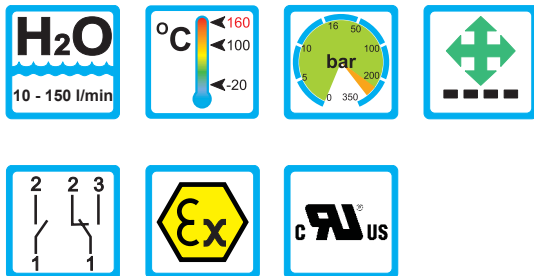


# Flow Monitor

## RVM/U-1



### Range of Application

#### Measuring Principle

- Float measuring principle

#### Application

- Machine construction
- Medical technology
- Pharmaceutical industry
- Chemical industry
- Research and development
- Cooling systems and cooling circuits

#### Features

- Universal orientation
- High reliability
- High switch accuracy
- Infinitely variable switchpoint adjustment by user
- EX-version to ATEX available
- High pressure resistance
- Threaded connection, special threads on request

#### Installation information

- The operating instructions for RVM/U must be observed
- Download: [www.meister-flow.com](http://www.meister-flow.com)

### Operating Data

|                            |                                              |
|----------------------------|----------------------------------------------|
| Maximum operating pressure | 250 bar (Brass)<br>300 bar (Stainless Steel) |
| Pressure drop              | 0,02 - 0,4 bar                               |
| Maximum media temperature  | 100 °C (optional 160 °C)                     |
| Accuracy                   | ±10 % of full scale                          |

### Measuring Ranges

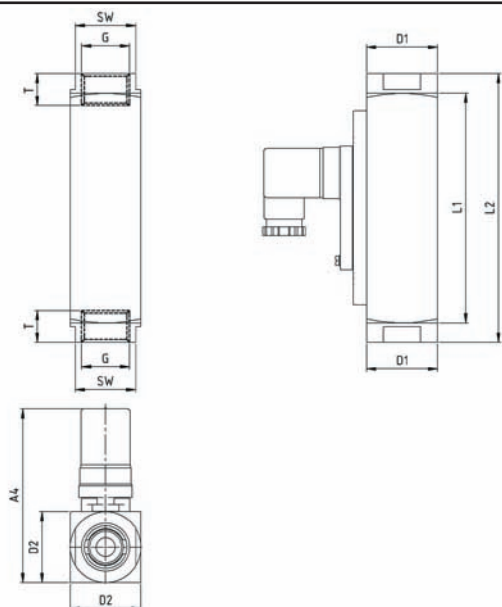
| Type        | Flow ranges for H <sub>2</sub> O at 20 °C <sup>(1)</sup> |               |             |
|-------------|----------------------------------------------------------|---------------|-------------|
|             | [l/min]                                                  | [gph]         | [gpm]       |
| RVM/U-1/30  | 10 - 30                                                  | 160,0 - 480,0 |             |
| RVM/U-1/45  | 15 - 45                                                  | 240,0 - 710,0 |             |
| RVM/U-1/60  | 20 - 60                                                  | 320,0 - 950,0 |             |
| RVM/U-1/90  | 40 - 90                                                  |               | 10,5 - 24,0 |
| RVM/U-1/150 | 60 - 150                                                 |               | 16,0 - 40,0 |

<sup>(1)</sup> The specified data are switch-off points, other switch ranges on request.

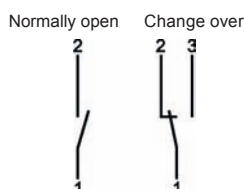


# Technical Data

## Mechanical drawing



## Electrical connection diagram



## Electrical Data

**Change over** 250V • 1,5A • 50VA <sup>(2)</sup>

**Normally open** 250V • 3A • 100VA

**ATEX II 2 G Ex mb II T6 & ATEX II 2 D Ex tD A21 IP67 T80 °C**

**ATEX II 2 G Ex mb II T5 & ATEX II 2 D Ex tD A21 IP67 T100 °C**

**Change over** 250V • 1A • 30VA <sup>(2)</sup>

**Normally open** 250V • 2A • 60VA

**Change over M 12x1 (-20 °C - 85 °C)** 250V • 1,5A • 50VA <sup>(2)</sup>

**Normally open M 12x1 (-20 °C - 85 °C)** 250V • 3A • 100VA

**Change over SPS** 250V • 1A • 60VA

### Ingress Protection:

IP65: plug connection DIN 43650 Form A

IP67: 1 m sealed in cable, (with EEx-version 2 m)  
or plug connection M 12x1

### Output Signal

The contact opens / changes when the flow decreases below the set point.

### Power supply

Not required (potentialfree reed contacts)

### Plug types

Other plug types or cable lengths on request

<sup>(2)</sup> Minimum load 3 VA

## Summary of types

| Type:       | Overall dimensions [mm] |    |    |    |    |    |     |    |    |    |    |     | Weight (approx.) |
|-------------|-------------------------|----|----|----|----|----|-----|----|----|----|----|-----|------------------|
|             | G                       | DN | D1 | D2 | SW | L1 | L2  | T  | A1 | A2 | A3 | A4  | ca. [g]          |
| RVM/U-1/30  | 3/4"                    | 20 | 40 | 40 | 34 | 30 | 152 | 15 | -  | -  | -  | ~98 | 1200             |
| RVM/U-1/45  |                         |    |    |    |    |    |     |    |    |    |    |     |                  |
| RVM/U-1/60  |                         |    |    |    |    |    |     |    |    |    |    |     |                  |
| RVM/U-1/90  | 1"                      | 25 | -  | 40 | 40 | 30 | -   | 17 | -  | -  | -  | ~98 | 1050             |
| RVM/U-1/150 |                         |    |    |    |    |    |     |    |    |    |    |     |                  |

## Material

### Brass version

#### Wetted parts:

Spring: 1.4571  
Gaskets <sup>(3)</sup>: NBR  
(optional FKM, EPDM) <sup>(4)</sup>  
Magnets: Hard ferrite  
Housing: Brass nickel-plated

All other wetted parts: Brass

### Stainless steel version

#### Wetted parts:

Spring: 1.4571  
Gaskets <sup>(3)</sup>: FKM  
(optional NBR, EPDM) <sup>(4)</sup>  
Magnets: Hard ferrite  
Housing: 1.4571

All other wetted parts: 1.4571

<sup>(3)</sup> Threaded connections only

<sup>(4)</sup> Other gasket materials on request