

# WESCHLER INSTRUMENTS

# FEATURES AND SPECIFICATIONS

## 20/20 Ac and Dc Custom Styled Panel Instruments

### Application

20/20 instruments have neat, clean lines which harmonize with highly styled electronic components. They can be properly applied on equipment ranging from a spectrometer to a unit of power switchgear.

### Readability

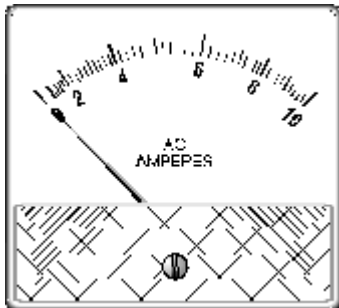
20/20 instruments were designed for maximum readability from a distance. The lance-design pointer in conjunction with the bold dial markings make this instrument the most easily read in its field.

### Enclosures

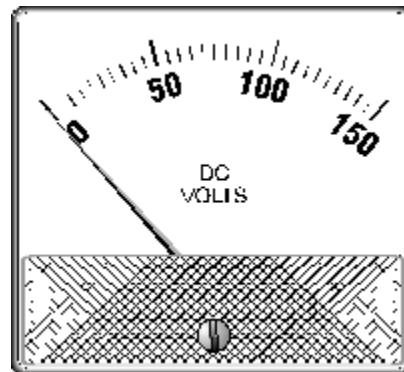
The 20/20 instrument case is made of a black Lexan plastic, dimensioned to meet the industry standards for Custom Styled Panel Instruments as defined by ANSI C39.1.

The snap-on cover is made up of a high grade Lexan plastic which will remain crystal clear in appearance. It is treated with Weschler Anti-Static

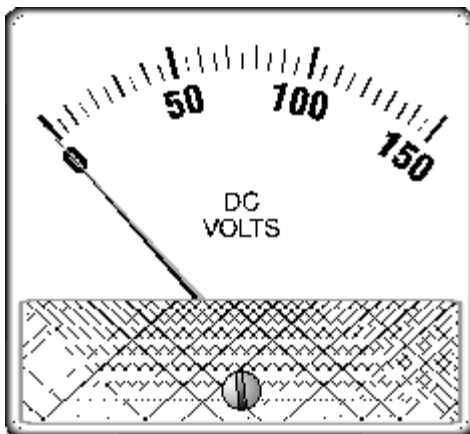
Agent to keep it dust-free, and to insure continued freedom from electrostatic effects. The side edges of the cover are also of clear plastic, allowing light to enter from any angle.



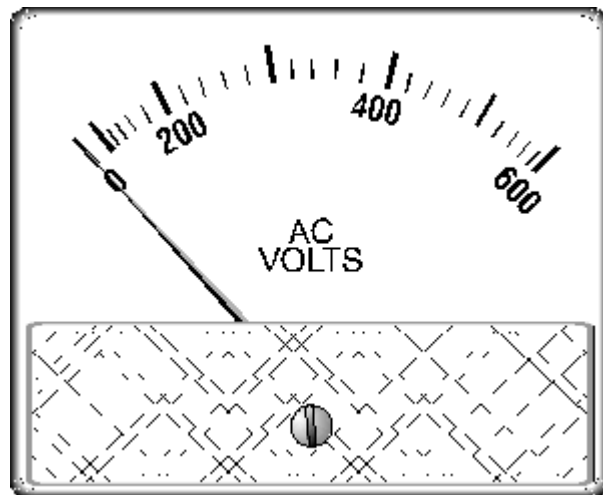
2 1/2" GA-332 Ac Ammeter



3 1/2" GX-352 Dc Voltmeter



4 1/2" GX-372 Dc Voltmeter



5 1/2" GA-382 Ac Voltmeter

### Rear-of-Panel Mounting

Bezels are available for rear-of-panel mounting of each of the four sizes of instruments available.



2 1/2" G-332



3 1/2" G-352



4 1/2" G-372



5 1/2" G-382

Bezel Style Number	292B767G04	292B767G02	292B767G08	292B767G05
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## 20/20 Ac and Dc Custom Styled Panel Instruments

### Specifications

	2 1/2" G-332	3 1/2" G-352	4 1/2" G-372	5 1/2" G-382
Dielectric Test Level	2600 Volts	2600 Volts	2600 Volts	2600 Volts
Insulation Rating	Working voltage to ground = 800 volts peak			
Type of Pointer	Lance	Lance	Lance	Lance
Scale Arc	100 degrees	100 degrees	100 degrees	100 degrees
Scale Length	2.18"	2.82"	4.02"	4.95"
Net Weight	6 oz.	6 oz.	9 oz.	12 oz.
Shipping Weight	3 lbs.	3 lbs.	3 lbs.	3 lbs.

