

## SIRAX BM950 Analog Panel Meter - ANSI

### Description

The analog panel meter SIRAX BM950 provides accurate indication and measurement of electrical as well as electronic parameters in industrial, educational and medical field as per the respective standards. The devices are available in 3 case sizes i.e. 2 1/2", 3 1/2" and 4 1/2".

The range of the analog panel meters offers AC and DC ammeters, voltmeters and frequency meters utilizing a high torque pivot and jewel movement, with a accuracy of 1.5% and true RMS measurement.

### Features and Benefits

- Robust polycarbonate housing with high flammability class UL94-V0
- ANSI standard case sizes
- Moving iron and moving coil mechanism
- True RMS measurement
- Measuring and indication of AC and DC current and voltage signals
- High torque pivot and jewel movement
- Simple panel mounting
- Easy replacement of the dial
- Compliant with ANSI C39.1

### Applications

- Energy management
- Utility power monitoring
- Embedded generation
- Switchgear
- Control panels
- Distribution systems
- Process control
- Motor monitoring
- Building management
- Marine

### Technical Data

#### Mechanical Data

Movement	High torque pivot and jewel moving coil and moving iron
Case details	ANSI standard case sizes (2 1/2", 3 1/2", 4 1/2")
Material of case	Polycarbonate matt black
Material of window	Shatterproof polycarbonate
Flammability class	UL94 V-0, self-extinguishing, non-dripping, halogen-free
Panel mounting	stackable next to each other
Fixing (surface mounting)	4 corner studs 4-40 UNC or 6-32 UNC
Terminal bolts	1/4 "UNC" - 28

#### Scaling

Scale and Pointer for electrical measuring instruments	acc. to ANSI C39.1
Dials	matt white



Scale	black printed
Pointer	knife-edge pointer
Scale balance	within 1% of scale length

### Electrical Data

Measuring ranges	AC and DC current AC and DC voltage Frequency
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### Input Ratings

DC Moving Coil Ammeters	50 µA ... 60 A
DC Moving Coil Voltmeters	50 mV ... 600 V
AC Moving Iron Ammeters	100 mA ... 50 A
AC Moving Iron Voltmeters	6 V ... 600 V
Frequency Meters	45 ... 65 Hz 360 ... 440 Hz

### Overload capacity

Voltmeters	Continuous 2 x for 0.5s: 9 overloads 2 x for 5s: 1 overload
Ammeters	10 x for 0.5s: 9 overloads
DC Center Zero Voltmeter	10 x for 5s: 1 overload

### Accuracy

DC Ammeters and Voltmeters	1.5% 0 ... 100% of full scale deflection
AC Ammeters and Voltmeters	1.5% 10 ... 100% of full scale deflection
Frequency Meters	0.5% of end scale value

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### Environmental conditions

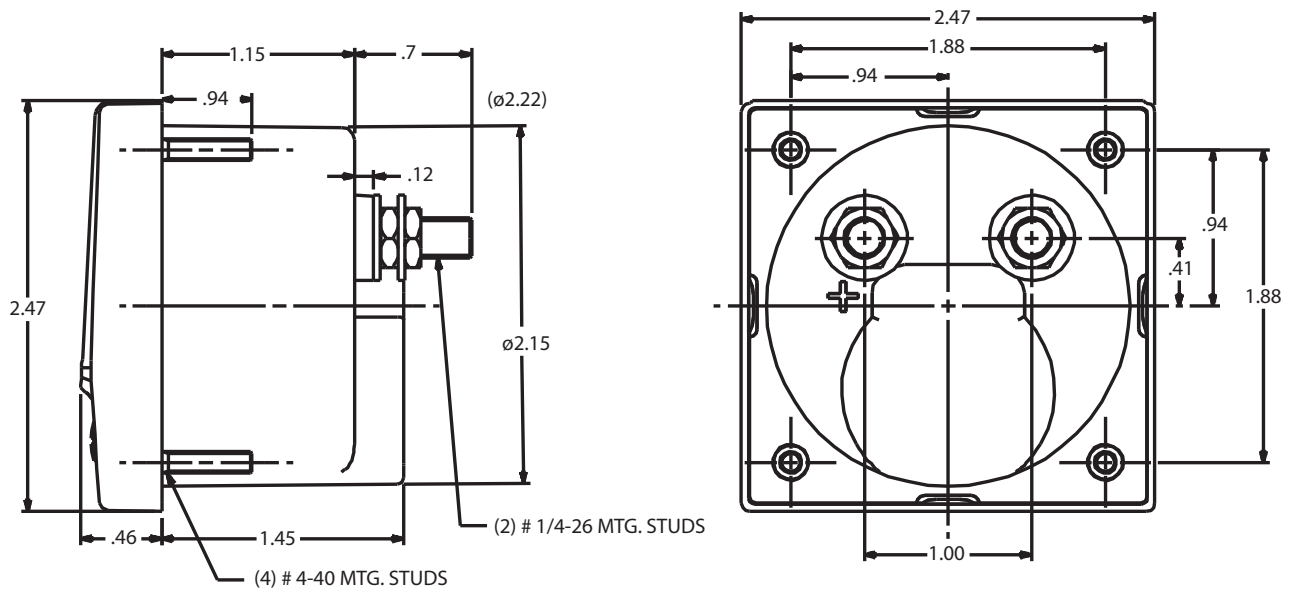
Performance	acc. to ANSI C39.1 and DIN EN 60 051
Operating temperature	-10 ... +55 °C
Storage temperature	-25 ... +65 °C
Relative humidity	25% ... 80% nominal range of use
Vibration	acc. to C39.1 cl. 5.13

