

RML2000

Coriolis Mass Flow Custody Transfer

The Next Wave of LP Gas Measurement Accuracy On the Bobtail



It's here...fully electronic flow measurement and transaction management on the bobtail. Successful in industrial applications for decades, proven Actaris Coriolis mass measurement technology now goes mobile on the bobtail.

Reducing costs today...and tomorrow

Coriolis mass measurement reduces LP Gas under-measurement—thanks to outstanding accuracy stability between yearly calibrations. Compared to traditional mechanical flowmeters, the Actaris mass flowmeter offers better accuracy with higher flow rates over a longer service life, thanks to its unobstructed dual vibrating tube design. No-moving-part technology reduces maintenance costs related to both product measurement and registration.

The Coriolis mass flowmeter provides volumetric flow measurement of LP Gas when interfaced with the same E4000 Electronic Register used with Actaris Type 4D-MT mechanical flowmeters. With the outstanding flexibility of the E4000 Register, the Actaris mass flow system allows an upgrade path not obtainable with competitive electronic transaction management systems. Electronic temperature compensation further enhances measurement accuracy.

The E4000 menu-driven register functions are easy to learn and remember. Interfacing through common handhelds and laptops makes data management fast and easy between truck and office.

Easy implementation

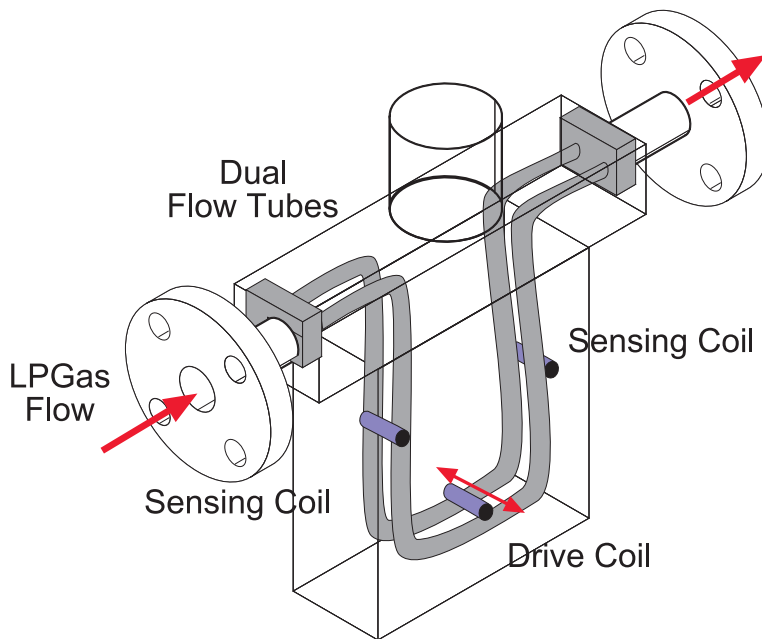
Accuracy savings aside, the space-efficient Actaris system is cost-

effective to implement on both new and existing vehicles. Retrofitting is easy using existing Actaris vapor releases and differential valves.

Here's stable accuracy, reduced maintenance, fast payback, plus the most cost-effective upgrade path in the market. Couple these benefits with strong Actaris support, and you can start realizing the benefits of total electronic operations today.

