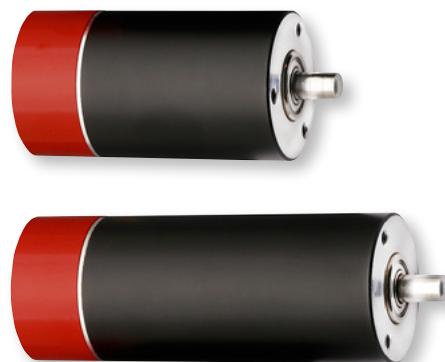


ElectroCraft's new RPX32 is a highly dynamic and controllable very small frame metric motor.

With an advanced 8 pole rotor and encapsulated core, this motor offers high torque density at a very affordable price. The RPX is highly energy efficient and ideal for embedded applications.

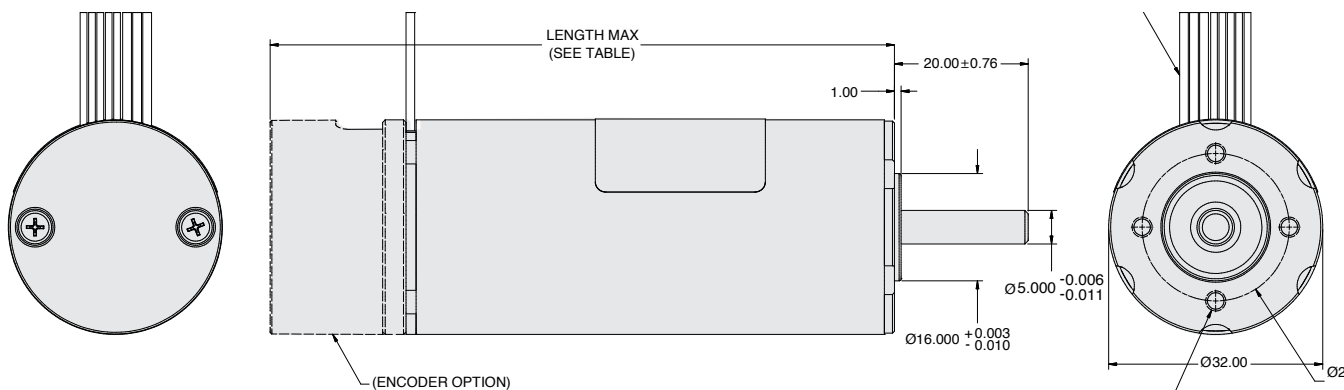
Features:

- High torque density delivers class leading torque per frame size performance.
- Smooth, controllable variable-speed operation.
- Highly energy efficient.
- Available in 12V, 24V and 48V versions.
- Available with a range of feedback options, providing highly accurate control resolution.
- Fully customizable with radiation tolerant, high temperature and high altitude versions available on request.
- Available with a range of IP ratings, up to IP65.



RPX32 BRUSHLESS DC MOTOR

Size:	32 mm diameter	
Peak Torque:	438 mNm	
Continuous Stall Torque:	RPX32-090	RPX32-150
	90 mNm	150 mNm
Speed:	up to 10,000 RPM	



MODEL	MAX LENGTH
RPX32-090	54
RPX32-150	74

ALL MEASUREMENTS IN MM

RPX Model Number

R	P	X	3	2	—	0	9	0	V	2	4	—	0	0	0	—	X								
Product Type			Frame Size			Torque mNm				Voltage			Rear Shaft		Front Shaft		Feedback								
			32 mm			90 150				12 24 48			0 - None 1 - Yes		0 - Round 1 - Flat		X - Hall Y - 256 Line, Differential Optical Encoder w/o Index								
																Termination									
																0 - Flying Leads									

RPX32

BRUSHLESS DC MOTOR

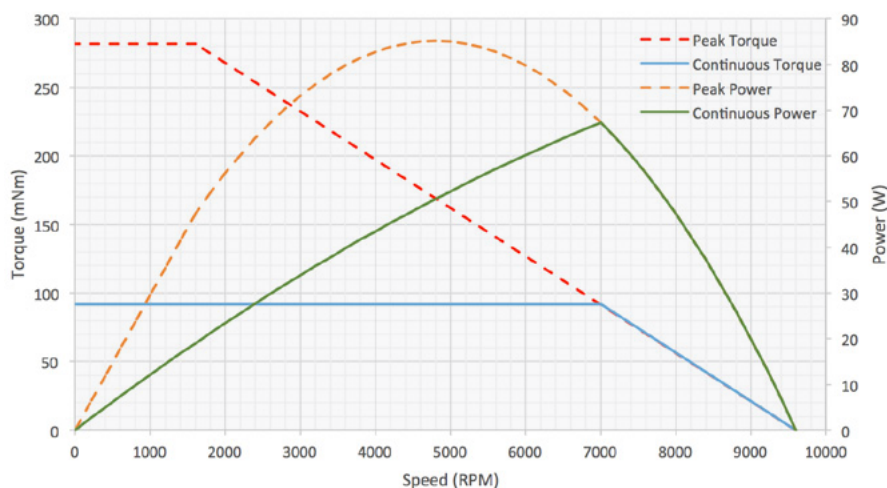
High torque density - high performance.



