

107-803

Definition - Principle

The LEM type LTA50P/SP1 is a transducer employing the Hall Effect to measure D.C. and complex waveform A.C. currents in a non invasive manner. Galvanic isolation is provided between the primary (measured) and the analogue output (control) signal.

A feature of the LTA100/SP1 is the direct provision of either a current output or voltage output.

Electrical data

Nominal current I_N	: 50 Amps rms.
Output modes	
(1) Current Output	: 1mA/Amp.
Measuring Range	: 0 to $\pm 160A$. (Supply voltage $\pm 15V$; R meas = 50 Ohms).
Overall Accuracy at 25°C	: $\pm 0.5\%$ of I_N
(2) Voltage Output	: 100mV/Amp.
Measuring Range	: 0 to $\pm 50A$.
Overall Accuracy at 25°C	: $\pm 1.0\%$ of I_N
Turns Ratio	: 1:1000.
Supply Voltage	: + and - 15V ($\pm 5\%$).
Dielectric Strength	: 3 kV rms/50Hz/1 min.

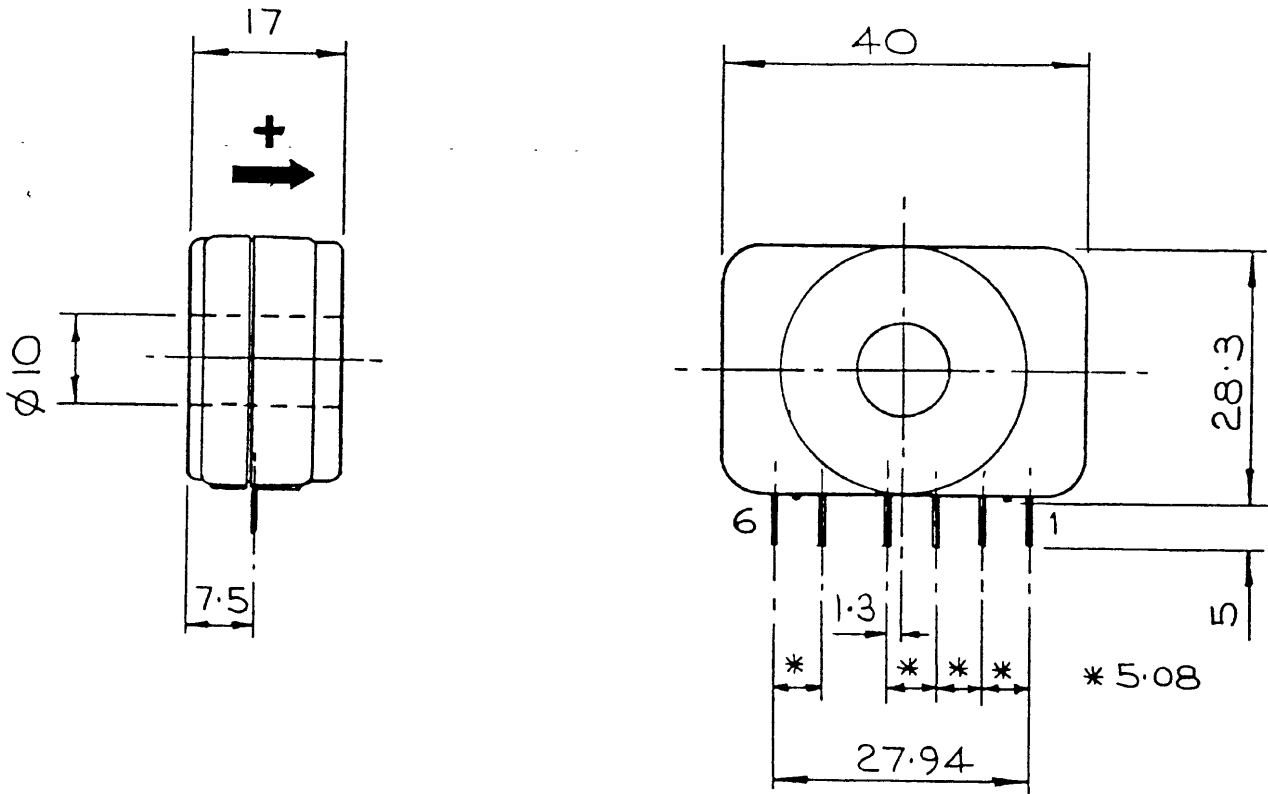
Dynamic Performance

Zero Drift (between 0°C and 70°C)	: Max $\pm 0.6mA$
Linearity	: $\pm 0.1\%$ of I_N
Response Time	: < 1 microsecond.
di/dt Accurately Followed	: > 50 Amps per microsecond.
Frequency Range	: DC to 100kHz.

General Data

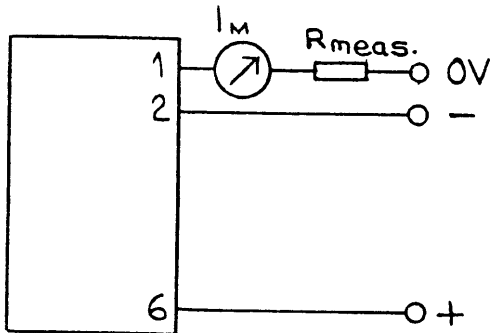
Operating Temperature	: 0°C to + 70°C.
Storage Temperature	: -25°C to +85°C.
Current Drain	: 15mA + I_m (measuring current).
Internal Resistance (for current output)	: 25 Ohms.
Connections	: On 6 pins 0.63 x 0.56mm.
Case Material	: Flame retardant Noryl Grade V0-150
Weight	: 15 grams.
Output Provisions	
Current Output	: On Pin 1.
Voltage Output	: On Pin 4. (Pins 1 and 4 must be linked).

Dimensions : LTA50P/SP1

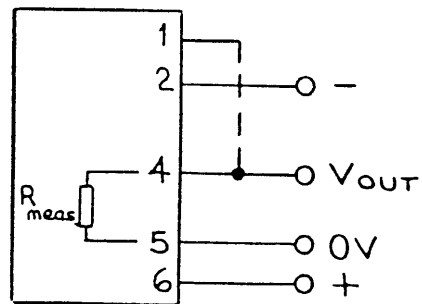


Electrical Connections : LTA50P/SP1

Current Output



Voltage Output



The Company policy is one of continual product improvement and the company reserves the right to revise the above specification without notice.