# Compac Dispenser Technology





Compac CNG dispensers are the culmination of 25 years of research, development, testing and experience.

The KG80 meter, C4000 electronics and hydraulic components provide unmatched accuracy and control.

Compac CNG dispensers are fully compatible with Compac unattended refuelling systems.





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### **KG80 Mass Flow Meter**



The most innovative metering system in the world using physics of Coriolis forces to accurately determine gas dispensed.

The Compac product range is recognised as being world class. Compac Industries design and manufacture all major critical components for CNG dispensers. This allows them the unique ability to guarantee the quality and performance of all components.

Compac's approvals, commitment to quality and on-going research & development ensure they remain the premium dispenser technology provider.



#### → KG80 Coriolis Mass Flow Meter

Compac KG80 meters are the most accurate CNG meters in the world. Compac has achieved a major advance in technology through the development of the KG80 meter and its integration with the C4000 electronic head.

The KG80 meter is a true mass flow meter using the physics of Coriolis forces to accurately determine mass flow. The KG80 meter is self-characterising so that there is no meter set up and no measurements to be taken during commissioning.

The KG80 meter has a rated working pressure of 275 bar and a burst pressure in excess of four times the working pressure. Compac has chosen the highest quality tubing and introduced some innovative manufacturing techniques to eliminate tube stress and corrosion over the life of the meter.

Using the Compac KG80 Coriolis mass flow meter will bring some major improvements to the performance of your dispenser:

No Free Gas – Highest possible accuracy. True error checking between meter and dispenser electronics prevents dispensing un-metered gas

**No Calibration Drift** – The dispenser automatically resets the zero point

Large Flow Range – The KG80 meter is accurate over the range 1-80kg/min and has been approved to the latest OIML standard: "Compressed Gaseous Fuel Measuring Systems for Vehicles"

**External Variables** – The mass flow measurement is independent of gas composition, humidity, temperature and pressure

### Dispenser Internals



A highly accurate electronic control and management system integrated with the metering and hydraulic components.



#### → C4000 Electronic Head

The Compac C4000 is a highly accurate electronic head designed to control and manage the dispenser. The KG80 meter and all other electronic components plug directly into the C4000 electronic head, which processes the data and controls the dispenser.

The power supply for the C4000 is housed in a flameproof, waterproof enclosure. This ensures additional safety to the dispenser and the C4000 electronic head should any electrical fault occur. The power supply controls the solenoids and provides intrinsically safe power to the electronic head, KG80 meters, displays, presets, start and stop buttons, temperature and pressure transducers, card readers and pinpads.

#### → Hydraulic Components

Compac hydraulic components are made of pressure grade stainless steel for superior performance and corrosion resistance. They are batch numbered with traceability to material certificates and production runs. This ensures the correct grades of materials are used and the ratings of the valves can be guaranteed.

Hydraulic components have been independently tested and third party analysed to verify their structural safety.

All valves are assembled at Compac under strict quality procedures and are tested on CNG. These procedures have been audited and comply with European PED requirements.

The valves are designed to be reliable and easily serviced without removing pipework.



- An integrated filter with dual outlet and built-in check valves
- Each filter contains a high quality coalescing filter element
- Capable of flow rates in excess of 50kg per minute

#### **Solenoid Valves**

- Pilot operated
- Opens at more than two times working pressure
- Closes with zero differential pressure
- Bubble tight shut-off
- Capable of flow rates in excess of 50kg per minute

#### **Regulator Valves**

- Bubble tight shut-off
- Tamper proof
- Adjustable range from 180 to 275 bar

## **Compac Certification**











#### **Approvals**

Compac dispensers have received certification and approvals in many different countries. Copies of these are available on our website and will be updated regularly.

### Please contact us if the approval you require is not listed here:

- Australian SA certification for Class 1 Zone 1 Hazardous areas
- European ATEX certification for Class 1 Zone 1 Hazardous areas
- European PED approved for CE marking
- European EMC requirements test report is available
- National Measurement Institute of Australia (NMI) approval for accuracy according to the latest OIML standard for 'Compressed Gaseous Fuel Measuring Systems for Vehicles'
- Malaysian Sirim Weights and Measures approval
- Indian CCOE Electrical approval

#### YOUR LOCAL DISTRIBUTOR

#### Key On Enterprise LTD.

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