MODEL VF32-D VERTICAL DOWNFLOW METER
SOLID STATE ELECTRONIC PROPELLER METER
DIGITAL INDICATOR - TOTALIZER
SIZES 4” thru 20”

DESCRIPTION

MODEL VF32 D VERTICAL DOWNFLOW METERS are designed for mounting in tees with up to 150 PSI working pressure. The bolt-on design permits use in a wide range of applications with up to 150 psi working pressure. The mounting flange conforms to ANSI class 125 drilling. It is necessary, upon ordering, to furnish the I.D. dimension of the pipe the meter is to be mounted on for calibration purposes.

INSTALLATION is made by bolting the meter assembly to an appropriate cast iron or fabricated steel tee. These tees usually replace an elbow in existing systems such as on the suction or discharge side of a centrifugal pump of laterals in irrigation systems. 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 five pipe diameters upstream and two pipe diameters downstream from the meter. An optional kit of adapters with up to 100 feet of cable is available to locate the indicator-totalizer at remote locations.

PROPELLER is magnetically coupled with electronic sensor through the sealed separator assembly. This completely eliminates water entering the meter assembly, and eliminates all moving parts except for the propeller. 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 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.

DIGITAL INDICATOR-TOTALIZER has a non-volatile EEPROM memory to store totalizer count (updated hourly while running). Features a large two line display. Five digit top line indicates flow rate, and eight digit bottom line provides volumetric flow data. Indicator is available in 22 different units, including GPM, CFS, MGD. Totalizer is available in 20 different units, including Gallons, AF, CF. Units of measurement are user-selectable. Battery life is 6 -10 years. Housing is NEMA 4X rated.

Available with optional 4-20mA and/or pulse output.

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 each meter size 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 each meter size and construction are rated for continuous operation. See flow chart.

INTERMITTENT FLOWS  As shown for each meter size 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 PROPELLER BEARING - ceramic sleeve type PROPELLER SPINDLE - ceramic coated stainless steel PROPELLER - injection molded thermoplastic DROP-PIPE - stainless steel SEPARATOR - stainless steel SHAFTS AND BOLTS - stainless steel METER HEAD - cast iron or fabricated steel, NSF approved, fusion epoxy coated.

OPTIONAL EQUIPMENT  Remote mounting kit, with up to 100 feet of cable, 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, temperature of meter environment, indicator scale and units, totalizer dial units, type of materials and construction, I.D. of pipe, and optional equipment desired.
### MODEL VF32-D

**VERTICAL DOWNFLOW METER**  
**SOLID STATE ELECTRONIC PROPELLER METER**  
**DIGITAL INDICATOR - TOTALIZER**  
**SIZES 4” thru 20”**

![Diagram of the vertical downflow meter with labels for various parts: E - Bolt Circle, F - Number of Bolts, G - Size of Bolts.]

Please specify pipe I.D. at propeller location.

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<table>
<thead>
<tr>
<th>METER &amp; PIPE SIZE</th>
<th>FLOW RANGES, GPM</th>
<th>STANDARD DIAL FACE (GPM/GAL)</th>
<th>DIMENSIONS (IN)</th>
<th>EST SHIPPING WEIGHT (POUNDS)</th>
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