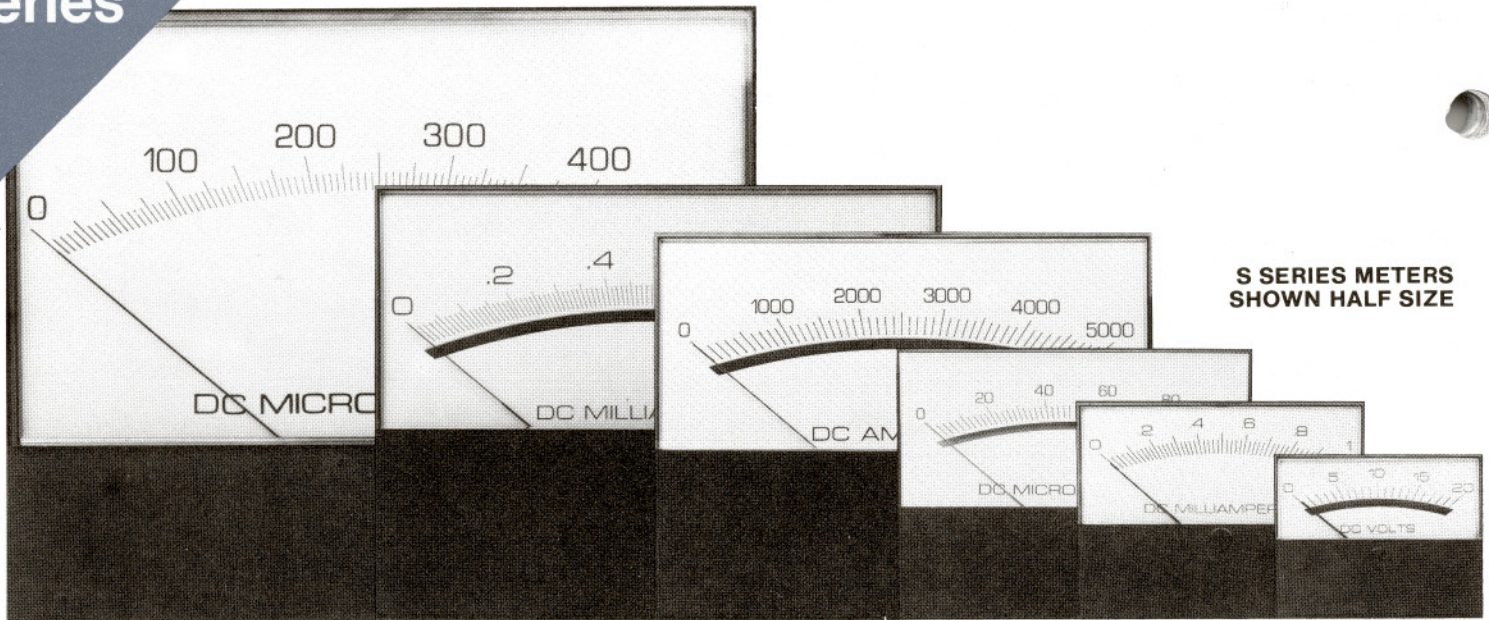


S series

PANEL METERS ~ *surface mount*



**S SERIES METERS
SHOWN HALF SIZE**

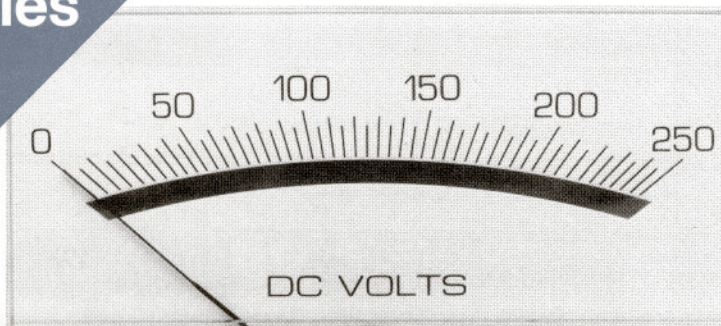
These clean-cut meters with straightforward design and pleasing aspect ratio are leaders of the Modutec line and will add distinction to any instrument or control panel. Available in six sizes and a wide variety of types and ranges, they resolve many problems for the equipment designer and are always a solid choice for function and appearance.

AC meters in this series are available in both moving coil (*rectifier type*) and iron vane versions. The latter has the virtue of being relatively insensitive to input distortion, while the rectifier type is less affected by frequency variations.

Options: Many desirable factory-installed options are available at modest additional cost; see pages 38-43.

W series

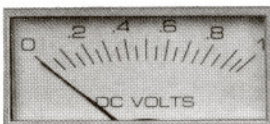
PANEL METERS ~ *Windo-mount*™



Windo-mount is sophisticated design that has found universal acceptance since Modutec introduced it several years ago. The W series meters are easily installed per applications bulletin AB6-1; when so installed the meter cover is flush with the panel surface, with the dial easily read.

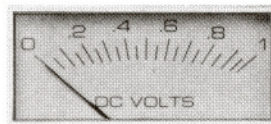
W Series meters are available in the same ranges and at the same prices as the S series meters. They offer excellent functional appearance, plus the looks-enhancing edge options shown below.

