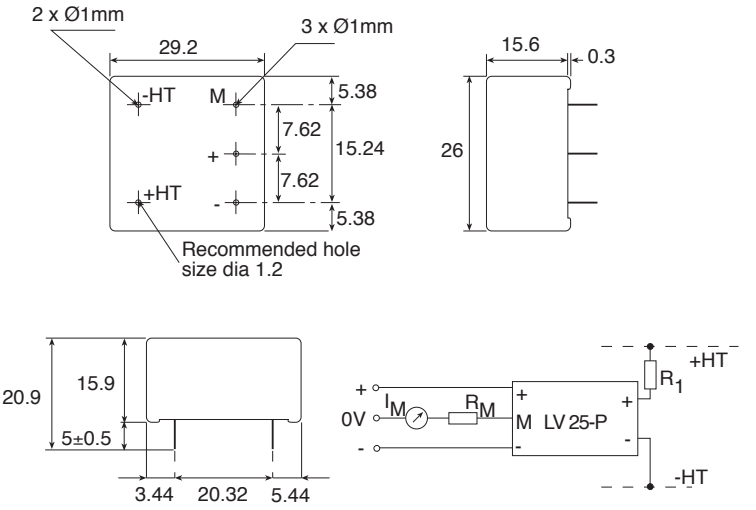
PCB Mounting Hall Effect Voltage Transducer

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

a. R1 = 25kΩ 10W, I prim. = 10mA, accuracy = ± 0.6% of U_N at +25°C

b. R1 = 50kΩ 5W, I prim. = 5mA, accuracy = ± 1.2% of U_N at +25°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 Connection to secondary circuit	By 2 pins 1mm diameter By 3 pins 1mm diameter