

# FLOW METER SERIES M23 FULL SIZE

## SPECIFICATIONS:

|                     |                                     |
|---------------------|-------------------------------------|
| <b>Material:</b>    | PA (polyamide)<br>PSU (polysulfone) |
| <b>Size:</b>        | 1" - 2.5"                           |
| <b>Range:</b>       | 0.066 - 2.64 USGPM                  |
| <b>O-Rings:</b>     | EPDM standard (Viton optional)      |
| <b>Accessories:</b> | Limit switches                      |

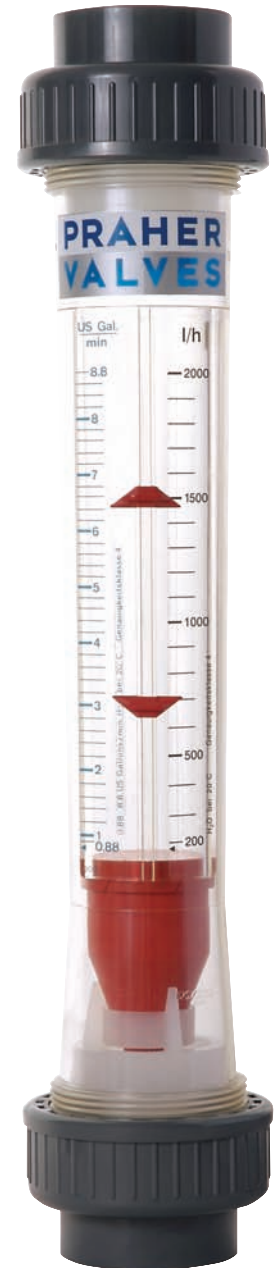
## FEATURES:

- Break and corrosion proof
- May be inserted and removed radially
- Available with special scales for almost all liquids and gasses
- Guide rail for accessories
- Limit switches, flow transmitters for remote indication
- Measuring tube labeled with nominal diameter, measuring range and material
- PVDF plastic floats and inserts are standard
- Available in measuring ranges from 15-60 l/h

## Operation:

The type M23 plastic flowmeter is based on the well known "suspended float" principle and is used for measuring and monitoring flows in closed pipes. The medium flows upwards through the flowmeter and raises the float. The flow rate can be read off against the scale on the flowmeter body. The indication point corresponds to the largest diameter of the float.

The standard type M23 plastic flowmeter is fitted with a scale for water and two limit indicators.



# FLOW METER SERIES M 23 FULL SIZE

Dimensions in mm Weight in kg/pc.

| Range<br>l/h<br>H <sub>2</sub> O | DN | dü  | G     | L   | solvent<br>cement<br>socket |     |     | fusion<br>socket |     |     | butt<br>fusion<br>socket PP |     | S<br>SDR<br>fusion<br>11 socket PP |    |     | S<br>SDR<br>33 |      |     | PVC<br>PA<br>PSU PVDF |      |      |
|----------------------------------|----|-----|-------|-----|-----------------------------|-----|-----|------------------|-----|-----|-----------------------------|-----|------------------------------------|----|-----|----------------|------|-----|-----------------------|------|------|
|                                  |    |     |       |     | dm                          | z   | Lm  | dm               | z   | Lm  | d                           | Ls  | S                                  | d  | Ls  | S              | dg   | Lg  | lg                    |      |      |
| 15-150                           |    |     |       |     |                             |     |     |                  |     |     |                             |     |                                    |    |     |                |      |     |                       |      |      |
| 50-500                           | 25 | 60  | 1.5"  | 335 | 32                          | 341 | 385 | 31.5             | 345 | 381 | 32                          | 455 | 3                                  | 32 | 443 | 2.4            | 1"   | 385 | 22                    | 0.41 | 0.52 |
| 100-1000                         |    |     |       |     |                             |     |     |                  |     |     |                             |     |                                    |    |     |                |      |     |                       |      |      |
| 200-2000                         | 40 | 83  | 2.25" | 335 | 50                          | 341 | 403 | 50               | 345 | 391 | 50                          | 467 | 4.6                                | 50 | 459 | 3              | 1.5" | 403 | 23                    | 1.02 | 1.22 |
| 300-3000                         |    |     |       |     |                             |     |     |                  |     |     |                             |     |                                    |    |     |                |      |     |                       |      |      |
| 600-6000                         | 50 | 103 | 2.75" | 335 | 63                          | 341 | 417 | 63               | 345 | 399 | 63                          | 473 | 5.8                                | 63 | 461 | 3              | 2"   | 418 | 24                    | 1.38 | 1.68 |
| 1200-12000                       |    |     |       |     |                             |     |     |                  |     |     |                             |     |                                    |    |     |                |      |     |                       |      |      |
| 2000-20000                       |    |     |       |     |                             |     |     |                  |     |     |                             |     |                                    |    |     |                |      |     |                       |      |      |
| 3000-30000                       | 65 | 122 | 3.5"  | 335 | 75                          | 341 | 429 | 75               | 345 | 407 | 75                          | 753 | 6.9                                | 75 | 453 | 3.6            | -    | -   | -                     | 2.15 | 2.9  |
| 8000-60000                       |    |     |       |     |                             |     |     |                  |     |     |                             |     |                                    |    |     |                |      |     |                       |      |      |

