

**MODEL LP21**

150 psi STRAP-ON SADDLE METER
SEALED METER MECHANISM - MAGNETIC DRIVE
CAST STRAP-ON SADDLE - SEALED TOTALIZER
4" SIZE



TOTALIZER



DESCRIPTION

MODEL LP21 STRAP-ON SADDLE METERS are designed for irrigation or other low pressure service up to 150 PSI working pressure. The strap-on design permits installation on many types of pipe material (3/16" PVC wall minimum). It is necessary upon ordering to furnish the I.D. dimension of the pipe the meter is to be mounted on, for calibration purposes. The pipe O.D. dimension must be 4.50" for proper sealing of the saddle to the pipe.

INSTALLATION is made by cutting a hole in the existing pipe line and then attaching the meter securely to the line. Furnished u-bolts are used to attach the meter saddle to the line. The meter can be installed in any of the following positions: horizontally, vertically, or inclined on suction or discharge lines. The meter must have a full flow of liquid for proper accuracy. Fully opened gate valves, fittings, or other obstructions that tend to set up flow disturbances should be a minimum of ten pipe diameters upstream and two pipe diameters downstream from the meter. Installations with less than ten pipe diameters of straight pipe require straightening vanes. Meters with straightening vanes require at least five pipe diameters upstream and two pipe diameters downstream.

PROPELLER is magnetically coupled with the drive mechanism through the sealed oil filled gearbox. This completely eliminates water entering the meter assembly, as well as the need for any packing gland. The propeller is a conical shaped three bladed propeller, injection molded of thermoplastic material resistant to normal water corrosion and deformity due to high flow velocities.

BEARING in propeller is a water lubricated ceramic sleeve and spindle bearing system with a ceramic/stainless steel spindle. Dual ceramic thrust bearings, standard on all meters, handle flows in both forward and reverse directions. The bearing design promotes extended periods of maintenance free propeller operation. Bearings within the sealed meter mechanism are shielded precision stainless steel bearings and are factory lubricated for the life of the meter.

TOTALIZER is o-ring sealed and magnetically coupled with the driving mechanism, and features a six digit totalizer with a full 3" diameter, 100 division, center sweep dial that permits extremely accurate readings for timing purposes in determining flow rates. The totalizer dial can be furnished in gallons, cubic feet, acre feet, or any standard liquid measuring units. The bonnet, with padlock hasp, can be positioned in four different directions.

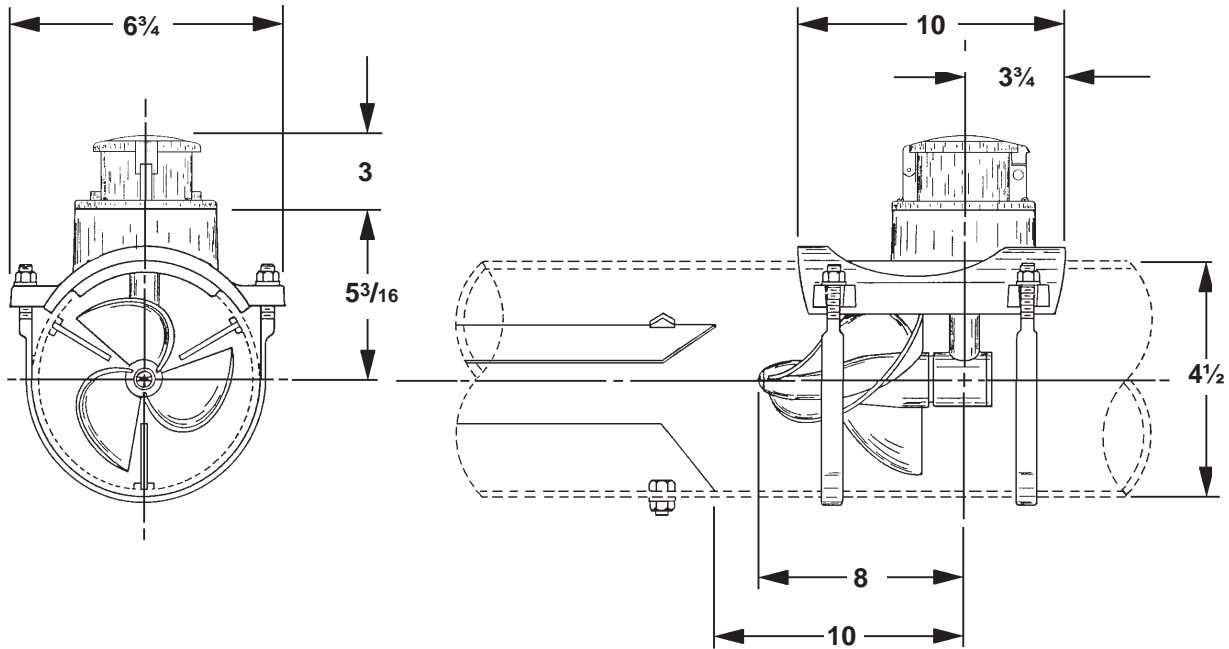
CHANGE GEARS may be easily exchanged in the field when changing the dial or when recalibrating for different pipe sizes. It is not necessary to remove pressure from the line.

O-RING SEALS are used at the meter head and all points where seals are required, making the meter mechanism completely immune to any of the corrosive effects of atmospheric moisture or the liquids measured by the meter assembly.

SPECIFICATIONS

ACCURACY	Plus or minus 2% of actual flow within the range specified for each meter size.
PRESSURE RANGE	Up to 150 PSI maximum working pressure.
TEMPERATURE RANGE	140° F Maximum. Consult factory for special construction for higher temperatures.
MINIMUM FLOWS	As shown for meter and construction are required for accurate registration. See flow chart. NOTE: Minimum flow will be higher when auxiliary equipment is added.
MAXIMUM FLOWS	As shown for meter and construction are rated for continuous operation. See flow chart.
INTERMITTENT FLOWS	As shown for meter are rated for 10% to 15% of the total time the meter is operating. Consult factory for High Velocity construction when intermittent flows are higher than shown on flow chart and/or when longer operating periods are required.
MATERIALS	Used in construction are chosen to minimize the corrosive effects of the liquids measured by the meter assembly. MAGNETS - permanent ceramic type INTERIOR BEARINGS - factory lubricated PROPELLER BEARING - ceramic sleeve type PROPELLER SPINDLE - ceramic sleeve/stainless steel PROPELLER - injection molded thermoplastic GEARBOX - cast bronze SEPARATOR - stainless steel SHAFTS and BOLTS - stainless steel SADDLE - NSF approved fusion epoxy coated ductile iron U-BOLTS - electro-galvanized dichromate sealed 101 B steel
OPTIONAL EQUIPMENT	Totalizer extensions and a wide range of controls and instruments for indicating, totalizing and recording flow data for each meter. Special constructions and materials are available upon request.
ORDERING INFO	Must be specified by the customer and includes: Minimum and maximum flow ranges, pipe internal diameter, temperature of meter environment, totalizer dial units, type of materials and construction, and optional equipment desired.

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NOTE: PLEASE SPECIFY PIPE I.D.

METER & PIPE SIZE	FLOW RANGES, GPM			SHIPPING WEIGHT POUNDS
	MIN.	MAX.	INT.	
4	80	500	700	28