



	Model FW5170	Model FW5180
包含探头	√	√
自动校零	√	√
最大/小值保持	√	√
真有效值	√	√
自动量程	√	√
峰值保持	×	√
相对模式	×	√
模拟输出	×	√
USB 通信口	×	√

技术参数

Model	FW5170	FW5180
基本精度	2%	1.1%
频率带宽	DC~20KHz	DC~25KHz
显示更新速率		
屏幕显示	4 次/秒	4 次/秒
模拟输出	无	100,000 次/秒
量程		
低场探头(专用)	1G	1G
低量程	200G	300G
中量程	2KG	3KG
高量程	20KG	30KG
分辨率		
低场探头(专用)	1mG	1mG
低量程	0.1G	0.1G
中量程	1.0G	1.0G
高量程	10G	10G
显示	LCD	LCD
显示位数	3 1/2	3 2/3
显示单位	高斯, 特斯拉, 安培/米	
模拟输出	无	±3V FS
通讯口	无	USB 通信
工作温度	0℃~50℃	
存储温度	-25℃~70℃	
电源	4 节 AA 碱性电池/电源适配器	
尺寸	6.9in×3.9in×1.44in/17.52cm×9.9cm×3.66cm	

探头和附件

型号	描述
FW5180 高斯计探头	
HTD18-0604	4 英寸(10.16cm)径向探头
STD18-0404	4 英寸(10.16cm)径向探头 (标配探头)
STD18-0402	2 英寸(5.08cm)径向探头
SAD18-1904	4 英寸(10.16cm)轴向探头
SAD18-1902	2 英寸(5.08cm)轴向探头
FW5170 高斯计探头	
HTH17-0604	4 英寸(10.16cm)径向探头
STH17-0404	4 英寸(10.16cm)径向探头 (标配探头)
STH17-0402	2 英寸(5.08cm)径向探头
SAH17-1904	4 英寸(10.16cm)轴向探头
SAH17-1902	2 英寸(5.08cm)轴向探头
FW5170/FW5180 高斯计探头	
STB1X-0201	超薄径向探头(厚度: 0.02 英寸/0.508mm)
MOS51-3204	低场探头
FW5170/FW5180 高斯计配件	
YA-111	校零盒 (适用于轴向、径向、低场探头)
PSRD-5	电源适配器, +5VDC 输出、110VAC 输入
PSRI-5	电源适配器, +5VDC 输出、220VAC 输入

注: 产品规格如有更改, 恕不另行通知。



Description

The 5100 Series Hall effect portable gaussmeters represent the most recent design from the world leader in magnetic measuring equipment. This new design incorporates the use of digital signal processing technology making it the world's first hand-held gaussmeter to have a digital signal processor (DSP) on board. F.W. Bell's exclusive Dynamic Probe Correction allows measurements from 0 to 30 kG with a basic accuracy of 1%.

Key features include Auto Zero, Min./Max./Peak Hold, Auto Range and Relative Mode. Both models allow the user to select Gauss, Tesla or Ampere/Meter readings. The 5180 features a corrected analog output ($\pm 3V$ FS) and a USB communication port.

The 5100 Series Hand-Held Gaussmeter's built-in software eliminates the need for complex calibration procedures. User prompts on the custom formatted LCD allow fast, simple push button operation. All models come equipped with a detachable transverse probe, zero gauss chamber, instruction manual, hard carrying case, and four AA batteries. Axial, ultra thin transverse and low-field probes are available as options.

Applications for the 5100 Series range from the most sensitive laboratory environment to the most rugged industrial setting. All instruments are CE compliant.

