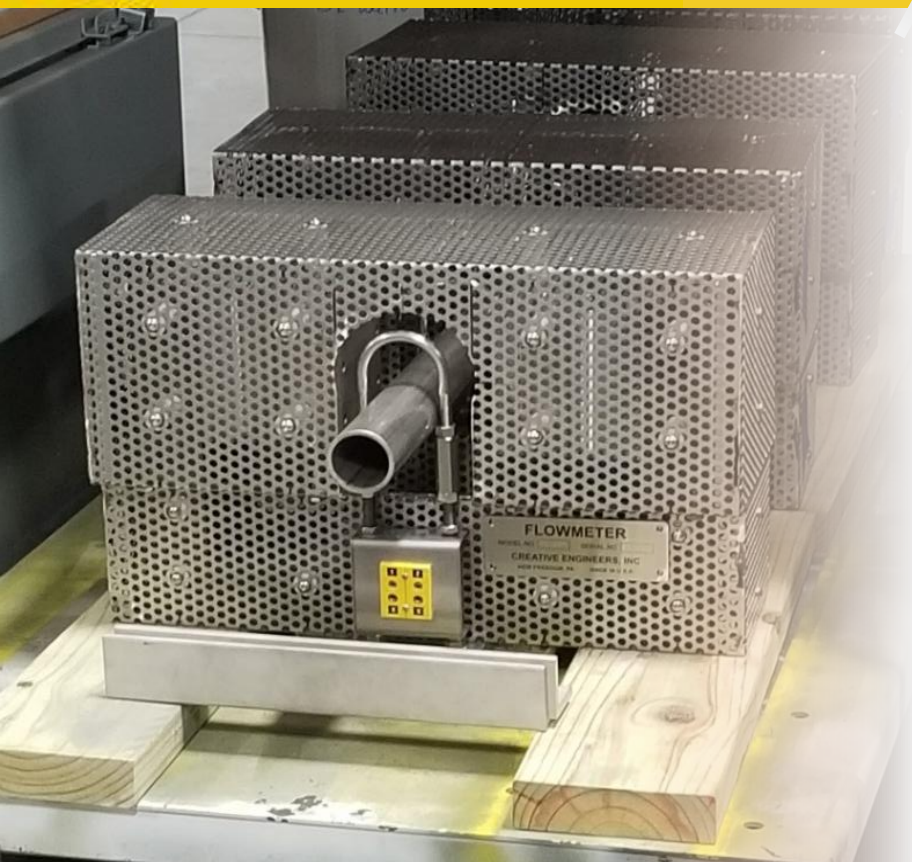




Creative Engineers, Inc.

UNITED STATES | INTERNATIONAL



EMFs

Electromagnetic Flow Meters

**ACCURATE. RELIABLE.
MAINTENANCE-FREE.**

CEI EMFs deliver precise, reliable flow measurement for liquid metals in the most demanding applications and environments.

WHY CHOOSE CEI EMFs?



NO MOVING PARTS

No seal. No packing glands. No leaks!



UP TO 1500 °F

Continuous operation at liquid metal temperature to 1500 °F / 816 °C.



±2 ACCURACY

Accuracy within ±2 of measured flow rate.



BUILT TO LAST

Dependable performance for 20+ years.



RADIATION TOLERANT

Operable in radiation fields.



PROVEN PERFORMANCE

Trusted since the 1950s.



ANY ORIENTATION

Can be mounted in any position.



LOW PRESSURE LOSS

Straight-through flow with no internal restrictions.



NEW FREEDOM, PA | GREENVILLE, SC

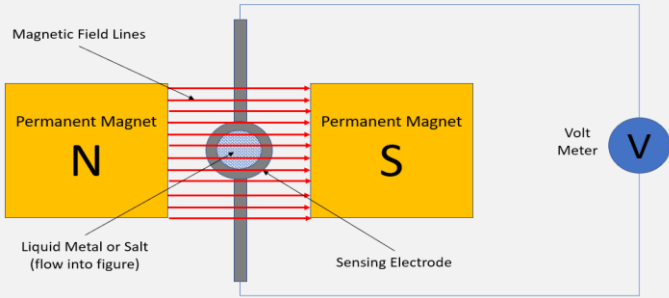


(717)235-5469



www.creativeengineers.com

PRINCIPLE OF OPERATION



① MAGNETIC FIELD APPLIED

Permanent magnets create a stable magnetic field across the flow tube.

② CONDUCTIVE LIQUID FLOWS

Moving liquid metal cuts across the magnetic field lines.

③ VOLTAGE GENERATED

A voltage is induced between the electrodes, proportional to the flow velocity.

EFM SIZING OPTIONS

CEI does not offer one-size-fits-all flow meters. Every electromagnetic flow meter is designed around the unique requirements of the application, including pipe size, fluid characteristics, operating conditions, and system constraints. From small laboratory systems to large industrial installations, CEI delivers custom-engineered solutions optimized for performance and reliability.

FLOW TUBE SIZES	AIR GAP OPTIONS (in / cm)	BASE FIELD STRENGTHS (Gauss)	PROCESS FLUID TEMP. LIMIT (°F / °C)	MAGNET TEMP. LIMIT (°F / °C)	CAGE DIMENSIONS (in / cm)	APPROX. WEIGHT (lb / kg)
1/4" OD Tube – 3/4" NPS SCH 40 Pipe 0.64 – 2.7 cm OD	0.5 – 6.0 / 1.3 – 15.2	8,200 – 350	≥1,500 / ≥816	248 / 120	10.75 x 11.0 x 14.0 / 27.3 x 27.9 x 35.6	50 / 23

CEI can specify the most appropriate flow meter for your application after receiving your process information.

ABOUT CREATIVE ENGINEERS, INC.

Creative Engineers, Inc. (CEI) designs, builds, and operates custom research and pilot-scale systems for alkali and other liquid metals. Backed by decades of specialized experience, our team helps clients move from concept to commercialization faster, safer, and more efficiently.



**CUSTOM
DESIGN**



**ENGINEERING &
MANUFACTURING**



**TESTING &
QUALIFICATION**



**INSTALLATION
SUPPORT**

LEARN MORE ABOUT OUR EMFs



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