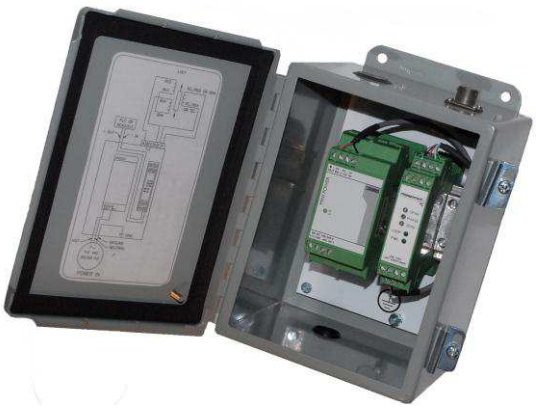


IEM-422

Line Powered Industrial LVDT/RVDT Current Transmitter

SPECIFICATIONS

- **115/230VAC line powered**
- **NEMA-13 rated enclosure**
- **4 to 20mA output**
- **Zero, span and phase adjustable**
- **2.5, 5 and 10kHz excitation frequencies**
- **Low noise, 3-pole Butterworth filter**
- **Master/slave capability**
- **Compatible with 4, 5 & 6 wire LVDTs/RVDTs**
- **Power and loop status LED's**

FEATURES

- Rugged NEMA-13 rated enclosure
- Conduit ports for easy connection
- Pre-configured 4-20mA output signal
- Bolt holes for easy mounting
- Multiple LVDT master/slave capability

APPLICATIONS

- Steam turbine control systems
- Process control systems
- Pulp/paper industry
- Petrochemical process control
- Roller gap position

The **IEM-422** is a line-powered current transmitter, designed for industrial process control applications. The IEM-422 consists of a power supply (PSD 40-15) and an LVDT/RVDT signal conditioner (LDM-1000), pre-configured to supply a 4 to 20 mA output from a 115 or 230 volt AC supply. The IEM-422 supplies an AC sine wave excitation to the LVDT or RVDT and then demodulates and amplifies its output. A full-wave synchronous demodulator eliminates quadrature and harmonics to maximize external noise rejection.

The IEM 422 is housed in a rugged NEMA 13 enclosure to protect it from dirt, dust, water and other contaminants commonly found in industrial environments. Power, input and signal output connections are made easy by using conduit ports to make the appropriate connections. LVDT hookup is completed by mating to the box-mounted, sealed M/S-style bayonet connector. The internal signal conditioner is also capable of providing several different DC output voltage signals to accommodate varying PLC and analog I/O requirements. The frequency response is internally selectable, as is the master/slave function which allows synchronization of multiple IEM-422 transmitters to prevent beat frequencies and cross talk between transducers.

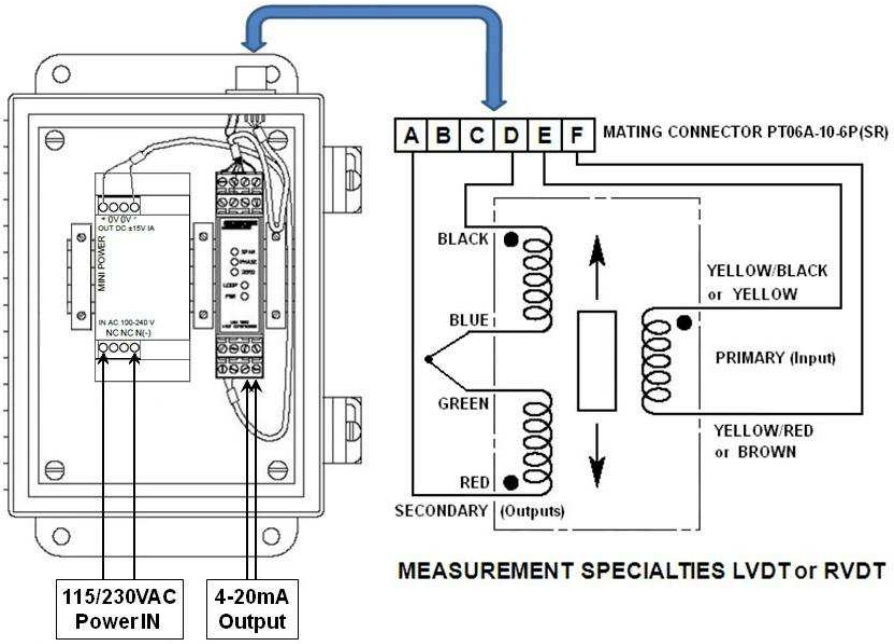
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PERFORMANCE SPECIFICATIONS

