

INSTALLATION INSTRUCTIONS

T-Probe

for retro-fitting to V100

The V100 (PSM) has the facility for a magnetically operated (reed switch) pulsed output, by the retrofitting of a dedicated probe assembly. The probe is fitted with a 100 Ω series resistor to protect the reed switch from power surges and is usually provided with a 5 metre length of cable, terminating in a sealed flying lead.

Location and Operating Principle:

The Probe position is next to the counter, on the top shoulder of the meter body, protected with a removable plastic cover (See 'A')
The volt free pulse is generated from the counter rotation, which has a two pole circular magnet fitted to the end roller. As the magnet rotates and opposite poles pass the reed switch, it pulls the reed contacts together. This produces 2 pulses per revolution of the end roller.

Where there are 4 red rollers, (15mm and 20mm size), this will generate 1 Pulse / 0.5 Litre.

1	2	3	4	0	0	0	0
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Where there are 3 red rollers, (available in 15mm to 40mm size), this will generate 1 Pulse / 5.0 Litre.

1	2	3	4	5	0	0	0
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Probe Fitting Instructions:

Remove and discard the plastic protective plug. Insert the probe into the socket and align with screw hole. Fit the retaining screw through the hole in the probe. (The reed switch within the probe is self-positioning, with the screw firmly in place). (See 'B').



'A' Probe location position under protective plug.



'B' Probe fitted and screwed in place with security screw.

Cable Identification and Wiring Details:

The factory fitted cable used for the T-Probe is defined as 4 x 7 / 0.2mm with Red, Blue, Black and Yellow as the core colours, contained within a white outer sheath.

RED and BLUE cores are the volt free pair These connections are not otherwise polarity sensitive. .
The loop-back is across the BLACK and YELLOW cores.

Note: The reed switch assembly is rated at 50 Vdc maximum working.
The duty cycle of the switch closure is typically 70% on, 30% off.

