

METERING • DIESEL, PETROL & KEROSENE

Fill-Rite 900CD Series • Digital Meter Range

Battery powered digital meters for fuel transfer, intrinsically safe and rated for hazardous areas. A four digit LCD reads the batch, two seven digit totalisers hold throughput, and units of measure are picked on the keypad rather than fixed at the factory. Two builds add a pulser for fuel management systems.



23-151

litres per minute

±1.25%

accuracy

Ex ia

intrinsically safe

Key features

- Four digit LCD with 19 mm digits, backlit on the pulser builds.
- Units picked on the keypad: litres, gallons, quarts, pints, ounces or user defined.
- Seven digit master totaliser plus a seven digit resettable totaliser.
- Runs on two AA alkaline cells. Memory holds the counts through a power loss.
- Electronic head lifts off and turns in 90 degree steps for horizontal or vertical pipe.
- Marked Ex ia intrinsically safe, ATEX, IECEx, CE and cULus. Made in the USA.



Models

MODEL	GO SKU	PORTS	BUILD
900CDBSPT	R1900CDBSPT	1" BSPT	Battery, no pulser
900CD1.5BSPT	R1900CD1.5BSPT	1.5" BSPT	Battery, no pulser
900CDPX1.5BSPT	R1900CDPX1.5BSPT	1.5" BSPT	Pulser, no barrier
900CDP1.5BSPT	R1900CDP1.5BSPT	1.5" BSPT	Pulser and barrier

Specifications

Flow range	23-151 L/min · 6-40 GPM
Accuracy	±1.25%
Repeatability	±0.25% at calibrated flow
Max working pressure	50 psi · 3.5 bar
Operating temperature	-40 to 60 °C with batteries fitted
Measuring principle	Nutating disc
Display	Four digit LCD, 19 mm digits
Counter	Four digit resettable, 0.01 to 9999 units
Totalisers	Seven digit master, plus seven digit resettable
Units of measure	Litres, gallons, quarts, pints, ounces, user defined
Body material	Powder coated aluminium, fluoroelastomer seals

● READING THIS TABLE

All four are BSPT builds. Fill-Rite lists the 900CD in 1 and 1.5 inch, NPT or BSPT, and the BSPT suffix on the model code is what you are buying. Units of measure are selected on the keypad, so the same meter reads litres or gallons.



Pulse output

MODEL	PULSER	BARRIER	SUITS
900CDBSPT	No	n/a	Standalone metering
900CD1.5BSPT	No	n/a	Standalone metering
900CDPX1.5BSPT	Yes	Not fitted	Fuel management, safe area
900CDP1.5BSPT	Yes	Included	Fuel management, hazardous

• WHERE THE BARRIER IS MANDATORY

In an explosive atmosphere the intrinsically safe barrier is not optional. Fill-Rite calls out a minimum 6 m circle around petrol pumping equipment. Mains AC cannot reach the meter directly, it has to go through the barrier, and the wiring is a licensed electrician's job.

Wiring and installation

- Supplied for horizontal pipework, left to right flow. An arrow on the casting shows it.
- Remove the four Torx T25 screws on the face and turn the head for vertical pipe.
- Seal every threaded joint with the appropriate sealant or sealant tape.
- Do not exceed 50 psi. A check valve without a relief valve can rupture the meter.
- Ten counts per unit of measure, in litre, gallon and quart units only.
- The fuel management system must take a current sinking or contact closure signal.
- Without the barrier: 20 mA maximum load, external DC 7.5 to 28 V at 0.2 A.
- With the barrier: 12 to 40 VDC or 90 to 240 VAC at 50 to 60 Hz, 259 m maximum run.
- Calibrate between 23 and 151 L/min against a container of known volume.
- The meter and the pipe either side must stay full of liquid and free of air.

Dimensions 172 mm high x 215 mm wide x 104 mm deep. Battery life is 4 to 6 years without a pulser, 2 to 4 years on the pulser builds.



Calibration

- Hold CAL and TOTAL together for 5 seconds to enter calibration mode.
- Press TOTAL to pick the unit of measure, then hold CAL for 2 seconds.
- Dispense into a container of known volume, then key in the amount dispensed.
- The meter rejects a calibration more than 15 percent out and shows Err0.

Fluid compatibility

Compatible

Petrol, diesel, kerosene, mineral turpentine, heptane and hexane, plus biodiesel to B20 and petrol to E15.

Not compatible

Bleach, hydrochloric acid, ink, sulfuric acid and salt water. Not for fluids containing water, nothing intended for human or animal consumption, and not aviation fuel.

Wetted materials: aluminium, stainless steel, nickel, acetal, polyester, fluorocarbon and Buna-N.

Service parts

PART	DESCRIPTION
900DKT	Rebuild kit. Chamber, driver, gaskets and screws
KIT900PF	Meter to pump flange kit, for 300 and 700 series pumps

Safety and warranty

- The faceplate is marked not to be used to measure liquid for resale. These meters record your own usage, not trade measurement.
- Change batteries only in a location known to be non-hazardous.
- Use only Duracell MN1500, MX1500 or Energizer E91. Never mix old with new.
- Fit a filter on the meter outlet and use static wire conductive hose on fuel.

● WARRANTY

Two years against defects in material and workmanship, per Fill-Rite's published 900 Series digital meter warranty. Nothing here limits your rights under the Australian Consumer Law.