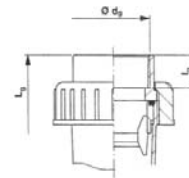
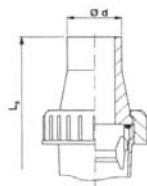
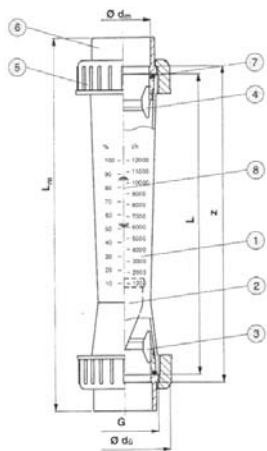
Pressure losses:

| Measuring<br>range l/h | 15-150 | 50-500 | 100-1000 | 200-2000 | 300-3000 | 600-6000 | 1200-12000 | 2000-20000 | 3000-30000 | 8000-60000 |
|------------------------|--------|--------|----------|----------|----------|----------|------------|------------|------------|------------|
| Pressure loss<br>mm Ws | 185.3  | 185.3  | 185.3    | 251.6    | 251.6    | 254.8    | 251.6      | 254.8      | 251.6      | 335.7      |

Fittings with solvent cement / fusion sockets

Fittings with butt fusion sockets

Fittings with internal female thread



Parts:

1. measuring tube
2. suspended float
3. lower insert
4. upper insert
5. union
5. inserts (fusion, butt fusion)
7. O-ring
8. limit indicator

# FLOW METER SERIES M123 (COMPACT)

## SPECIFICATIONS:

|                        |  |
|------------------------|--|
| <b>Material:</b>       | PSU (Polysulfone) and PVC                                  |
| <b>Range:</b>          | 0.0066 - 4.4 USGPM   |
| <b>Size:</b>           | 3/8" - 1"  |
| <b>O-rings:</b>        | EPDM standard (Viton optional)                             |
| <b>End connectors:</b> | PVC union ends for PVC and PSU models                      |
|                        | Also available in FNPT unions                              |
| <b>Float:</b>          | PVDF on all models   |
| <b>Head Loss:</b>      | 3/8" and 1/2" flow meters: 1.81" water column or 0.066 psi |
|                        | 1/2" flow meters: 3.26" water column or 0.12 psi           |

## FEATURES:

- Rugged and corrosion proof
- May be inserted and removed radially
- Available with special scales for almost all liquids and gasses
- Guide rail for accessories
- Measuring tube labeled with nominal diameter, measuring range and material
- PVDF plastic floats and inserts are standard
- Available in measuring ranges from 1.5-1.000 l/h
- Less space required due to short unit length

## Operation:

The type M123 plastic flow meter is based on the well known "suspended float" principle and is used for measuring and monitoring flows in closed pipes. The medium flows upwards through the flowmeter and raises the float. The flow rate can be read off against a scale on the flowmeter body. The indication point corresponds to the largest diameter of the float.

The standard M123 plastic flowmeter is fitted with a scale for water and two limit indicators.



