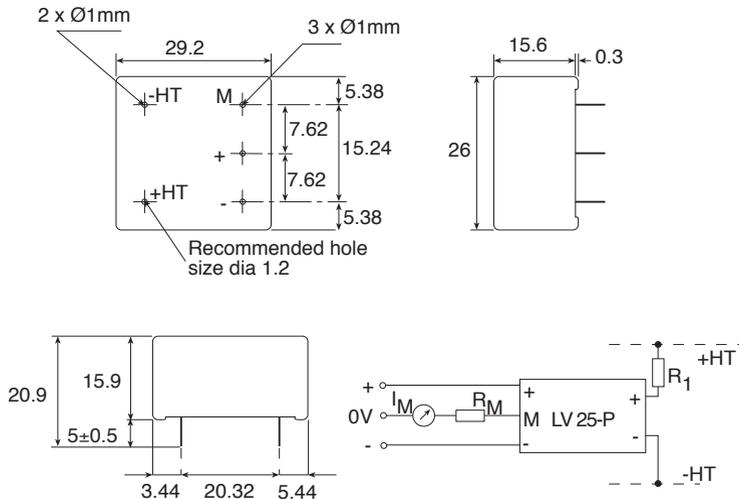




PCB Mounting Hall Effect Voltage Transducer

Stock No. 286-361

Figure 1. Mounting detail



Primary resistor R1: the transducer's optimum accuracy is obtained with the nominal primary current. As far as possible, R1 will be calculated so that the nominal voltage to be measured corresponds to a primary current of 10mA.

Example: Voltage to be measured $U_N = 250V$

- $R1 = 25k\Omega$ 10W, $I_{prim.} = 10mA$, accuracy = $\pm 0.6\%$ of U_N at $+25^\circ C$
- $R1 = 50k\Omega$ 5W, $I_{prim.} = 5mA$, accuracy = $\pm 1.2\%$ of U_N at $+25^\circ C$

Operating range (recommended): taking into account the resistance of the primary windings (which must remain low compared to R1, in order to keep thermal deviation as low as possible) and the isolation, this transducer is suitable for measuring nominal voltages of 10 to 500V.

Connection pins

- Pin + : Supply voltage +15V
- Pin M : Measuring output
- Pin- : Supply voltage -15V
- Pin + HT : Primary voltage +
- Pin -HT : Primary voltage -

Technical specification

Input : 10mA

Output : 25mA

RS stock no. 286-361

LV 25-P

| | |
|---------------------------------|---|
| Nominal current I_N | 10mA |
| Nominal analogue output current | 25mA |
| Turns ratio | 2500 : 1000 |
| Overall accuracy at +25°C | ±0.6% of I_N |
| Supply voltage | ±15V (±5%) |
| Isolation | 2.5kVr.m.s./50Hz/1 min |
| Linearity | <0.2% |
| Response time | <40µs for R1 series 25kΩ resistor |
| Operating temperature | 0°C to +70°C |
| Storage temperature | -25°C to +85°C |
| Current consumption | 10mA + output current |
| Primary internal resistance | 250Ω (at +70°C) |
| Secondary internal resistance | 110Ω (at +70°C) |
| Weight | 22g |
| Package | Potted into an insulated self extinguishing plastic case |
| Polarity markings | a positive output current is obtained on terminal M when a positive voltage is applied on terminal +HT of the primary circuit |
| Connection to primary circuit | By 2 pins 1mm diameter |
| Connection to secondary circuit | By 3 pins 1mm diameter |