



## UL FREQUENCY TRANSDUCER

MODEL AFT

### DESCRIPTION:

The AFT Frequency Transducer combines wide frequency range capability with high accuracy measurement in a UL & CUL listed package. The AFT can accurately measure frequencies up to 1000Hz with some models measuring from dc to full scale. For applications requiring better resolution, the AFT has standard models with narrower frequency ranges. A wide input range means that all standard models accept voltages from 3V to 575V. The AFT comes with standard outputs of 1mA, 4 - 20mA, 0 - 20mA as well as 5V and 10V.

### FEATURES

- High accuracy over wide frequency ranges.
- Each model covers all input voltages from 3V to 575V.
- UL & CUL Approvals.



### APPLICATION

- Where indication of instantaneous frequency is required.



INPUT FREQUENCY (Hz)	STANDARD OUTPUTS MODEL NUMBER AFT-					
	0 - 1mA	0 - 10Vdc	0 - 5Vdc	4 - 20mA	4 - 20mA*	0 - 20mA
45 - 55	050-10B	050-10D	050-10X5	050-10E	050-10E2	050-10EA
55 - 65	060-10B	060-10D	060-10X5	060-10E	060-10E2	060-10EA
375 - 425	400-50B	400-50D	400-50X5	400-50E	400-50E2	400-50EA
0 - 10	010B	010D	010X5	010E	010E2	010EA
0 - 55	055B	055D	055X5	055E	055E2	055EA
0 - 65	065B	065D	065X5	065E	065E2	065EA
0 - 100	100B	100D	100X5	100E	100E2	100EA
0 - 425	425B	425D	425X5	425E	425E2	425EA
0 - 1000	1000B	1000D	1000X5	1000E	1000E2	1000EA

115Vac, 50/60Hz instrument power is required on all units.

For 230Vac, 50/60Hz instrument power - add "-22" suffix to part number.

\* Output is loop powered from 15 - 24Vdc (also requires instrument power).

### ORDERING INFORMATION

Example: 55 - 65 Hz. input, with  
0 - 5Vdc output  
**AFT - 060-10X5**

## MODEL AFT SPECIFICATIONS

### INPUT

FREQUENCY RANGE: See table

VOLTAGE RANGE: 3 - 575V

BURDEN : 1.25VA

OVERLOAD: 575V

DIELECTRIC TEST:

Input to Output/Inst. Pwr.: 3250Vac

Inst. Pwr. to Output: 2200Vac

Case to Input/Output/Inst. Pwr.: 2200Vac

INSTRUMENT POWER:

115Vac, 50/60Hz,  $\pm 15\%$ , 15VA max.

-22 option: 230Vac, 50/60Hz.,  $\pm 15\%$ , 15VA max

### OUTPUT

**ACCURACY:  $\pm 0.1\%$  span**

OUTPUT LOADING (OHMS):

1mA: 0 - 10K

10V & 5V: 2K min.

4 - 20mA, 0 - 20mA: 0 - 500

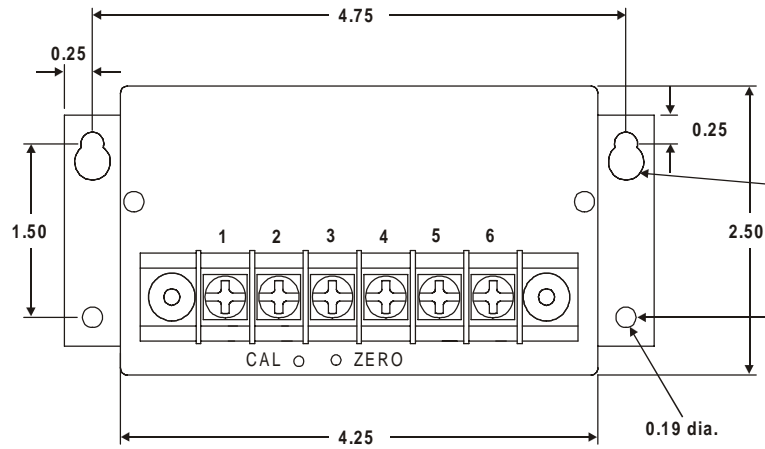
OUTPUT RIPPLE:  $\pm 1.0\%$  F.S.

RESPONSE TIME: < 200 milliseconds

TEMPERATURE RANGE: -20°C - +60°C

TEMPERATURE EFFECT:  $\pm 0.005\%/^{\circ}\text{C}$

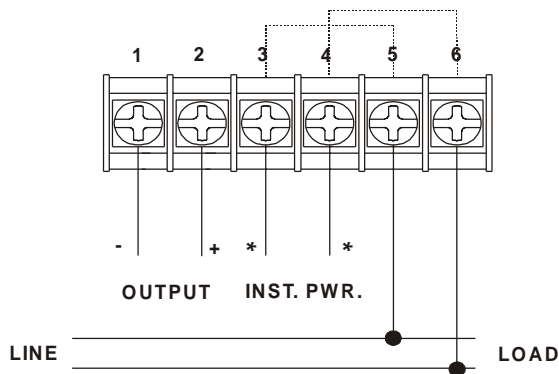
# OHIO SEMITRONICS, INC.



DIMENSIONS IN INCHES  
CASE HEIGHT 4.5"  
WEIGHT 1.5 LBS.

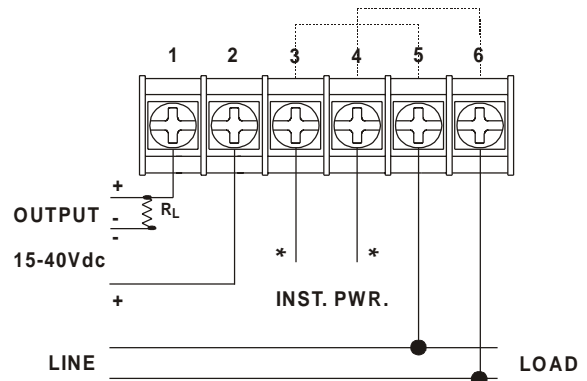
## CONNECTION DIAGRAMS

### MODELS WITH B, D, X5 E, EA OPTIONS



\* Terminals 3 & 5 and 4 & 6 may be tied together as shown, if line voltage is within instrument power ratings.

### MODELS WITH E2 OPTIONS



\* Terminals 3 & 5 and 4 & 6 may be tied together as shown, if line voltage is within instrument power ratings.