



Rosemount™ Magnetic Flow Meters for Data Centers

Rosemount Magnetic Flow Meters
Trusted Flow Measurement Supporting Data Center Reliability



Smarter Flow Measurement for Reliable, Efficient Data Center Operations



Data center teams face constant pressure to protect uptime, efficiency, and control across critical cooling systems. Emerson understands these challenges firsthand, from tight installation windows and complex piping to the real consequences of unreliable measurement. That is why our flow solutions are designed around how data centers operate: helping teams install faster, verify performance, and maintain visibility into system health. When flow issues go unnoticed, risks escalate quickly. Waiting to act can compromise reliability, efficiency, and ultimately uptime.



Grounding Fault diagnostics quickly identify installation issues during commissioning so teams can correct problems before startup, while built-in Smart Meter Verification Basic confirms the meter is operating properly and reduces uncertainty from day one.



With proven production capacity for large data center projects and standard two-week lead times, we simplify ordering through optimized model configurations while still offering flexibility for custom requirements.



High system accuracy of 0.25% +1 mm/s, with an optional 0.15% +1 mm/s, ensures reliable measurement, while strong repeatability and flow stability maintain performance even in short runs where accuracy is often challenged.



Remote monitoring and field-licensable diagnostics enable early issue detection and long-term equipment health tracking, while extended warranties and a leak-minimizing design help protect critical cooling systems.



Rosemount Magnetic Flow Meter Offering for Data Center Applications

Rosemount 8705 Magnetic Flow Sensor and Rosemount 8732 Magnetic Flow Transmitter



Rosemount 8705 Magnetic Flow Sensor and Rosemount 8712 Magnetic Flow Transmitter



Fast and Painless Installations

Rosemount Magnetic Flow Meters simplify installation and commissioning in demanding data center environments. Factory pre-configuration and the Local Operator Interface (LOI) enable fast setup without special tools, while ProLink software supports efficient transmitter cloning to replicate configurations across multiple devices and streamline commissioning at scale. Suitable for limited straight run piping installations, maintaining measurement confidence even when piping constraints exist.



Grounding Fault Detection Included

Built-in Grounding Fault Detection alerts installers immediately to any grounding issues during installation. This diagnostic enables teams to identify and correct problems early, helping ensure proper installation and reducing commissioning delays before the system enters operation.



Trimmable Cable Options

Flexible cabling options help streamline installation and control costs. Choose pre-cut cable lengths to save time during installation, or select continuous lengths for on-site trimming to reduce material waste across large data center projects.

Flow Technology Designed to Support Continuous Data Center Operations



Smart Meter Verification

- Confirms the flow meter is operating within specification
- Included standard as Smart Meter Verification Basic
- Enables on-demand verification without process interruption
- Supports faster troubleshooting and reduced uncertainty
- Upgradeable to Smart Meter Verification Professional for deeper diagnostics

Coated Electrode Diagnostic

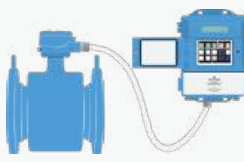
- Detects changes in measurement quality caused by coating or buildup
- Provides early indication of performance degradation over time
- Helps teams address issues before measurement confidence is impacted
- Field-licensable to support flexibility across the equipment lifecycle

Rosemount Magnetic Flow Meters

Data center cooling systems depend on accurate, stable flow measurement to support continuous operation and efficiency. Rosemount magnetic flow meters are widely used across critical water and water-glycol applications, trusted for their reliability, diagnostic capabilities, and performance in demanding installations. Built-in verification and condition-based diagnostics help teams maintain visibility into measurement quality, identify developing issues early, and act before flow problems impact system reliability or uptime.

Rosemount Magnetic Flow Meter Offering by Communication Protocol

Simplified ordering helps reduce errors while giving data center teams confidence in a vendor built to scale. Emerson’s magnetic flow portfolio supports a wide range of line sizes and communication protocols, with standard configurations for common applications and factory customization available for more complex requirements.

Sensor Line Size	4"	6"	8"	10"	12"	14"	16"	18"
Model Code	040	060	080	100	120	140	160	180
4-20mA + Pulse Ordering Specifications					Model Codes			
	Integral mounted LOI 4-20mA + pulse ½" NPT conduits 0.25% accuracy (.15% optional) ½" to 36" line sizes				8705TSA__C1W0B3 AC Power: 8732EMT1A1M4 DC Power: 8732EMT2A1M4			
	Remote mounted LOI 4-20mA + pulse ½" NPT conduits, 0.25% accuracy (.15% optional) ½" to 36" line sizes				8705TSA__C1W0 AC Power: 8712EMR1A1M4 DC Power: 8712EMR2A1M4 08732-0065-2001 qty by ft			
Ethernet Ordering Specifications					Model Codes			
	Integral mounted LOI Ethernet ½" NPT conduits 0.25% accuracy (.15% optional) ½" to 36" line sizes				8705TSA__C1W0B3 AC Power: 8732EMT1E1M4E4			
	Remote mounted LOI Ethernet ½" NPT conduits 0.25% accuracy (.15% optional) ½" to 36" line sizes				8705TSA__C1W0 AC Power: 8732EMR1E1M4E4 08732-0065-2001 qty by ft			
Modbus + Pulse Ordering Specifications					Model Codes			
	Integral mounted LOI Modbus + pulse ½" NPT conduits 0.25% accuracy (.15% optional) ½" to 36" line sizes				8705TSA__C1W0B3 AC Power: 8732EMT1M1M4 DC Power: 8732EMT2M1M4			
	Remote mounted LOI Modbus + pulse ½" NPT conduits 0.25% accuracy (.15% optional) ½" to 36" line sizes				8705TSA__C1W0 AC Power: 8712EMR1M1M4 DC Power: 8712EMR2M1M4 08732-0065-2001 qty by ft			



Emerson is More than a Vendor. We Are Your Global Partner.

Data center projects demand consistency, scale, and reliability across every phase of the lifecycle. Emerson works alongside data center teams to support design, installation, operation, and long-term maintenance. Our global presence and proven experience help reduce risk, simplify execution, and maintain confidence as systems scale.



Global Production Capability

Emerson operates multiple production facilities worldwide that work together to support high-volume requirements and compressed delivery timelines. Standard offerings are designed to meet common data center needs while maintaining flexibility for site-specific requirements.



Global Support Across the Lifecycle

From early design through installation and ongoing operation, Emerson provides local technical support backed by global product expertise. Standardized configurations simplify ordering and help reduce errors, ensuring teams receive the right instruments when they are needed to support predictable startup and long-term reliability.

Maintain critical cooling flow with accurate, low-maintenance magnetic flow measurement.



Fast Delivery. Simplified Procurement. One Trusted Partner

Emerson's short lead times, modular install options, and complete instrumentation portfolio simplify procurement into a single order – accelerating startup, enabling phased commissioning, and streamlining spec approval. **In addition, expedited delivery available to meet your accelerated schedule and keep your build project on track.**

[Emerson.com/DataCenterMeasurement](https://emerson.com/DataCenterMeasurement)

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