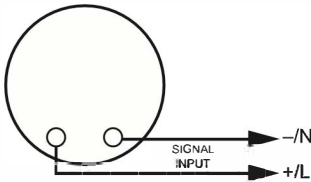


# AC and DC Ammeters, Voltmeters and Frequency Meters

This range of self contained, pivot and jewel moving iron meters feature 250° linear scale. AC instruments are available with true RMS converting circuit or RMS compensated rectifier. While types of frequency meters can be damaged by transient supply voltage spike, Crompton Instruments 007-41 frequency meters can withstand, without damage, 10 successive transient spikes of 1250 volts. The range offers c-UL-us certification.



Fig. AA 007-05/007-41



## Specifications-General

Manufactured in accordance with American National Standards ANSI C39.1, (1981)

<b>Accuracy</b>	±1% full scale at 23°C (73°F)
<b>Scales arc</b>	250° full scale deflection
<b>Scale length</b>	007 and 078: 175.2 mm (6.9")
<b>Scale plate</b>	2 piece, platform type
<b>Response time</b>	007 and 078: Approximately 2.5 seconds to full scale
<b>Operating temperature</b>	0 to 40°C (32 to 104°F)
<b>Storage temperature</b>	-10 to +50°C (14 to 122°F)
<b>Extreme temperature range</b>	-20° to +65°C (-4° to 149°F)
<b>Terminals</b>	Standard 10-32 UNF stud. M5 screw clamp is optional
<b>Dielectric withstand</b>	2300V AC for 1 minute between electrical circuit and case
<b>Overshoot</b>	33% maximum
<b>Enclosure code</b>	007: IP54, optional IP55 and 078: IP67
<b>Certification</b>	c-UL-us

## Specifications-Ammeters and Voltmeters

<b>Overload rating</b>	AC ammeters - 2 x continuous, 50 x for 1 second AC voltmeters and frequency meters - 1.2 x continuous DC ammeters - 2 x continuous 10 x for 1 second DC voltmeters - 1.2 x continuous
<b>Frequency range</b>	AC calibration 50/60Hz ±20%

## Specifications-Frequency Meters

<b>Response time</b>	3 seconds maximum
<b>External temperature influence</b>	0.6 times accuracy maximum with ±10°C from reference temperature
<b>External field influence</b>	2.0 times accuracy maximum with 0.5m T field
<b>Acceptable input harmonic influence</b>	up to 30% distortion

Maximum Frequency - Hz	Center Scale - Hz	Error in Hz
45-55	50	0.15
46-54	50	0.15
45-65	55	0.25
50-70	60	0.25
55-65	60	0.15
56-64	60	0.15

## DC Ammeters

Product Codes - Self Contained - Accuracy  $\pm 1\%$ \*\*\*

Rating	Scaling*	4 1/2" square flange	
		Std. case catalog number	Std. case hi-shock catalog number
0-200QA	0-200QA	•007-05AA-EAEA	078-05AJ-EAEA
0-300QA	0-300QA	•007-05AA-EEEE	078-05AJ-EEEE
0-500QA	0-500QA	•007-05AA-EMEM	078-05AJ-EMEM
0-800QA	0-800QA	•007-05AA-EWEW	078-05AJ-EWEW
0-1mA	0-1mA	•007-05AA-FAFA	078-05AJ-FAFA
0-2mA	0-2mA	•007-05AA-FGFG	078-05AJ-FGFG
0-5mA	0-5mA	•007-05AA-FXFX	078-05AJ-FXFX
0-10mA	0-10mA	•007-05AA-HAHA	078-05AJ-HAHA
0-20mA	0-20mA	•007-05AA-HFHF	078-05AJ-HFHF
0-30mA	0-30mA	•007-05AA-HMHM	078-05AJ-HMHM
0-50mA	0-50mA	•007-05AA-HXHY	078-05AJ-HXHY
0-100mA	0-100mA	•007-05AA-JRJR	078-05AJ-JRJR
0-200mA	0-200mA	•007-05AA-KAKA	078-05AJ-KAKA
0-300mA	0-300mA	•007-05AA-KGKG	078-05AJ-KGKG
0-500mA	0-500mA	•007-05AA-KMKM	078-05AJ-KMKM
0-800mA	0-800mA	•007-05AA-KWKW	078-05AJ-KWKW
0-1A	0-1A	•007-05AA-LALA	078-05AJ-LALA
0-5A	0-5A	•007-05AA-LSLS	078-05AJ-LSLS
0-10A	0-10A	•007-05AA-MTMT	078-05AJ-MTMT
0-15A	0-15A	•007-05AA-NDND	078-05AJ-NDND
0-20A	0-20A	•007-05AA-NGNG	078-05AJ-NGNG
0-30A	0-30A	•007-05AA-NLNL	078-05AJ-NLNL



DC Ammeter

Product Codes - Millimeters - Suppressed Zero, No Zero Adjust Unless Specified

1/5mA	To Suit	•007-05RA-GM**	078-05RJ-GM**
4/20mA	To Suit	•007-05RA-HG**	078-05RJ-HG**
10/50mA	To Suit	•007-05RA-HZ**	078-05RJ-HZ**

Product Codes - Shunt Rated - Accuracy  $\pm 1\%$ \*\*\*

Rating	Scaling*	4 1/2" square flange	
		Std. case catalog number	Std. case hi-shock catalog number
50mV	To suit shunt rating	•007-05AA-EY**	078-05AJ-EY**
50-0-50mV		•007-05CA-GB**	078-05CJ-GB**
100mV		•007-05AA-GB**	078-05AJ-GB**
100-0-100mV		•007-05CA-GM**	078-05CJ-GM**

Product Codes - Zero Left For Use With 50 mV Shunts and 0.05 Ohm Shunt Leads\*\*\*and \*\*\*\*

50mV	0-15A	•007-05AA-EYND	078-05AJ-EYND
50mV	0-20A	•007-05AA-EYNG	078-05AJ-EYNG
50mV	0-30A	•007-05AA-EYNL	078-05AJ-EYNL
50mV	0-40A	•007-05AA-EYNP	078-05AJ-EYNP
50mV	0-75A	•007-05AA-EYPB	078-05AJ-EYPB
50mV	0-100A	•007-05AA-EYPK	078-05AJ-EYPK
50mV	0-150A	•007-05AA-EYPZ	078-05AJ-EYPZ
50mV	0-200A	•007-05AA-EYRL	078-05AJ-EYRL
50mV	0-300A	•007-05AA-EYRX	078-05AJ-EYRX
50mV	0-400A	•007-05AA-EYSC	078-05AJ-EYSC
50mV	0-500A	•007-05AA-EYSF	078-05AJ-EYSF
50mV	0-750A	•007-05AA-EYSM	078-05AJ-EYSM
50mV	0-1000A	•007-05AA-EYSS	078-05AJ-EYSS
50mV	0-1200A	•007-05AA-EYSU	078-05AJ-EYSU
50mV	0-1500A	•007-05AA-EYTC	078-05AJ-EYTC
50mV	0-2000A	•007-05AA-EYTM	078-05AJ-EYTM
50mV	0-3000A	•007-05AA-EYUA	078-05AJ-EYUA

- c-UL-us certified.  
Specify shunt lead resistance value if in excess of 0.05 ohms for calibration purposes.  
DC shunt rated ammeters have thermistor circuit ambient temperature compensation.  
Separate shunt and shunt leads are not included.
- \* Other scales are available.
- \*\* Specify scale required.
- \*\*\* Other mV ratings and scale options available upon request.
- \*\*\*\* For case types 007/078 use 10-32 UNF terminals.