

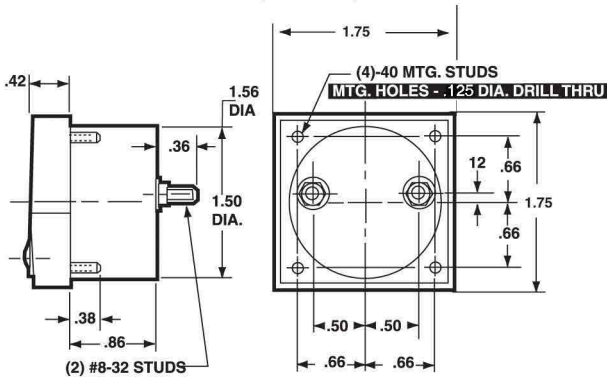
# Tru-View Style Analog Panel Meters



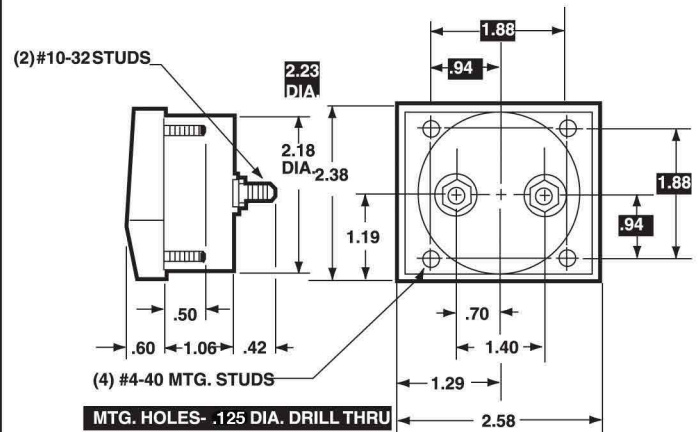
- Clear acrylic case updates panel design
- Black knife-edge pointer for precision reading
- Special colored scales or logos available

## Dimensions

1-1/2"-Model 921, 921T, 941



2-1/2"-Model 922, 942



## Specifications

Accuracy:	±2% F.S. (iron vane), ±3% F.S. (rectifier)
Movement:	DC: Annular, self-shielding AC: Models 953 & 954: Iron-vane, magnetically damped others: Annular, rectified
Suspension:	Pivot and jewel or taut band
Tracking:	±3%
Repeatability:	2%, taut band: 0.5%
Shielding:	Calibration is unaffected by stray magnetic field or panel mounting.
Response Time:	1.5 seconds maximum above 10mA.
Overload (1 sec.):	10 times F.S.
Overload (Continuous):	1.5 times F.S.
Dial:	Sharp clear scale. Each dial arc is calibrated to track the specific type of movement used.
Operating Temperature:	-4°F to +149°F (-20°C to +65°C)
Resistance:	±15% of meter impedance
Case:	Clear plastic
Pointer:	Knife edge, black matte finish
Scale Length:	Models 921 & 941: 1.56" (39.62mm) Models 922 & 942: 2.40" (60.96mm) Model 953: 2.94" (74.68mm) Models 923 & 943: 3.27" (83.06mm) Model 954: 3.53" (89.66mm) Model 924: 3.92" (99.67mm)
Net Weight:	Models 921 & 941: 1.5oz (.04kg) Models 922 & 942: 4oz (.11kg) Models 923, 943 & 953: 6 oz (0.17kg) Models 924, 944 & 954: 8oz (0.23kg)





# Tru-View Style Analog Panel Meters

## Ordering Information

### AC Milliammeters Iron Vane Movement

Range	Approx. Impedance (Ohms) @ 60 Hz	Model/Size and Catalog Number	
		3-1/2" Model 953	4-1/2" Model 954
0-10	1650	TV3AMA010	TV4AMA010
0-50	80	TV3AMA050	TV4AMA050
0-100	17.2	TV3AMA100	TV4AMA100
0-150	7.16	TV3AMA150	TV4AMA150
0-250	3.15	TV3AMA250	TV4AMA250
0-500	0.9	TV3AMA500	TV4AMA500

### AC Ammeters Iron Vane Movement

Range	Approx. Impedance (ohms) @ 60 Hz	Model/Size and Catalog Number	
		3-1/2" Model 953	4-1/2" Model 954
0-1	0.213	TV3AAA001	TV4AAA001
0-1.5	0.105	TV3AAA1R5	TV4AAA1R5
0-2	0.065	TV3AAA002	TV4AAA002
0-3	0.028	TV3AAA003	TV4AAA003
0-5	0.008	TV3AAA005	TV4AAA005
0-10	0.004	TV3AAA010	TV4AAA010
0-15	0.0025	TV3AAA015	TV4AAA015
0-25	0.002	TV3AAA025	TV4AAA025
0-30	0.0015	TV3AAA030	TV4AAA030
0-50	0.001	TV3AAA050	TV4AAA050
0-75	0.008	TV3AAA075*	TV4AAA075*
0-100	0.008	TV3AAA100*	TV4AAA100*
0-150	0.008	TV3AAA150*	TV4AAA150*
0-200	0.008	TV3AAA200*	TV4AAA200*
0-300	0.008	TV3AAA300*	TV4AAA300*

\* These meters require use of a current transformer.

