# 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: ± 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: | ± 2.5% full scale |
| Repeatability: | ± 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 *(standard)* |
| | Stainless steel 316 *(on request)* |
| Diaphragm: | Stainless steel 316 |
| Flow indicator: | Borosilicate glass tube |
| Diver: | Stainless steel 316 SS (*liquids)* |
| | Aluminium (gases) |
| Thrusts: | Stainless steel 316 |
| Sealing: | O-rings in Buna N as standard; FPM on request |

## OPTIONS

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

764

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

| Scales [ Water at 20°C ] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| P and H /mbar | | | | | | | | | | |
| P | 100 | | 160 | | 250 | | 400 | | 630 | |
| DN | $m^3/h$ | H | $m^3/h$ | H | $m^3/h$ | H | $m^3/h$ | H | $m^3/h$ | 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 | $Nm^3/h$ | H | $Nm^3/h$ | H | $Nm^3/h$ | H | $Nm^3/h$ | 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.

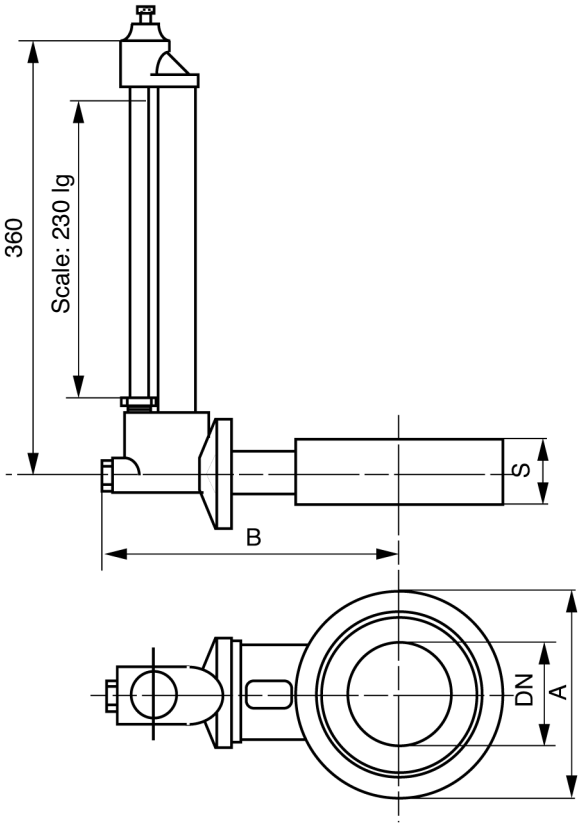
For air, flow rates are in Normo m3/h, operating pressure and temperature should be confirmed with the order.
The air should be dry without humidity to prevent condensation in the reading tube.

## 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/$Nm^3$
Maximal flow rate: . . . . . $m^3/h$ or $Nm^3/h$
Pipe O. D: . . . . . mm
Pipe thickness: . . . . . mm
Pipe material: . . . . . .

764


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**
**764-01/2**