



Key Performance Features:

- High Energy Neodymium Magnets
- Operating Speeds to 6,000 RPM
- High Torque to Size Ratio
- Encoder Ready
- NEMA 23 Flange Mounting
- 24-320 VDC Typical Bus Voltage

BFA23 / BA23 BRUSHLESS SERVO MOTOR SERIES

Motor Characteristics (8 pole design)

FRAME SIZE	STACK LENGTH	PEAK STALL TORQUE (T _s) OZ-IN	CONT. STALL TORQUE (T _c) OZ-IN	FRICTION TORQUE (T _f) OZ-IN	ROTOR INERTIA (J _m) OZ-IN-SEC ²	THERMAL RESISTANCE (RM) °C/WATT	MAX RECOMMEND SPEED RPM	MAX WINDING TEMP. °C	ELEC. TIME CONSTANT MSEC	POWER RANGE W	WEIGHT LB
BFA23/BA23 -- 100		175	60	4.2	0.001	2.5	7000	155	1.7	130	1.4
BFA23/BA23 -- 200		360	115	5.3	0.002	2.0	7000	155	1.9	240	2.4
BFA23/BA23 -- 300		540	170	6.6	0.003	1.5	7000	155	2.1	340	3.4
BFA23/BA23 -- 400		690	230	8.0	0.004	1.1	7000	155	2.2	440	4.3

Sample Windings

CONSULT MAGMOTOR APPLICATION STAFF FOR OTHER AVAILABLE WINDINGS

	BF23 -- 100				BF23 -- 200				BF23 -- 300				BF23 -- 400			
	E	G	I	K	E	G	I	K	E	G	I	K	E	G	I	K
Torque Constant (Kt) oz-in/amp	7.93	12.59	19.98	31.61	15.86	25.17	39.96	63.22	23.78	37.78	59.95	94.83	31.71	50.34	79.93	126.44
Voltage Constant (Ke) Volts/Krpm	5.86	9.31	14.78	23.37	11.72	18.61	29.55	46.75	17.59	27.92	44.33	70.12	23.45	37.23	59.1	93.49
L-L Resistance (Rt) Ohms (cold)	0.41	1.0	2.5	6.1	0.68	1.69	4.23	10.16	1.12	2.8	7	16.7	1.5	3.75	9.2	22
Inductance (L-L) mH	0.75	1.85	4.85	11.65	1.35	3.36	8.4	21.17	2.23	5.55	13.86	35	3	7.4	19.5	46.5
Peak Current (A) Amps	22	14	8.8	5.6	20.5	12.9	8.12	5.13	17.6	12.2	7.85	4.85	18.75	11.8	7.45	4.7

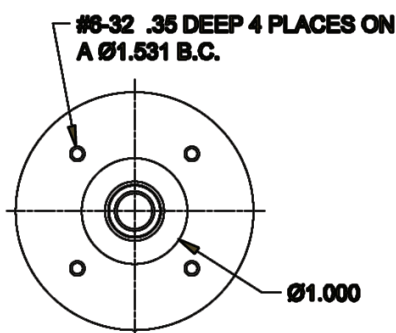
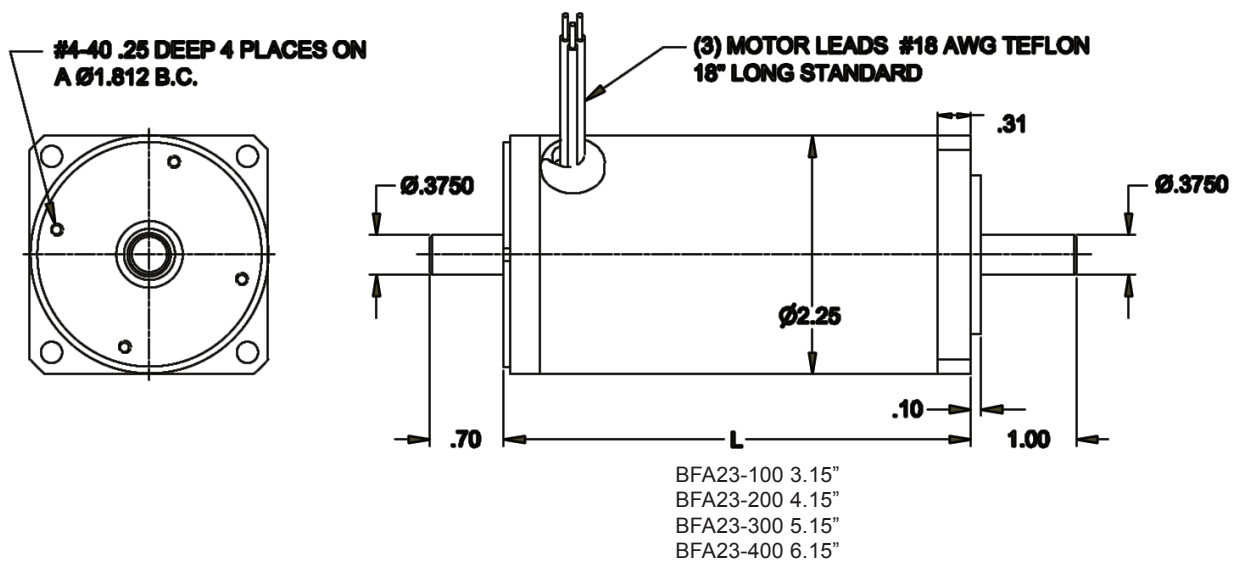
VALUES AS LISTED ARE TEST CONDITIONS, ACTUAL RESULTS MAY VARY

BF23 Series Options

- Optical Encoders
- Hall Sensor or Commutation Encoder
- Gear Boxes and Brakes
- Application Specific Windings and Mechanical designs
- Custom Cables and Connectors
- For more options, see magmotor.com custom solutions, or call us.

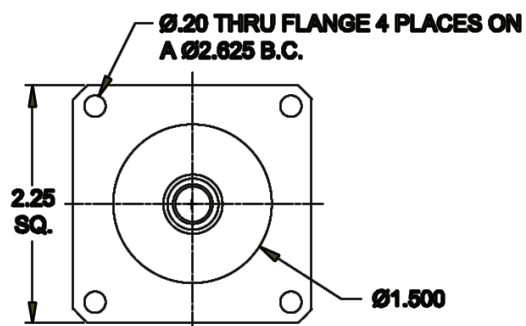
Typical Applications

- Semiconductor Equipment
- Medical Equipment
- Automated Assembly Machines
- Laboratory Equipment
- Pharmaceutical Equipment
- X-Y-Z Positioning Machines



FACE MOUNT

Note: BA = Round Body, BFA = Square Finned Body
 See Magmotor Selection Guide to select NEMA or Face Mount



NEMA 23
 FLANGE MOUNT