



ROSEMOUNT COMPACT ORIFICE FLOW METER

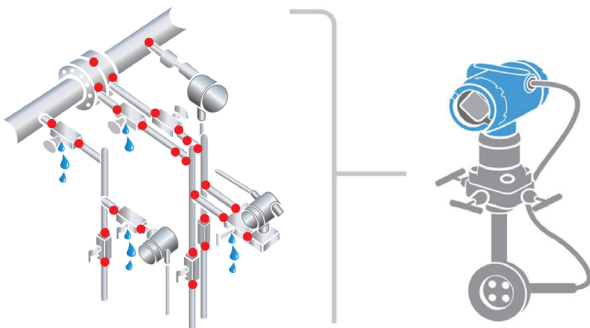
Engineered for enhanced measurement accuracy

Emerson's Rosemount™ Compact Orifice Flow Meter is an innovative design that reduces straight run and minimizes leak points.

Most flow technologies require a significant amount of straight run, which increases cost and complicates installation in tight spaces. While a single hole orifice plate can require up to 44 diameters of straight run, the Rosemount Compact Orifice only requires two diameters upstream and downstream. It's innovative 4-hole design effectively minimizes errors from upstream disturbances, significantly reducing the straight-run requirements.

Pairing a Rosemount Compact Orifice with a Rosemount DP Flow transmitter offers the advantages of an integrated flow meter:

- A simplified solution that delivers reliable flow measurements with reduced installation complexity and maintenance.
- Eliminate the need for impulse piping, reducing potential leak points by 70%.
- Lower overall maintenance costs by preventing plugged lines and ensuring a consistent, accurate flow performance.



The 3051SFC Compact Conditioning Flow Meter reduces leak points (shown in red) by eliminating the need for impulse piping with a fully integrated assembly.

The Rosemount 3051SFC Compact Orifice Flow Meter is an ideal solution for tight spaces, reducing installation costs and increasing safety by eliminating the need for additional straight pipe runs and minimizing the risk of flow disturbances.



Rosemount 405C Conditioning Orifice Plate



Rosemount 3051SFC Compact Conditioning Flow Meter



Reduced Maintenance

Engineered for long-lasting performance that provides accurate, stable flow measurements in harsh environments.



Enhanced Safety

Helps eliminate impulse piping which improves the systems safety by minimizing potential leak points and creating less hazards.



Installation Cost Savings

Requires only two diameters of straight run upstream and downstream, drastically cutting material, labor, engineering hours, and procurement expenses.

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| Product Specifications | |
|----------------------------|--|
| Product Family | Orifice, 405C |
| Fluid Type | Liquid, Gas, Steam |
| Line Size | 0.5 to 12 in. (15 to 300 mm) |
| Straight Run Requirements | 2 diameters upstream and 2 diameters downstream |
| Temperature Limits | Remote Mount: -321°F to 850°F (-196°C to 454°C) Direct Mount: -40°F to 450°F (-40°C to 232°C) |
| Max Operating Pressure | ANSI B16.5 600#, DIN PN100 |
| Accuracy | ± 0.5-1.0% |
| Process Wetted Material | 316 SST |
| Certifications | SIL 2/3 certified to IEC 61508 by an independent 3rd party Certificate of Compliance to NACE MR0175/ISO 15156 for wetted materials See the Product Data Sheet for additional approvals |
| Common Applications | Water, Natural Gas, Hydrogen, Steam, Air, Biogas |
| Update Rate of Transmitter | 1 second to 60 minutes, user selectable |
| Diagnostics | Basic Diagnostics, Loop Integrity, Process Intelligence, Plugged Impulse Line |

For more information, visit [Emerson.com/DPFlow](https://www.emerson.com/DPFlow)
or reach out to a local Sales representative

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