

50 series

Surface Mounted Analog Panel Meters

The Jewell surface mounted 50 series analog panel meter is designed with traditional black case and glass windows. Black phenolic Bakelite covers and cases suited for industrial equipment. Available in both round and square shapes.

Mechanisms/Sizes

T taut band

- Compact self-shielded taut band movement using simplified, frictionless suspension system supporting moving assembly. For applications that do not have severe shock and vibration.
- 2½" round/square (52RT/52ST), 3½" round/square (53RT/53ST), and 5" square (55ST).

TB taut band

- High performance taut band movement having unique suspension system for shock resistance. Offers variety of ballistics with superior torque and damping capabilities.
- 2½" round (52RTB), 3½" round (53RTB), and 5" square (55STB).

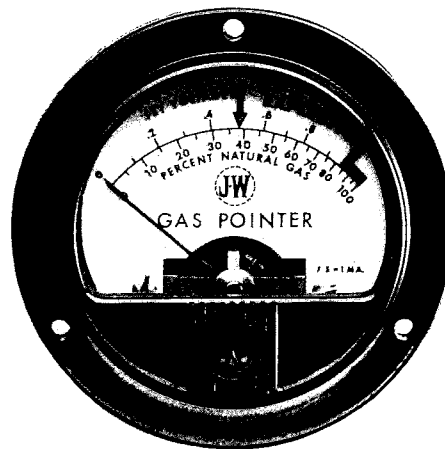
CM core-mag

- Compact, self-shielded D'Arsonval pivot and jewel movement providing excellent damping, repeatability and resistance to shock and vibration.
- 2½" round/square (52RCM/52SCM), 3½" round/square (53RCM/53SCM), and 5" square (55SCM).

Pivot & Jewel

- D'Arsonval mechanism offering excellent sensitivity, repeatability and resistance to shock and vibration. Offers variety of ballistics with superior torque and damping capabilities.
- 2½" round/square (52R/52S), 3½" round/square (53R/53S), and 5" square (55S).

Jewell



52R Series

Specifications

- **Performance** Meets requirements of American National Standard Institute ANSI C39.1.
- **Accuracy** All DC meters $\pm 2\%$ and all AC rectified-type meters $\pm 3\%$ of full scale at 23 degrees celsius.
- **Case** Precision molded, black phenolic Bakelite case.
- **Cover** Precision molded, black phenolic Bakelite cover with glass window.
- **Zero Set** Zero left is standard. Zero center, zero right, and offset zero available upon request.
- **Zero Adjuster** External adjuster on cover is standard on all models with minimum $\pm 3\%$ adjustment range.
- **Dial** White metal dial with sharp division marks, black printed numerals and radial arc. Special dials including mirrored for 5" meters and multicolor available upon request.
- **Pointer** Black lance pointer is standard. Knife edge or tubular pointers and red or white colors available upon request.
- **Deflection** T taut band standard is 100 degrees. TB taut band standard is 100 degrees. CM core-mag standard is 90 degrees. Pivot & Jewell standard is 100 degrees for 100 microamp range and above and 90 degrees for below.
- **Terminals** Threaded stud-type terminals are standard. Solder lugs available upon request.
- **Mounting** Three-stud mounting on all round meters and four-stud mounting on all square meters.
- **Illumination** Internal illumination available on 5" meters. Two lamp welds are cemented to meter case holding two lamp sockets. Light bulbs not included.
- **Warranty** One year limited warranty.

Specifications subject to change without notice.