### AC Voltmeters Iron Vane Movement

Range	Approx. Impedance (ohms) @ 60 Hz	Model/Size and Catalog Number	
		3-1/2" Model 953	4-1/2" Model 954
0-5	33	TV3AVV005	TV4AVV005
0-10	133	TV3AVV010	TV4AVV010
0-15	300	TV3AVV015	TV4AVV015
0-25	833	TV3AVV025	TV4AVV025
0-50	3333	TV3AVV050	TV4AVV050
0-100	16666	TV3AVV100	TV4AVV100
0-150	25000	TV3AVV150	TV4AVV150
0-250	41166	TV3AVV250	TV4AVV250
0-300	50000	TV3AVV300	TV4AVV300
0-500	25000	TV3AVV500*	TV4AVV500*
0-1000	25000	TV3AVV1TH*	TV4AVV1TH*

\* AC Voltmeters with a range of 500V or higher require an external multiplier (model 183).

### AC Voltmeters Rectified, Self-shielding Movement

Range	Approx. Impedance (Ohms) @ 60 Hz	Model/Size and Catalog Number				
		1-1/2" Model 941	2-1/2" Model 942	3-1/2" Model 943	4-1/2" Model 944	4" x 6" Model 946
0-5	2000 ohms per volt	TV1RVV005	TV2RVV005	TV3RVV005	TV4RVV005	TV6RVV005
0-10		TV1RVV010	TV2RVV010	TV3RVV010	TV4RVV010	TV6RVV010
0-15		TV1RVV015	TV2RVV015	TV3RVV015	TV4RVV015	TV6RVV015
0-20		TV1RVV020	TV2RVV020	TV3RVV020	TV4RVV020	TV6RVV020
0-25		TV1RVV025	TV2RVV025	TV3RVV025	TV4RVV025	TV6RVV025
0-50		TV1RVV050	TV2RVV050	TV3RVV050	TV4RVV050	TV6RVV050
0-100		TV1RVV100	TV2RVV100	TV3RVV100	TV4RVV100	TV6RVV100
0-150		TV1RVV150	TV2RVV150	TV3RVV150	TV4RVV150	TV6RVV150
0-200		TV1RVV200	TV2RVV200	TV3RVV200	TV4RVV200	TV6RVV200
0-250		TV1RVV250	TV2RVV250	TV3RVV250	TV4RVV250	TV6RVV250
0-300		TV1RVV300	TV2RVV300	TV3RVV300	TV4RVV300	TV6RVV300

### DC Micrometers Self-shielding movement

Range	Approx. Impedance (Ohms) @ 60 Hz	Model/Size and Catalog Number				
		1-1/2" Model 921	2-1/2" Model 922	3-1/2" Model 923	4-1/2" Model 924	4"X6" Model 926
0-50	1800 (5500)	TV1DUA050	TV2DUA050	TV3DUA050	TV4DUA050	< >
0-100	1800	TV1DUA100	TV2DUA100	TV3DUA100	TV4DUA100	TV6DUA100
0-200	1100	TV1DUA200	TV2DUA200	TV3DUA200	TV4DUA200	TV6DUA200
0-500	90 (190)*	TV1DUA500	TV2DUA500	TV3DUA500	TV4DUA500	TV6DUA500
100-0-100	1100	TV1DUA1H1	TV2DUA1H1	TV3DUA1H1	TV4DUA1H1	TV6DUA1H1
500-0-500	43	TV1DUA5H5	TV2DUA5H5	TV3DUA5H5	TV4DUA5H5	TV6DUA5H5

\* Resistance for 1/2" sizes shown in ( ).

