Flow Monitor RVM/UM

Flow monitor for liquids and gases according to the float measuring measuring principle

- High reliability
- High switching accuracy
- Ex-version according to ATEX directive available
- UL recognized version available
- High pressure resistance
- Threaded connection, special thread on request

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Features
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Applications
- Cooling systems and cooling circuits
- Mechanical engineering
- Research & development

Operating data	
Operating pressure max.	200 bar (brass version)
	300 bar (stainless steel version)
Pressure drop	See diagram on page 4
Temperature max.	100 °C (optional 160 °C)
Measuring accuracy	
Switch point > 3 l/min	± 5 % of switch value
Switch point ≤ 3 l/min	± 0,1 l/min
Changed operating data apply to the device in explosion-proof design according to the ATEX directive. For UL recognized devices, changed operating data apply.	

Material		
	Brass, wetted parts	**Stainless steel, wetted parts**
Spring	1.4571	1.4571
Magnets	Hard ferrite	Hard ferrite
Device body	Brass, nickel-plated	1.4571
All other wetted parts	brass	1.4571

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Measuring ranges			
Type	**Switching range for H_2O at 20 °C (1)**		
RVM/UM	**l/min**	**gph**	**gpm**
Lowest switch point	0,1	1,6	
Highest switch point	30	480	

The switch point is factory adjusted. Please specify switch point when ordering. The recommended maximum flow is 120 l/min.

(1) The specified measuring / switching ranges apply to water with a density of 1.00 kg / dm^3, with vertical installation of the device and flow from bottom to top.

Other installation positions or operating densities deviating from this specification increase the measurement error specified in the data sheet.

Operating density of water at 20 °C and 1.013 bar absolute: 1.00 kg / dm^3.

Special scales for different media, operating conditions and installation positions (only for devices that are independent of position) are available on request.

The specified switching values are switch-off points, i.e. switching values with falling flow. Other measuring / switching ranges are available on request.

Summary of types
Stainless steel version (4-sided)

Type	**Overall dimensions (mm)**												**Weight approx.**
	G	**DN**	**SW**	**L1**	**L2**	**T**	**D1**	**D2**	**A1**	**A2**	**A3**	**A4**	**[g]**
RVM/UM	1“	25	40	130	-	17	-	40	-	-	-	~98	1150

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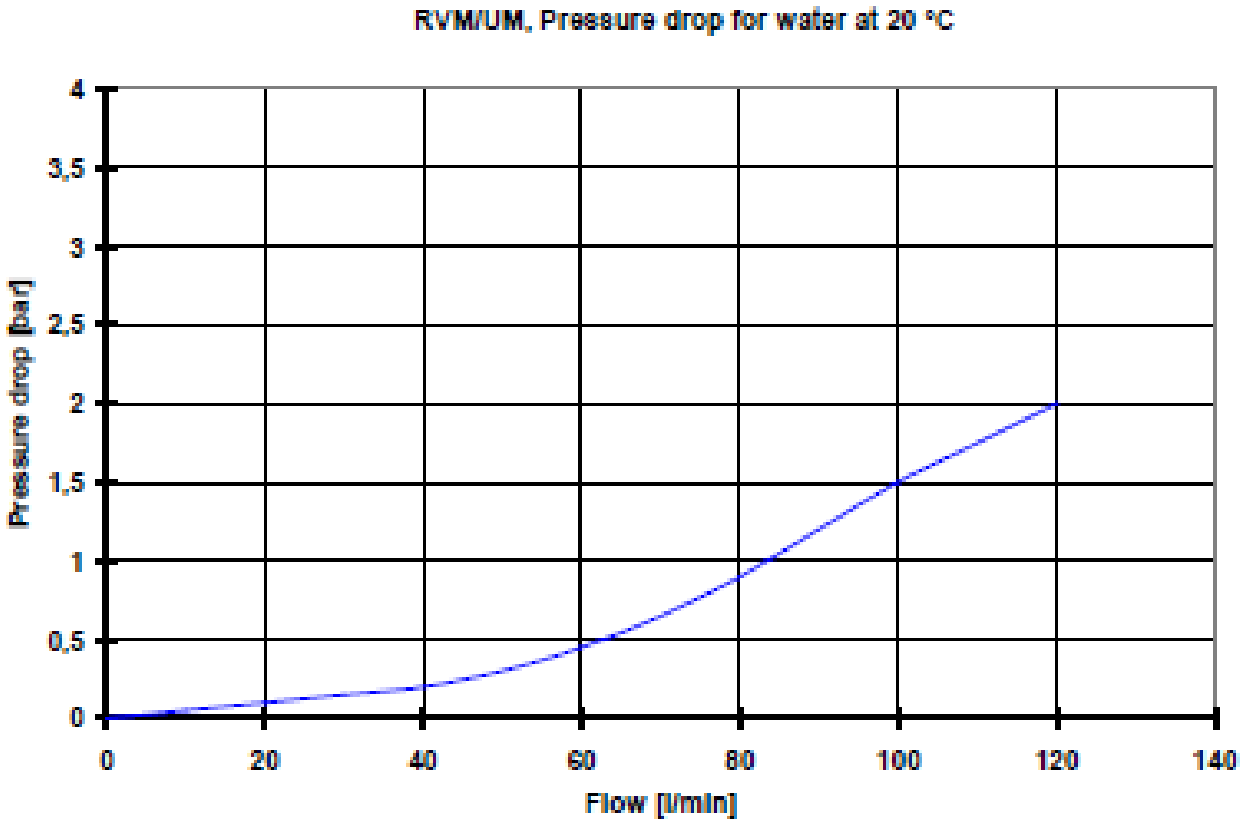
Pressure drop



