Molded In-line Fitting Remote Mount Display
Three Display Options:
• Rate & Total Display Only
• Rate, Total, Analog output
• Rate, Total, Process Control

Features:
• High accuracy digital paddlewheel technology.
• Flow rate from .4 to 200 GPM (1 to 700 LPM)
• Rate and total flow display.
• Optional Process Control alarm or batch processing relay.
• Optional 4-20mA or 0-10VDC output.

Specifications:
Max. working pressure: ..........300 PSI (20 bar) @ 70°F (21°C)
Max. fluid temperature: ..........200°F (93°C) @ 0 PSI
Max. ambient temperature: ....14°F to 110°F / -10°F to 43°C
Full scale accuracy: ...............+/- 1%
Power requirement: ...............16-24VDC
Model RT units only: .............4 AA batteries or AC/DC transformer
All units: ..........................AC/DC transformer

Signal Distance: .... AC sine wave sensor = 200 ft (60 m)
                   Optional Hall Effect sensor = 1 mile (1.6 km)
Signal Cable: ..............3 conductor shielded. Included 25 ft. (7.6 m)
Max pressure drop: 8 PSI (varies per model)
Enclosure: ...............NEMA 4X (IP56)
Approx ship wt: .... 2 lb. (.91 kg)

Materials of Construction:
Pipe fitting: ................. Polypropylene (options: PVDF)
Sensor, paddlewheel, axle: ....PVDF
Sensor O-ring seals: ...........Viton® (optional EP)

Installation Requirements:
Minimum Straight Pipe Length Requirements
The meter's accuracy is affected by disturbances such as pumps, elbows, tees, valves, etc., in the flow stream. Install the meter in a straight run of pipe as far as possible from any disturbances. The distance required for accuracy will depend on the type of disturbance.

<table>
<thead>
<tr>
<th>Type Of Disturbance</th>
<th>Minimum Inlet Pipe Length</th>
<th>Minimum Outlet Pipe Length</th>
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</thead>
<tbody>
<tr>
<td>Flange</td>
<td>10 X Pipe I.D.</td>
<td>5 X Pipe I.D.</td>
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<tr>
<td>Reducer</td>
<td>15 X Pipe I.D.</td>
<td>5 X Pipe I.D.</td>
</tr>
<tr>
<td>90° Elbow</td>
<td>20 X Pipe I.D.</td>
<td>5 X Pipe I.D.</td>
</tr>
<tr>
<td>Two Elbows -1 Direction</td>
<td>25 X Pipe I.D.</td>
<td>5 X Pipe I.D.</td>
</tr>
<tr>
<td>Two Elbows -2 Directions</td>
<td>40 X Pipe I.D.</td>
<td>5 X Pipe I.D.</td>
</tr>
<tr>
<td>Pump Or Gate Valves</td>
<td>50 X Pipe I.D.</td>
<td>5 X Pipe I.D.</td>
</tr>
</tbody>
</table>

Mounting location:
- The meter is designed to withstand outdoor conditions. A cool, dry location, where the unit can be easily serviced is recommended.
- The meter can be mounted on horizontal or vertical runs of pipe. Mounting at the vertical (twelve o'clock) position on horizontal pipe is recommended. Mounting anywhere around the diameter of vertical pipe is acceptable, however, the pipe must be completely full of water at all times. Back pressure is essential on downward flows. See the minimum straight length of pipe requirement chart above.
- The meter can accurately measure flow from either direction.
**Dimensions:**

![Dimensions Diagram]

**Flow Stream Requirements:**

Measuring accuracy requires a fully developed turbulent flow profile. Pulsating, swirling and other disruptions in the flow stream will affect accuracy. Flow conditions with a Reynolds Number greater than 4000 will result in a fully developed turbulent flow. A Reynolds Number less than 2000 is laminar flow and may result in inaccurate readings.

\[
\text{REYNOLDS NUMBER} = \frac{3160 \times Q \times G}{D \times V}
\]

Where:
- Flow rate of the fluid in GPM = Q
- Specific gravity of the fluid = G
- Pipe inside diameter in inches = D
- Fluid viscosity in centipoise = V