< > available on special order

### DC Taut-Band Microammeters Self-shielding movement

Range	Approx. Impedance (Ohms) @ 60 Hz	Model/Size and Catalog Number				
		1-1/2" Model 921T	2-1/2" Model 922T	3-1/2" Model 923T	4-1/2" Model 924T	4" X 6" Model 926T
0-10	4900	-	TV2TUA010	TV3TUA010	TV4TUA010	< >
0-15	1960	-	TV2TUA015	TV3TUA015	TV4TUA015	< >
0-25	1960	-	TV2TUA025	TV3TUA025	TV4TUA025	< >
0-50	960	TV1TUA050	TV2TUA050	TV3TUA050	TV4TUA050	< >
0-100	500	TV1TUA100	TV2TUA100	TV3TUA100	TV4TUA100	TV6TUA100
0-200	234	TV1TUA200	TV2TUA200	TV3TUA200	TV4TUA200	TV6TUA200

< > available on special order

### DC Milliammeters Self-shielding movement

Range	Approx. Impedance (Ohms) @ 60 Hz	Model/Size and Catalog Number				
		1-1/2" Model 921	2-1/2" Model 922	3-1/2" Model 923	4-1/2" Model 924	4" X 6" Model 926
0-1	43	TV1DMA001	TV2DMA001	TV3DMA001	TV4DMA001	TV6 DMA001
0-3	2.0	TV1DMA003	TV2DMA003	TV3DMA003	TV4DMA003	TV6 DMA003
0-5	2.0 (20)*	TV1DMA005	TV2DMA005	TV3DMA005	TV4DMA005	TV6 DMA005
0-10	10.0 (2.2)*	TV1DMA010	TV2DMA010	TV3DMA010	TV4DMA010	TV6 DMA010
0-15	6.6 (2.2)*	TV1DMA015	TV2DMA015	TV3DMA015	TV4DMA015	TV6 DMA015
0-20	5.0	TV1DMA020	TV2DMA020	TV3DMA020	TV4DMA020	TV6 DMA020
0-25	4.0 (6.0)*	TV1DMA025	TV2DMA025	TV3DMA025	TV4DMA025	TV6 DMA025
0-50	2.0 (3.0)*	TV1DMA050	TV2DMA050	TV3DMA050	TV4DMA050	TV6 DMA050
0-100	1.0 (1.5)*	TV1DMA100	TV2DMA100	TV3DMA100	TV4DMA100	TV6 DMA100
0-150	0.66 (1.0)*	TV1DMA150	TV2DMA150	TV3DMA150	TV4DMA150	TV6 DMA150
0-200	0.50 (.75)*	TV1DMA200	TV2DMA200	TV3DMA200	TV4DMA200	TV6 DMA200
0-250	0.40 (.60)*	TV1DMA250	TV2DMA250	TV3DMA250	TV4DMA250	TV6 DMA250
0-300	0.33 (.50)*	TV1DMA300	TV2DMA300	TV3DMA300	TV4DMA300	TV6 DMA300
0-500	0.20 (.30)*	TV1DMA500	TV2DMA500	TV3DMA500	TV4DMA500	TV6 DMA500
0-750	0.13	TV1DMA750	TV2DMA750	TV3DMA750	TV4DMA750	TV6 DMA750

\*Resistance for 1-1/2" sizes shown in ( )



# Tru-Vue Style Analog Panel Meters



## Ordering Information

### DC Ammeters Self-shielding movement

Range	Approx. Impedance (Ohms) @ 60 Hz	Model/Size and Catalog Number				
		1-1/2" Model 921	2-1/2" Model 922	3-1/2" Model 923	4-1/2" Model 924	4"X6" Model 926
0-1	0.050	TV1DAA001	TV2DAA001	TV3DAA001	TV4DAA001	TV6DAA001
0-2	0.025	TV1DAA002	TV2DAA002	TV3DAA002	TV4DAA002	TV6DAA002
0-3	0.0166	TV1DAA003	TV2DAA003	TV3DAA003	TV4DAA003	TV6DAA003
0-5	0.010	TV1DAA005	TV2DAA005	TV3DAA005	TV4DAA005	TV6DAA005
0-10	0.005	TV1DAA010	TV2DAA010	TV3DAA010	TV4DAA010	TV6DAA010
0-15	0.0033*	TV1DAA015*	TV2DAA015	TV3DAA015	TV4DAA015	TV6DAA015
0-20	0.0025*	TV1DAA020*	TV2DAA020	TV3DAA020	TV4DAA020	TV6DAA020
0-25	0.0020*	TV1DAA025*	TV2DAA025	TV3DAA025	TV4DAA025	TV6DAA025
0-30	0.0017*	TV1DAA030*	TV2DAA030	TV3DAA030	TV4DAA030	TV6DAA030
0-50	0.001*	TV1DAA050*	TV2DAA050	TV3DAA050	TV4DAA050	TV6DAA050
0-100	10.0*	TV1DAA100*	TV2DAA100*	TV3DAA100*	TV4DAA100*	TV6DAA100*
0-150	10.0*	TV1DAA150*	TV2DAA150*	TV3DAA150*	TV4DAA150*	TV6DAA150*
0-200	10.0*	TV1DAA200*	TV2DAA200*	TV3DAA200*	TV4DAA200*	TV6DAA200*
0-300	10.0*	TV1DAA300*	TV2DAA300*	TV3DAA300*	TV4DAA300*	TV6DAA300*
0-500	10.0*	TV1DAA500*	TV2DAA500*	TV3DAA500*	TV4DAA500*	TV6DAA500*
50-0-50	0.001	TV1DAA5T5*	TV2DAA5T5*	TV3DAA5T5*	TV4DAA5T5*	TV6DAA5T5*