Options: Many desirable options are available at modest additional cost, as described on pages 39-43.



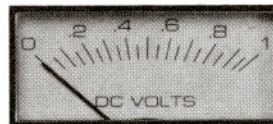
EDGE OPTIONS W1

1. Clear. Concealed outside edge of dial cover is polished plastic. This is the standard meter, and will be supplied unless specified otherwise.



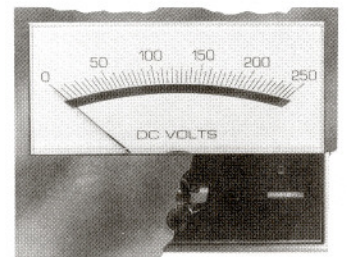
W2

2. White. Concealed outside edge of dial cover is painted white. Added cost HAG. To order, change catalog number prefix to "___W2".



W3

3. Black. Concealed outside edge of dial cover is painted black. Added cost HAG. To order, change catalog number prefix to "___W3".



Cutaway of Windo-Mount Meter installed in 1/8" panel

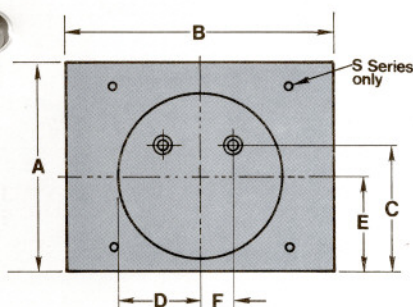
S & W Series-Types Available (UL recognition optional)

DC Microammeters: standard, logarithmic, suppressed zero
Milliammeters: standard, suppressed zero
Ammeters
Millivoltmeters
Voltmeters: standard, expanded scale, percent deviation

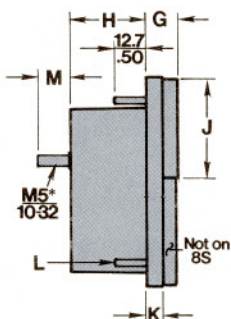
AC Milliammeters: taut band, iron vane
Ammeters: taut band, iron vane
Voltmeters: standard, expanded scale - taut band, iron vane
Null Meters
VU Meters
Pyrometers
Frequency Meters
Elapsed Time Meters

1½", 2½", 3½", 4½", 5½", 8" sizes

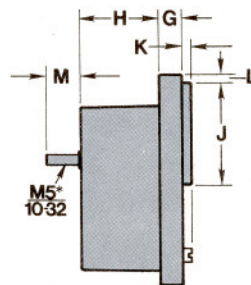
S & W series



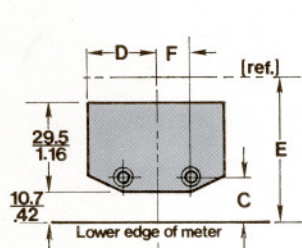
Above: S and W Series rear view (combined)