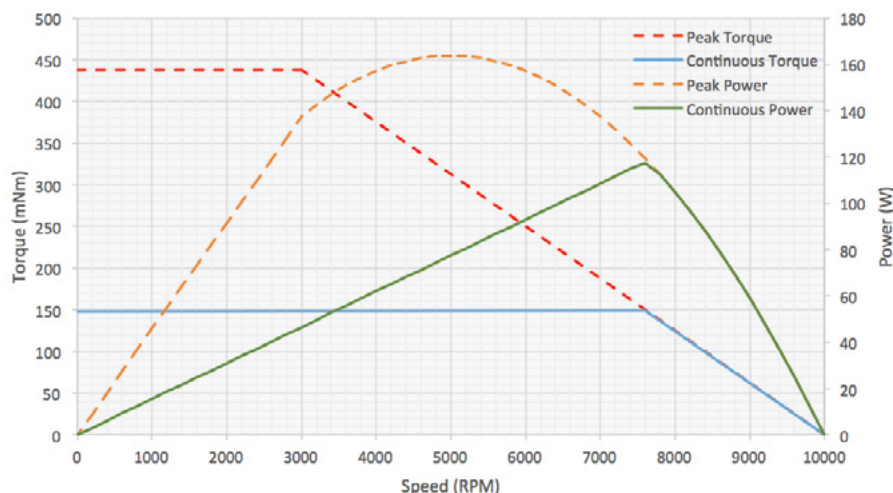
Applications:

- **Automotive:** Linear actuators, Seat motors, Window motors
- **Medical Science:** Precision pumps, Prostheses
- **Lab Equipment:** Dosing systems, Pumps, Analysis equipment
- **Factory Automation:** Conveyor belts, Handling systems
- **Robotics:** Industrial robots, Service and Humanoid eneral purpose robots, Unmanned vehicles
- **Optical:** Camera lens adjustment, Zoom, Focus
- **Aerospace:** Seat adjustments, Flight recorders, Autopilots
- **Industrial Automation:** Printing, Winding machines, Textile machines, Bonding machines, Wafer processing, Packing machines
- **Communications:** Copiers, Antenna adjustments, Printers
- **Security:** Surveillance cameras, Access and lock systems, Automated gates
- **Electronics/Semiconductor Technology:** Feeders, SMD placement equipment, Lithography systems
- **Power Tools:** Professional tools, Power screwdrivers, Nail guns
- **Cash and Ticket machines:** Cash dispensers, Card readers, Money changing machines
- **Instrumentation:** Microscopes, Climate analyzers, Precision scales, Mobile inspection systems, Measuring equipment, Calibration systems, Spectroscopes

RPX32-090 Performance



RPX32-150 Performance



Mechanical/Winding Data

	Units	RPX32-090			RPX32-150		
Continuous Stall Torque*	mNm	90			150		
Peak Torque	mNm	282			438		
Motor Constant	nMn/√Watt	24.01			35.31		
Elec. Time Constant	msec	0.6			0.62		
Mech. Time Constant	msec	1.35			1.15		
Rotor Inertia	gm.cm ²	8.0			11.1		
Thermal Resistance	C/Watt	5.2			4.1		
Weight	g	150.0			260.0		
		V12	V24	V48	V12	V24	V48
Design Voltage	Volts	12	24	48	12	24	48
Cont. Stall Current	Amps	6.5	4.0	2.0	12.0	6.5	3.5
Peak Current	Amps	18.0	12.0	8.0	30.0	20.0	11.0
Voltage Constant ± 10%	V/rad/sec	0.015	0.023	0.048	0.016	0.022	0.045
Torque Constant ±10%	mNm/amp	12.2	23.5	47.9	11.5	22.0	45.0
Resistance ±10%	Ohms	0.22	0.96	3.68	0.113	0.48	1.67
Inductance ±30%	mH	0.193	0.6	2.3	0.1255	0.3	1.0

*Continuous rating based on a 25°C ambient temperature, winding temperature rise of 100°C. Mounted on a 150 X 150 X 6 mm aluminum heat sink.



Your Genius. Our Drive.

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