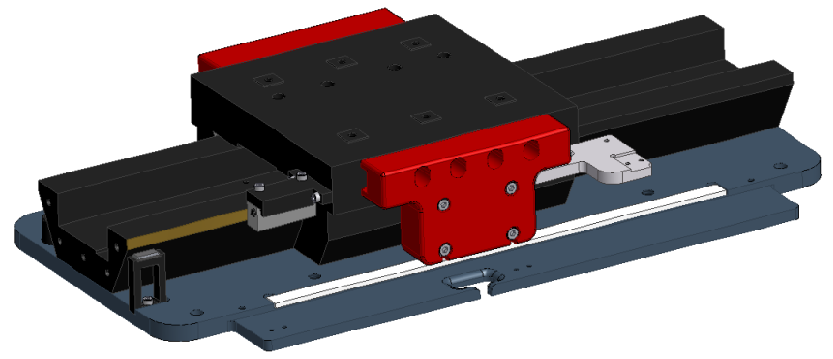
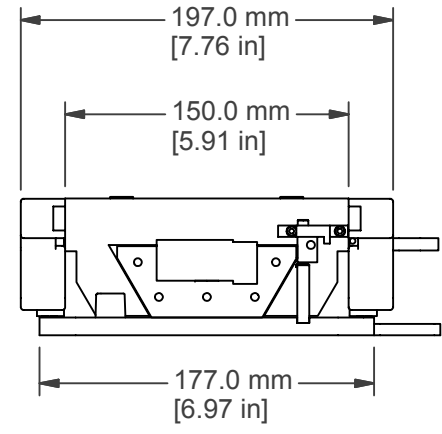


**AIR QUALITY**  
 AIR SUPPLY MUST BE FREE OF CONTAMINANTS AND MOISTURE. FILTERED AIR SUPPLY TO ISO 8573.1 QUALITY CLASS 3

**CLASS: 3 (RECOMMENDED)**  
 DIRT: 5 MICRON PARTICAL SIZE OR SMALLER  
 WATER: -4 F, PRESSURE DEWPOINT (128 ppm. vol.) AT 100 psig  
 OIL: 1.0 mg/m<sup>3</sup> (INCLUDING VAPOR)

**CLASS: 4 (MINIMUM)**  
 DIRT: 15 MICRON PARTICAL SIZE OR SMALLER  
 WATER: +37.4 F, PRESSURE DEWPOINT (940 ppm. vol.) AT 100 psig  
 OIL: 5 mg/m<sup>3</sup> (INCLUDING VAPOR)



**STANDARD FEATURES**  
 MOTORS: DUAL HR-4, MAX FORCE 30 to 36 N  
 TRAVEL: 200mm  
 SPEED: 250mm/sec MAX.  
 ENCODER OUTPUT: ANALOG 1 Vp-p (STANDARD)  
 OPTIONAL: 5um, 1um, 0.5um, 0.1um, 50nm, 20nm, 10nm, or 5nm USING 4096 INTERPOLATION. (CONTROLLER DEPENDENT) (CONSULT FACTORY FOR ADDITIONAL REQUIREMENTS)  
 SYSTEM REPEATABILITY: +/- 2 ENCODER COUNTS (CONTROLLER DEPENDENT)  
 HOME: STANDARD  
 BEARINGS: PRECISION AIR BEARING  
 NOT TO EXCEED AIR QUALITY SPECIFICATION  
 ENCLOSURES: ALUMINUM  
 ATMOSPHERES: STANDARD & CLEAN ROOM  
 TEMPERATURE: 10 to 35 DEG C  
 HUMIDITY: 10% to 80% NON-CONDENSING  
 ASSEMBLY MASS: 7.6 kg (MOVING MASS: 1.9 kg)

**AIR BEARING PERFORMANCE SPECIFICATIONS**  
 OPERATING PRESSURE: 60 PSIG TO 80 PSIG, 120 PSIG MAX.  
 MAXIMUM LOAD RATING: 63 kg (139 lbs) (@ 60 psig)  
 HORIZONTAL STRAIGHTNESS: 0.25 um / 25 mm (10 micro-inch /inch)  
 VERTICAL STRAIGHTNESS: 0.25 um / 25 mm (10 micro-inch /inch)  
 HORIZONTAL STIFFNESS: 105\*10e6 N/m (600,000 lbs/in)  
 VERTICAL STIFFNESS: 250\*10e6 N/m (1,400,000 lbs/in)  
 PITCH MOMENT: 20 N-m (177 in-lbs)  
 ROLL MOMENT: 24 N-m (212 in-lbs)  
 YAW MOMENT: 10 N-m (89 in-lbs)  
 ALL SPECIFICATIONS LISTED FOR 60 psig OPERATING PRESSURE  
 LOADING, STIFFNESS, AND MOMENT SPECIFICATIONS INCREASE AT HIGHER OPERATING PRESSURES

**ACCESSORIES**  
 MOTOR AMPLIFIERS

**OPTIONAL EQUIPMENT**  
 MOTION CONTROLLERS

CUSTOM DESIGNS FOR OEM INTEGRATION

**USE IN-LINE PRESSURE SWITCH TO KILL MOTOR POWER IF AIR PRESSURE DROPS BELOW RATED OPERATING VALUE**

**DO NOT OPERATE UNLESS AIR PRESSURE IS APPLIED!**

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DRAWN Dan Crews 10/12/2004			
CHECKED			
Tolerances: x.x ± .04 in x.xx ± .02 in x.xxx ± .005 in		TITLE <b>AI-D4-20000E-AB</b>	
MATERIAL		SIZE B	REV 001
SCALE		DWG NO 0010-00911	SHEET 1 OF 1