

## Temperature Transmitter Type TT

### Application.

Our Temperature Transmitters are designed for the harshest applications. They are particularly stable, with high resolution and can transmit over a long distance. Wetted parts and the standard housing are manufactured from 316L stainless steel ensuring exceptional resistance to chemical and moisture attack. A comprehensive range of process connections, measurement elements types and accuracies are available.

### Configuration.

316L stainless steel probe with welded process connection, fitted to a terminal head (stainless steel standard). Insertion length and process connection are manufactured to customer's specification. The standard temperature sensor features mineral insulated element whilst the loop powered 4 to 20 mA output signal module features zero and span adjustment trim pots for any on site requirements. Programmable Pucks, HART Protocol and Universal Pucks are also available.

### Terminal Housing.

Temperature probes can be fitted to the BTT large stainless steel housing (standard), BTT Ex d stainless steel, aluminium or bakelite housing. See <http://www.benney.com.au/standard> for standard terminal housing specifications or <http://www.benney.com.au/exd> for the Ex d terminal housing specifications.

### Process Connection.

- 1/4" BSPT male (1/4" Probe only)
  - 1/2" BSPT male
  - 1 1/2" BSM (flat face, with nut)
  - 2" BSM (flat face, with nut)
  - 3" BSM (flat face, with nut)
  - 1 1/2" BSM (recessed face, with nut)
  - 2" BSM (recessed face, with nut)
  - 3" BSM (recessed face, with nut)
  - 1 1/2" Triclover
  - 2" Triclover
  - 1/2" BSPP captive nut
- Other process connections available upon request.

### Transmitter Pucks.

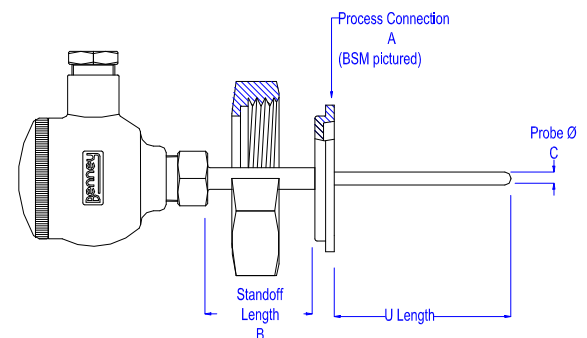
See [www.benney.com.au](http://www.benney.com.au) for temperature puck data specifications.

### Measurement Elements / Accuracy.

Standard: +/- 0.06% @ 0°C.  
High accuracy (Optional): +/-0.01% @ 0°C.

### Wetted Materials.

316L stainless steel



"A"	Refer to process connections.
"B"	Instrument standoff between none and 150mm.
"C"	Probe diameter between 1/4" (6mm) and 1/2" (12mm). All probes have 1/4" tip for quick response.

### Output Specification with Standard Transmitters

Output – 4/20mA loop powered, Max 30mA  
Supply Voltage – 10 to 30V DC Reverse connection protected  
Loop Volts sensitivity - 10uA/volt  
Temp. Stability – ZERO drift typ. 0.02%/°C FRO  
SPAN typ. 0.005%/°C FRO  
Ambient Temp – 0 to 70 °C operating at 24V supply  
250 ohm load  
Accuracy - +/-0.2°C plus +/-0.2% rdg  
Response – 100mS to reach 70% of final value  
Span adjustment - 25°C to 500°C  
Loop Resistance – 700R @ 24 V