

Round Style Analog Panel Meters



- UL Recognized - File # E91015
Except for the Wattmeters & Frequency Meters
- Glass Window for optimum viewing
- Rugged black plastic case
- Black spade-type pointer for easy distant reading



Ordering Information

AC Microammeter Rectifier Type Self-Shielding Movement		
Range	Approx. Impedance (Ohms)	Model / Size and Catalog No.
		3 - 1/2" Model 45
0 - 100	3400	04080

AC Milliammeters Iron Vane & Rectified Movement *				
Range	Approx. Impedance (Ohms) @ 60Hz	Model / Size and Catalog No.		
		2 - 1/2" Model 155	3 - 1/2" Model 55	3 - 1/2" Model 45 *
0 - 1	600	< >	< >	06820 *
0 - 5	200	< >	< >	06840 *
0 - 15	887.0	< >	05380	< >
0 - 50	80.0	< >	05400	< >
0 - 100	717.2	< >	05410	< >
0 - 150	8.76	< >	35069	< >
0 - 250	3.1	06080	05420	< >
0 - 500	.9	< >	05430	< >
* Rectified Models				

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Ordering Information

AC Ammeters Iron Vane Movement			
Range	Approx. Impedance (Ohms) @ 60 Hz	Model / Size and Catalog No.	
		2 - 1/2" Model 155	3 - 1/2" Model 55
0 - 1	.213	02100	00950
0 - 1.5	.105	< >	00960
0 - 2	.065	02120	00970
0 - 3	.028	02130	00980
0 - 5	.008	02140	00990
0 - 10	.004	02150	01001
0 - 15	.0025	02160	01010
0 - 25	.002	02170	01020
0 - 30	.0015	02180	01030
0 - 50	.001	02190	01040
0 - 75	.0002	< >	03432
0 - 75	.008	02200 *	< >
0 - 100	.008	02210 *	01060 *
0 - 150	.008	02220 *	01070 *
0 - 200	.008	< >	01080 *
0 - 250	.008	02240 *	01090 *
0 - 300	.008	< >	01100 *
0 - 500	.008	02260 *	01110 *
< > Available on special order			
* These meters require use of an external current transformer			

AC Voltmeters Iron Vane Movement			
Range	Approx. Impedance (Ohms) @ 60 Hz	Model / Size and Catalog No.	
		2 - 1/2" Model 155	3 - 1/2" Model 55
0 - 5	33	< >	08410
0 - 10	133	< >	08420
0 - 15	300	< >	08430
0 - 25	833	< >	08440
0 - 50	3,333	09290	08450
0 - 100	16,166	< >	08460
0 - 150	25,000	09310	08470
0 - 250	41,166	09320	08480
0 - 300	50,000	09330	08490
0 - 500	83,333	09340 *	08500 *
0 - 750	125,000	< >	08510 *
< > Available on special order			
* External multipliers (Model 183) are furnished on AC meters having a range of 500 volts or higher			

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AC Voltmeter Rectifier Type Self-Shielding Movement		
Range	Approx. Impedance (Ohms) @ 60Hz	Model / Size and Catalog No.
		3 - 1/2" Model 45
0 - 150	300K	08010

4-20mA Process Meters Dial indicates 0-100 Percent		
Range	Approx. Impedance (Ohms)	Model / Size and Catalog No.
		3 - 1/2" Model 25
4- 20	5.0	35022

Wattmeters - Dynamometer Type			Not 
Range	Maximum		Model / Size and Catalog No.
	Volts	Amps	3 - 1/2" Model 75
0 - 300	150	4.0	10600

Frequency Meters Self-Shielding Movement Not 			
Range	Voltage	Model / Size and Catalog No.	
		2 - 1/2" Model 185	3 - 1/2" Model 85
45 - 55 Hz	120V	35154	35160
55 - 65 Hz	120V	35156	35162
380 - 420 Hz	120V	35158	35164
45 - 55 Hz	240V	35155	35161
55 - 65 Hz	240V	35157	35163
380 - 420 Hz	240V	35159	35165

DC Microammeters Self-Shielding Movement			
Range	Approx. Impedance (Ohms) @ 60Hz	Model / Size and Catalog No.	
		2 - 1/2" Model 125	3 - 1/2" Model 25
0 - 50	1800	04210	03760
0 - 100	1800	04220	03770
0 - 200	1100	04230	03780
0 - 500	90	04240	03790
50-0-50	1800	04194	03810
100-0-100	1100	04196	03820
500-0-500	43	< >	03830
< > Available on special order			

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Ordering Information

DC Taut-Band Microammeters Self-Shielding Movement			
Range	Approx. Impedance (Ohms) @ 60Hz	Model / Size and Catalog No.	
		2 - 1/2" Model 125T	3 - 1/2" Model 25T
0 - 10	4900	04197	< >
0 - 15	1960	< >	03741
0 - 25	1960	04201	03751
0 - 50	960	< >	03761
0 - 100	500	< >	03771
< > Available on special order			