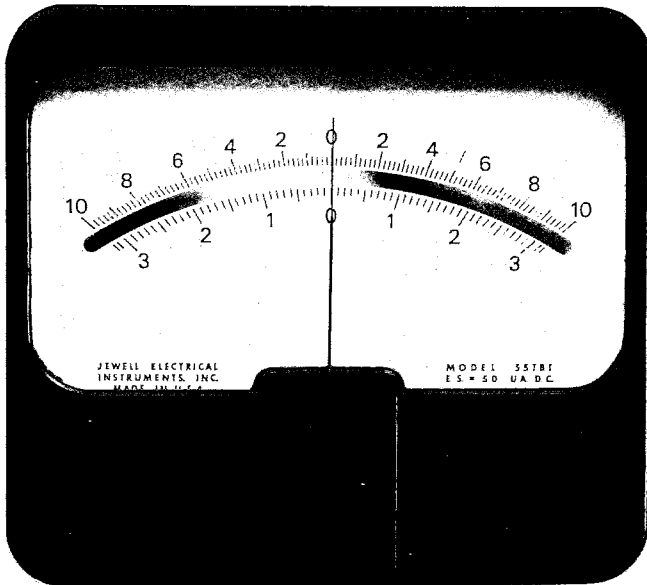
Ranges and Resistances

50 Series

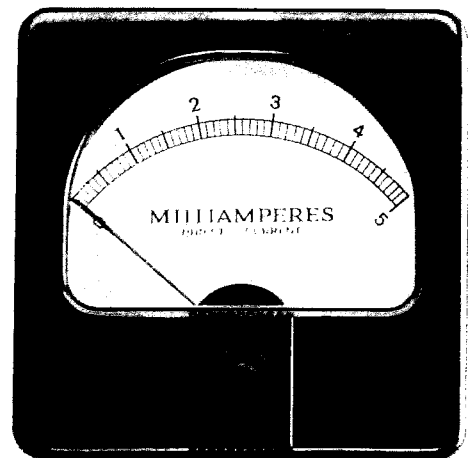
Standard Ranges	Standard Resistances			
	52RT, 52ST 53RT, 53ST 55ST	52RTB 53RTB 55STB	52RCM, 52SCM 53RCM, 53SCM 55SCM	52R, 52S 53R, 53S 55S
MICROAMPERES DC				
0-10	NA	3400	NA	NA
0-20	NA	1710	NA	2200
0-50	2560	1660	NA	1650
0-100	730	450	900	1325
0-200	225	197	500	460
0-500	272	41	200	280
50-0-50	730	450	900	1325
100-0-100	225	197	500	460
500-0-500	77	18	45	45
MILLIAMPERES DC				
0-1	77	18	45	45
0-5	7.9	CF	5	6
0-10	5.9	CF	CF	6
0-25	CF	CF	CF	2
0-50	CF	CF	CF	1
0-100	CF	CF	CF	0.5
0-200	CF	CF	CF	0.25
0-500	CF	CF	CF	0.1
AMPERES DC				
0-1	0.05	0.05	CF	0.05
0-5	0.01*	CF	CF	0.01
0-10	0.005*	CF	CF	0.005
0-25	0.002*	CF	CF	0.002
0-50	0.001*	CF	CF	0.001

Standard Ranges	Standard Resistances			
	52RT, 52ST 53RT, 53ST 55ST	52RTB 53RTB 55STB	52RCM, 52SCM 53RCM, 53SCM 55SCM	52R, 52S 53R, 53S 55S
MILLIVOLTS DC				
0-5	NA	20	CF	NA
0-10	NA	40	CF	NA
0-50	50	50	50	10
VOLTS DC (ohms/volt)				
0-1	1000	1000	1000	1000
0-5	1000	1000	1000	1000
0-10	1000	1000	1000	1000
0-15	1000	1000	1000	1000
0-25	1000	1000	1000	1000
0-30	1000	1000	1000	1000
0-50	1000	1000	1000	1000
0-100	1000	1000	1000	1000
0-150	1000	1000	1000	1000
0-200	1000	1000	1000	1000
0-500	1000	1000	1000	1000
VOLTS AC rectified (ohms/volt)				
0-150	1000	1000	1000	1000
0-300	1000**	1000	1000**	1000

NA - not available CF - consult factory
 Standard resistance for all ammeters in ohms $\pm 10\%$ and for all voltmeters in ohms $\pm 5\%$.
 Consult factory for special ranges and resistance.
 * Not available in 2 1/2" meter, consult factory.



