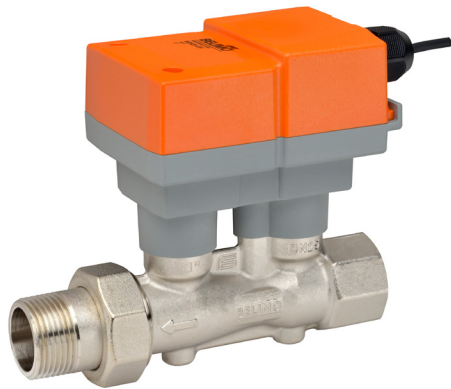


# FM100, 1", Flow Meter

## Ultrasonic, Transit Time Technology



Technical Data	
Service	chilled, hot water, up to 60% glycol
Size [mm]	1" [25]
End Fitting	inlet 1" [25] npt female, outlet 1" [25] npt male
Body Pressure Rating [psi]	360
Inlet Length to Meet Specified Measurement Accuracy	inlet: 5x nominal pipe size (NPS) outlet: no requirement
Flow Measurement Tolerance	±2% *
Flow Measurement Repeatability	±0.5%
Sensor Technology	ultrasonic (transit time) with glycol and temperature compensation
Cv	20
Power Supply	24 VAC ± 20%, 24 VDC -10% + 20%
Power Consumption Rating	0.5 W / 1 VA
GPM Range	0.22-21.8...(1.0")
Media Temperature Range	-4°F to 250°F [-20°C to 120°C]
Output Signal	0-10 VDC
Output Resolution	1.25 mV
Wiring	black (ground), red (24 VAC/DC), white (VDC feedback signal)
Flow Housing Material	forged brass, nickel plated
Enclosure	NEMA 2, IP54, UL enclosure type 2
Electrical Connection	3ft [1m], 18 GA appliance cable
Quality Standard	ISO 9001
Velocity Range	0.10-9.20 FPS
Pressure loss at V'nom	1.18 psi

\*All flow accuracies are @ 68°F-77°F (20°C-25°C).

### Wiring Diagrams

#### ⚡ INSTALLATION NOTES

⚠ Provide overload protection and disconnect as required.

#### ⚠ WARNING! LIVE ELECTRICAL COMPONENTS!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

### Application

The ultrasonic flow meters are designed for HVAC chilled water, hot water, and water/glycol solutions from -4°F to 250°F [-20°C to 120°C] up to 60% glycol.

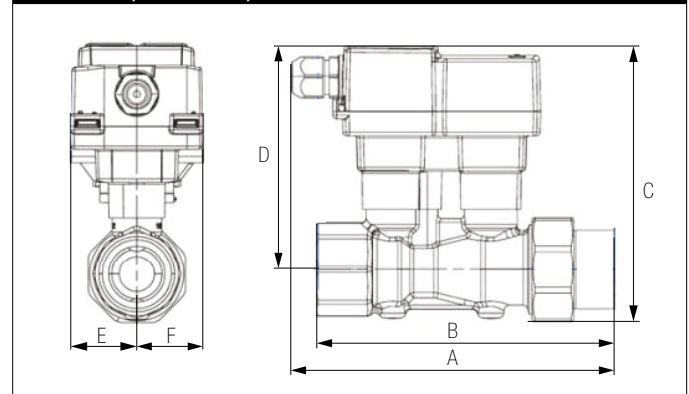
### Operation

The ultrasonic flow meter is an accurate and repeatable liquid flow measurement meter by utilizing ultrasonic transit time technology. The transducers perform as both emitter and receiver to provide accurate signal reflection.

### Product Features

The flow meter incorporates an embedded temperature sensor which enables Belimo's patented temperature and glycol compensation logic to accurately read flow over a wide range of water variables. Easy installation and compact to fit anywhere.

### Dimensions (Inches [mm])



A	B	C	D	E	F
5.37"	4.88"	5.25"	4.45" [113]	1.5" [38]	
[136.4]	[124.0]	[133.4]			

