

Ultimag® Size 4EM

Part Number: 197124-0XX

All catalog products manufactured after April 1, 2006 are RoHS Compliant

Specifications

Dielectric Strength	1000 VRMS (23 awg); 1200 VRMS (24-33 awg)
Recommended Minimum Heat Sink	Maximum watts dissipated by the Ultimag are based on an unrestricted flow of air at 20°C, with the Ultimag mounted on the equivalent of an aluminum plate measuring 6-1/4" square by 1/8" thick (15.9 cm sq. x 0.32 cm)
Thermal Resistance	7.6°C/watt with heatsink; 15.0°C/watt without heatsink
Rotor Inertia	8.43 x 10 ⁻⁷ (kgm ²)
Peak Torque Rating (Tp)	45 oz.in. (0.32 Nm)
Power Input	145 watts (stalled at Tp; 25°C; Pp)
Number of Phases	1
Static Friction (Tf)	1 oz.in. max. (7mNm)
-3dB Closed Loop	78 Hz
Maximum Winding	180°C
Number of Poles	6
Weight:	7.6 oz. (215 gms)
Dimensions:	Ø1.625" x 1.04" L (Ø41.66 mm x 26.3 mm L) See page B10.



Performance

Maximum Duty Cycle	100%	50%	25%	10%
K _m (oz-in/√watt)	5.8	5.1	4.6	4.3
Maximum ON Time (sec) when pulsed continuously ¹	∞	40	15	4
Maximum ON Time (sec) for single pulse ²	∞	108	34	9
Typical Energize Time (msec) ³	6	5	4.5	3.5
Watts (@ 20°C)	14.5	29	58	145
Ampere Turns (@ 20°C)	510	721	1020	1613

Coil Data

awg (0XX) ⁴	Resistance (@20°C)	# Turns ⁵	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
23	0.71	104	3.2	4.5	6.4	10.1
24	1.54	174	4.7	6.7	9.4	14.9
25	2.15	195	5.6	7.9	11.2	17.6
26	3.01	219	6.6	9.3	13.2	20.9
27	5.78	328	9.2	12.9	18.3	28.9
28	8.09	368	10.8	15.3	21.7	34.3
29	14.40	515	14.5	20.4	28.9	45.7
30	20.11	575	18.9	24.2	37.7	59.6
31	34.40	774	22.3	31.6	44.6	71.0
32	56.60	1008	28.7	40.5	57.0	91.0
33	91.40	1288	36.0	51.5	73.0	115.0

How to Order

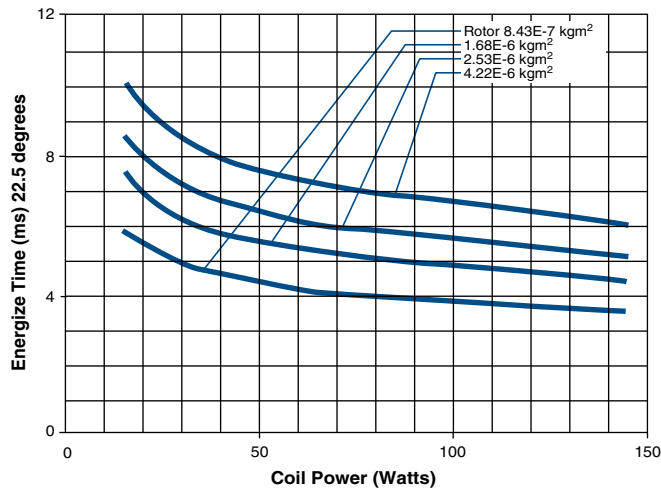
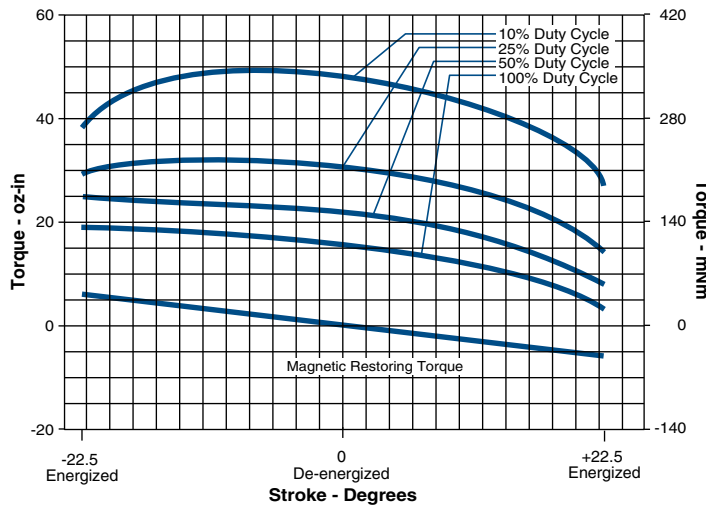
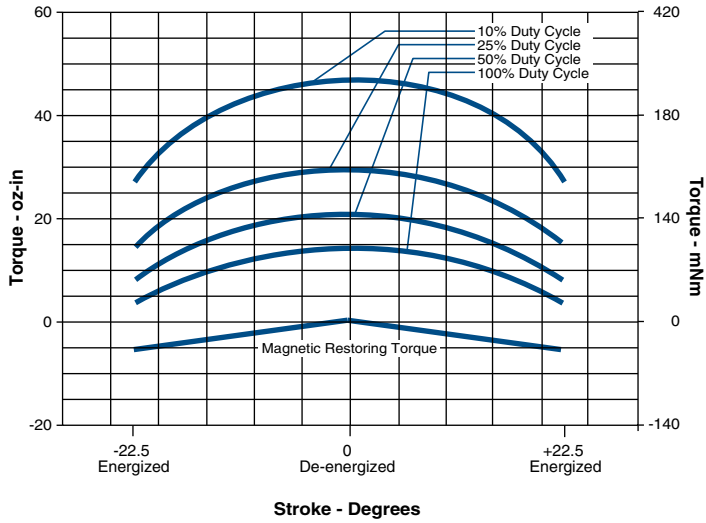
Add the coil awg number (0XX) to the part number (for example: to order a 25% duty cycle rated at 18.5 VDC, specify 197124-027).