### Safety

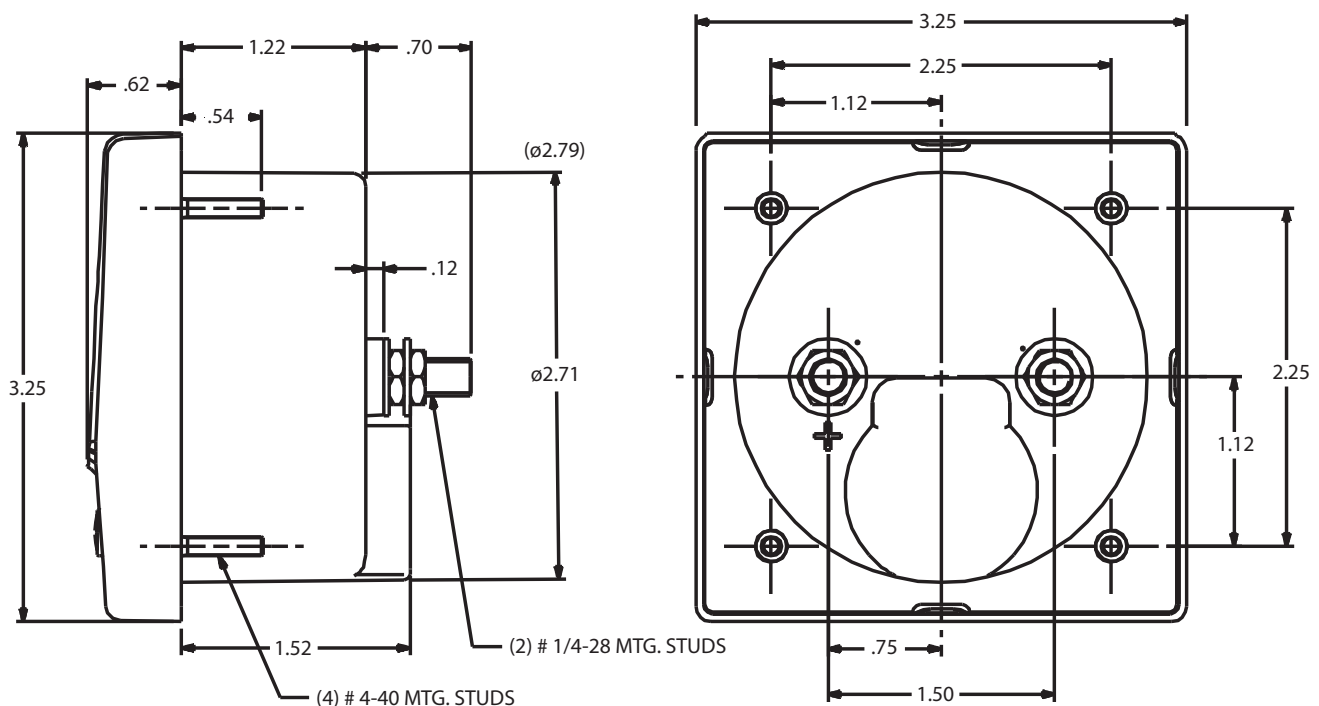
EMC resistance	acc. to EN 61 000-6-2
EMC emission	acc. to EN 61 000-6-4
Safety requirements and protective measures for Electrical indicating instruments and their accessories	acc. to EN 60 010-1 and BS EN 61 326 DIN 40050 / 8-70 VDE 0110 / 11-72 VDE 0410 / 10-76
Housing protection class	IP50