DC Milliammeters Self-Shielding Movement			
Range	Approx. Impedance (Ohms) @ 60Hz	Model / Size and Catalog No.	
		2 - 1/2" Model 125	3 - 1/2" Model 25
0 - 1	43.0	05580	04610
0 - 1.5	43.0	< >	04620
0 - 5	2.0	05610	04640
0 - 10	10.0	05620	04650
0 - 15	6.6	05630	04660
0 - 25	4.0	05650	04680
0 - 50	2.0	< >	04690
0 - 75	1.3	05670	< >
0 - 100	1.0	05680	04710
0 - 150	.66	05690	04720
0 - 200	.5	05700	04730
0 - 250	.5	05710	< >
0 - 300	.33	< >	04750
0 - 500	.2	05730	04760
0 - 1000	.05	< >	04780
< > Available on special order			

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Ordering Information

DC Ammeters Self-Shielding Movement			
Range	Approx. Impedance (Ohms) @ 60Hz	Model / Size and Catalog No.	
		2 - 1/2" Model 125	3 - 1/2" Model 25
0 - 1	.050	01460	00005
0 - 2	.025	< >	00030
0 - 3	.0166	01490	00040
0 - 5	.010	01500	00050
0 - 10	.005	01510	00060
0 - 15	.0033	01520	00070
0 - 25	.002	01530	00080
0 - 30	.0017	01540	00090
0 - 50	.001	01550	00099
0 - 75	10.0	01560 *	00110 *
0 - 100	10.0	01570 *	00120 *
0 - 150	10.0	01580 *	00130 *
0 - 200	10.0	01590 *	00140 *
0 - 250	10.0	< >	00151 *
0 - 300	10.0	01610 *	00160 *
0 - 500	10.0	01620	00170 *
0 - 750	10.0	< >	00177 *
0 - 1000	10.0	< >	00188 *
15-0-15	.0033	< >	00200
30-0-30	.0017	01660	00210
50-0-50	.001	01670	00220
75-0-75	20.0	35066	35037 *
* DC current meters are self-contained for ranges up to and including 50 amperes			
Higher range DC current meters (50 mV) listed above are calibrated for 5' leads and require external shunts			
< > Available on special order			

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Ordering Information

DC Millivoltmeters Self-Shielding Movement			
Range	Approx. Impedance (Ohms) @ 60Hz	Model / Size and Catalog No.	
		2 - 1/2" Model 125	3 - 1/2" Model 25
0 - 50	10.0	06970	06910
0 - 100	20.0	< >	35093
< > Available on special order			

DC Voltmeters Self-Shielding Movement			
Range	Approx. Impedance (Ohms) @ 60Hz	Model / Size and Catalog No.	
		2 - 1/2” Model 125	3 - 1/2” Model 25
0 - 1.5	1000 Ohms Per Volt	08850	< >
0 - 3		< >	07070
0 - 5		08870	07080
0 - 10		08890	07100
0 - 15		08900	07110
0 - 25		08910	07120
0 - 30		08920	07130
0 - 50		08930	07140
0 - 100		08940	07150
0 - 150		08950	07160
0 - 200		08960	07170
0 - 250		08970	07180
0 - 300	2000 Ohms Per Volt	< >	07190
0 - 500		< >	07200
0 - 750		< >	07210
0 - 1000		< >	07220 *
0 - 2000		< >	07240 *
0 - 3000		< >	07260 *
0 - 5000		< >	07280 *
*External multipliers, Model 183, are furnished on 3-1/2” DC meters 1000 volts or higher			
< > Available on special order			

Round Style Analog Panel Meters

Specifications	
Accuracy	$\pm 2\%$ F.S. (Iron-Vane), $\pm 3\%$ F.S. (Rectifier)
Frequency models	45-55Hz ± 0.3 Hz (120V-240V) 55-65Hz ± 0.3 Hz (120V-240V) 380-420Hz ± 1.2 Hz (120V-240V)
Wattmeters	+2% F.S.; Compensated Meters: +3% F.S.
Movement	Models 55, 155: Iron-vane, magnetically damped Models 45, 145: Annular, rectifier type Models 85 & 185: small core magnet, self-shielding Models 25, 27, 29, 125: Annular, self-shielding
Tracking	$\pm 3\%$
Shielding	Calibration is unaffected by magnetic field or panel mounting
Response Time	1.5 seconds maximum
Overload (1 sec.)	10 times F.S.
Overload (Continuous)	1.5 times F.S.
Repeatability	2%
Dial	Sharp clear scale. Each dial arc is calibrated to track the specific type of movement used
Case	High density black plastic
Resistance	$\pm 15\%$
Operating Temperature	- 4°F to + 149°F (- 20°C to + 65°C)
Pointer	Models 85 & 185: Knife edge, black finish All others: Spade pointer with black matte finish
Scale Length	Model 155 & 185: 1.6" (40.6mm) Models 125 & 145: 1.8" (45.7mm) Model 55: 2.3" (58.4mm) Models 25, 27, 45 & 85: 2.5" (63.5mm) Model 29: 3.80" (96.5mm)
Net Weight	Models 55, 155 & 185: 5oz (0.14kg) Models 85, 125, 145 & 45: 7oz (0.20kg) Models 25 & 27: 8oz (.23kg) Model 29: 11oz. (.31kg)

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Dimensions

3 - 1/2" Model 75 Wattmeter

