# **Pipeline Ancillaries**

# Sight Glasses / Flow Indicators DA 6.00 - 6.30

Single Glass Sight Glasses / Flow Indicators

# **Technical Data**

Connection DN Connection G Nominal Pressure PN Temperature Medium

15 - 50 1/2 - 2 16 130 °C liquids, gases and steam

# Description

Sight glasses without flow indicator may be used for easy checking of fill levels, consistency, bi- or multiphase flows or condensate. They may also be used for mixtures of liquids, gases and vapours. Flow indicators fitted with a vane can be used for monitoring the flow of liquids, gases and biphase fluids. Flow indicators fitted with an impeller are used for liquids and small flow volumes. Flow indicators fitted with a ball can be used for liquids and gases.

DA 6.00 sight glass without internal components: Installation:

» in any position

DA 6.10 flow indicator with internal vane for uniform flow direction: With graduated scale 1 - 10 for horizontal or vertical installation. Sizes  $\frac{1}{2} - 1$  or DN 15 - 25 are supplied without return spring; they can be supplied with return spring as an option; return springs can be fitted retrospectively. All other sizes are fitted with return springs as standard equipment.

- Installation:
- » with spring: in any position
  » without spring: horizontal only if vane points downward; vertical only if flow is upward.

DA 6.12 with external indicator for uniform flow direction, for turbid or opaque fluids:

With graduated scale 1 – 10 for horizontal or vertical installation. Sizes G  $\frac{1}{2}$  - G 1 or DN 15 - 25 are supplied without return spring; they can be supplied with return spring as an option; return springs can be fitted retrospectively. All other sizes are fitted with return springs as standard equipment.

- Installation:
- with spring: in any position
  without spring: horizontal only if pointer points downward; vertical only if flow is upward.

DA 6.30 with impeller wheel uniform flow direction, for small flow volumes (v < 1 m/s):

Installation: » in any position

Top and bottom sections of the valve body are connected by a clamp ring and two bolts. Servicing/maintenance is easy and does not call for special tooling.

### Standard

- » all stainless steel construction
- » quick-release body clamp ring

# Options

- various seal materials suitable for your medium »
- special connections: Aseptic, ANSI or JIS flanges, welding spigots; »
- other connections on request
- special versions on request

Operating instructions, know how and safety instructions must be observed. All the pressure has always been indicated as overpressure. We reserve the right to alter technical specifications without notice. Pressure & Vacuum

& Temp

Tube & Fittings

Custom Services



### Sensitivy [m<sup>3</sup>/h]

| type | nominal diameter G |      |     |       |       |     |  |  |  |  |
|------|--------------------|------|-----|-------|-------|-----|--|--|--|--|
|      | 1/2                | 3/4  | 1   | 1 1/4 | 1 1/2 | 2   |  |  |  |  |
| 6.10 | 0.2                | 0.25 | 0.3 | 1.8   | 1.8   | 2.3 |  |  |  |  |
| 6.12 | 0.4                | 0.6  | 0.8 | 2     | 2     | 2.3 |  |  |  |  |
| 6.30 | 0.15               | 0.4  | 0.5 | 0.5   | 0.6   | 1   |  |  |  |  |

## Soncitive [m<sup>3</sup>/h]

| Sensitivy [m /n] |                     |      |     |     |     |     |  |  |  |  |
|------------------|---------------------|------|-----|-----|-----|-----|--|--|--|--|
| type             | nominal diameter DN |      |     |     |     |     |  |  |  |  |
|                  | 15                  | 20   | 25  | 32  | 40  | 50  |  |  |  |  |
| 6.10             | 0.2                 | 0.25 | 0.3 | 1.8 | 1.8 | 2.3 |  |  |  |  |
| 6.12             | 0.4                 | 0.6  | 0.8 | 2   | 2   | 2.3 |  |  |  |  |
| 6.30             | 0.15                | 0.4  | 0.5 | 0.5 | 0.6 | 1   |  |  |  |  |
|                  |                     |      |     |     |     |     |  |  |  |  |