55S Series

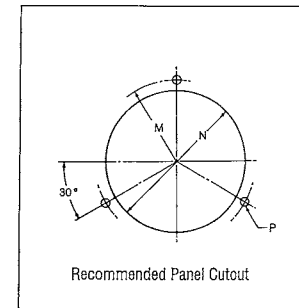
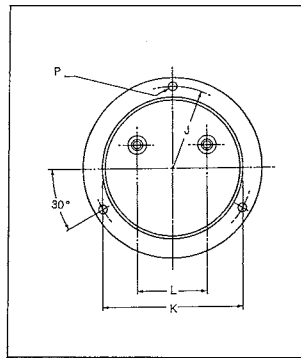
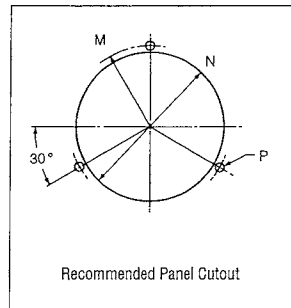
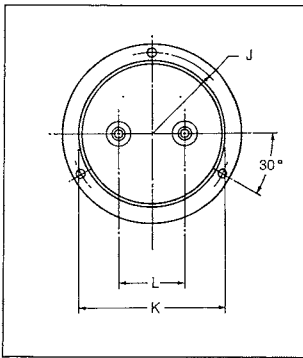
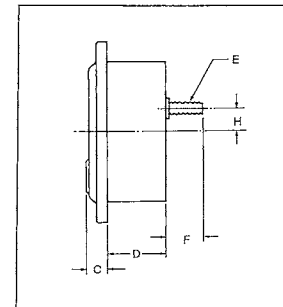
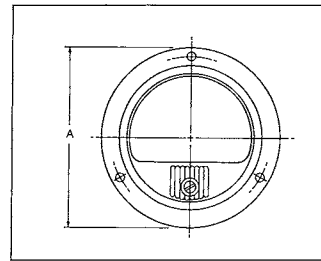
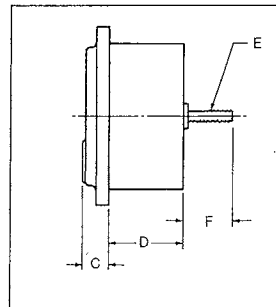
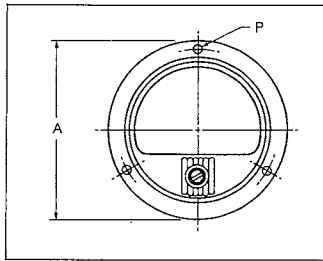


53S Series

Dimensions

Round Surface Mount

MODELS	A	C	D	E	F	H	J	K	L	M	N	P
52R, 52RTB	2.72 in	0.37 in	1.16 in	10-32 UNC-2A	0.75 in		1.22 in	2.18 in	1.00 in	1.22 in	2.22 in	0.125 in
52RT, 52RCM	69.08 mm	9.40 mm	29.46 mm		19.05 mm		30.99 mm	55.37 mm	25.40 mm	30.99 mm	56.39 mm	3.18 mm
53R, 53RTB	3.50 in	0.37 in	1.16 in	1/4-28 UNF-2A	0.75 in	0.44 in	1.58 in	2.73 in	1.38 in	1.58 in	2.82 in	0.15 in
53RT, 53RCM	88.90 mm	9.40 mm	29.46 mm		19.05 mm	11.18 mm	40.13 mm	69.34 mm	35.05 mm	40.13 mm	71.63 mm	3.81 mm