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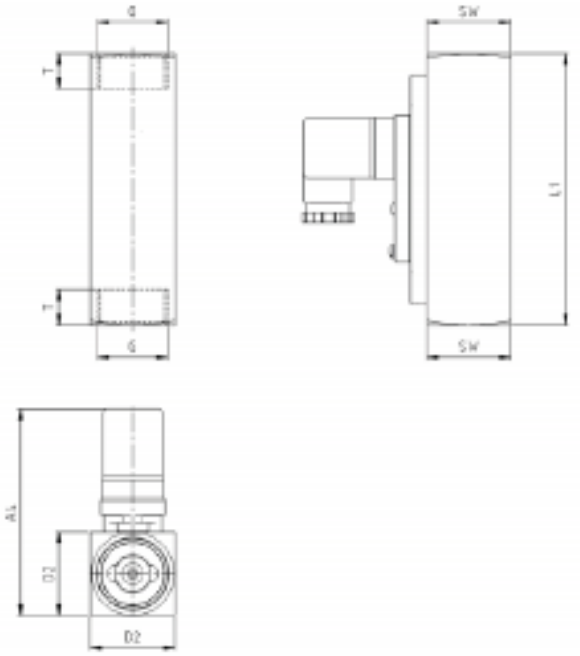
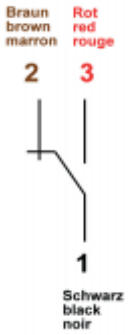
Technical drawing



Stainless steel version (4-sided)

Connector in compliance with EN 175301-803 Form A and cable

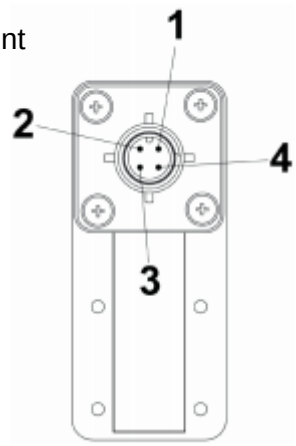
Change over (COC)



Normally open (NOC)

M12x1

Pin assignment



Change over (COC)

Normally open (NOC)

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Electrical Data	
Change over (COC)	250 V • 1,5A • 50 VA (3)
Normally open (NOC)	250 V • 3A • 100 VA
Change over M 12x1 (-20 °C – 85 °C)	250 V • 1,5A • 50 VA (3)
Normally open M 12x1 (-20 °C – 85 °C)	250 V • 3A • 100 VA
EX-version in compliance with ATEX directive	
ATEX II 2G Ex mb IIC T6 Gb & ATEX II 2 D Ex tb IIIC T80 °C Db	
ATEX II 2G Ex mb IIC T5 Gb & ATEX II 2 D Ex tb IIIC T100 °C Db	
Change over	250 V • 1A • 30 VA
Normally open	250 V • 2A • 60 VA
UL recognized switch contacts	
Change over	240 V • 1,5A • 50 VA (3)
Normally open	250 V • 3A • 100 VA
(3) Minimum load 3 VA	

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Electrical connection
• Connector in compliance with EN 175301-803, Form A (DIN 43650, Form A) • Connector M12x1 • Cable (1 m)
EX-version in compliance with ATEX directive • Cable (2 m)
UL recognized switch contacts • Connector in compliance with EN 175301-803, Form A • Cable (1 m)
Ingress protection: IP65: Connector in compliance with EN 175301-803, Form A IP67: able or connector M12x1
Output signal The contact opens / changes when the flow decreases below the set point.
Power supply Not required (potential-free reed contacts)
Plug types Other connector types or cable lengths on request

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Important instructions!
Technical changes and errors reserved.
Pictures can be similar.
The operating instructions belonging to this device must be observed! Download at www.schmidt-messtechnik.com.