

# HS series

## Surface Mounted Analog Panel Meters

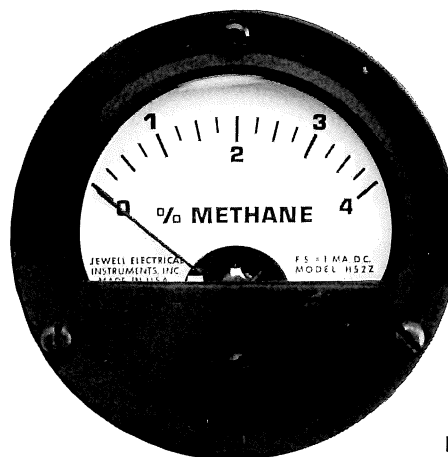
The Jewell surface mounted HS series analog panel meter is renowned for its resistance to shock, vibration and moisture. Special parts and fastening reduce the effects of hard usage; one-piece, steel case provides magnetic and electrostatic shielding; and convex glass window is hermetically sealed.

### Mechanisms/Sizes

#### 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.
- 1 1/2" (HS1), 2 1/2" (HS2), and 3 1/2" (HS3).

# Jewell



HS2 Series

### Specifications

- **Performance** Exceeds the 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** One-piece, steel case.
- **Cover** Convex glass cover cemented to case.
- **Zero Set** Zero left is standard. Zero center, zero right, and offset zero available upon request.
- **Zero Adjuster** "O" ring sealed external adjuster furnished for 2 1/2" and 3 1/2" meters only.
- **Dial** White metal dial with sharp division marks, black printed numerals, radial arc. Special multicolor dials available upon request.
- **Pointer** Black lance pointer is standard. Knife edge or tubular pointers and red or white colors upon request.
- **Deflection** The 1 1/2" meters are 100 degrees. The 2 1/2" and 3 1/2" meters are 100 degrees deflection for 100 microamps DC and above, 90 degrees for 50 microamps DC, and 60 degrees for 20 microamps DC.
- **Terminals** Solder lug terminals are standard.
- **Mounting** The 1 1/2" meters use four-stud mounting. The 2 1/2" and 3 1/2" meters use three-stud mounting. All sizes use ANSI drilling plan. Neoprene gasket standard for HS1 and optional for HS2. Black fiber spacer standard for HS2 and HS3.
- **Bezel** Dull-black aluminum bezel is standard.
- **Warranty** One year limited warranty.

Specifications subject to change without notice.

## Ranges and Resistances

Standard Ranges	Standard Resistances			
	HS1		HS2 HS3	
MICROAMPERES DC				
0-10	NA		NA	
0-20	NA		2200	
0-50	2200		2200	
0-100	1000		1000	
0-200	430		430	
0-500	225		225	
50-0-50	1000		1000	
100-0-100	430		430	
500-0-500	95		95	
MILLIAMPERES DC				
0-1	95		95	
0-5	4		4	
0-10	3		3	
0-25	2		2	
0-50	1		1	
0-100	0.5		0.5	
0-200	0.25		0.25	
0-500	0.1		0.1	
AMPERES DC				
0-1	12.5*		.05**	
0-5	12.5*		.01**	
0-10	12.5*		.005**	
0-25	12.5*		12.5*	
0-50	12.5*		12.5*	

## HS Series

Standard Ranges	Standard Resistances			
	HS1		HS2 HS3	
MILLIVOLTS DC				
0-5	CF		CF	
0-10	CF		CF	
0-50	12.5		12.5	
VOLTS DC (ohms/volt)				
0-1	95***		1000	
0-5	95***		1000	
0-10	95***		1000	
0-15	95***		1000	
0-25	95***		1000	
0-30	95***		1000	
0-50	95***		1000	
0-100	95***		1000	
0-150	95***		1000	
0-200	95***		1000	
0-500	95***		95***	
VOLTS AC rectified (ohms/volt)				
0-150	NA		1000	
0-300	NA	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.

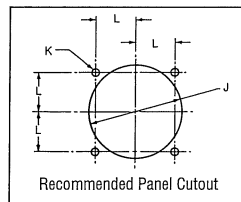
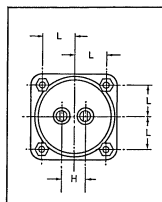
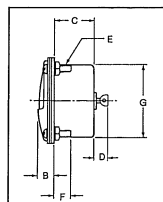
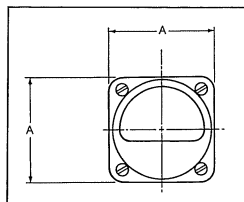
\* Supplied as 50MVDC for use with external shunt (not supplied).

\*\* Supplied with externally mounted shunt board.

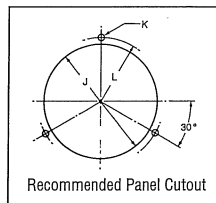
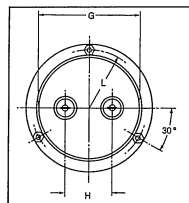
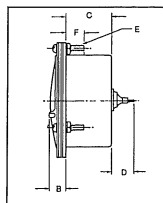
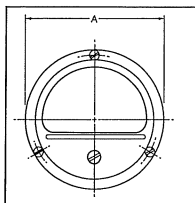
\*\*\* Supplied as 1 MADC meter for use with external multiplier (not supplied).

## Dimensions

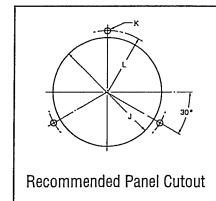
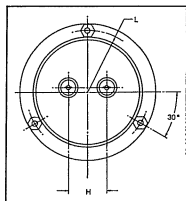
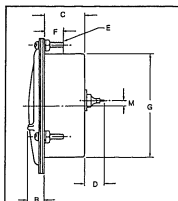
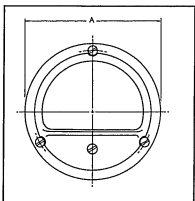
MODEL	A	B	C	D	E	F	G	H	J	K	L
HS1	1.75 in 44.45 mm	0.33 in 8.38 mm	0.83 in 21.08 mm	0.26 in 6.60 mm	4-40 UNC-2A	0.35 in 8.89 mm	1.50 in 38.10 mm	0.50 in 12.70 mm	1.53 in 38.86 mm	0.125 in 3.18 mm	0.656 in 16.66 mm



MODEL	A	B	C	D	E	F	G	H	J	K	L
HS2	2.696 in 68.48 mm	0.40 in 10.16 mm	1.081 in 27.46 mm	0.52 in 13.21 mm	4-40 UNC-2A	0.39 in 9.90 mm	2.15 in 54.61 mm	1.00 in 25.40 mm	2.22 in 56.39 mm	0.125 in 3.18 mm	1.22 in 30.99 mm



MODEL	A	B	C	D	E	F	G	H	J	K	L	M
HS3	3.51 in 94.74 mm	0.40 in 90.98 mm	1.063 in 27.00 mm	0.52 in 13.21 mm	6-32 UNC-2A	0.50 in 12.70 mm	2.68 in 68.07 mm	1.00 in 25.40 mm	2.82 in 71.63 mm	0.15 in 3.81 mm	1.58 in 40.13 mm	0.125 in 3.18 mm



### Scale and Pointer

METER	scale	pointer
HS1 series	1.14 in 28.96 mm	0.728 in 18.49 mm
HS2 series	1.87 in 47.50 mm	1.07 in 27.18 mm
HS3 series	2.50 in 63.50 mm	1.42 in 36.07 mm