Figure 1 Mecon Variable Area Meter TM Unox

## Application

The TM Unox variable area meters are used to measure the volume of transparent liquids and gases passing through closed piping. The variable area meters can also be used for flow monitoring if they are equipped with one or more switching contacts. Standard scales are available for liquids with a density of 1 kg/l (62.43 lbs/cu.ft). The scales must be recalculated for all other media depending on the physical characteristics.

The measuring accuracy corresponds to class 1.6 according to VDE/VDI 3513, page 2.

## Special Features

- Product scales for liquids and gases
- Fast installation/removal of the flow tube possible without removal of the fitting
- Increased protection of users from glass breakages by additional cover with single-pane safety glass.

## Design and Operation

The main components of the TM Unox variable area meters are the glass variable-area flow tube with float and the connection parts. The flow is displayed directly on the scale present on the flow tube (e.g. in l/h). The flow tube is optionally available with a percentage or 2-mm (0.079 inch) scale.

The flow is read at the position of the float's widest diameter.

Please contact sales@tecmara.de for further information to this product.

## Technical Data

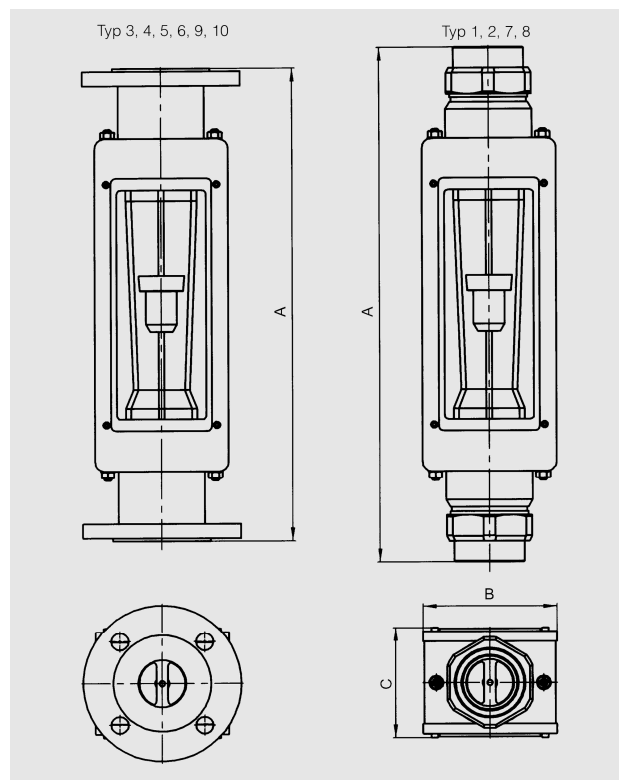| TM Unox (Variable area flow meter) | | |
|---|---|---|
| Liquids | min. | 0.1 - 1 l/h |
| | max. | 2.5 - 25 m³/h |
| | min. | 0.0004 – 0.0044 USgpm |
| | max. | 11 - 110 USgpm |
| | | transparent |
| Air/Gases | min. | 1.6 -16 l/h |
| | max. | 40 - 400 m³/h |
| | min. | 0.007 – 0.070 USgpm |
| | max. | 176 – 1,761 USgpm |
| Pressure | max. | 10 bar, 145 psi |
| Temperature | max. | 150 °C, 302 °F |
| Accuracy | | Class 1.6 |
| Installation position | | Vertical |
| Flow direction | | Vertically upwards |
| Connections | | G ¼ - 2 |
| | | NPT ¼ " - 2" |
| | | DN 15 - 80 |
| | | ANSI ½" - 3" |
| Accessories | | Switching contacts |
| PED 97/23/EG | Cat. | Art. 3.3 (DN15 up to DN 80; G ¼ up to G2; gas fluid gr. 2, liquids fl gr. 1) I (> DN 25; G1 ¼ up to G2, gas and liquids fl gr. 1) |

1/1



Typ 3, 4, 5, 6, 9, 10          Typ 1, 2, 7, 8

Figure 2 TM Unox

TM Unox-Area-Meter-Short_01.doc