### Performance

	Dc	Ac
Rated Accuracy in Percent of Full Scale	+ or - 2%	+ or - 2% + or - 3% (Iron Vane Rectifier)
Overshoot---Maximum	20% Max.	20% Max.
<b>Response Time (in seconds):</b>		
.....Microammeters below 50 ua	3.0 Sec. Max.	1.5 Sec. Max.
.....Microammeters above 50 ua	1.5 Sec. Max.	1.5 Sec. Max.
RF Ammeters		2.5 Sec. Max.

### Typical Modifications Include:

Special scales and calibration.  
Customer identification or trade names.  
Mirror dials and knife-edge pointers.  
Colored zones.  
Special legends.  
Center zero.  
Suppressed zero.

For definition of above terms refer to ANSI Standard C39.1.

### Repeatability---error not detectable.

Repeatability in most instrument applications is far more important than tracking or accuracy. Repeatability alone guarantees that precise duplication of an instrument reading can be made for a given set of conditions.

### Ratings, Mechanisms, and Accuracy

Instrument	Case Size and Type				Ratings	Movement	Accuracy Class*
	2 1/2"	3 1/2"	4 1/2"	5 1/2"			
Dc Microammeters	GX-332	GX-352	GX-372	GX-382	50-800	Permanent-Magnet, Moving-Coil	+ or - 2%
Dc Milliammeters	GX-332	GX-352	GX-372	GX-382	1-800	Permanent-Magnet, Moving-Coil	+ or - 2%
Dc Ammeters, Self-Contained	GX-332	GX-352	GX-372	GX-382	1-50	Permanent-Magnet, Moving-Coil	+ or - 2%
Dc Ammeters, External Shunt	GX-332	GX-352	GX-372	GX-382	5-2500	Permanent-Magnet, Moving-Coil	+ or - 2%
Dc Millivoltmeters	GX-332	GX-352	GX-372	GX-382	20-800	Permanent-Magnet, Moving-Coil	+ or - 2%
Dc Voltmeters	GX-332	GX-352	GX-372	GX-382	1-800	Permanent-Magnet, Moving-Coil	+ or - 2%
Ac Ammeters	GA-332	GA-352	GA-372	GA-382	5-800	Repulsion, Iron Vane	+ or - 2%
Ac Ammeters, Self-Contained	GA-332	GA-352	GA-372	GA-382	1-50	Repulsion, Iron Vane	+ or - 2%
Ac Ammeters, External Transformers	GA-332	GA-352	GA-372	GA-382	20-2500	Repulsion, Iron Vane	+ or - 2%
Ac Voltmeters	GA-332	GA-352	GA-372	GA-382	1.5-600	Repulsion, Iron Vane	+ or - 2%
Rectifier Microammeters	GC-332	GC-352	GC-372	GC-382	80-800	Rectifier with Permanent Magnet,	+ or - 2%
Rectifier Milliammeters	GC-332	GC-352	GC-372	GC-382	1-20	Moving-Coil Rectifier with Permanent	+ or - 3%
Rectifier Voltmeters	GC-332	GC-352	GC-372	GC-382	3-800	Magnet, Moving-Coil Rectifier with Permanent Magnet, Moving-Coil	+ or - 3%
AC Wattmeter, with External Transducer (VP2-840)	.....	GX-352	GX-372	GX-382	5A, 120V	Permanent-Magnet, Moving-Coil	+ or - 2%
AC Varmeter, with External Transducer (VV2-841)	.....	GX-352	GX-372	GX-382	5A, 120V	Permanent-Magnet, Moving-Coil	+ or - 2%
Frequency Meter, with External Transducer (9VC2-841)	.....	GX-352	GX-372	GX-382	60, 400 Hz	Permanent-Magnet, Moving-Coil	+ or - 2%
Power Factor Meter, with External Transducer (VF2-841)	.....	GX-352	GX-372	GX-382	5A, 120V	Permanent-Magnet, Moving-Coil	+ or - 2%
Expanded Scale Voltmeter, with External Transducer (VE2-841)	.....	GX-352	GX-372	GX-382	110-130V	Permanent-Magnet, Moving-Coil	+ or - 2%
Thermometer, with External Transducer, (VT2-841)	.....	GX-352	GX-372	GX-382	0-200 degrees C	Permanent-Magnet, Moving-Coil	+ or - 2%
Tachometer, with External Transducer (VR2-841)	.....	GX-352	GX-372	GX-382	50-14,000 Pulses	Permanent-Magnet, Moving-Coil	+ or - 2%

\*Accuracy class is stated in percent of full scale deflection, with the exception of the Frequency Meter and Expanded Scale Voltmeter which are 2% of span.

