

HEADMOUNT TRANSMITTERS

PT100 THERMOCOUPLES MILLIVOLTS POTENTIOMETERS

- ☑ Headmount
- ☑ 2-wire
- ☑ Loop powered
- ☑ Analogue
- ☑ Low cost
- ☑ High quality
- ☑ DIN size 43mm
- ☑ Robust terminals
- ☑ Australian made
- ☑ Low profile
- ☑ Scaleable
- ☑ High accuracy
- ☑ Good stability
- ☑ Fixed or rangeable
- ☑ CJC for Tc's
- ☑ Meets EMC specs
- ☑ Flush top LED
- ☑ Fully encapsulated



GUARANTEE:

This product is guaranteed against faulty workmanship or defective material, for a period of 3 (three) years from the date of delivery by INSTROTECH.

INSTROTECH undertakes to replace without charge all defective equipment which is returned during the period of guarantee (transportation costs prepaid) provided there is no evidence that the equipment has been abused or mishandled in any way.

In the interests of continuous product improvement, INSTROTECH reserves the right to alter any specification without prior notice.

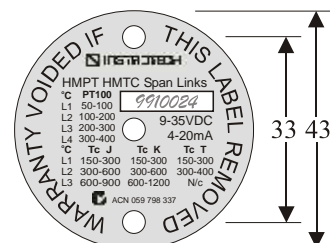
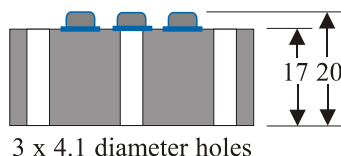
Instrotech Australia Pty Ltd

P O Box 3137
Newton SA 5074

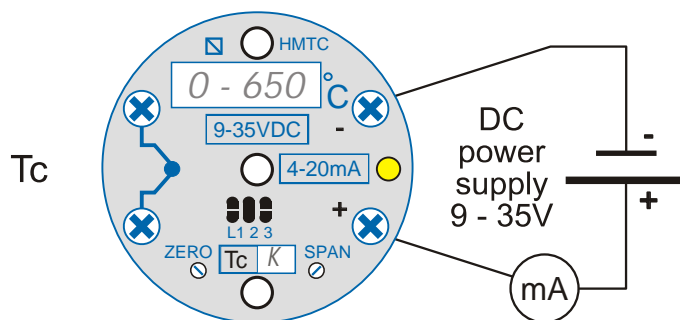
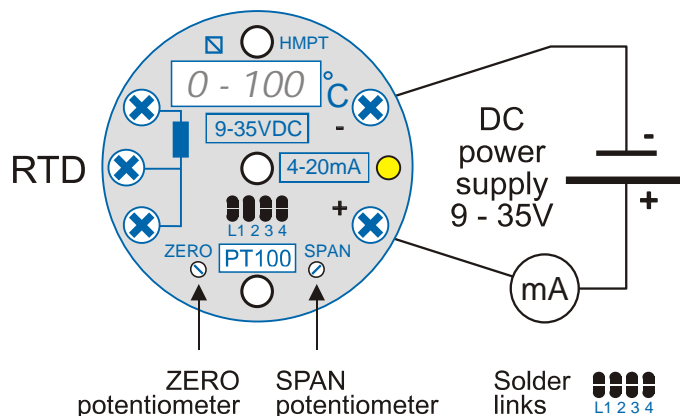
www.instrotech.com.au
sales@instrotech.com.au
Tel (08) 8337 8033
Fax +61 8 8337 8656



DIMENSIONS : mm



TERMINATIONS :



CALIBRATION :



- 1 - For rangeable versions, make the solder link for the SPAN required as per the table on Page 2.
- 2 - Connect a 24V DC power supply and a mA indicator, or a loop calibrator, to the supply.
- 3 - Connect a PT100, Thermocouple, mV or Potentiometer simulator to the input terminals.
- 4 - Simulate the ZERO value and adjust with the ZERO potentiometer for the required reading.
- 5 - Simulate the SPAN value and adjust with the SPAN potentiometer for the required reading.
- 6 - Repeat steps 4 and 5.

Typical Specifications for both Fixed and Rangeable versions

MODELS			HMPT	HMTC	HMMV	HMPO
Size and type			43mm diameter x 20mm high overall, DIN, headmount			
Power supply			9 - 35V DC, with flush top LED indicator			
Power supply effect			0.0063% / V			
Reverse polarity			Protection provided			
Output			4 - 20mA (28mA maximum)			
Load capability			(V[bat] - 9 V) / 20mA			
Operating temperature range			-40 to +85 °C			
Zero adjustment			Potentiometer : -50 to +50°C			
Span adjustment			Potentiometer : -30 to +40% of minimum ranges selected			
Zero drift			± 0.025% / °C			
Span drift			± 0.010% / °C			
PT100 RTD			HMPT			
Ranges (see table below)			-50 to 400°C, in factory fixed or link selectable ranges			
Linearisation			0.25%			
Sensor load effect			0.03°C / ohm			
Burnout / line failure			1 line : 27mA typical - 2 lines : 2.2mA typical			
Maximum sensor line resistance			250 ohms			
Thermocouple			HMTC			
Type J ranges (see table below)			-50 to 900°C, in factory fixed or link selectable ranges			
Type K ranges (see table below)			-50 to 1200°C, in factory fixed or link selectable ranges			
Type T ranges (see table below)			-50 to 400°C, in factory fixed or link selectable ranges			
Burnout			Upscale 27mA (standard) Downscale 2.2mA (optional)			
Cold junction drift			0.05°C / °C			
Maximum sensor line resistance			10 K ohms			
Millivolt			HMMV			
Ranges (see table below)			10 to 160mV, in factory fixed or link selectable ranges			
Potentiometer			HMPO			
Ranges (see table below)			100 ohms to 50 K ohms, in fixed or selectable ranges			
SPAN	PT100	Type J	Type K	Type T	mV	Pot
L1	50 to 100°C	150 to 300°C	150 to 300°C	150 to 300°C	10 to 20	1 K ohms
L2	100 to 200°C	300 to 600°C	300 to 600°C	300 to 400°C	20 to 40	4K7 ohms
L3	200 to 300°C	600 to 900°C	600 to 1200°C		40 to 80	5K6 ohms
L4	300 to 400°C				80 to 160	10 K ohms



Note: These ranges are factory fixed or solder link selectable on the top of the transmitter