AMTI
FORCE AND MOTION

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Multi-axis Force Transducer Calibration Data
Model: MC3A-1000   Serial Number: M6024M

Calibration Filed under M6024M.1
Calibrated on: 6/5/2017

GENERAL USE   (Only main sensitivity terms)

The 'Sensitivities' (output/input) for each channel are:
-------- Forces --------   -------- Moments --------

	uV/V x N	uV/V x lb		uV/V x N-m	uV/V x in-lb
Fx	.69027	3.07034	Mx	38.46732	4.34610
Fy	.69553	3.09370	My	38.51579	4.35158
Fz	.15820	.70367	Mz	29.43779	3.32593

Location of the center of the top plate relative
to the effective XYZ center of the transducer.

x_o = 0.048 y_o = -0.116 z_o = -34.578   [millimeters]
x_o = 0.002 y_o = -0.005 z_o = -1.361   [inches]

ADVANCED USE   (Sensitivity Matrix Analysis) M6024M

SI Units: SENSITIVITY MATRIX S(i, j)
Output of channel i (uV/Vex) is S(i,j) times the
mechanical input j (N, N-m)

j i	Fx	Fy	Fz	Mx	My	Mz
Vfx|	.69027	.01044	.00023	-.14107	.32272	-.00406
Vfy|	.00787	.69553	.00034	-.30986	-.04318	-.59651
Vfz|	-.00240	-.00307	.15820	.04732	.01491	-.04599
Vmx|	-.00002	-.01804	-.00448	38.46732	.09438	-.49843
Vmy|	-.01806	-.01782	-.00185	.36547	38.51579	-.23251
Vmz|	.00133	.02192	.00021	.05768	.00779	29.43779

SI Units: INVERTED SENSITIVITY MATRIX B(i, j)
Input to channel i (N, N-m) is B(i,j) times the
electrical output j (uV/Vex)

j i	VFx	VFy	VFz	VMx	VMy	VMz
fx|	1.44862	-.02192	-.00208	.00525	-.01217	-.00026
fy|	-.01642	1.43741	-.00274	.01146	.00172	.02933
fz|	.02156	.02699	6.32082	-.00747	-.00258	.01028
mx|	-.00001	.00066	.00073	.02600	-.00006	.00045
my|	.00067	.00064	.00029	-.00024	.02596	.00021
mz|	-.00005	-.00107	-.00004	-.00006	-.00001	.03395

USC Units: SENSITIVITY MATRIX S(i, j)
Output of channel i (uV/Vex) is S(i,j) times the
mechanical input j (lb/in-lb)

j i	Fx	Fy	Fz	Mx	My	Mz
Vfx|	3.07034	.04644	.00104	-.01594	.03646	-.00046
Vfy|	.03502	3.09370	.00150	-.03501	-.00488	-.06740
Vfz|	-.01067	-.01365	.70367	.00535	.00168	-.00520
Vmx|	-.00007	-.08025	-.01992	4.34610	.01066	-.05631
Vmy|	-.08035	-.07925	-.00825	.04129	4.35158	-.02627
Vmz|	.00590	.09749	.00093	.00652	.00088	3.32593

USC Units: INVERTED SENSITIVITY MATRIX B(i, j)
Input of channel i (uV/Vex) is B(i,j) times the
electrical output j (uV/Vex)

j i	VFx	VFy	VFz	VMx	VMy	VMz
fx|	.32568	-.00493	-.00047	.00118	-.00274	-.00006
fy|	-.00369	.32316	-.00062	.00258	.00039	.00659
fz|	.00485	.00607	1.42105	-.00168	-.00058	.00231
mx|	-.00006	.00586	.00649	.23013	-.00056	.00402
my|	.00595	.00569	.00261	-.00212	.22976	.00190
mz|	-.00047	-.00948	-.00039	-.00053	-.00007	.30047