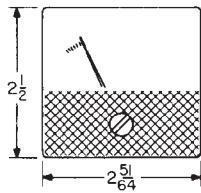
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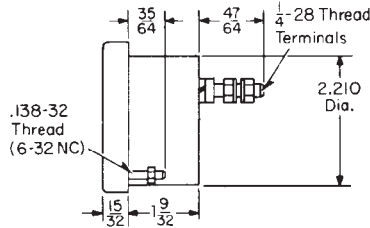
### Instruments, Outline and Drilling Dimensions in Inches

#### Type G-332

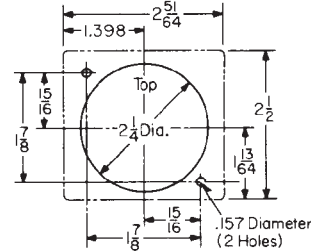
Front View



Side View



Drilling Plan Front View



Back View

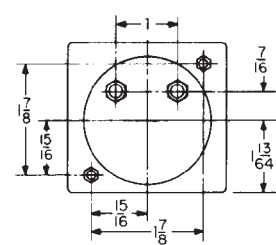
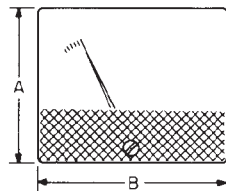


Fig. 2

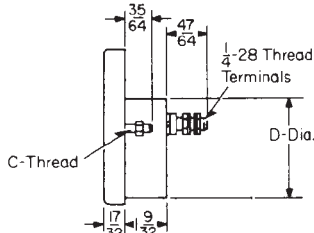
#### Types G-352, G-372, G-382

Polarity (+) ... (-) When Viewed From Rear (Dc Instruments Only)

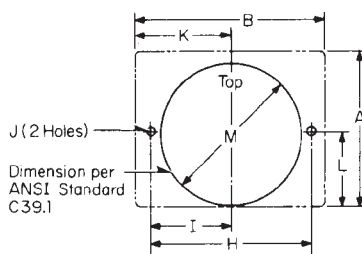
Front View



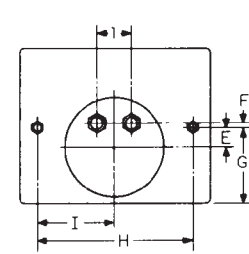
Side View



Drilling Plan Front View



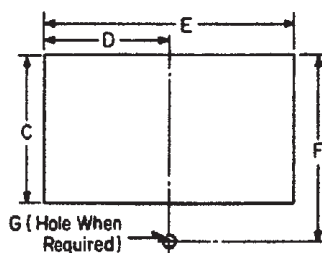
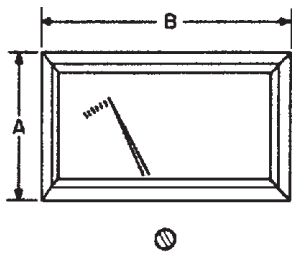
Back View



Type Dimensions in Inches

Type	A	B	C (Thread Size)	D	E	F	G	H	I	J (Dia.)	K	L	M (Dia.)
G-352	3	3 1/2	.138 - 32 (6-32)	2.21	.....	7/16	1 13/64	2 5/8	1 5/16	0.157	1 3/4	1 13/64	2 1/4
G-372	4	4 1/2	.164 - 32 (8-32)	2.79	0.08	0.568	1 19/32	3 1/2	1 3/4	0.18	2 1/4	1 19/32	3
G-382	4 1/2	5 1/2	.164 - 32 (8-32)	2.79	0.585	1/16	2 3/32	4 1/2	2 1/4	0.18	2 3/4	2 3/32	4

### Instrument With Bezel, Outline and Drilling Dimensions in Inches



Type Dimensions in Inches

Type	A	B	C	D	E	F	G (Dia.)
G-332	1 23/32	3 1/8	1 39/64	1 1/2	3	2 9/64	9/32
G-352	2 17/64	3 55/64	2 5/32	1 55/64	3 23/32	2 39/64	9/32
G-372	2 29/32	4 31/32	2 3/4	2 13/32	4 13/16	3 9/16	3/8
G-382	3 5/16	6 1/16	3 5/32	2 61/64	5 29/32	4 1/32	3/8

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