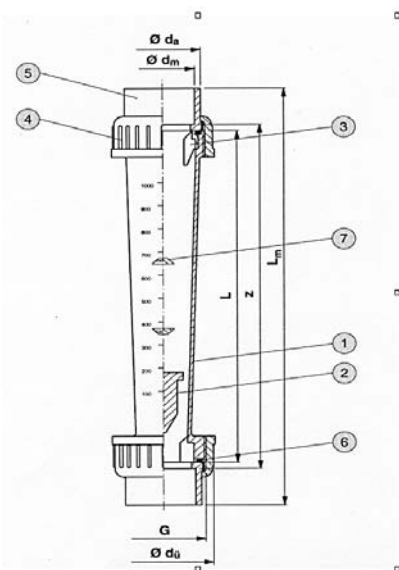
# FLOW METER SERIES M 123 (COMPACT)

| Dimensions in mm     |    |    |        |     |                 |     |     |                |     |     |             |     | Weight in kg |                  |     |    |      |
|----------------------|----|----|--------|-----|-----------------|-----|-----|----------------|-----|-----|-------------|-----|--------------|------------------|-----|----|------|
| Range                | DN | dü | G      | L   | Solvent sockets |     |     | Fusion sockets |     |     | Butt fusion |     |              | Threaded sockets |     |    | PSU  |
| l/h H <sub>2</sub> O |    |    |        |     | dm              | z   | Lm  | dm             | z   | Lm  | d           | Ls  | s            | dg               | Lg  | lg |      |
| 1.5-15               |    |    |        |     |                 |     |     |                |     |     |             |     |              |                  |     |    |      |
| 2.5-25               | 10 | 35 | 3/4"   | 165 | 16              | 171 | 199 | 15.5           | 175 | 201 |             |     |              | 3/8"             | 199 | 11 | 0.08 |
| 5-50                 |    |    |        |     |                 |     |     |                |     |     |             |     |              |                  |     |    |      |
| 10-100               |    |    |        |     |                 |     |     |                |     |     |             |     |              |                  |     |    |      |
| 8-80                 |    |    |        |     |                 |     |     |                |     |     |             |     |              |                  |     |    |      |
| 15-150               | 15 | 43 | 1"     | 185 | 20              | 191 | 223 | 19.5           | 195 | 223 | 20          | 293 | 1.9          | 1/2"             | 223 | 13 | 0.13 |
| 20-200               |    |    |        |     |                 |     |     |                |     |     |             |     |              |                  |     |    |      |
| 15-150               |    |    |        |     |                 |     |     |                |     |     |             |     |              |                  |     |    |      |
| 30-300               |    |    |        |     |                 |     |     |                |     |     |             |     |              |                  |     |    |      |
| 50-500               | 25 | 60 | 1 1/2" | 200 | 32              | 206 | 250 | 31.5           | 210 | 246 | 32          | 320 | 3.0          | 1"               | 250 | 17 | 0.24 |
| 100-1000             |    |    |        |     |                 |     |     |                |     |     |             |     |              |                  |     |    |      |

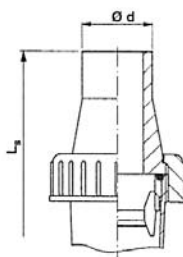
## Pressure losses:

| Measuring range l/h | 1.5-15 | 2.5-25 | 5-50 | 10-100 | 8-80 | 15-150 | 20-200 | 15-150 | 30-300 | 50-500 | 100-1000 |
|---------------------|--------|--------|------|--------|------|--------|--------|--------|--------|--------|----------|
| Pressure loss mm Ws | 46.0   | 46.0   | 46.0 | 46.0   | 44.7 | 44.7   | 44.7   | 82.8   | 82.8   | 82.8   | 82.8     |

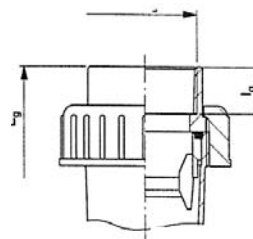
### Fittings with solvent cement / fusion sockets



### Fittings with butt fusion sockets



### Fittings with internal female thread



#### Parts:

1. Measuring tube
2. Suspended float
3. Insert
4. Union
5. Tube insert
6. O-ring
7. Limit indicator