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SECTION 23 05 19
METERS AND GAGES FOR HVAC PIPING F 9.9

PART 2 - PRODUCTS

See execution section of this specification for installation services required by the equipment provider.

ULTRASONIC FLOW METERS

Technology:	Transit Time
Pipe size:	2” to 100”
Fluid type:	Liquid
Factory Tested Accuracy:	±0.5%
Field Accuracy:	±2.0%
Repeatability:	±0.15%
Response time:	0.3 to 30 seconds
Velocities:	-40 to 40 ft/sec
Maximum Fluid Temp:	250°F
Input Power:	120 VAC
Output Signal:	Frequency output
Transducers:	Stainless steel clamps
	NEMA 6 rated housings
Other:	No moving parts
	Field programmable
Manufacturer:	EMCO SonoTrak Transit Time, Fuji Time Delta-C, or approved equal.

1 ALL FLOW METERS:

1 DIFFERENTIAL PRESSUR E FLOW METERS
Provide

Figure 2: 3-Valve Manifold Diagram

MAGNETIC FLOW METERS

Reserved for future detailed installation notes in addition to manufacturers installation instructions.

POSITIVE DISPLACEMENT METERS

Condensate piping shall be Schedule 80 black steel. Install unions on either side of the meter. Do not insulate unions, strainers, condensate meter body, or check valves.

ENERGY CONSUMPTION METERS

Provide wiring and conduit between the flow meter, temperature sensors, and the flow processor. Validate the inputs to the flow processor are accurate, and the calculations performed are accurate per the requirements identified in the Startup and Calibration portion of this specification.

Figure 3: Energy Consumption Flow Meter Schematic