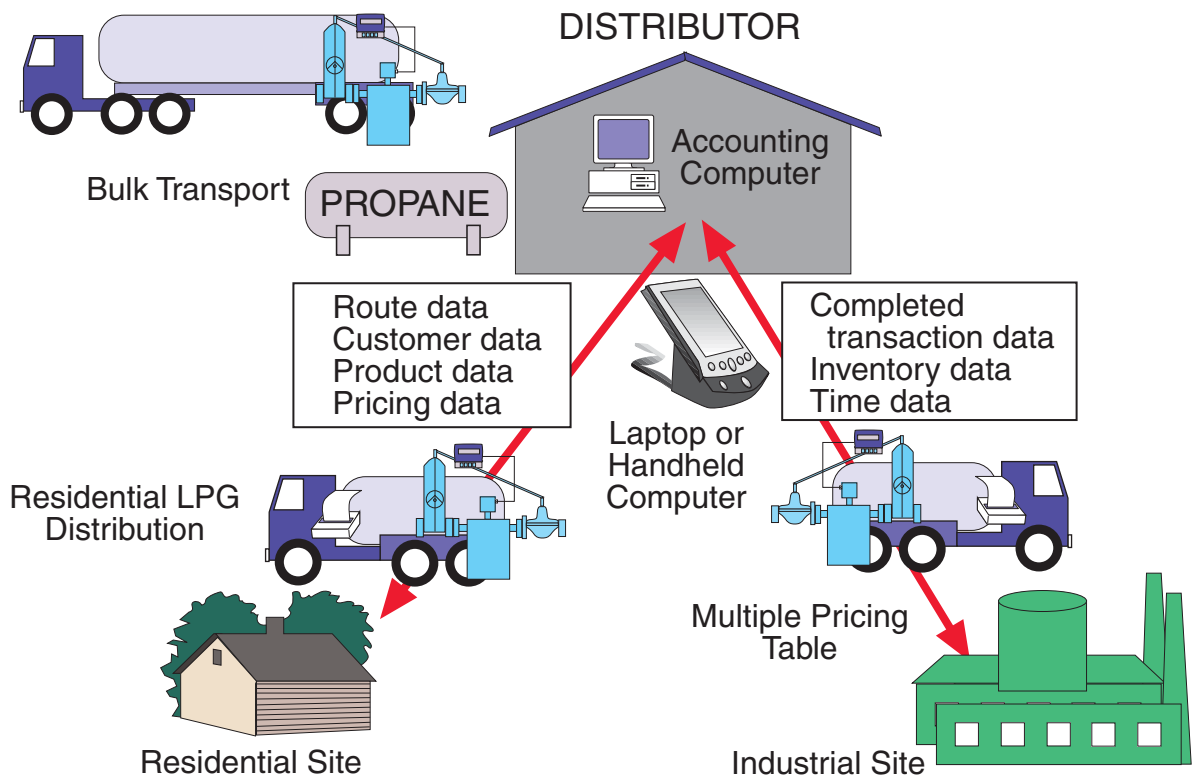


TS-614 Coriolis Mass Flow Custody Transfer



Dual Flow Tube Coriolis Technology For Stable Accuracy

A drive coil causes the tubes to vibrate. Fluid flow through the tubes causes them to twist. This twist, directly proportional to the mass flow rate of the fluid, is measured by two sensing coils. Electronics convert the resulting mass flow rate signal to volumetric flow for LP Gas delivery.

