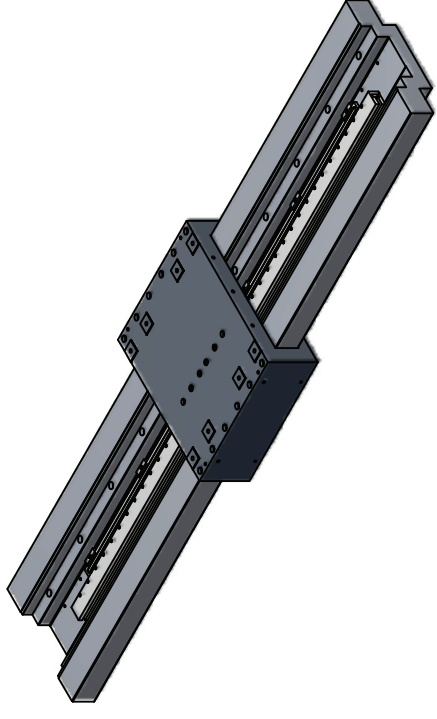




ALIO STAGE AND MOTOR SPECIFICATIONS



MODEL	UNITS	AI-LM-100000-AB-BR
TRAVEL	mm	1000
MAX VELOCITY [7]	m/s	2.0
MAX ACCELERATION [7]	G	2.0
ASSEMBLY MASS	kg	29
X MOVING MASS	kg	11.3
MAX Z LOAD	N	1000
MAX Y LOAD	N	400
MAX PITCH MOMENT	N-m	
MAX ROLL MOMENT	N-m	
MAX YAW MOMENT	N-m	
VERTICAL Z STIFFNESS	N/um	
HORIZONTAL Y STIFFNESS	N/um	
AIR SUPPLY REQUIRED [7]	psi	60-100
AIR CONSUMPTION	NLPM	18

CONSULT ALIO
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MOTOR INFORMATION	DEFAULT MOTOR
MOTOR TYPE	LINEAR BRUSHLESS
MOTOR MODEL [6]	P12-1
MAGNETIC PITCH (N-N)	30.48
MAX VOLTAGE (LINE TO LINE) [1]	V
ELECTRICAL TIME CONSTANT	msec
MAX MOTOR TEMP	°C
DELTA CONNECTION	
FORCE CONSTANT	N/Apk
PHASE RESISTANCE (@25° C) [2]	Ohm
PHASE RESISTANCE (@130° C) [2]	Ohm
INDUCTANCE	mH
CONTINUOUS FORCE [3]	N
CONTINUOUS CURRENT [3]	Apk
PEAK FORCE [4]	N
PEAK CURRENT [4]	Apk
BACK EMF CONSTANT	V/m/s
WYE CONNECTION	
FORCE CONSTANT	N/Apk
PHASE RESISTANCE (@25° C) [2]	Ohm
PHASE RESISTANCE (@130° C) [2]	Ohm
INDUCTANCE	mH
CONTINUOUS FORCE [3]	N
CONTINUOUS CURRENT [3]	Apk
PEAK FORCE [4]	N
PEAK CURRENT [4]	Apk
BACK EMF CONSTANT	V/m/s

OPTIONAL MOTORS	
LINEAR BRUSHLESS	
P12-2	P12-3
30.48	30.48
500	500
0.19	0.19
130	130
16.3	24.4
11.6	17.4
16.4	24.6
2.1	3.2
47	71
2.9	2.9
151	226
9.2	9.2
16.3	24.4
28.2	42.3
34.7	52.1
49.1	73.7
6.4	9.6
47	71
1.7	1.7
151	226
5.4	5.4
28.2	42.3

Notes:

1. Back EMF plus IR drop must not exceed maximum line to line voltage.
2. Resistance values do not include cable resistance. Cable resistance adds 0.146 ohm/m for Delta connection and 0.44 ohm/m for Wye Connection.
3. Continuous operating limits are based on continuous operation at maximum temperature with aluminum heat sink (300mm x 12.5mm x motor length).
4. Maximum on time at peak operating limits is 10 seconds.
5. All specifications may vary by 12% from listed values.
6. Additional motor options are available for optimized performance as necessary per customer requirements.
7. Specifications are dependent on load and center of gravity.

AIR QUALITY REQUIREMENTS
 AIR SUPPLY MUST BE FREE OF CONTAMINANTS
 AND MOISTURE (<85% RELATIVE HUMIDITY). FILTERED
 AIR SUPPLY TO ISO 8573.1 QUALITY CLASS 3 OR BETTER

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

CLASS: 2 (RECOMMENDED)
 DIRT: 1 MICRON PARTICAL SIZE OR SMALLER
 WATER: -40 F, PRESSURE DEWPOINT
 (16 ppm. vol.) AT 100 psig
 OIL: 1 mg/m**3 (INCLUDING VAPOR)

ALIO INDUSTRIES PROPRIETARY INFORMATION
 (Tel) 303.339.7500 - SALES@ALIOINDUSTRIES.COM - WWW.ALIOINDUSTRIES.COM



DRAWN
 NBROWN
 CHECKED
 5/12/2012

TITLE

AI-LM-(TRAVEL)00-AB-BR

SIZE

B

DWG NO

0010-08018

REV

001

SCALE

ALIO STD TEMPLATE - REV 006 | SHEET 1 OF 1

SEE NOTES

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3

4

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