



**STANDARD FEATURES**  
**MOTOR: IRONLESS CORE LINEAR MOTOR**  
**FORCE CONSTANT: 8.9 N/AMP**  
**PEAK FORCE: 84 N**  
**TRAVEL: 50mm**  
**SPEED: > 1 m/sec**  
**ENCODER RESOLUTION: ANALOG 1 VOLT, PEAK TO PEAK**  
**5nm RESOLUTION WITH 4096x INTERPOLATION**  
**OPTIONAL: 5um, 1um, 0.5um, 0.1um, 0.05um, 0.02um\*\*, AND 0.01um\*\***  
**(\*\* REDUCED SPEEDS APPLY)**  
**SYSTEM REPEATABILITY: +/- 2 ENCODER COUNTS (CONTROLLER DEPENDENT)**  
**HOME SENSOR: STANDARD**  
**BEARINGS: PRECISION ANTI-SKID CROSSED ROLLERS ~ 2.0um PARALLELISM**  
**BEARING DYNAMIC LOAD RATING: 14kN**  
**ENCLOSURES: ALUMINUM 6061-T6 STAINLESS STEEL OPTIONAL**  
**ENVIRONMENT: STANDARD, CLEAN ROOM, VACUUM 10e-6 TORR (CONSULT FACTORY)**  
**TEMPERATURE: 0 to 100 DEG C**  
**HUMIDITY: 10% to 80% NON-CONDENSING**  
**ASSEMBLY MASS: 1.9 kg**  
**MOVING MASS: 1.1 kg**

**ACCESSORIES**  
**MOTOR AMPLIFIER**  
**DIGITAL ENCODER INTERPOLATOR**

**OPTIONAL EQUIPMENT**  
**MOTION CONTROLLERS**

**CUSTOM DESIGNS FOR OEM INTEGRATION**

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DRAWN NBROWN		2/15/2006			
CHECKED					
Tolerances: x.x ± .04 in x.xx ± .02 in x.xxx ± .005 in				TITLE  <b>AI-LM-5000</b>	
MATERIAL				SIZE B	REV 002
FINISH SEE NOTES				DWG NO 0010-00700	SCALE
				ALIO STD TEMPLATE - REV 005	SHEET 1 OF 1