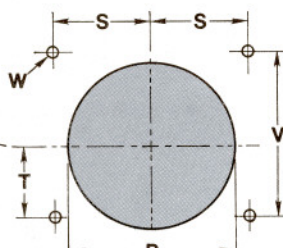
Side view, S Series



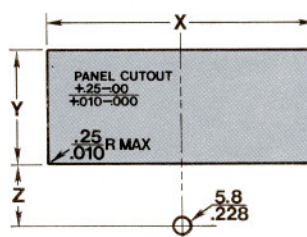
Side view, W Series



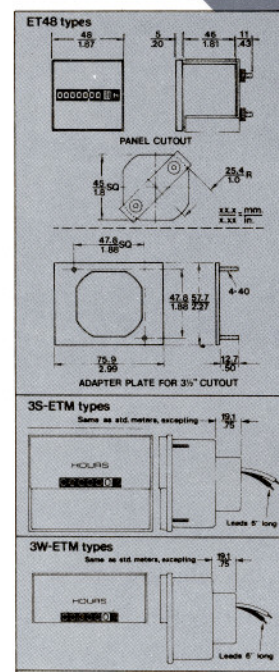
8S and 8W barrel detail



S Series panel cutout



W Series panel cutout



Elapsed Time Meters

DIMENSIONAL DATA

	A	B	C	D	E	F	G	H	J	K	L	M	R	S	T	V	W
1S	mm. 44.5	56.9	25.1	19.3	21.1	12.2	8.6	33.0	22.1		M3*	6.4	39.4	16.8	16.8	33.3	3.2
	in. 1.75	2.24	.99	.76	.83	.48	.34	1.30	.87	N/A	4-40	.25	1.55	.66	.66	1.31	.125
2S	mm. 57.7	75.9	33.8	27.2	28.7	14.2	10.2	33.0	31.5		M3*	12.7	56.4	23.9	23.9	47.8	3.2
	in. 2.27	2.99	1.33	1.07	1.13	.56	.40	1.30	1.24	N/A	4-40	.50	2.22	.94	.94	1.88	.125
3S	mm. 72.9	94.0	36.6	33.8	36.6	14.2	10.4	33.0	39.4		M3*	12.7	71.6	28.4	28.4	57.2	3.2
	in. 2.87	3.70	1.44	1.33	1.44	.56	.41	1.30	1.55	N/A	4-40	.50	2.82	1.12	1.12	2.25	.125
4S	mm. 100.6	129.5	44.2	33.8	44.2	14.2	12.9	33.0	55.9		M3.5*	12.7	71.6	50.8	39.1	90.4	3.8
	in. 3.96	5.10	1.74	1.33	1.74	.56	.51	1.30	2.20	N/A	6-32	.50	2.82	2.00	1.54	3.56	.150
5S	mm. 113.8	148.6	41.9	33.8	41.9	14.2	14.0	33.0	63.5		M3.5*	12.7	71.6	66.8	21.6	76.2	3.8
	in. 4.48	5.85	1.65	1.33	1.65	.56	.55	1.30	2.50	N/A	6-32	.50	2.82	2.63	.85	3.00	.150
5S Opt.1	mm. 113.8	148.6	41.9	33.8	41.9	14.2	14.0	33.0	63.5		M3.5*	12.7	71.6	57.2	27.8	88.9	3.8
	in. 4.48	5.85	1.65	1.33	1.65	.56	.55	1.30	2.50	N/A	6-32	.50	2.82	2.25	1.093	3.50	.150
8S	mm. 165.1	203.2	17.3	25.4	50.8	12.2	14.0	30.5	114.3	10.4	M3.5*	12.7	88.9	76.2	25.4	114.3	3.8
	in. 6.50	8.00	.68	1.00	2.00	.48	.55	1.20	4.50	.41	6-32	.50	3.50	3.00	1.00	4.50	.150

	A	B	C	D	E	F	G	H	J	K	L	M	X	Y	Z
1W	mm. 45.0	57.4	24.9	19.3	20.8	12.2	7.0	33.0	23.5	3.7	1.5	6.4	54.6	23.7	13.6
	in. 1.77	2.26	.98	.76	.82	.48	.275	1.30	.925	.145	.06	.25	2.150	.935	.535
2W	mm. 58.2	76.5	34.3	26.9	29.2	14.2	7.5	33.0	32.0	3.7	1.5	12.7	73.7	32.3	16.1
	in. 2.29	3.01	1.35	1.06	1.15	.56	.295	1.30	1.260	.145	.06	.50	2.900	1.270	.633
3W	mm. 73.7	94.7	36.8	33.8	36.8	14.2	8.1	33.0	40.3	3.7	1.8	12.7	91.7	40.5	20.4
	in. 2.90	3.73	1.45	1.33	1.45	.56	.32	1.30	1.585	.145	.07	.50	3.610	1.595	.804
4W	mm. 103.1	131.6	45.5	33.8	45.5	14.2	9.4	33.0	59.3	.37	2.3	12.7	127.5	59.6	21.7
	in. 4.06	5.18	1.79	1.33	1.79	.56	.37	1.30	2.335	.145	.09	.50	5.020	2.345	.856
5W	mm. 116.8	151.6	41.9	33.8	41.9	14.2	9.4	33.0	65.6	3.7	2.5	12.7	146.8	65.8	32.5
	in. 4.60	5.97	1.65	1.33	1.65	.56	.37	1.30	2.583	.145	.10	.50	5.780	2.590	1.278
8W	mm. 165.1	203.2	17.3	25.4		12.2	10.4	30.5	114.3	3.6	3.0	12.7	198.4	114.6	28.9
	in. 6.50	8.00	.68	1.00	N/A	.48	.41	1.20	4.50	.14	.12	.50	7.810	4.510	1.138

SPECIFICATIONS

Modutec meters meet or exceed the performance requirements of American National Standards (ANSI) C39.1-1981

***Accuracy:** ±2% DC;
±2% AC — iron vane;
±3% AC — rectifier type
(60 Hz sine wave).

***Tracking:** ±1½% DC;
±2% AC; vertical
mounting.

***Repeatability:**
±0.5% DC and rectifier;
±2% iron vane

Response time: 1.5 sec-
onds maximum for all
ranges, except 0-50 µA
and below, where the
response time is 3.0
seconds maximum.

***Symmetry:** ±1.5%.

Resistance:
±10% DC and rectifier;
±30% iron vane

Scale arc: 100°
(iron vane 90°).

Shielding: Self-shielded;
no special calibration
needed for steel or non-
ferrous panel mounting,
including iron vane
meters, a Modutec
exclusive.

Scale lengths:

Meter	Scale Length	
Size	DC & Rectifier	Iron Vane
1½"	1.75"	—
2½"	2.41"	2.15"
3½"	3.00"	2.70"
4½"	4.22"	3.80"
5½"	5.12"	—
8"	7.55"	—

*Percent of full scale. On zero center meters, specification applies to full scale, not end scale values, e.g., 50-0-50 µA is 100 µA full scale.

NOTE ON ORDERING: The ranges, catalog numbers, and price codes on the next six pages apply to both the S and W Series meters. To designate choice when ordering, replace the ☐ in the applicable catalog number with "S" or "W".