\* 1 1/2" DC current meters are self-contained through 10 amps; 15 amps and higher are supplied as 50mV meters and require an external shunt. 2 1/2", 3 1/2" and 4 1/2" meters are self-contained through 50 amps. Higher ranges are 50 mV meters and require an external shunt.

### DC Millivoltmeters Self-shielding movement

Range	Approx. Impedance (Ohms) @ 60 Hz	Model/Size and Catalog Number				
		1-1/2" Model 921	2-1/2" Model 922	3-1/2" Model 923	4 - 1/2" Model 924	4"X6" Model 926
0-50	10.0	TV1DMV050	TV2DMV050	TV3DMV050	TV4DMV050	TV6DMV050
0-100	20.0	TV1DMV100	TV2DMV100	TV3DMV100	TV4DMV100	TV6DMV100
0-500	100.0	TV1DMV500	TV2DMV500	TV3DMV500	TV4DMV500	TV6DMV500
50-0-50	20.0	TV1DMV5T5	TV2DMV5T5	TV3DMV5T5	TV4DMV5T5	TV6DMV5T5

### DC Voltmeters Self-shielding movement

Range	Approx. Impedance (Ohms) @ 60 Hz	Model/Size and Catalog Number				
		1-1/2" Model 921	2-1/2" Model 922	3-1/2" Model 923	4 - 1/2" Model 924	4"X6" Model 926
0-1	All 1,000 ohms per volt	TV1DVV001	TV2DVV001	TV3DVV001	TV4DVV001	TV6DVV001
0-5		TV1DVV005	TV2DVV005	TV3DVV005	TV4DVV005	TV6DVV005
0-8		TV1DVV008	TV2DVV008	TV3DVV008	TV4DVV008	TV6DVV008
0-10		TV1DVV010	TV2DVV010	TV3DVV010	TV4DVV010	TV6DVV010
0-15		TV1DVV015	TV2DVV015	TV3DVV015	TV4DVV015	TV6DVV015
0-20		TV1DVV020	TV2DVV020	TV3DVV020	TV4DVV020	TV6DVV020
0-25		TV1DVV025	TV2DVV025	TV3DVV025	TV4DVV025	TV6DVV025
0-30		TV1DVV030	TV2DVV030	TV3DVV030	TV4DVV030	TV6DVV030
0-50		TV1DVV050	TV2DVV050	TV3DVV050	TV4DVV050	TV6DVV050
0-100		TV1DVV100	TV2DVV100	TV3DVV100	TV4DVV100	TV6DVV100
0-150		TV1DVV150	TV2DVV150	TV3DVV150	TV4DVV150	TV6DVV150
0-200		TV1DVV200	TV2DVV200	TV3DVV200	TV4DVV200	TV6DVV200
0-250		TV1DVV250	TV2DVV250	TV3DVV250	TV4DVV250	TV6DVV250
0-300		TV1DVV300	TV2DVV300	TV3DVV300	TV4DVV300	TV6DVV300
0-500		2000 ohms per volt	TV1DVV500*	TV2DVV500	TV3DVV500	TV4DVV500
0-750	TV1DVV750*	TV2DVV750*	TV3DVV750	TV4DVV750	TV6DVV750	
0-1000	TV1DVV1TH*	TV2DVV1TH*	TV3DVV1TH*	TV4DVV1TH*	TV6DVV1TH*	

\*External multipliers (not included), Model 183, are required with 1 1/2" DC meters 500 volts or higher; on 2-1/2" DC meters, 750 volts or higher; and on 3-1/2" and 4 - 1/2" meters, 1000 volts or higher.



Model 183 Multiplier



Model 186 Current Transformer



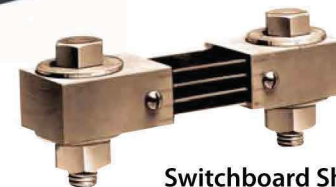
Donut Current Transformer



Terminal Type Current Transformer



Portable Shunt



Switchboard Shunt