Features

	Model 5170	Model 5180
Probe Included	X	X
Auto Zero	X	X
Min/Max Hold	X	X
True RMS	X	X
Auto Range	X	X
True Peak Hold		X
Relative Mode		X
Outputs (analog)		X
USB Communication Port		X

Model	5170	5180
Basic DC Accuracy	2%	1.1%
Frequency Bandwidth	DC-20 kHz	DC-25 kHz
Update Rates		
Display	4 readings/sec	4 readings/sec
Analog Output	None	100K samples/sec
Ranges		
Ultra Low Range (low-field probe only)	1 G	1 G
Low Range	200 G	300 G
Mid Range	2 kG	3 kG
High Range	20 kG	30 kG
Resolution		
Ultra Low Range (low-field probe only)	1 mG	1 mG
Low Range	0.1 G	0.1 G
Mid Range	1.0 G	1.0 G
High Range	10 G	10 G
Display	LCD	LCD
Digits	3 1/2	3 2/3
Readings	Gauss, Tesla, Amps/Meter	Gauss, Tesla, Amps/Meter
Analog Output	None	±3V FS
Communication Port	None	USB (1 samples/sec)

General Information

All Models

Temperature	
Operating	0°C to 50°C
Storage	-25°C to 70°C
Power	4 AA batteries
Size	6.9 in x 3.9 in x 1.44 in.

Probes and Accessories

Model Number	Description
Model 5180 Probes	
HTD18-0604	4" Transverse Probe
STD18-0404	4" Transverse Probe (incl. w/5180)
STD18-0402	2" Transverse Probe
SAD18-1904	4" Axial Probe
SAD18-1902	2" Axial Probe
Model 5170 Probes	
HTH17-0604	4" Transverse Probe
STH17-0404	4" Transverse Probe (incl. w/5170)
STH17-0402	2" Transverse Probe
SAH17-1904	4" Axial Probe
SAH17-1902	2" Axial Probe
Models 5170/5180 Gaussmeter Probes	
STB1X-0201	Ultra Thin Transverse Probe (0.020" thick)
MOS51-3204	Low Field Probe

Models 5170/5180 Gaussmeter Accessories

YA-111	Zero Gauss Chamber (for axial, transverse and low-field probes)
PSRD-5	AC Adapter, +5VDC Regulated Output, 110VAC Input, Domestic
PSRI-5	AC Adapter, +5VDC Regulated Output, 220VAC Input, Switching, International

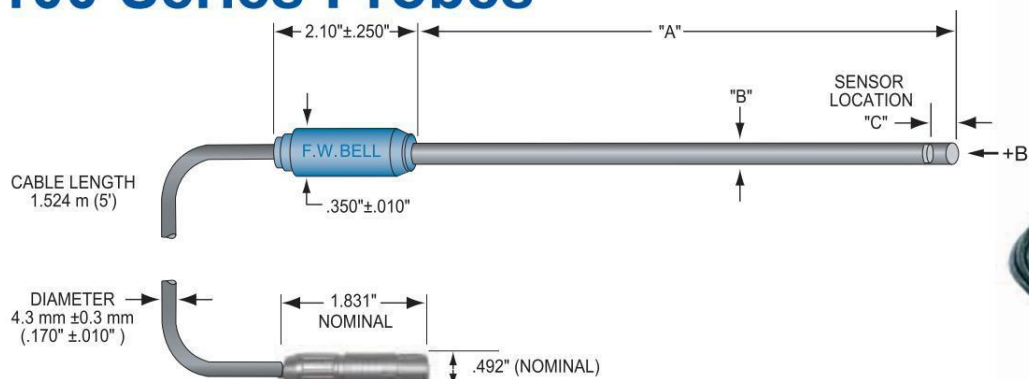
Note: Due to continuous process improvement, specifications are subject to change without notice.

