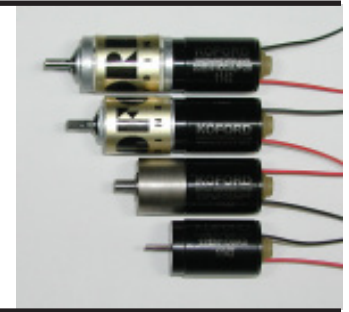


•Maximum rpm 30,000

•Rated power 21.8 watts

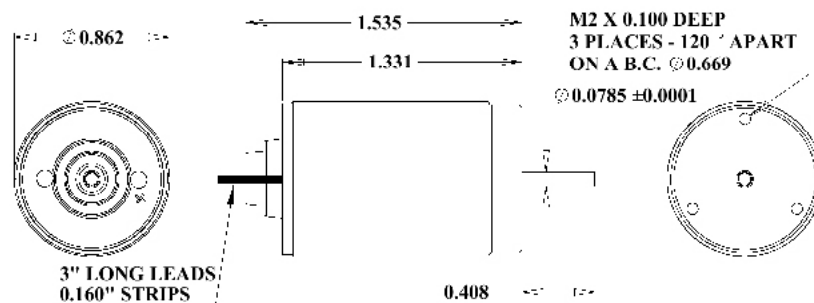
Neo rare earth magnets standard for high performance. Electrographite brushes for long motor life at high speeds. Available with EMI filters. Compact and cost efficient design makes it suitable for a variety of applications such as medical/dental handpieces, intermittent duty pumps, lab mixers stirrers, and battery powered tools. ABEC 3 ball bearing and M2 high speed steel shaft heat treated to Rc60-63 and Nickel/Phosphorous alloy plated and ground for maximum corrosion resistance. Housing black zinc plated. Available with all steel gear planetary gearboxes in 3.70 25.01 and 92.70 ratios. Custom ratios on request.



Motor Data

Winding		900	990	1000
Nominal supply voltage	volts	12	24	30
no load speed	rpm	15,000	23,990	30,000
Stall torque theoretical	oz-in	2.3	4.8	6.0
Continuous torque heat sink/no h.s.	oz-in	.8/.62	1.0/.55	1.0/.54
Motor constant Km	oz-in/√w	.50	.52	.52
Resistance	ohm	6.6	6.5	6.5
Peak output (1 amp)	watts	6.4	16.5	21.8
No load current max rpm	amp±50%	.050	.060	.061
No load current gradient	amp/krpm	.0006	.0006	.0006
Velocity constant	rpm/volt±12%	900	990	1,000
Torque constant Kt	oz-in/amp	1.30	1.33	1.34
Stall current theoretical	amps	1.82	3.69	4.6
Maximum efficiency	%	70	76	78
Armature inductance	mH	.60	.60	.60
Mechanical time constant	ms	14	14	14
Rotor inertia	10 ⁻⁴ oz-in-sec ²	.29	.29	.29
Thermal res. housing to ambient	°C/W	19	19	19
Thermal res. armature to housing	°C/W	3.5	3.5	3.5
Bearing rating dynamic	oz	464	464	464
Bearing axial (static)	oz	176	176	176
Weight		1.6 oz		

The motor current should be limited to 1 amp maximum to prevent damage. Maximum armature temperature 140°C Maximum case temperature 70°C Values based on winding and magnet temp. of 20°C



Ordering Information: phone 937-695-1275 • fax 937-695-0237 • www.koford.com • mail@koford.com

Example: Part Number 22B 1000 A / P4

Motor dia. and type _____ Gearbox P4=3.70:1, P25=25.01:1, P93=92.70

winding number _____

A=no emi filter B=internal filter cap _____

Planetary Gearheads

Construction is planetary with case hardened alloy steel gears, and double shielded ball bearings on output. Input speed for best life is 6,000 rpm or lower. Bearing lube rated for -35C to 140C. Low temp lube rated for -60 to 130C available on special order. Other ratios or custom gearboxes suitable for higher input speeds are available on special order.

3.70:1 L=.775 127 oz-in peak 85 oz-in cont.

90% eff.

25.01:1 L=1.039 149 oz-in peak 99 cont.

80% eff.

92.70:1 L=1.303 168 oz-in peak 112 cont.

70% eff.

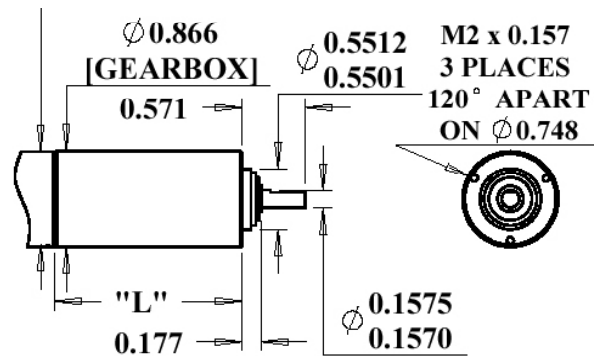
Weight 3.70:1=1.7 oz, 25.01:1=2.1 oz,

92.70:1=2.6 oz

Max backlash 3.70:1=1.5°, 25.01:1=2°, 92.70:1=2.5°

92.70:1=2.5°

Inertia 10^{-4} oz-in-sec² = .05



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