Programmable Frequency to Analogue Converter MicroFREQ F-A

Function: Isolating signal converter, which will convert from a frequency range to an analogue output. The MicroFREQ is a microprocessor based signal converter and can therefore be programmed by the user to specify the input frequency type and range and the output type and range. Both the input and the output stages of the instruments are powered from separate secondaries of the transformer thus maintaining 3 port isolation. The MicroFREQ has the programming function resident in memory. Connect the MicroFREQ to a terminal or PC via a Lee-Dickens MicroLEAD and change the input and output ranges as required.

SPECIFICATIONS

INPUTS:

Frequency
Between 0 and 10,000 Hz
Minimum Span: 0.1 Hz

Voltage
Minimum 50mV DC
Maximum 50 Volt DC

Transducer Supply
(Potentiometer adjustable)
3 to 24 Volt DC
20mA Maximum

OUTPUTS:

DC Current
Between 0 and 20mA
Minimum span 1mA
20mA into 10 to 1000 ohms
10mA into 10 to 2000 ohms

DC Voltage
Between 0 and 10 Volts
into 1K ohms minimum
Minimum span 1 Volt

Input/Output/Supply Isolation
600 Volts > 20M ohms

SUPPLY:

Power Supply Voltage
1) User selectable
115 Volt AC ±15% 50/60 Hz
230 Volt AC ±15% 50/60 Hz
or
2) 18 to 30 Volt DC with converter to maintain signal to power supply isolation

Power Required
3VA Maximum

Pilot Light
Red LED shows Power ON

GENERAL:

Resolution
Minimum 1 count per 1000

Operating Temperature Range
0 to +45ºC

Storage Temperature Range
-20 to +60ºC

Operating Humidity Range
0 to 95% RH non-condensing

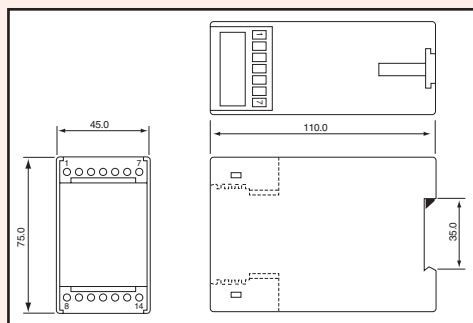**Storage Humidity Range**
0 to 95% RH non-condensing

Weight
MicroFREQ   310 gms
MicroLEAD   65 gms

MECHANICAL DETAILS

45.0
110.0
75.0
35.0

TERMINATION DETAILS

Terminal		Terminal	
1	Magnetic Transducer	8	Output -ve
2	Magnetic Transducer	9	Output +ve
3	If above link 3 to 4	10	Unused
4	or if not - Logic Pulse i/p	11	Unused
5	Pull down 100R to 0V	12	230 Volt ±15% 50/60 Hz or 24 Volt DC +ve
6	0V	13	115 Volt ±15% 50/60 Hz Unused
7	3 to 24V transducer supply	14	Neutral 24 Volt DC -ve

ORDERING DETAILS

a) Give identification code, i.e. MicroFREQ F-A
b) Give power supply voltage, i.e. 240 Volt 60 Hz
c) Give details of input signal, both type and range, i.e. 12 volt dc pulse, 0 to 6000Hz.
d) Give details of output signal, both type and range, i.e.4 to 20mA
e) If programming yourself then please just specify items (a) and (b), and, if programming for the first time, please order a MicroLEAD

LEE-DICKENS LTD
Desborough, Kettering, Northants NN14 2QW U.K.
Tel: (01536) 760156 Fax (01536) 762552