

ORIFICE PLATE FLOW INDICATOR U6 SERIE



- Mounting in all positions
- Construction: cast iron or stainless steel
- For pipes from ND 40 up to ND 300 mm
- Scale amplification from 2 to 10
- Accuracy: $\pm 2.5\%$
- Optional: High or/and Low flow switches

PRINCIPLE

The orifice plate flow indicators U6 are specifically designed for the measurement of high flow rates. They are suitable for pipes with a diameter equal or over 2".

The direct reading is done on a variable area flow meter.

For an optimal accuracy, the diaphragm characteristics are calculated against the process parameters (*see further on*).

TECHNICAL FEATURES

| | |
|----------------------|---|
| Measuring range: | 1 to 1600 m ³ /h [Water at 20°C] 180 to 200 000 Nm ³ /h [normo m ³ /h of air] |
| Accuracy: | $\pm 2.5\%$ full scale |
| Repeatability: | $\pm 0.5\%$ reading |
| Scale amplification: | from 2 to 10 - Linear scale |
| Temperature limits: | 0 ... 90°C, sealing in Buna 0 ... 150°C, sealing in FPM |
| Pressure limit: | 21 bar as a maximum |

MATERIALS

| | |
|-----------------|--|
| Wetted parts: | Cast iron and brass (<i>standard</i>) Stainless steel 316 (<i>on request</i>) |
| Diaphragm: | Stainless steel 316 |
| Flow indicator: | Borosilicate glass tube |
| Diver: | Stainless steel 316 SS (<i>liquids</i>) Aluminium (<i>gases</i>) |
| Thrusts: | Stainless steel 316 |
| Sealing: | O-rings in Buna N as standard; FPM on request |

OPTIONS

| | |
|------------------------|----------------------------------|
| Alarm contacts: | (<i>low or high flow rate</i>) |
| Inductive contact: | Mono or bi-stable |
| Operating temperature: | Ambient from -25°C to 60°C |
| Protection: | IP 67 |
| Protection relay: | Relay S112A |

BAMO MESURES

22, Rue de la Voie des Bans - Z.I. de la Gare - 95100 ARGENTEUIL

Tél : (+33) 01 30 25 83 20 - Web : www.bamo.fr

Fax : (+33) 01 34 10 16 05 - E-mail : info@bamo.fr

ORIFICE PLATE
FLOW INDICATOR
U6 SERIE

07-05-2010

764 I1 01 B

DEB

764-01/1

Scales [Water at 20°C]

| P and H /mbar | | | | | | | | | | |
|---------------|------|----|------|----|------|----|------|-----|------|-----|
| P | 100 | | 160 | | 250 | | 400 | | 630 | |
| DN | m³/h | H | m³/h | H | m³/h | H | m³/h | H | m³/h | H |
| 50 | 16 | 35 | 20 | 55 | 25 | 88 | 32 | 140 | 40 | 220 |
| 80 | 36 | | 46 | | 57 | | 72 | | 90 | |
| 100 | 62 | | 78 | | 98 | | 124 | | 155 | |
| 150 | 136 | | 172 | | 215 | | 272 | | 340 | |
| 200 | 245 | | 310 | | 385 | | 485 | | 610 | |

Scales [Air in Normo m3/h]

| P and H /mbar | | | | | | | | |
|---------------|-------|---|-------|---|-------|----|-------|----|
| P | 16 | | 25 | | 40 | | 160 | |
| DN | Nm³/h | H | Nm³/h | H | Nm³/h | H | Nm³/h | H |
| 50 | 180 | 5 | 220 | 8 | 280 | 13 | 560 | 53 |
| 80 | 450 | | 560 | | 710 | | 1430 | |
| 100 | 700 | | 880 | | 1120 | | 2250 | |
| 150 | 1600 | | 2000 | | 2500 | | 5000 | |
| 200 | 2820 | | 3500 | | 4500 | | 8650 | |

P: measuring differential pressure / H: pressure loss

Flow rates herein above are for U6 according to the internal diameter of the pipe.

For air, flow rates are in Normo m3/h, operating pressure and temperature should be confirmed with the order. The air should be dry without humidity to prevent condensation in the reading tube.

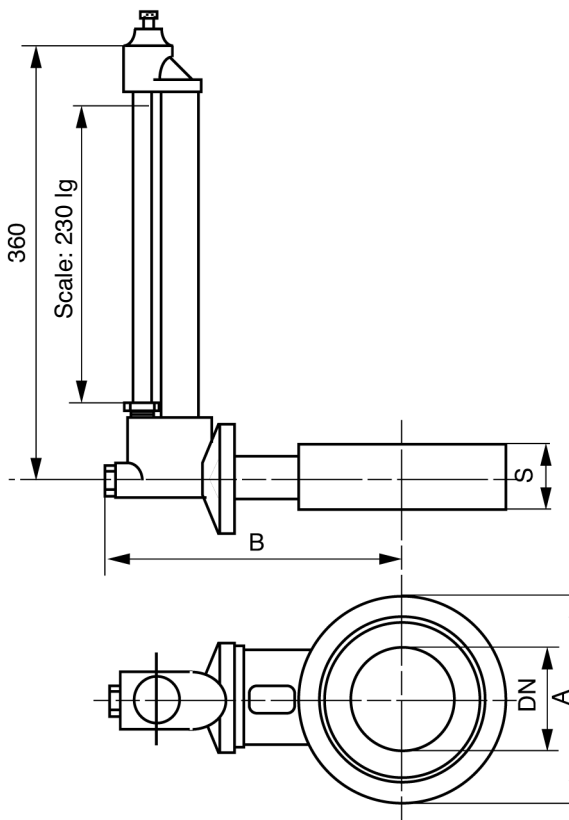
MOUNTING

The specific connection (*jointed coupling*) between the diaphragm and the flow indicator allows mounting of U 6 unit on vertical or horizontal pipe (*with any flow direction*).

Special mention is necessary for the reading scale: over or below the pipe axis.

Fitting: wafer type, between flanges PN 10 bar (*standard flanges supplied on request*).

| Type | ND | A | B | S |
|------------|-----|-----|-----|----|
| U 6 - 3000 | 40 | 88 | 167 | 34 |
| U 6 - 3100 | 50 | 100 | 174 | 34 |
| U 6 - 3200 | 65 | 115 | 184 | 34 |
| U 6 - 3300 | 80 | 130 | 194 | 34 |
| U 6 - 3400 | 100 | 155 | 204 | 34 |
| U 6 - 3600 | 150 | 210 | 234 | 38 |
| U 6 - 3800 | 200 | 265 | 264 | 38 |
| U 6 - 4000 | 250 | 315 | 294 | 38 |
| U 6 - 4200 | 300 | 370 | 324 | 38 |



Details to confirm with an inquiry

- Fluid:
- Pressure: bar
- Temperature: °C
- Specific weight: kg/L or kg/Nm³
- Maximal flow rate: m³/h or Nm³/h
- Pipe O. D: mm
- Pipe thickness: mm
- Pipe material: