Specifications of Ultrasonic Flow Meter UX/UXZ for Fuel Gas Management

- **Model**:
  - UX
  - UXZ

- **Pipe connection**
  - <1/2"<br>  - 1/2"<br>  - 1/2"<br>  - 1/2"

- **Maximum working pressure**
  - 0kPa<br>  - 0kPa<br>  - 0kPa<br>  - 0kPa

- **Display**
  - Battery life: 10 years<br>  - LCD temperature: -20°C to +50°C<br>  - LCD humidity: 85% RH max.

- **Output**
  - Pulse output: 2 MHz max. / 100mA max.<br>  - RS485: 100kΩ max.<br>  - Power supply: 24V DC<br>  - Power consumption: 1W max.<br>  - Ambient temperature: 0°C to +50°C<br>  - Operating temperature: 0°C to +50°C<br>  - Storage temperature: -20°C to +70°C

Conversion into Normal Flow: example (at fluid temperature of 15°C)

<table>
<thead>
<tr>
<th>Diameter of 40A</th>
<th>Diameter of 10A</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.001 m³/h (normal)</td>
<td>0.001 m³/h (normal)</td>
</tr>
<tr>
<td>0.002 m³/h (normal)</td>
<td>0.002 m³/h (normal)</td>
</tr>
<tr>
<td>0.003 m³/h (normal)</td>
<td>0.003 m³/h (normal)</td>
</tr>
<tr>
<td>0.004 m³/h (normal)</td>
<td>0.004 m³/h (normal)</td>
</tr>
<tr>
<td>0.005 m³/h (normal)</td>
<td>0.005 m³/h (normal)</td>
</tr>
</tbody>
</table>

Equation for conversion

**Normal flow**
- Actual flow = Normal flow / Atmospheric pressure / Absolute temperature

**Standard flow**
- Actual flow = Standard flow / Atmospheric pressure / Absolute temperature

Technical specifications in this catalog are up-to-date as of June 2020.

Manufactured and Distributed by
Aichi tokei denki co.,ltd.

For inquiries, please contact us.

To Our Customers
Please understand that product specifications may be changed without notice.

Aichi tokei denki co.,ltd.
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For inquiries, please contact us.
Developed for customer’s "NEEDS"

**Need 1**  Customer wants to install a flow meter immediately after a bend part in the piping

*No straight pipe section required for installation*

It is possible to connect the flow meter directly to a bend such as an elbow piece and a flexible pipe.

The flow meter has to be located 100 or more distant from a governor irrespective whether it is placed upstream or downstream of the governor. Failing to meet this condition may lead to inaccurate measurements. (D = pipe diameter)

**Need 2**  Customer wants to measure a small flow range

*As wide as a 1:50 turn down ratio*

Applicable also for measuring gas flow of a burner having a large turn down ratio.

Measuring a small flow accurately

**Gas**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Gas type: city gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>UX/UZ 40</td>
<td>1.6 ~ 80m³/h</td>
</tr>
<tr>
<td>UX/UZ 50</td>
<td>3 ~ 150m³/h</td>
</tr>
</tbody>
</table>

**Need 3**  Customer wants to replace batteries

*Easy to replace batteries*

Users can replace batteries without removing the meter from the piping.

Battery pack for replacement

For battery life, see the specifications on the backside of this print.

Customer’s option to be chosen when buying the product

**Need 4**  Customer wants to reduce maintenance work

*Strong against dust, and high durability*

Use the product in such a condition that does not allow the gas to re-liquify into oil mist.

**Need 5**  Customer wants to use it outdoors

*IP64 Protection available for outdoor use*

High temperature can cause the electronic circuit board to be deteriorated and batteries to be consumed. To avoid unnecessary rise in temperature, the product is recommended to be fitted with a sunshade.

**External dimension**

*The overall length (L) is as same as that of our company’s turbine meter (TBX/TBZ) of the same diameter:

**Model code**

**Pressure loss chart**

This data stands for pressure loss for air. For city gas 13A, multiply the reading by 0.64 (specific gravity of the gas).

For LPG, multiply the reading by about 1.55 (specific gravity of LPG).