# VOLTAGE TRANSDUCERS

## DC or VARIABLE FREQUENCY VOLTAGE TRANSDUCER *MODEL* VT7 & VT8

### DC TO 10K HERTZ FREQUENCY RANGE

## FEATURES

- VT7 Output is proportional to the input amplitude and frequency (ac in/ac out, dc in/dc out).
- VT8 Provides dc output which is proportional to **RMS** value of AC and/or dc input signal.
- Better than 10 kilohertz bandwidth.
- Input/output isolation of 2500V.

| * INPUT mV | STANDARD OUTPUTS MODEL VT7- or VT8- | | | |
|---|---|---|---|---|
| | ***1mA | 4-20mA | ***10V | ***5V |
| 0 - 50 | 015B | 015E | 015D | 015X5 |
| 0 - 100 | 016B | 016E | 016D | 016X5 |
| 0 - 200 | 017B | 017E | 017D | 017X5 |
| 0 - 250 | 018B | 018E | 018D | 018X5 |
| **INPUT VOLTS** | **STANDARD OUTPUTS MODEL VT7- or VT8-** | | | |
| | ***1mA | 4-20mA | ***10V | ***5V |
| 0 - 10 | 001B | 001E | 001D | 001X5 |
| 0 - 25 | 002B | 002E | 002D | 002X5 |
| 0 - 50 | 003B | 003E | 003D | 003X5 |
| 0 - 100 | 004B | 004E | 004D | 004X5 |
| 0 - 150 | 005B | 005E | 005D | 005X5 |
| 0 - 250 | 006B | 006E | 006D | 006X5 |
| 0 - 300 | 007B | 007E | 007D | 007X5 |
| 0 - 400 | 008B | 008E | 008D | 008X5 |
| 0 - 500 | 009B | 009E | 009D | 009X5 |
| 0 - 600 | 010B | 010E | 010D | 010X5 |
| 0 - 700 | 011B | 011E | 011D | 011X5 |
| 0 - 800 | 012B | 012E | 012D | 012X5 |
| 0 - 900 | 013B | 013E | 013D | 013X5 |
| 0 - 1000 | 014B | 014E | 014D | 014X5 |

*Shunt Rated

Highlighted models will be supplied with an externally mounted multiplier module.
50,100,200 and 250mV models can be used for shunt isolation.
All units have universal power supply 85-265Vac, 48-420Hz or 110-370Vdc

Optional DC Instrument Power Available
-12, -15, -24, -37, -48 (150mA)

## SPECIFICATIONS

**INPUT**
Voltage ..... See Table
Frequency Range ..... dc-10kHz
Overload .. 0.05-600V ..... 2 X F.S. or 600Vac/850Vdc max.
700V-1000V(w/external multiplier box)...1.25 X F.S.
Burden (Ohms) ..... > 100K
Dielectric Test.....(Direct Input/Output/Case) ... 2500Vac
Inst. Power ..... 85-265Vac, 48-420Hz, 5VA or 110-370Vdc, 5VA
Temperature Effects...(-10°C to +60°C) ..... + 1.0% Rdg.
Field Adjustable Cal. ..... + 10%

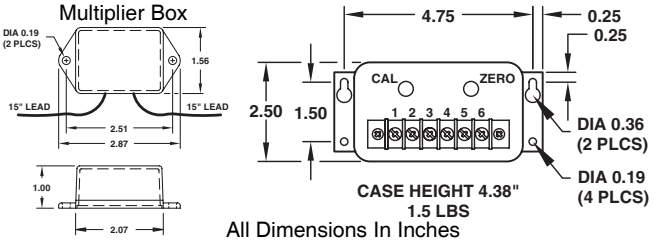
**OUTPUT**
**ACCURACY**
Includes effects of linearity, setpoint and repeatability.
VT7 Models ..... **+ 0.25% F.S.@ DC**
VT8 Models ..... **+ 0.25% F.S.@ 48-420Hz**
Response Time
VT7 Models ..... (to 90%) ..... 50 microseconds
VT8 Models ..... (to 90%) ..... 100 milliseconds
Output Loading (Ohms)
1mA ..... 0-10K
10V, 5V ..... > 2K
20mA ..... 0-500

## APPLICATIONS

- Monitoring of substation or electric circuit performance.
- Isolation and amplification of shunt output.
- Accurate measurement of voltage that may contain dc and non-sinusoidal AC components.
- Monitoring of RMS voltage. (VT8)

**ORDERING INFORMATION**
Example: 120Vdc Input with 4-20mA Output.
**VT7-005E**

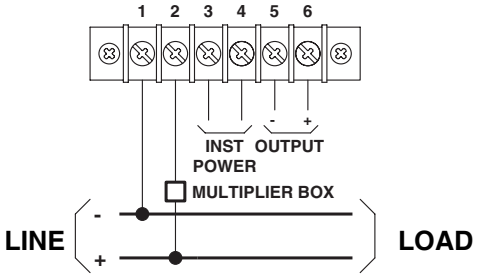
## CASE DIMENSIONS




All Dimensions In Inches

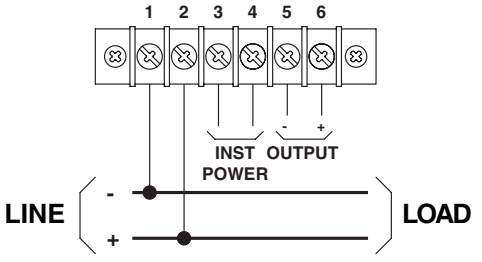
## CONNECTION DIAGRAMS

**700V - 1000V Models**

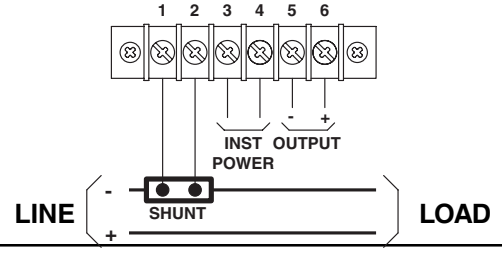



Note: All models above 600V input require a multiplier box in series with the input terminal #2. Do not connect the input voltage directly, damage to the transducer will result if not properly connected.

**10V - 600V Models**




**Shunt Isolator 50mV - 250mV Models**

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