



MODEL NO.	"A"	"B"	MATERIAL	CORRECTED LINEARITY AT DISPLAY	LINEARITY AT UNCORRECTED ANALOG OUTPUT	FREQUENCY RANGE	SENSITIVITY	ACTIVE AREA	OPERATING TEMPERATURE RANGE	TEMPERATURE STABILITY		HALL DEVICE TYPE	TEMPERATURE COMPENSATED See Note 4.0
										ZERO	CAL		
ZOA83-3208-10 ZOA83-3208-30	8.0" ± 0.125 "	0.312" ± 0.005 "	ALUMINUM 3003 3/4 F.H	0.25%/10kG	1.0%/10kG	DC - 400Hz	1X	.060" DIA. (NOM)	0°C TO +75°C	± 0.1 GAUSS/°C	$-0.04\%/^{\circ}\text{C}$	YB-2053	NO
ZOA83-3208-10-T ZOA83-3208-30-T										± 0.06 GAUSS/°C	$-0.02\%/^{\circ}\text{C}$		YES

SPECIFICATIONS

- 1.0 GENERAL DESCRIPTION**
 8000 SERIES 3-AXIS PROBES ARE PRECISION MAGNETIC FIELD SENSORS WHICH PROVIDE 3-AXIS FIELD MEASUREMENT CAPABILITY WHEN USED WITH F.W. BELL, INC. GAUSSMETERS THREE (3) MATCHED HALL ELEMENTS ARE MOUNTED MUTUALLY PERPENDICULAR TO EACH OTHER TO MEASURE THE X, Y AND Z COMPONENTS OF THE FIELD.
- 2.0 ELECTRICAL AND PHYSICAL SPECIFICATIONS**
- 2.1 SPECIFICATION DETAILS : REFER TO TABLE.
- 2.2 ELECTRICAL SCHEMATIC : U2-6277
- 2.3 STORAGE TEMPERATURE RANGE : -55°C TO +100°C
- 2.4 WEIGHT : NET - 4 LBS
SHIPPING - 10 LBS
- 3.0 CALIBRATION**
- 3.1 CALIBRATION IS REFERENCED TO A LABORATORY STANDARD MAGNET. THIS STANDARD IS MEASURED BY THE NUCLEAR MAGNETIC RESONANCE (NMR) TECHNIQUE WHICH IS BASED ON ACCEPTED VALUES OF NATURAL PHYSICAL CONSTANTS.
- 3.2 PROBES ARE CALIBRATED TO INDICATED ACCURACY OVER THE SPECIFIED GAUSS RANGE WHEN USED WITH THE APPROPRIATE F. W. BELL GAUSSMETER. USE BEYOND THESE RANGES WILL SHOW LINEARITY ERROR GREATER THAN THE SPECIFICATIONS.
- 3.3 GAUSSMETER ERRORS MUST BE ADDED TO PROBE ERRORS TO OBTAIN OVERALL MEASURING ACCURACY.
- 4.0 TEMPERATURE COMPENSATION**
- 4.1 COMPENSATED PROBES CONTAIN A THERMISTOR TO MONITOR PROBE TIP TEMPERATURE. THE COMPENSATION IS PERFORMED BY THE GAUSSMETER FOR IMPROVED ACCURACY ON THE DISPLAY, COMMUNICATION BUS AND CORRECTED ANALOG OUTPUT. PERFORMANCE AT UNCORRECTED ANALOG OUTPUT IS SAME AS UNCOMPENSATED PROBE.

REF	QTY	ITEM NO.	DRAWING NO.	DESCRIPTION
UNLESS OTHERWISE SPECIFIED: DIMENSIONS IN INCHES (DO NOT SCALE TO DWG)				 TITLE SPECIFICATION, 3 AXIS 8000 SERIES PROBES SHT 1 OF 1 DWG NO. U1-6278 REV —
SCALE		None	DRN 07-30-09 GG	
DEC±		.005	APPD 10-29-12 UAG	
FRAC±		—	QA APPD 10-26-12 JSS	
ANG±		—	REL 10-29-12 LNP	