

# Emerson's Compact Prover

Versatile small volume prover for accurate flow meter calibration and reliable performance.



## Highly accurate meter proving

Designed for optimum reliability and flexibility, Emerson's Compact Prover delivers the most cost-effective and accurate solution for volumetric or mass meter proving traceable to the National Institute of Standards and Technology (NIST). Available in stationary or mobile configurations, Emerson's Compact Prover featuring optical detector switches, when used with pulse interpolation electronics, enables highly accurate and fast proving with a smaller volume and fewer flow meter pulses than traditional prover technology.

## Expert Partner

Ensuring the validity of your metering system demands a reliable prover. Working with experts backed by over 100 years of experience in flow measurement means you can expect a dependable Compact Prover designed for your demanding measurement quality applications.

- Standard ANSI pressure ranges from 150# to 1500# and voltage options suitable for worldwide applications.
- Compatible with virtually all pulse metering technologies, including turbine, ultrasonic, coriolis and positive displacement type.
- Compliant with the American Petroleum Institute (API) 4.2 Displacement Provers and compatible with double chronometry technology as outlined in API 4.6.
- Mounting options include stationary installation or truck/trailer mounting for portable field proving.



Emerson's Compact Prover conforms to API 4.2 and 4.6 standards and operates with virtually any pulse output flow meter.

Emerson's Compact Prover provides highly accurate and automated proving of flow meters.

For more information visit [Emerson.com/Provers](https://www.emerson.com/Provers) or contact your local Emerson Sales Representative



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## Proven performance capabilities

### Smoother operation and serviceability

- Redesigned piston and poppet assembly minimizes flow disturbance while delivering smoother operation
- Belt drive system with clutch facilitates system operation, access and servicing
- Observation windows allow visual access to the drive system
- Easy access to interior of flow tube without disturbing process connections
- 3-point mounting design ensures secure installation on uneven surfaces

### Reliable performance

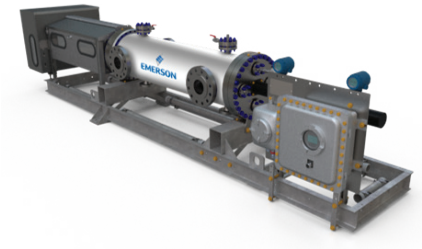
- Prover validation/self-test function
- Long-wearing seals made of proprietary Polytetrafluoroethylene (PTFE) blends

### Continuous shaft

- Reduce operational risk with a continuous shaft that delivers equal upstream and downstream volumes

### Stainless steel components

- All wetted parts and most drive-end parts are stainless steel, limiting the affects of corrosion and ensuring integrity of the system



Ensure compliance to proving standards and local regulations in fiscal measurement applications, including:

- Crude oil
- Refined products
- High-pressure NGLs
- Cryogenic fluids
- Various process fluids

## Specifications and Certifications

Connection flange sizes	3-in. to 24-in.
Pressure ratings	150 – 1500 ANSI <sup>(1)</sup>
Flow rates	0.25 to 24,500 GPM (0.36 to 35,000 BPH)
Turn down ratio	Typically 1200:1
Repeatability rate	≤ 0.02% (water draw)
Certifications	ISO, EC, CSA, IECEx

<sup>(1)</sup> 1500 ANSI not available on all sizes.

For more information, visit [Emerson.com/Provers](https://www.emerson.com/Provers)

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