



RF1

Residential diaphragm gas meter

The robust and temper-prove RF1 gas meter is the best choice for customers focusing on a reliable and proven measuring concept. A member of the RF1 product family, the new aluminium version is a compact residential gas meter designed for highest measuring accuracy and reliability. Its future-prove design minimizes installation costs and enables future field upgrades.

KEY BENEFITS

- » Reliable product platforms
- » Low pressure loss
- » Robust construction
- » Multi-range application
- » Smart-ready meter

APPLICATION

The RF1 long-term metrology stability makes it the right choice for demanding, high consumption residential gas markets.

METER DESCRIPTION

The RF1 gas meter meets strict metrological requirements such as MID, O.I.M.L and EN1359 as well as different national requirements and standards.

The RF1 is a combination of proven and reliable gas meter concepts and includes:

- » A reciprocating synthetic diaphragm
- » Crank-controlled and oscillating slides
- » Robust and tight connections between components
- » The use of precise, light-weight and noise-free plastic parts

OPERATING PRINCIPLE

The RF1 is a positive displacement diaphragm gas meter with a stand-alone twin chamber measuring unit. A transmission gear and a magnetic coupling transfer the reciprocating motion to the mechanical index.

The measuring unit is housed in a robust gas-tight die-cast aluminium casing.

BENEFITS

SMART READY METER

The mechanical index is equipped with a Cyble target for retrofitable AMR communication systems. This standard Itron meter interface allows the adaptation of different Cyble modules as a communication device (such as pulse, M-Bus or radio frequency wireless links).

RELIABLE PLATFORMS

The new RF1 aluminium version is built on well-proven product platforms. Produced more than 12 mio. units, the RF1 measuring unit platform made in Germany is the best choice for an accurate, reliable and durable gas consumption measurement.

The Cyble totalizer comes with the same design as many other diaphragm gas meter in the Itron meter portfolio.

DURABILITY

The RF1 is synonymic for long-term accuracy and reliability. With its robust 2 dm³ measuring unit, the RF1 shows a minimal drift over the full measuring range after an endurance period of 10,000 hours.

ROBUST CONSTRUCTION

The RF1 can rely on proven design of the measuring unit and index. The new designed meter body is built to resist the harshest environment conditions.

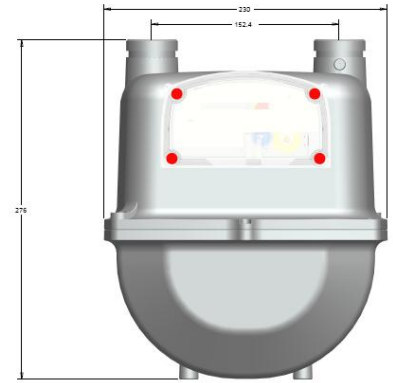
MULTI-RANGE APPLICATION

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Technical Specifications

Gas Type	Natural Gas, air, propane, butane, nitrogen and all non-corrosive gases
Metrology	Meter conforming to Australian Standard AS4647 and OIML R137-1
Accuracy	Maximum permissible errors (% of measurement) +/- 3% from Qmin. to 0.1 Qmax. +/- 1.5% from 0.1 Qmax. to Qmax.
Pressure drop	125Pa at 8.5 m ³ /h (gas)
Cyclic Volume	2 dm ³
Temperature range	Operating: -10°C to +60°C Storage: -40°C to +70°C
Maximum Operating Pressure	50kPA (1 Bar option)
Measuring Range	Qmin 0.016 m ³ /h Qmax 10 m ³ /h
Casing Material	Aluminium die-cast case with grounding and polyester powder painting (resist 1000h salt spray test)
Totalizer	Mechanical index with 8 drums (3 decimals)
Transmission Rate	0.01 m ³ / rotation
Transmission System	Cyble™ target
Approval	Australian NMI-R137
Dust and rain protection	IP67 (according EN60529)
Connections	1" (BS746)
Flow Direction	Left to Right
Colour	Mushroom color (Y65 in accordance with AS 2700 -1985)
Back Flow Protection	Back run stop
Transmission	Magnetic coupling
Weight	3 kg
Pressure tap	Outlet connector - Thread no.2 B.A. (Ø4,7) according to PRS 11

Dimensions (mm)



RF1 with Cyble module



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