Shipping Weight

Domestic 3.5 lbs 1.59 kgs
International 4 lbs 1.82 kgs

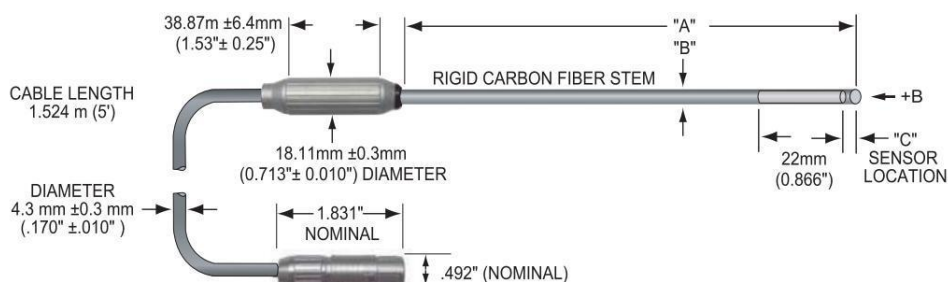


5100 Series Probes



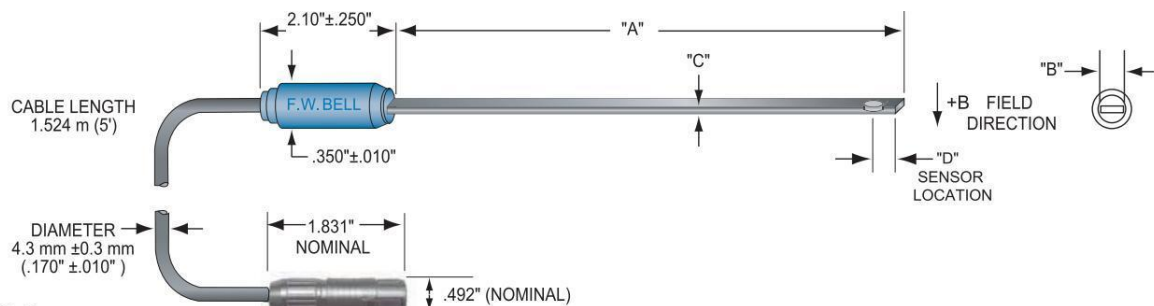
Axial Probes

Model	A ±.063"	B	C	Stem Material	Corrected Linearity	Sensitivity	Active area	Operating temp. range	Temp. stability (typical)		Frequency Response
	Zero								Calibrate		
SAD18-1902	2"	0.187" ±.006"	0.010" (NOMINAL)	RIGID PHENOLIC	0.5%/30kG	1X	0.015" DIA. (NOM)	0°C to +75°C	±0.300 Gauss / °C	-0.05% % / °C	DC to 20kHz
SAD18-1904	4"				1.0%/20kG						DC to 10kHz
SAH17-1902	2"										DC to 10kHz
SAH17-1904	4"										DC to 10kHz



Low Field Axial Probes

Model	A ±.063"	B	C	Stem Material	Corrected Linearity	Sensitivity	Active area	Operating temp. range	Temp. stability (typical)		Frequency Response
									Zero	Calibrate	
MOS51-3204	4"	0.285" ±0.006"	0.050" (NOMINAL)	RIGID PHENOLIC	0.75%/1G	1X	0.866" (NOM)	0°C to +75°C	±0.02 mG / °C	-0.001 % / °C	DC to 700Hz (-3dB)



Transverse Probes

Model	A ±.063"	B	C	D	Material	Corrected Linearity	Sensitivity	Active area	Operating temp. range	Temp. stability (typical)		Frequency Response	
										Zero	Calibrate		
STD18-0402	2"	0.158" ±.004"	0.040" +.000" -.004"	0.0335" (NOMINAL)	Polypro- pylene **see note	0.5%/30kG	1X	0.015" DIA. (NOM)	0°C to +75°C	±0.300 Gauss / °C (typical)	-0.05% % / °C (typical)	DC to 20kHz	
STD18-0404	4"					1.0%/20kG						DC to 10kHz	
STH17-0402	2"				1.0%/20kG	DC to 10kHz							
STH17-0404	4"				ALUMINUM 3003 3/4 FH	0.5%/30kG						DC to 20kHz	
HTH17-0604	4"	0.180" ±.004"	0.060" +.000" -.004"	0.030" (NOMINAL)	KAPTON	1.0%/10kG		0.025" DIA (NOM.)		±0.200 Gauss / °C	-0.1 % / °C	DC only	
HTD18-0604	4"					1.0%/10kG						DC only	
STB1X-0201	1"	.050" ±.005"	.020" MAX	.030" (NOMINAL)	KAPTON	1.0%/10kG						DC only	

Note: Due to continuous process improvement, specifications subject to change without notice.

****** Prior to late 2006 Transverse Probe Stems were rigid glass epoxy, .150 x .040".