

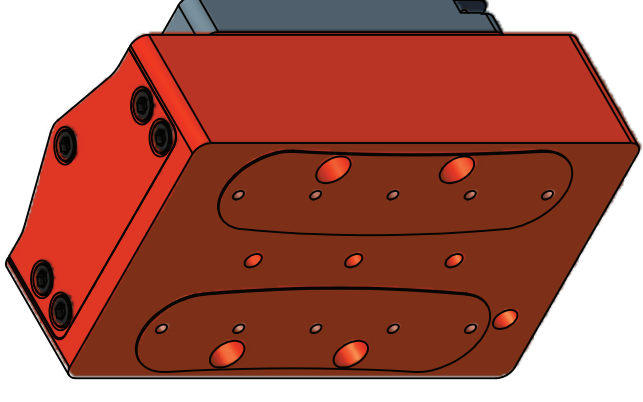


# ALIO STAGE AND MOTOR SPECIFICATIONS

MODEL	UNITS	AI-LM-2500-Z-MCB-2N	AI-LM-2500-Z-MCB-7N	AI-LM-2500-Z-MCB-15N
TRAVEL	mm	25		
TRAVEL BETWEEN HARD STOPS	mm	32		
MAX PAYLOAD [6]	N	2.5 N	7.5 N	15 N
PAYLOAD RANGE [6]	N	0 - 2.5 N	2.5 - 7.5 N	7.5 - 15 N
VACUUM COMPATIBLE	Y/N	YES		
MAX VELOCITY	m/s	0.1		
MAX ACCELERATION	G	0.5		
ASSEMBLY MASS	kg	1.9		
MOVING MASS	kg	1.3		
MOTOR INFORMATION				
MOTOR TYPE	--	LINEAR BRUSHLESS		
MOTOR MODEL	--	P12-1		
MAGNETIC PITCH (N-N)	mm	30.48		
MAX VOLTAGE (LINE TO LINE) [1]	V	500		
ELECTRICAL TIME CONSTANT	msec	0.19		
MAX MOTOR TEMP	°C	130		
DELTA CONNECTION [5]				
FORCE CONSTANT	N/Apk	8.1		
PHASE RESISTANCE (@25° C) [2]	Ohm	5.8		
PHASE RESISTANCE (@130° C) [2]	Ohm	8.2		
INDUCTANCE	mH	1.1		
CONTINUOUS FORCE [3,10]	N	23		
CONTINUOUS CURRENT [3]	Apk	2.9		
PEAK FORCE [4,10]	N	75		
PEAK CURRENT [4]	Apk	9.2		
BACKEMF CONSTANT	V/m/s	8.1		
WYE CONNECTION [5]				
FORCE CONSTANT	N/Apk	14.1		
PHASE RESISTANCE (@25° C) [2]	Ohm	17.4		
PHASE RESISTANCE (@130° C) [2]	Ohm	24.6		
INDUCTANCE	mH	3.2		
CONTINUOUS FORCE [3]	N	23		
CONTINUOUS CURRENT [3]	Apk	1.7		
PEAK FORCE [4]	N	75		
PEAK CURRENT [4]	Apk	5.4		
BACKEMF CONSTANT	V/m/s	14.1		

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 0.66 ohm/m for Delta connection and 0.99 ohm/m for Wye Connection.
3. Continuous operating limits are based on continuous operation at maximum temperature with a 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. Payload must be specified at time of order. Higher payload options available upon special request.



DRAWN  
NBROWN  
CHECKED



TITLE

**AI-LM-(TRAVEL)00-Z-MCB-  
(MAX PAYLOAD)**

SIZE  
B

DWG NO

0010-08033

REV

001

FINISH  
SEE NOTES

SCALE

ALIO STD TEMPLATE - REV 006 | SHEET 1 OF 1

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