

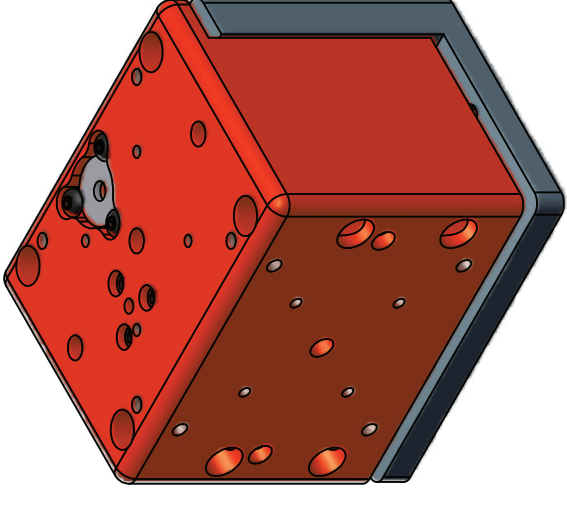


# ALIO STAGE AND MOTOR SPECIFICATIONS

MODEL	UNITS	AI-VC-600-Z-SCB
TRAVEL [7]	mm	6
MAX VELOCITY	m/s	0.1
MAX ACCELERATION	G	0.2
ASSEMBLY MASS	kg	0.9
MOVING MASS	kg	0.5
MAX PAYLOAD [8]	kg	2.5
COUNTERBALANCE [9]	--	VARIOUS
MOTOR INFORMATION		
MOTOR TYPE	--	VOICE COIL
MOTOR MODEL	--	VC12-17
MAGNETIC PITCH (N-N)	mm	--
MAX VOLTAGE (LINE TO LINE) [1]	V	17
ELECTRICAL TIME CONSTANT	msec	0.3
MAX MOTOR TEMP	°C	155
DELTA CONNECTION [5]		
FORCE CONSTANT	N/Apk	7.3
PHASE RESISTANCE (@25° C) [2]	Ohm	2.8
PHASE RESISTANCE (@130° C) [2]	Ohm	--
INDUCTANCE	mH	0.9
CONTINUOUS FORCE [3,10]	N	15
CONTINUOUS CURRENT [3]	Apk	2.1
PEAK FORCE [4,10]	N	44
PEAK CURRENT [4]	Apk	6.0
BACKEMF CONSTANT	V/m/s	7.3
WYE CONNECTION [5]		
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	--
BACKEMF CONSTANT	V/m/s	--

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 Del
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. Delta connection applies only to linear brushless motor.
6. All specifications may vary by 12% from listed values.
7. Travel listed is travel between hard stops.
8. Higher payload options available upon special request.
9. Multiple force springs are provided with every unit for user adjustability of counterbalance force. See spring installation instructions.
10. Voice coil peak and continuous forces are reduced by 25% at the ends of travel.



DRAWN	5/12/2012		
CHECKED			
TITLE			
AI-(MOTOR)-(TRAVEL)00-Z-SCB			
SIZE	DWG NO	REV	
B	0010-08034	001	
FINISH	SCALE	SHEET	OF
SEE NOTES	2	1	1

ALIO INDUSTRIES PROPRIETARY INFORMATION  
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Tolerances: x.x ± .05 in [1.3 mm]	Surface Roughness: ✓ RMS MAX.
x.xx ± .01 in [0.25 mm]	
x.xxx ± .005 in [0.13 mm]	
Angles ± 0.5°	
MATERIAL	

