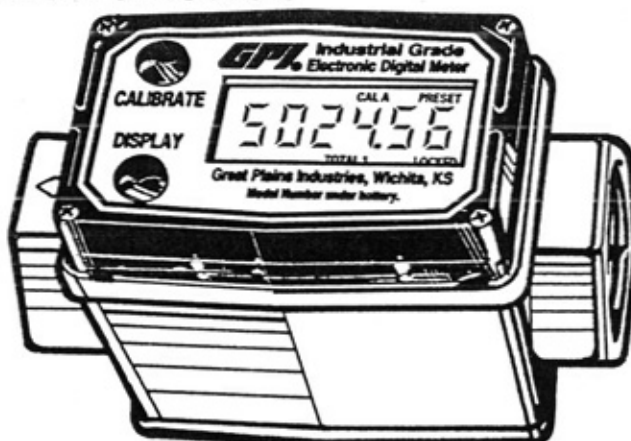




Fact Sheet

Industrial Grade Metering Products Stainless Steel Turbine Model S100



- Field Replaceable Internal Parts
- Excellent Chemical Compatibility
- High Accuracy
- High Turndown Ratio
- Pressure Rating of 1,500 PSIG (103 bar)
- Extended Flow Range of 2.5 to 50 GPM (9.5 to 190 LPM)
- Linear Range of 5 to 50 GPM (18.9 to 190 LPM)
- Signal Output Capabilities
- Repeatability of $\pm 0.1\%$
- Accessories easily upgrade meters

Model S100 Turbine shown with standard Computer Electronics which are sold separately.

The Industrial Grade Model S100 Turbine Housing is a one-inch, stainless steel turbine measuring in the 2.5 to 50 GPM (9.5 to 190 LPM) flow range. It addresses a wide range of industrial and commercial fluid measuring applications. These turbines offer high accuracy, compact design, and a modular approach to maximize flexibility and meet your specific needs.

GPI turbines are trouble-free. The turbine housing contains only one moving part and kits are available for the field replacement of all internal components. Wetted parts are held to a minimum of only four materials: 316 stainless steel, tungsten carbide, PVDF, and ceramic. The signal generator is fully encapsulated to increase chemical compatibility.

These turbines, when paired with the GPI Computer Electronics which are sold separately, provide a microprocessor-based LCD readout with a large six-digit display and an impressive 20:1 turndown ratio. Both totalizer and rate of flow features are available. Paired with one of the many optional accessory modules, the meter communicates with most process equipment in addition to providing local or remote indication.

GPI is a registered trademark of Great Plains Industries, Inc. U.S. Patents 4,856,384; 4,700,579; and 5,046,370. Australian Patent 572,494. Canadian Patent 1,223,464. European Patent EU0147004. German Patent P3478494.2-08. Italian Patent 68074-BE/89.



GREAT PLAINS INDUSTRIES, INC.

Technical Specifications

Stainless Steel Turbine Model S100

Flow Ranges

Linear:	5 to 50 GPM (18.9 to 190 LPM)
Extended:	2.5 to 50 GPM (9.5 to 190 LPM)
Maximum Flow:	75 GPM (284 LPM)
Fluid Velocity in Extended Range:	0.93-18.6 ft./sec. (0.28-5.7 m/sec.)

Performance*

Linear Range:	10:1 @ $\pm 1.0\%$ of reading
Extended Range:	20:1 @ $\pm 5.0\%$ of reading
Repeatability:	$\pm 0.1\%$
Maximum Pressure	
Drop in 10:1 Range:	5 PSIG (0.34 bar)
Pressure Rating:	1,500 PSIG (103 bar)*
Frequency Range:	45-475 Hz @ 5-50 GPM

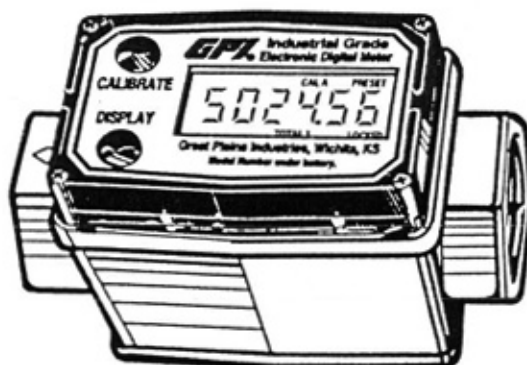
Connections

Inlet and Outlet:	1 inch female NPT or ISO
Wrench Flat Size:	1-5/8 in. (41mm)

Temperatures**

Operational:	-40° to +250°F (-40° to +121°C)
Storage:	-40° to +250°F (-40° to +121°C)

- * Results determined with 1 centipoise stoddard solvent test fluid at 70°F (21°C).
- ** Turbine only without computer.
- * Consult the factory for models rated to 3,000 PSIG (207 bar).



Approvals

All GPI turbines are Factory Mutual Approved and carry a Class 1, Division 1 Approval for hazardous environments.

Wetted Components

Housing:	316 Stainless Steel
Journal Bearings:	Ceramic (96% Alumina)
Shaft:	Tungsten Carbide
Rotor and Supports:	PVDF
Retaining Rings:	316 Stainless Steel

Weight

Turbine only:	2.4 lbs.(1.1kg)
Turbine with computer:	2.6 lbs.(1.2kg)

Shipping Weight

Turbine only:	2.6 lbs.(1.2kg)
Turbine with computer:	2.8 lbs.(1.3kg)

