MASTERPIECES
MADE IN GERMANY

Flow Monitor

RVM/U-4

OVERVIEW

Operation

- Float measuring principle

Application

- Cooling systems and cooling circuits
- Mechanical engineering
- Medical engineering
- Pharmaceutical industry
- Chemical industry
- Research & Development

Features

- Universal orientation
- High reliability
- High switch accuracy
- Infinitely variable switch point adjustment by operator
- EX-version according to ATEX directive available
- High pressure resistance
- Threaded connection, special thread on request

Installation information

- The operating instructions for RVM/U-4 Module BASICS / ...ATEX must be observed!
- **Download: www.meister-flow.com**

RVM/U-4 1 0004 12-15 E M

OPERATING DATA

Operating pressure, max.	300 bar (Brass version)
	350 bar (Stainless steel version)
Pressure drop	0,02 – 0,2 bar
Temperature, max.	100 °C (optional 160 °C)
Measuring accuracy	±10 % of full scale

Changed operating data apply to the device in explosion-proof design according to ATEX directive. Refer to the Operating Instructions for RVM/U-4 Module ATEX.

Download: www.meister-flow.com

MEASURING RANGES

Type	**Switch range for H_2O at 20 °C** [1]		
	l/min	**gph**	**gpm**
RVM/U-4/01	0,005 – 0,06	0,08 – 0,95	
RVM/U-4/02	0,04 – 0,13	0,65 – 2,05	
RVM/U-4/06	0,1 – 0,6	1,6 – 9,5	
RVM/U-4/1	0,2 – 1,2	3 – 19	
RVM/U-4/2	0,4 – 2	6,5 – 31,5	
RVM/U-4/3	0,5 – 3	8 – 48	
RVM/U-4/5	1 – 5	16 – 80	

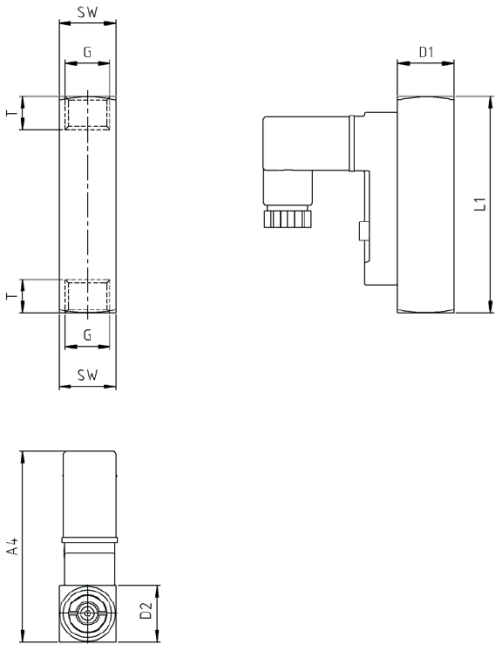
[1] The specified measuring- / switch ranges are valid for water having a density of 1.00 kg/dm³, vertical installation of the device and flow direction from bottom to top.
Other installation positions or deviation from the operating densities will increase the measurement error specified in the data sheet.
Operating density for water at 20 °C and 1.013 bar (absolute value): 1.00 kg/dm³.
Upon request, special scales for deviating media, different operating conditions and installation positions (only for devices which can be installed in any position) are available.
The specified switch values are switch-off points, i.e. switch values by decreasing flow.
Other measuring- /switch ranges are available upon request.

MATERIALS

Brass version, wetted parts	
Spring:	1.4571
Magnets:	Hard ferrite
Device body:	Brass, nickel-plated
all other wetted parts:	Brass

Stainless steel version, wetted parts	
Spring:	1.4571
Magnets:	Hard ferrite
Device body:	1.4571
all other wetted parts:	1.4571

TECHNICAL DRAWING



SUMMARY OF TYPES

Type	Overall dimensions [mm]												Weight approx.
	G [2]	DN	SW	L1	L2	T	D1	D2	A1	A2	A3	A4	[g] [3]
RVM/U-4/01													
RVM/U-4/02													
RVM/U-4/06													
RVM/U-4/1	1/4"	8	17	65	–	10	17	17	–	–	–	~57	140
RVM/U-4/2													
RVM/U-4/3													
RVM/U-4/5													

[2] NPT thread on request

[3] Connection cable weight, 2 m ca. approx. 80 g

ELECTRICAL DATA

Change over (COC) [4]	150V AC/DC · 1A · 20VA
Normally open (NOC)	140V AC · 0,7A · 20VA
	200V DC · 1A · 20VA
Change over M12x1 [5]	125V AC/DC · 1A · 20VA
Normally open M12x1 [5]	125V AC · 0,7A · 20VA
	125V DC · 1A · 20VA

EX-version in compliance with ATEX directive

EC-Type examination

EPS 13 ATEX 1 596 U

Connection to certified intrinsically safe circuits

Li = 0 Ci = 0

Gas			Dust		
Ui	**Ii**	**Pi**	**Ui**	**Ii**	**Pi**
< 12,1 V	1,0 A	3,0 W	< 12,1 V	0,25 A	0,75 W
< 20 V	0,309 A	1,55 W	< 20 V	0,25 A	0,75 W
< 25 V	0,158 A	0,99 W	< 25 V	0,25 A	0,75 W
< 30 V	0,101 A	0,76 W	< 30 V	0,25 A	0,75 W

Operating temperature

-5 °C < $T_{Service}$ < 45 °C

Marking

Ⓔx II 2G Ex ib IIC
Ⓔx II 2D Ex ib IIIC

[4] Available with connector only

[5] -20 °C – 85 °C

ELECTRICAL CONNECTION

- Connector in compliance with EN 175301-803, Form C (DIN 43650, Form C)
- Connector M12x1
- Cable (1 m) [6]

EX-version in compliance with ATEX directive

- Connector in compliance with EN 175301-803, Form C (DIN 43650, Form C)
- Connector M12x1
- Cable (1 m) [6]

Ingress Protection

IP65: Connector in compliance with EN 175301-803, Form C
or Connector M12x1
IP67: Cable

Output signal

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

Power supply

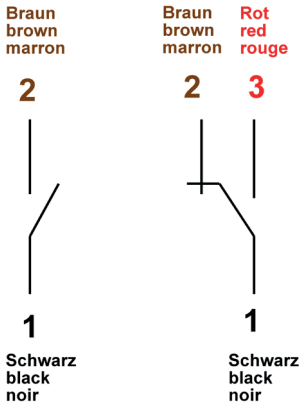
Not required (potential-free reed contacts)

Connector types

Other connector types or cable lengths on request

[6] Available as Normally Open Contact (NOC) only

CONNECTION DIAGRAM



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