### Dimensions (all dimension are in inches)

SIRAX BM950 - 2 1/2"



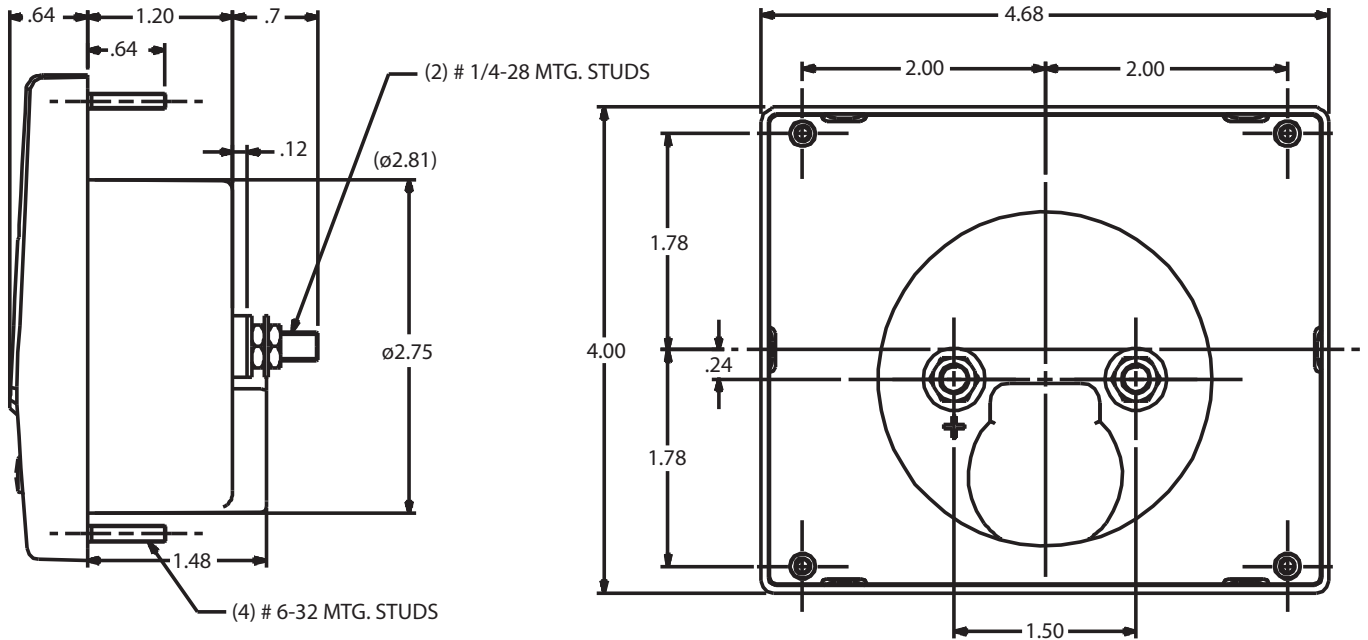
SIRAX BM950 - 3 1/2"



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SIRAX BM950 - 4 1/2"



### Order details

Description	Blockingcode	No-go with blockingcode	Article No. / Feature
SIRAX BM950, Analog Panel Meter - ANSI			BM950-
<b>Features, Selection</b>			
<b>01 Dimensions type</b>			
2 1/2"			1
3 1/2"			2
4 1/2"			3
<b>02 Meter type</b>			
Moving Iron	A		1
Moving coil	B		2
Frequency	C		3
<b>03 Measuring input</b>			
DC Voltage	D	A	1
DC Current	E	A	2
AC Voltage	F	B	3
AC Current	G	B	4
Frequency	H	A, B	5
<b>04 Measuring range</b>			
DC and AC Current			
50 µA		A, C, D, F, H	01
60 µA		A, C, D, F, H	02

