

# S130 Industrial Single-Jet Hot Water Meter

**Size: 3/4"**



	<u>Size:</u>	<b>3/4"</b>
Min Flow (gpm) $\pm$ 5%		1/4
Low Flow (gpm) $\pm$ 2%		1
Recommended Continuous Flow (gpm) $\pm$ 2%		11
Peak Flow (gpm) $\pm$ 2%		22
Pressure Loss psi Min		0.1
Pressure Loss psi Low		0.5
Pressure Loss psi Cont		4
Pressure Loss psi Peak		13
Max Operating Pressure psi		150
Operating Temperature		195° F / 90° C

Sweep Hand Register:

US Gallons	Red=x.1 Red=x 1 Red=x10
Cubic Meters	Red=x.001 Red=x.01 Red=x1

Capacity of Register/Pulser:

US Gallons (millions)	10
Cubic Meters (thousands)	100

Contact/Closure (Pulser):

US Gallons	1 Contact/Gallon
Cubic Meters	1 Contact/1 Litre

Materials:

Main Case	Brass
Top Plate	PPO-Glass-Loaded
O-ring	Rubber (Nitrile)
Impeller	Polyamide 12
Magnet	Ceramic (Ferrite)
Strainer	Polyacetal
Register	Plastic
Register Housing & Lid	Plastic
Reg Gearing & Number Wheels	Plastic
Lens	Polycarbonate High Impact
Pulser	Polycarbonate High Impact
Reed Switch	4 watt, 24 AC/DC voltage max., 0.2 Amp Current max., not to exceed 4 watts. Current limiting resistance in series with Reed Switch

**Operation.** The S130 (formerly 5UM-20) is a single-jet (inferential) impeller meter. The impeller movement is transferred by a magnetic coupling to the hermetically vacuum sealed register.

**Installation.** The meter must be installed in a clean pipeline, free from any foreign materials. The meter shall be installed with the direction of flow as indicated by the arrow cast in the meter case. The meter may be installed in horizontal or inclined lines, up to 45 degrees with the register facing upward. Note: The meter must have 10 pipe diameters ahead of the unit and 5 after of straight pipe to ensure proper flow through the meter. The meter is for use in hot water up to 195° F and working pressure to 150 psi. Both pressure loss and accuracy tests are made before shipment. No adjustments need be made before installation.

**Construction.** The meter consists of the main case, a driven register or register pulser assembly. The main case is cast brass with raised characters showing direction of flow. The top plate is made of PPO-Glass-Loaded and secured by a closing nut made of Polyacetal-Glass-



Loaded which is threaded into the main case, sealed by the O-ring gasket. The main case is designed to house the impeller/magnet and transfers the flow to the register pulser. The register pulser is positioned to the top plate with expansion dowel pins and secured by a clamp made of Polyamide with a threaded securing pin and nut.

**Register.** The register is dust and water-proof evacuated (no condensation caused by variation of temperature). The register is stationary and cannot be moved.

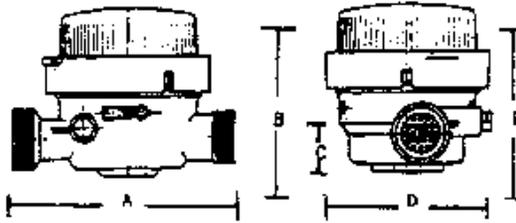
**Pulser.** The pulse unit consists of a clear housing with a register and cable exiting from the side of the register. The pulse element is a dry contact reed switch rated at 4 watts. This unit requires power from an external source and normally is wired in series with no regard to polarity. The unit has approximately 5 feet of 2-wire shielded cable exiting a sealed fitting. Note: The pulse unit cannot be repaired, however, the pulser can be replaced.

**Connection.** The meter casing spuds have external straight threads conforming to ANSI B2.1. Bronze coupling nuts and tailpieces are provided. Add 5 1/8" to length for couplings.

**Pulse Wiring.** The pulse element is a 4-watt rated reed switch which requires power from an external source. The unit is to be wired in series with no regard to polarity.

## Dimensions and Net Weights

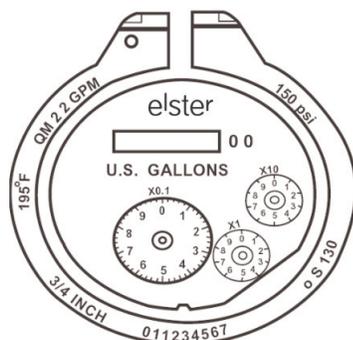
Meter Size	A Length	B Height w/Cap	C Center to Btm.	D Width	E Height w/Pulser w/o Cap	Weight (lbs.)	
						REGISTER	PULSER
3/4"	4.527	3.625	.787	3.25	3.500	1.50	1.75



## Temperature/Pressure Rating

Temp °F	32-150	200	230	250
MIN PSIG	--	6	25	45

"MIN PSIG" is the minimum line pressure required to prevent flashing within the meter body.



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