Sensitivy for water 20 °C, horizontal installation

# **Pipeline Ancillaries**

# Sight Glasses / Flow Indicators DA 6.00 - 6.30

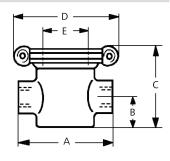


Single Glass Sight Glasses / Flow Indicators

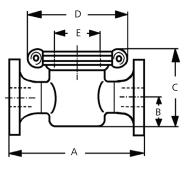
#### Materials DA 6.00 DA 6.10 Туре Temperature 130 °C 130 °C Body CrNiMo-steel EPDM optional Nova Universal Seal Glass borosilicate glass Internals without CrNiMo-steel Cover Fastening profile clamp made of CrNiMo-steel G 2 and DN 50 with screws Materials Туре DA 6.12 DA 6.30 80°C Temperature 80 °C Body CrNiMo-steel Seal EPDM **EPDM** optional Nova Universal Glass without borosilicate glass CrNiMo-steel, PBTP Internals CrNiMo-steel Cover Fastening profile clamp and CrNiMo-steel G 2 and DN 50 with screws

# **Dimensional Drawing**

sleeve



flange



### Dimensions [mm]

| size            |                      | nominal diameter G |     |     |       |       |     |  |  |  |
|-----------------|----------------------|--------------------|-----|-----|-------|-------|-----|--|--|--|
|                 |                      | 1/2                | 3/4 | 1   | 1 1/4 | 1 1/2 | 2   |  |  |  |
| А               | (tolerance $\pm 2$ ) | 100                | 105 | 140 | 192   | 190   | 225 |  |  |  |
| В               |                      | 25                 | 25  | 25  | 25    | 25    | 50  |  |  |  |
| С               |                      | 75                 | 75  | 75  | 75    | 75    | 150 |  |  |  |
| D               |                      | 140                | 140 | 140 | 140   | 140   | 135 |  |  |  |
| øE              | DA 6.00/6.10/6.30    | 65                 | 65  | 65  | 65    | 65    | 90  |  |  |  |
|                 | DA 6.12              | 80                 | 80  | 80  | 80    | 80    | 90  |  |  |  |
|                 |                      |                    |     |     |       |       |     |  |  |  |
| Dimensions [mm] |                      |                    |     |     |       |       |     |  |  |  |
| size            |                      | nominal diameter   |     |     |       |       |     |  |  |  |
|                 |                      | 15                 | 20  | 25  | 32    | 40    | 50  |  |  |  |
| А               | (tolerance $\pm 2$ ) | 170                | 180 | 215 | 220   | 226   | 230 |  |  |  |
| В               |                      | 25                 | 25  | 25  | 25    | 50    | 50  |  |  |  |
| С               |                      | 75                 | 75  | 75  | 75    | 150   | 150 |  |  |  |
| D               |                      | 140                | 140 | 140 | 140   | 135   | 135 |  |  |  |
| øE              | DA 6.00/6.10/6.30    | 65                 | 65  | 65  | 65    | 90    | 90  |  |  |  |
|                 | DA 6.12              | 80                 | 80  | 80  | 80    | 90    | 90  |  |  |  |

# Weiahts [ka]

n

| nominal diameter G |     |    |    |     | nominal diameter DN |   |     |     |     |     |    |    |  |
|--------------------|-----|----|----|-----|---------------------|---|-----|-----|-----|-----|----|----|--|
| 1/2                | 3/4 | 1  | 11 | 1/4 | 1 1/2               | 2 | 15  | 20  | 25  | 32  | 40 | 50 |  |
| 0.85 1             |     | 1. | 1  | 1.8 | 2.3                 | 3 | 3.3 | 4.5 | 4.9 | 5.8 |    |    |  |

#### **Customs Tariff Number** 84818099

Special designs on request.

The pressure has always been indicated as overpressure.

Mankenberg reserves the right to alter or improve the designs or

specifications of the products described herein without notice.