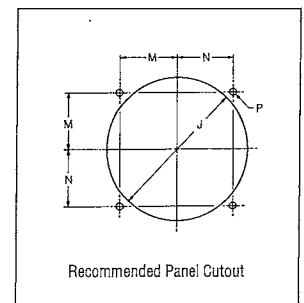
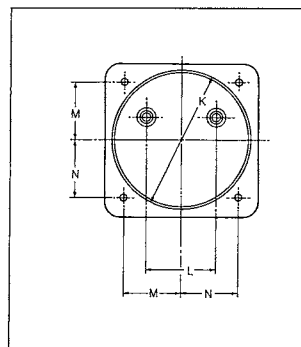
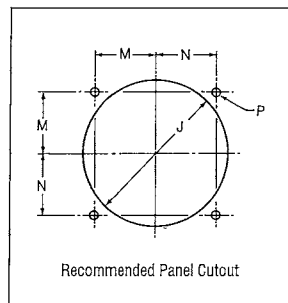
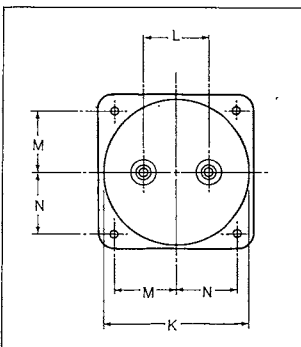
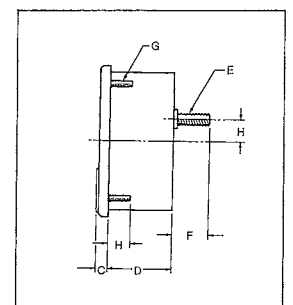
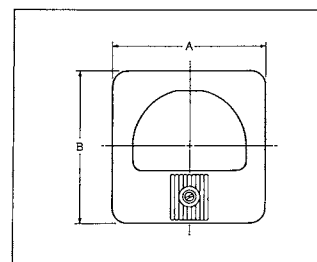
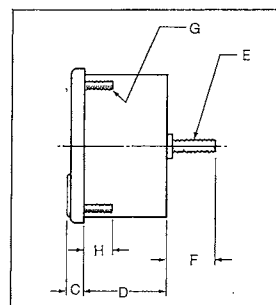
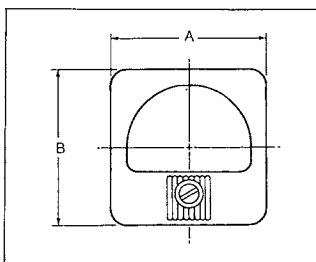


2 1/2" meters

3 1/2" meters

Square Surface Mount

MODELS	A	B	C	D	E	F	G	H	J	K	L	M	N	P
52S	2.38 in	2.38 in	0.19 in	1.30 in	10-32 UNC-2A	0.75 in	4-40 UNC-2A	0.44 in	2.22 in	2.18 in	1.00 in	0.938 in	0.938 in	0.125 in
52ST, 52SCM	60.45 mm	60.45 mm	4.83 mm	33.02 mm		19.05 mm		11.18 mm	56.39 mm	55.37 mm	25.40 mm	23.83 mm	23.83 mm	3.18 mm
53S	3.00 in	3.00 in	0.19 in	1.28 in	1/4-28 UNF-2A	0.75 in	4-40 UNC-2A	0.44 in	2.82 in	2.73 in	1.38 in	1.125 in	1.125 in	0.125 in
53ST, 53SCM	76.20 mm	76.20 mm	4.83 mm	32.51 mm		19.05 mm		11.18 mm	71.63 mm	69.34 mm	35.05 mm	28.58 mm	28.58 mm	3.18 mm