Please see www.ledex.com (click on Stock Products tab) for our list of stock products available through our North American distributors.

- ¹ Continuously pulsed at stated watts and duty cycle
- ² Single pulse at stated watts (with coil at ambient room temperature 20°C)
- ³ Typical energize time based on no load condition. Times shown are for half of full rotary stroke starting at center-off position.
- ⁴ Other coil awg sizes available — please consult factory
- ⁵ Reference number of turns

WARNING: Exposed Magnet may affect pacemakers. In the event a product unit's magnet is exposed due to product disassembly, Pacemaker Wearers should distance themselves 10 feet from exposed magnet.

All specifications subject to change without notice.



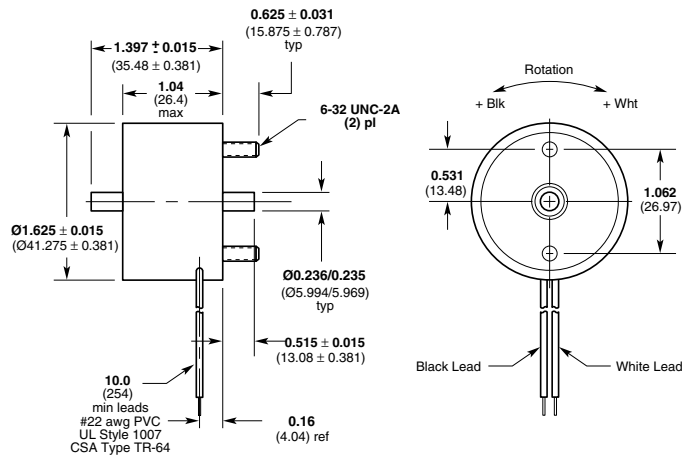
Torque values for reference only.

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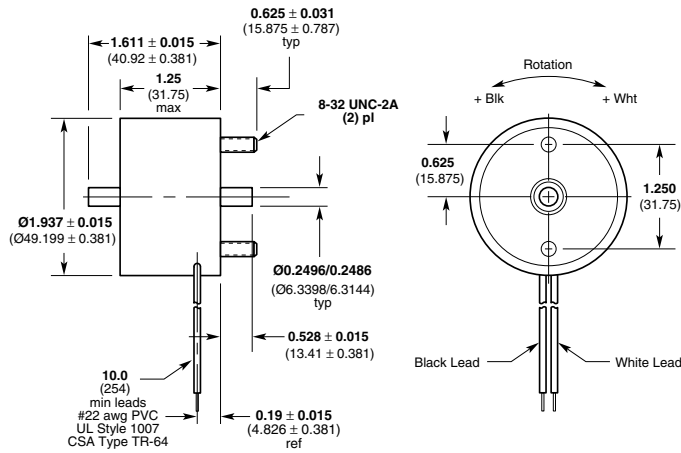
Ultimag® Dimensions

inches (mm)

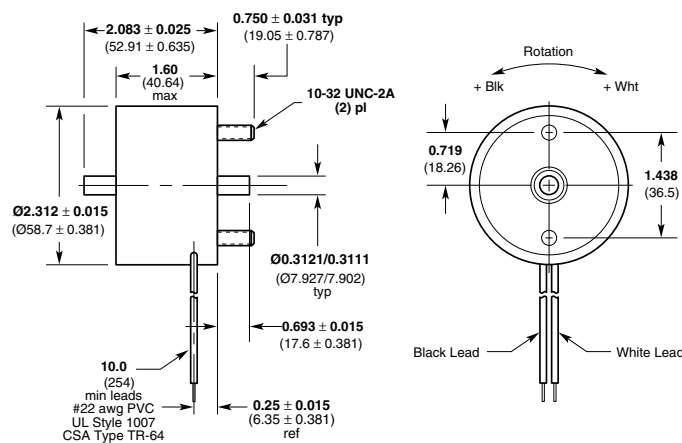
4EM



5EM



6EM



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