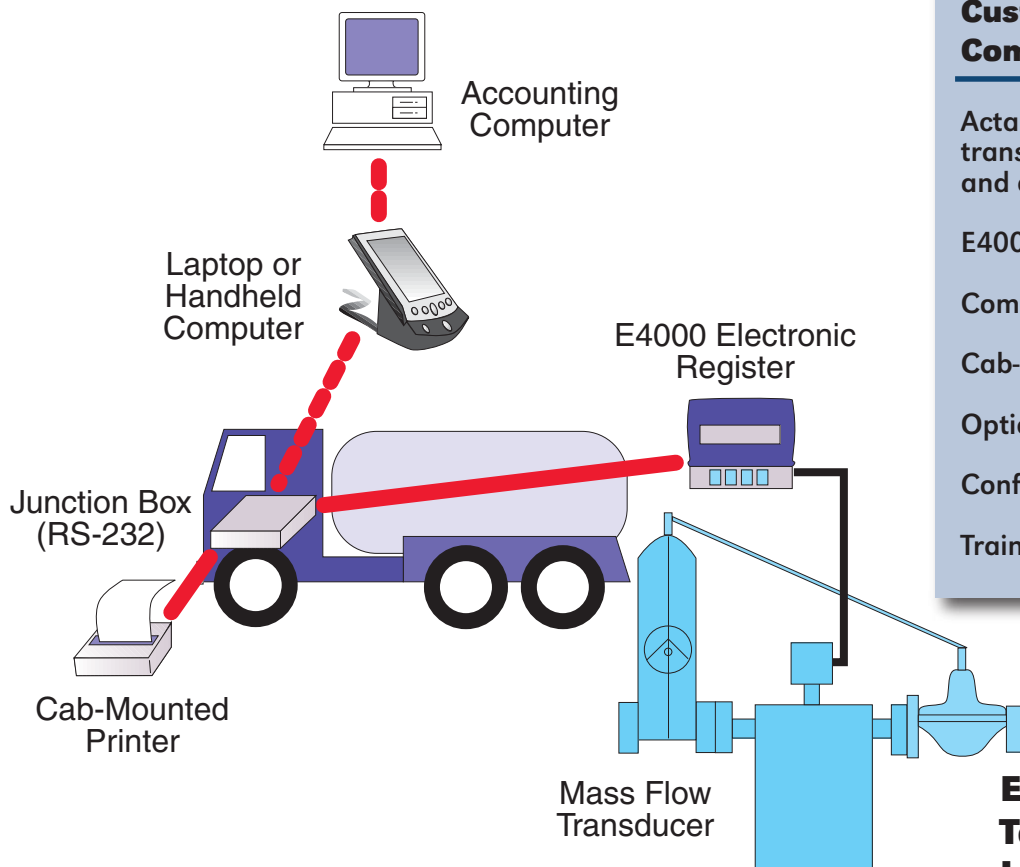


**Comprehensive Information Flow,
From Unloading Through Distribution**

TS-614 Coriolis Mass Flow Custody Transfer

Features and benefits

- Reduced product losses between yearly calibrations
- No-moving-part technology means more reliable operation, less downtime and longer life cycles
- Typical payback less than two years based on accuracy stability alone
- High-frequency electronic temperature compensation sampling for improved accuracy
- Easy-to-use E4000 Electronic Register
- Electronic register handles multiple products and multiple pricing tables
- Electronic capture of all transaction data eliminates manual errors
- From simple pump and print to full electronic inventory management—all in one model without upgrades
- Communicates easily with office accounting and route management applications
- Actaris Coriolis mass flowmeters have applications from the bulk terminal to the end user: bulk transport, multi-product distribution, residential distribution, fuel oils, gasoline, aviation fuels
- Established technology in a new application—from a long-established name in LP Gas bobtail metering
- Actaris service and support



Actaris Mass Flow Custody Transfer System Components

Actaris Coriolis mass flow transducer with vapor release and differential control valve

E4000 Electronic Register

Compact junction box

Cab-mounted printer

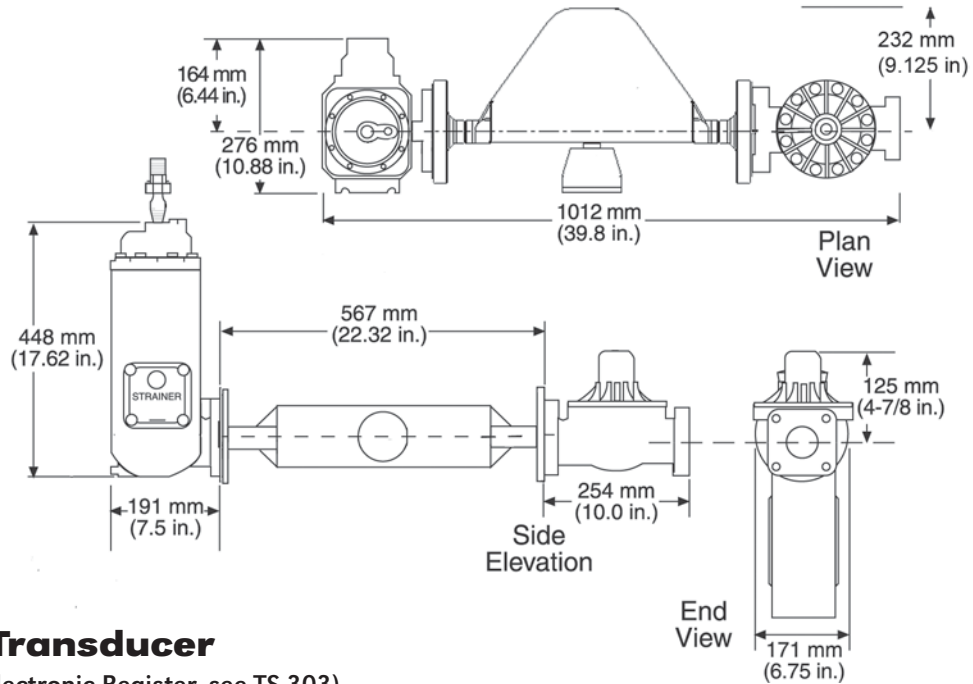
Optional flow valve

Configuration software

Training, support and consulting

**Easily Applied
To Conventional Truck
Installations**

Coriolis Mass Flow Transducer Dimensions



Specifications

Coriolis Mass Flow Transducer

(For specifications on the E4000 Electronic Register, see TS-303)

PHYSICAL

Wetted parts	316L stainless steel
Sensor housing	304L stainless steel
Signal transmitter	CF-3M stainless steel
Weight (transducer only), kg (lb)	13 (28)
Line size, mm (in.)	51 (2)

PERFORMANCE

Approved volumetric flow rate, litres/min (gpm)	30–310 (8–82)
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ENVIRONMENTAL

Temperature range (E4000 Register) ¹ , °C (°F)	-30–55°C (-22–131°F)
Pressure rating, bar (psi)	24 (350)

APPROVALS

UL and CSA	Class I, Div. 2, Groups A, B, C, and D (when properly connected to a Actaris E4000 Electronic Register) pending
Weights and Measures	NTEP approval to Handbook 44 and NCWM Publication 14

¹There is no ambient temperature limit for the transducer.

