

SKU **M20-14-A-01** · RETAIL **CONTACT SALES**

RATED VOLTAGE	24 VDC
NO LOAD SPEED	2,700 rpm
NO LOAD CURRENT	0.2 A
CONTINUOUS TORQUE	0.353 N·m · 50 oz·in
SPEED AT RATED TORQUE	2,000 rpm
CONTINUOUS CURRENT	5.0 A

CONTINUOUS POWER	75 W
TORQUE CONSTANT (KT)	0.0854 N·m/A · 12.10 oz·in/A
BACK EMF (KB)	6.35 Vrms/krpm
MOTOR CONSTANT (KM)	0.0741 N·m/√W · 10.50 oz·in/√W
RESISTANCE (L-L)	1.30 Ω
INDUCTANCE (L-L)	0.50 mH

Continuous ratings measured with the motor mounted to a 254 × 254 × 6.4 mm (10 × 10 × 0.25 in) aluminum plate.

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