SPECIFICATIONS	
Supply voltage	85 to 264 VAC @ 45-65Hz
Output range	4 to 20mA
Zero output	12mA
Zero adjustment range	±30% of FRO
Temperature coefficient of output	±0.02% of FSO per degree F [±0.036% of FSO per degree C]
Operating temperature range	-13°F to +185°F [-25°C to 85°C]
Current output noise & ripple	25µA maximum
Current loop resistance	700Ω maximum
Frequency response	250Hz and 1kHz @ -3 dB *(DIP switch selectable, 250Hz as shipped)*
Non-linearity	≤±0.02% of FS
Weight	8.9 lbs [4.04 kilograms]
IEC 60529 & NEMA ratings	IP65; NEMA 13
Transducer excitation	
Voltage	1 and 3VRMS *(DIP switch selectable, 3VRMS as shipped)*
Current	25mA RMS
Frequency	2.5, 5 and 10kHz *(DIP switch selectable, 2.5kHz as shipped)*
Transducer requirements	
LVDT/RVDT input impedance	50Ω minimum @ 1VRMS excitation ; 150Ω minimum @ 3VRMS

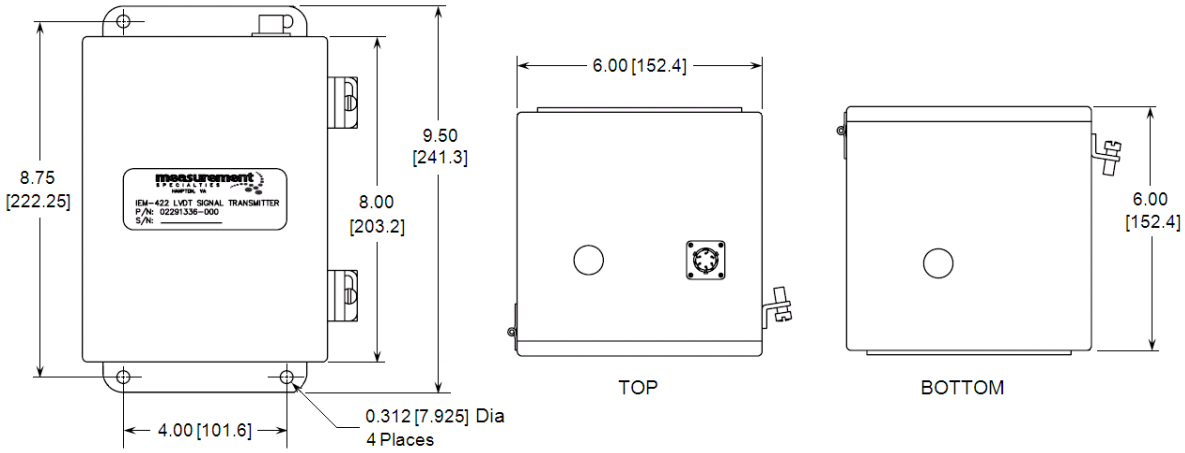
Notes:
All values are nominal unless otherwise noted
FSO (Full Scale Output) is the largest absolute value of the outputs measured at the range ends
FRO (Full Range Output) is the algebraic difference in measured outputs at the ends of the range

WIRING



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DIMENSIONS



Dimensions are in inch [mm]

ORDERING INFORMATION

Description	Part Number
IEM-422 Current Transmitter	02291336-000
Mating connector for LVDT/RVDT, Amphenol/Bendix PT06A-10-6P(SR)	62101056-000
Cable to connect HCA/HCI/GCA/R36AS to IEM-422, PTO6A-10-6S to PTO6A-10-6P (1)	04290133-000
Cable to connect MP Series LVDT to IEM-422, Stripped & Tinned to PTO6A-10-6P (1)	04290594-000

(1) All cables are shielded, 10 foot long, and rated 80°C [176°F] operating. Consult factory for other lengths.

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