

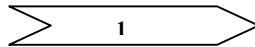
PG100 (Reed Switch) Pulse Unit Operating Principles and Fitting Instructions (For retrofitting to H4000, S2000 and C4000 meters) COPPER CANNED COUNTERS - PG100

Uni-directional REED SWITCH (PG100)

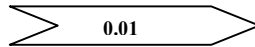
A magnetically operated (reed switch) pulsed output, facility is provided, by the retrofitting of a dedicated “dovetail” pulse unit to the copper canned counter. **The pulse unit is fitted with a 100 Ω series resistor** to protect the reed switch from power surges and is usually provided with a 5 metre length of cable, terminating in a sealed flying lead.

Location and Operating Principle:

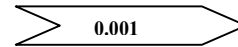
The volt free switch closure is generated by the rotation of integral magnets, set within the circumference of the counter. The pulse frequencies at the various slot positions (not visible with the shroud in place), correspond to the markings on the dial face.



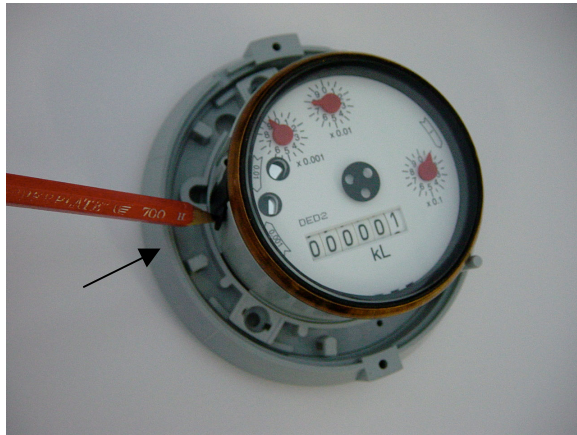
Reed Switch Pulse
1p/1000 litres



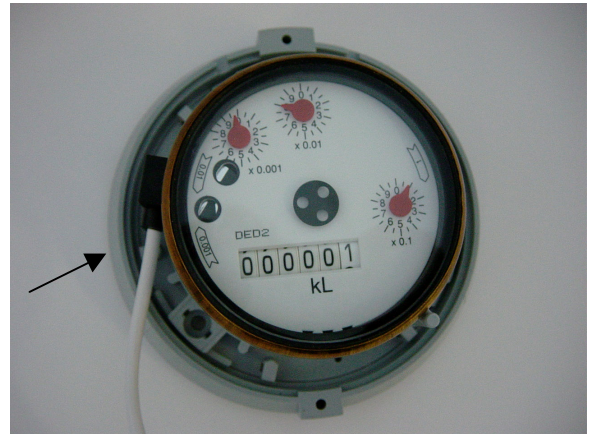
Reed Switch Pulse
1p/10 litres



Optical Pulse Output
1p/1 litre



Closure panel needs to be removed
exposing copper can (magnet position)



PG100 fitted @ 1p=10 litres (0.01)

PG100 Pulse Unit Fitting Instructions: (Copper canned counter)

There are 2 opposing screws holding the shroud in place. Remove these and lift the shroud clear from the counter assembly. This will expose the plastic sensor holder surrounding the copper canned counter. Select the appropriate pulse position as detailed above and remove the plastic closure panel from the holder, exposing the copper can.

Hold the reed switch pulse unit at cable entry point in a vertical position and clip into place by locating the front dovetail edge, under the locating lug, applying pressure towards the counter, until the rear dovetail edge, snaps under the sensor holder. The pulse unit is now self-positioned with the internal magnet. Run the cable anti-clockwise inside the base ring, to the most convenient exit slot, ensuring the small cable restraint is enclosed within the base ring. Re-fit the shroud with the 2 screws.

Cable Identification and Wiring Details:

The factory potted cable is defined as 4 x 7 / 0.3mm with Red, Blue, Black and Yellow as the core colours, contained within a white outer sheath.

RED and **BLUE** are the volt free pair of contacts, therefore Black and Yellow cores can be cut back and discarded.

Maximum output ratings:

Reed switch rating:	24 Vdc maximum working voltage.
Maximum current:	50 mA
Maximum Power:	0.25 Watts
Switch closure duty cycle:	15% on, 85% off typically.