

GMW Associates
Electromagnet Excitation Data
Field Vs Current

Contract No:		Date:	July 10, 2014
Customer:	GMW	Fixed Axis:	Engr: Greg Douglas
Model:	3470	Power Supply:	Set Currents: 0 to 8A
Serial No:	None	Serial No:	Target Field:
Pole Face:	NO-POLES	Teslameter:	Probe:
Serial No:	None	Serial No:	Serial No:
Pole Gap:	NONE	Notes: Data taken in Magneto simulation software	
Pole Spacers:	none	Field decreases if coil moved from min to max position	
		Field Difference at 8A = 59.4%	

Current Amps	Field T (Bz) Min Coil Gap	Field T (Bz) Mid Coil Gap	Field T (Bz) Max Coil Gap	Field mT (Bz) Min Coil Gap	Field mT (Bz) Mid Coil Gap	Field mT (Bz) Max Coil Gap	Field T (Bz)
0.0	0.00000	0.00000	0.00000	0.0	0.0	0.0	0.00000
0.5	0.00550	0.00430	0.00345	5.5	4.3	3.4	0.00000
1.0	0.01099	0.00860	0.00690	11.0	8.6	6.9	0.00000
1.5	0.01649	0.01290	0.01034	16.5	12.9	10.3	0.00000
2.0	0.02199	0.01720	0.01379	22.0	17.2	13.8	0.00000
2.5	0.02748	0.02151	0.01724	27.5	21.5	17.2	0.00000
3.0	0.03298	0.02581	0.02069	33.0	25.8	20.7	0.00000
3.5	0.03848	0.03011	0.02414	38.5	30.1	24.1	0.00000
4.0	0.04398	0.03441	0.02759	44.0	34.4	27.6	0.00000
4.5	0.04948	0.03872	0.03104	49.5	38.7	31.0	0.00000
5.0	0.05498	0.04302	0.03449	55.0	43.0	34.5	0.00000
5.5	0.06048	0.04733	0.03794	60.5	47.3	37.9	0.00000
6.0	0.06598	0.05163	0.04139	66.0	51.6	41.4	0.00000
6.5	0.07148	0.05593	0.04484	71.5	55.9	44.8	0.00000
7.0	0.07697	0.06024	0.04829	77.0	60.2	48.3	0.00000
7.5	0.08247	0.06454	0.05174	82.5	64.5	51.7	0.00000
8.0	0.08797	0.06885	0.05519	88.0	68.8	55.2	0.00000
Current Amps	Field T (Bz)	Field T (Bz)	Field T (Bz)	Field T (Bz)	Field T (Bz)	Field T (Bz)	Field T (Bz)
0.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1.5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2.5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
3.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
3.5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
4.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
4.5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5.5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
6.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
6.5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
7.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
7.5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
8.0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

GMW Associates

Electromagnet Excitation Plot

Field Vs Current at Different Coil Positions

Contract No: Customer: GMW Model: 3470 Serial No: None Pole Face: NO-POLES Serial No: None Pole Gap: 02mm Pole Spacers: none	Fixed Axis: Power Supply: Serial No: Teslameter: Serial No: Notes: Data taken in Magneto simulation software Field decreases if coil moved from min to max position Field Difference at 8A = 59.4% Note: Data plotted in millitesla	Date: July 10, 2014 Engr: Greg Douglas Set Currents: 0 to 8A Target Field: Probe: Serial No:
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