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100 $\mu$ A		A, C, D, F, H	03
150 $\mu$ A		A, C, D, F, H	04
250 $\mu$ A		A, C, D, F, H	05
400 $\mu$ A		A, C, D, F, H	06
500 $\mu$ A		A, C, D, F, H	07
600 $\mu$ A		A, C, D, F, H	08
1 mA		A, C, D, F, H	09
1.5 mA		A, C, D, F, H	10
2.5 mA		A, C, D, F, H	11
4 mA		A, C, D, F, H	12
5 mA		A, C, D, F, H	13
6 mA		A, C, D, F, H	14
10 mA		A, C, D, F, H	15
15 mA		A, C, D, F, H	16
20 mA		A, C, D, F, H	17
25 mA		A, C, D, F, H	18
40 mA		A, C, D, F, H	19
60 mA		A, C, D, F, H	20
100 mA		C, D, F, H	21
150 mA		C, D, F, H	22
250 mA		C, D, F, H	23
400 mA		C, D, F, H	24
600 mA		C, D, F, H	25
1 A		C, D, F, H	26
1.5 A		C, D, F, H	27
2.5 A		C, D, F, H	28
4 A		C, D, F, H	29
5 A		C, D, F, H	30
6 A		C, D, F, H	31
10 A		C, D, F, H	32
15 A		C, D, F, H	33
20 A		C, D, F, H	34
25 A		C, D, F, H	35
30 A		C, D, F, H	36
40 A		C, D, F, H	37
50 A		C, D, F, H	38
60 A		C, D, F, H	39
Special range DC and AC Current on request Customer value		C, D, F, H	40

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DC and AC Voltage			
50 mV		B, C, E, F, H	41
60 mV		B, C, E, F, H	42
75 mV		B, C, E, F, H	43
100 mV		B, C, E, F, H	44
150 mV		B, C, E, F, H	45
250 mV		B, C, E, F, H	46
400 mV		B, C, E, F, H	47
600 mV		B, C, E, F, H	48
1 V		B, C, E, F, H	49
1.5 V		B, C, E, F, H	50
2.5 V		B, C, E, F, H	51
4 V		B, C, E, F, H	52
6 V		C, E, G, H	53
10 V		C, E, G, H	54
15 V		C, E, G, H	55
25 V		C, E, G, H	56
30 V		C, E, G, H	57
40 V		C, E, G, H	58
50 V		C, E, G, H	59
60 V		C, E, G, H	60
100 V		C, E, G, H	61
120 V		C, E, G, H	62
132 V		C, E, G, H	63
150 V		C, E, G, H	64
200 V		C, E, G, H	65
250 V		C, E, G, H	66
300 V		C, E, G, H	67
400 V		C, E, G, H	68
500 V		C, E, G, H	69
600 V		C, E, G, H	70
Special range DC and AC Current on request			
Customer value		C, E, G, H	71
Frequency			
45 ... 50 ... 55 Hz		A, B, D, E, F, G	72
45 ... 55 ... 65 Hz		A, B, D, E, F, G	73
55 ... 60 ... 65 Hz		A, B, D, E, F, G	74
360 ... 400 ... 440 Hz		A, B, D, E, F, G	75
380 ... 400 ... 420 Hz		A, B, D, E, F, G	76
Special range DC and AC Current on request			
Customer value		A, B, D, E, F, G	77

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<b>05</b>	<b>Rated input voltage for Frequency</b>			
	57.7 V		A, B, D, E, F, G	01
	63.5 V		A, B, D, E, F, G	02
	100 V		A, B, D, E, F, G	03
	110 V		A, B, D, E, F, G	04
	115 V		A, B, D, E, F, G	05
	120 V		A, B, D, E, F, G	06
	127 V		A, B, D, E, F, G	07
	208 V		A, B, D, E, F, G	08
	220 V		A, B, D, E, F, G	09
	230 V		A, B, D, E, F, G	10
	240 V		A, B, D, E, F, G	11
	289 V		A, B, D, E, F, G	12
	380 V		A, B, D, E, F, G	13
	400 V		A, B, D, E, F, G	14
	415 V		A, B, D, E, F, G	15
	440 V		A, B, D, E, F, G	16
	500 V		A, B, D, E, F, G	17
	Special range rated input voltage for frequency on request Customer value		A, B, D, E, F, G	18
<b>06</b>	<b>Scalefactor</b>			
	Standard			1
	Non Standard (Customized)			2



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