

Sening® CM3

Portable Turbine Check Meter

The CM3 is a portable turbine check meter that enables economical and simple to use measurement of liquid products.

The CM3 is used on direct discharge tank trucks to easily determine the delivered volume. As a result, you no longer need to discharge complete compartments – instead, you can check the discharged quantity to react to the demands of the specific situation.

The ergonomic design enables the CM3 to be simple, convenient, and easy to use. It is an in-line connection between the tank truck's product coupling and the discharge hose. A robust membrane keypad ensures simple use and the large display makes reading easy.

The large 3" (DN80) diameter and the high efficiency turbine design keep pressure loss to a minimum and discharge flow rates high.

The CM3 was developed from customer's need to fit their exact requirements. Its low weight and space-saving, compact design make the CM3 easy to handle, operate, and store.

The intrinsically safe electronics are approved for use in explosion-proof areas (zone 3) and conforms to PN10. The CE stamp conforms to EU regulations for EMC.



Benefits:

- More flexible route planning
- Simple handling
- Low weight and compact design
- Minimal pressure drop
- Intrinsically safe and approved electronics

Sening[®] CM3

Principal of Operation

The fluid passing through the meter allows the measurement turbine to rotate. The number of revolutions of the rotor is proportional to the throughput. The rotation of the turbine blades is detected by a non-contact magnetic sensor. These signals are interpreted by the meter's electronics and displayed on the user interface. The flow rate and the total discharged volume in liters are displayed. Before starting measurement, the volume value is reset to zero by the touch of a button. The device also has a non resettable accumulative totalizer. The CM3 is a "check" meter and was developed for measurements that are not subject to Weight & Measure certification or custody transfer applications.

Storage and Transport Protection

Special fixtures are available to protect the CM3 when not in use.

Connections

3" BSP thread for standard hose couplings.

Operating Specifications

Medium: Low viscosity petroleum products (max. 5cp)

Flow Rate: Minimum: 250 L/min (66 GPM)
Maximum: 2000 L/min (528 GPM)

Accuracy: In application average of $\pm 5\%$ of actual flowrate

Operating Temperature: $-20^{\circ}\text{C} \pm 60^{\circ}\text{C}$ ($-4^{\circ}\text{F} \pm 140^{\circ}\text{F}$)

Design Pressure: 10 bar

Battery Life: More than 2 years under normal operating conditions

Enclosure Rating: IP65

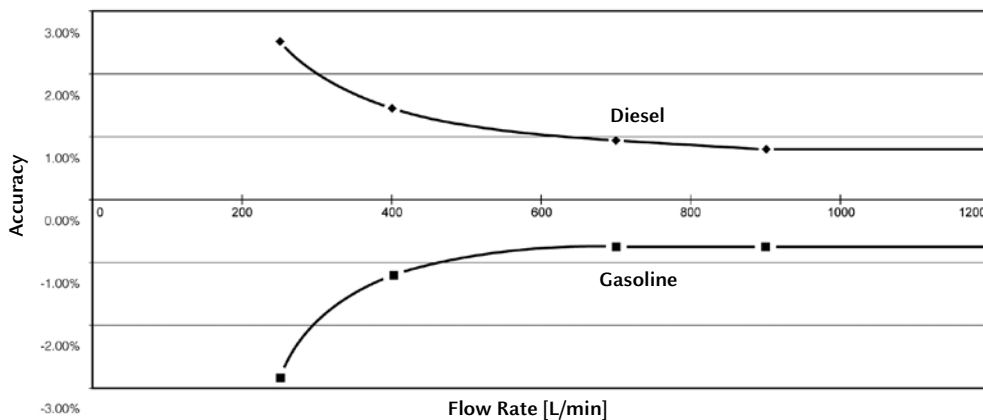
Explosion Protection: EEx ia IIB T4

Materials of Construction: Aluminum, brass, stainless steel

Weight: Approximately 7.5 kg (16.5 lb)

FMC Technologies can also supply various metering systems for custody transfer applications that have been approved by Weight & Measures. If you would like more information, please ask your local distributor or contact us directly.

CM3 Typical Accuracy with Diesel and Gasoline



**We put you first.
And keep you ahead.**

Headquarters:
FMC Technologies
500 North Sam Houston
Pky. West, Suite 100
Houston, Texas 77067, USA
+1 (281) 260 2190

FMC Technologies
Measurement Solutions, Inc.
1602 Wagner Avenue
Erie, PA 16510, USA
+1 (814) 898 5000

Direct Contact:
F.A. Sening GmbH
FMC Technologies
Regentstr. 1
25474 Ellerbek, Germany
+49 (4101) 304 0

www.fmctechnologies.com/measurementsolutions