

# CM Technology



## Key Performance Features:

- 42 to 151 oz-in Continuous Torque
- 12-180 VDC Typical
- Operating Speeds to 10,000 RPM
- 4-Pole Neodymium Magnets Performance
- Dynamically Balanced Rotors
- Round or NEMA 23 Flange Mounting
- RoHS Compliant, CE Certification

# BL234

# Brushless Servo Motors

## Motor Characteristics

FRAME SIZE	STACK LENGTH	Peak Stall Torque (Tp) oz-in	Cont. Stall Torque (Tc) oz-in	Friction & Cogging Torque (Tf) oz-in	Rotor Inertia (Jm) oz-in-sec <sup>2</sup>	Thermal Resistance (Rth) degC/Watt	Max Recom'd Speed RPM	Max Winding Temp C	Elec Time Constant (Te) msec	Power Range W	Weight lb
BL234 - 075		120	42	3.5	0.001	1.5	10,000	155	0.8	105	1.1
BL234 - 150		240	84	4.4	0.001	1.0	10,000	155	1.2	189	1.8
BL234 - 225		342	120	5.6	0.002	0.9	10,000	155	1.4	252	2.6
BL234 - 300		432	151	6.6	0.002	0.8	10,000	155	1.6	315	3.3

## Sample Windings

Consult CM Tech Application Staff for other available windings

	BL234 - 075				BL234 - 150				BL234 - 225				BL234 - 300			
	E	G	I	K	E	G	I	K	E	G	I	K	E	G	I	K
Torque Constant (Kt) oz-in/amp	2.7	4.3	6.8	10.4	5.4	8.6	13.0	20.7	8.0	12.7	20.0	31.8	10.3	16.3	26.0	41.3
Voltage Constant (Ke) Volts/Krpm	2.0	3.2	5.1	7.9	4.0	6.4	9.7	16.0	5.9	9.4	14.8	24.0	7.6	12.1	19.2	30.5
L-L Resistance (Ra) Ohms (cold)	0.2	0.4	1.1	2.6	0.3	0.6	1.4	3.4	0.3	0.7	1.8	4.3	0.3	0.8	2.0	5.0
Inductance (L-L) mH	0.2	0.4	1.0	2.5	0.3	0.7	1.7	4.0	0.4	0.9	2.4	4.7	0.5	1.2	3.1	7.4
Peak Current (A) Amps	66	42	26	16	66	42	26	16	66	42	26	16	66	142	26	16

Values as listed based on actual tested results, Application test results may vary, Subject to change

For more options or assistance contact CM Technology with your application needs  
 Phone (978) 664-6218 • Fax (978) 664-6219 • E-mail: [sales@cmtechllc.com](mailto:sales@cmtechllc.com)

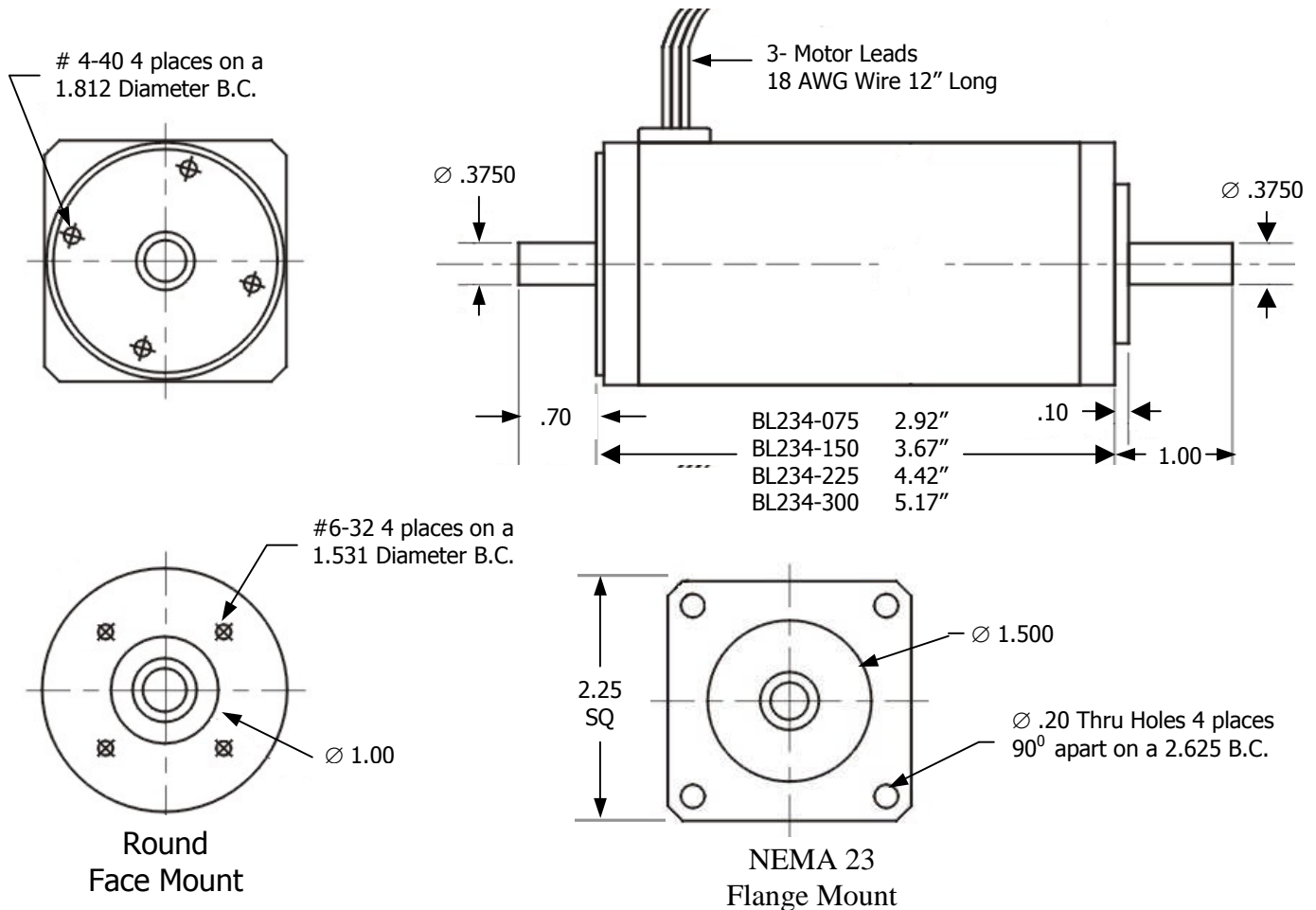
## BL234 Series Options

- Feedback: Hall Sensors, Resolvers, Optical Encoders, Commutation Encoders
- Accessories Gear Boxes and Brakes
- Application Specific Windings and Mechanical designs
- Custom Cables and Connectors
- IP 67 Sealing

## Typical Applications

- Hybrid & Electrical Vehicle Systems  
Commercial, Fleet & Military, Off Road
- Power Steering, Vehicle Actuators
- Robotic Applications
- Medical & Laboratory Equipment
- Automated Assembly Machines
- X-Y-Z Positioning Machines

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