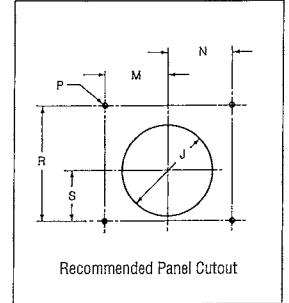
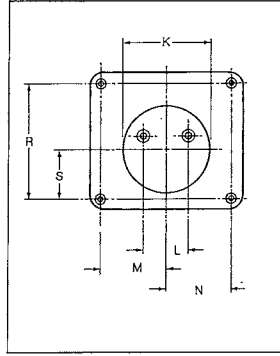
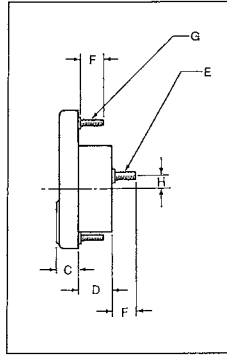
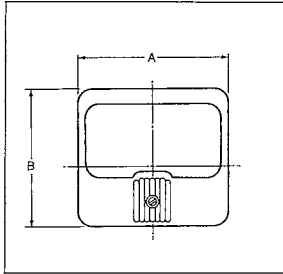
2 1/2" meters

3 1/2" meters

Dimensions (continued)

MODELS	A	B	C	D	E	F	G	H	J	K	L	M	N	P
55S, 55STB	4.66 in	4.16 in	0.59 in	0.95 in	1/4-28 UNF-2A	0.75 in	6-32 UNC-2A	0.44 in	2.82 in	2.78 in	1.38 in	2.00 in	2.00 in	0.15 in
55ST, 55SCM	118.36 mm	105.66 mm	14.99 mm	24.13 mm		19.05 mm		11.18 mm	71.63 mm	69.34 mm	35.05 mm	50.80 mm	50.80 mm	3.81 mm

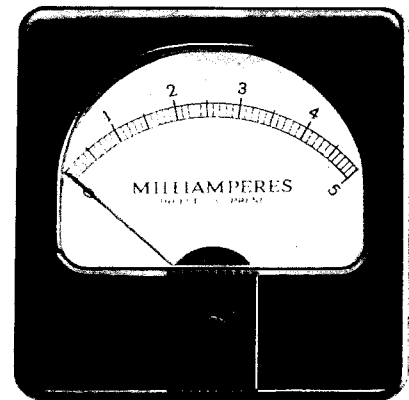
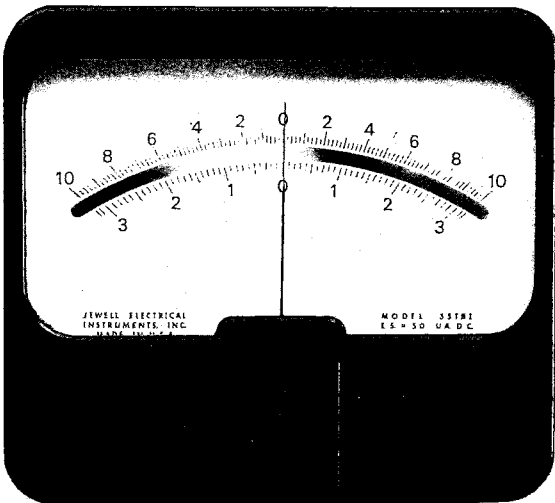
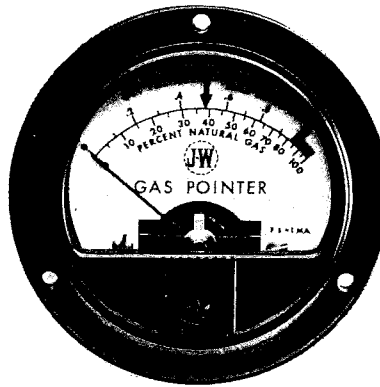
MODELS	R	S
55S, 55STB	3.562 in	1.531 in
55ST, 55SCM	90.47 mm	38.89 mm



5" meters

Scale and Pointer

METER	scale	pointer
52 series round/square	1.87 in 47.50 mm	1.07 in 27.18 mm
53 series round/square	2.48 in 62.99 mm	1.42 in 36.07 mm
55 series square	3.82 in 97.03 mm	2.19 in 55.63 mm



JEWELL ELECTRICAL INSTRUMENTS

124 Joliette Street, Manchester, New Hampshire 03102 USA Toll free (800) 227-5955 Tel (603) 669-6400 Fax (603) 669-5962