



Flow Monitor RVM/U-L1

Flow monitor according to the float principle for monitoring air / gases



D-EN-RVMUL1-20200603

- Universal orientation
- High reliability
- High switch accuracy
- EX-version according to ATEX directive available



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Features

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

Application

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

Installation information

The operating instructions for RVM/U-L1 Module BASICS / ...ATEX must be observed! Download: www.schmidt-messtechnik.de

Operating data	
Operating pressure, max.	250 bar (brass version) 300 bar (stainless steel version)
Pressure drop	0,02 – 0,4 bar
Temperature, max.	120°C (optional 160°C)
Measuring accuracy	±10 % of full scale
<p>Changed operating data apply to the device in explosion-proof design according to ATEX directive. Refer to the Operating Instructions for RVM/U-L1 Module ATEX. For UL Recognized devices, changed operating data apply. Refer to the Operating Instructions for RVM/U-L1 Module BASICS</p>	



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Material		
	Brass version	Stainless steel version
Spring:	1.4571	1.4571
Gaskets (2):	NBR (optional FKM, EPDM) (3)	FKM (optional NBR, EPDM) (3)
Magnets:	Hard ferrite	Hard ferrite
Housing:	Brass nickel-plated	1.4571
All other wetted parts:	Brass	1.4571
(2) Only with process connections (3) Other gasket materials on request		

Measuring ranges			
Type	Switch range for air at 1 bar abs., 20 °C (1)		
	[NI/min]	[SCFH]	[SCFM]
RVM/U-L10180	60 - 180	125,0 – 380,0	
RVM/U-L10300	100 - 300	210,0 – 635,0	
RVM/U-L10650	200 - 650		7,0 – 23,0
<p>(1) The specified measuring- / switch ranges are valid for air having a density of 1.205 kg/m³, 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 air at 20 °C and 1.013 bar (absolute value): 1.205 kg/m³ Standard density for air (at 0 °C and 1.013 bar (absolute value): 1.293 kg/m³ 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.</p>			

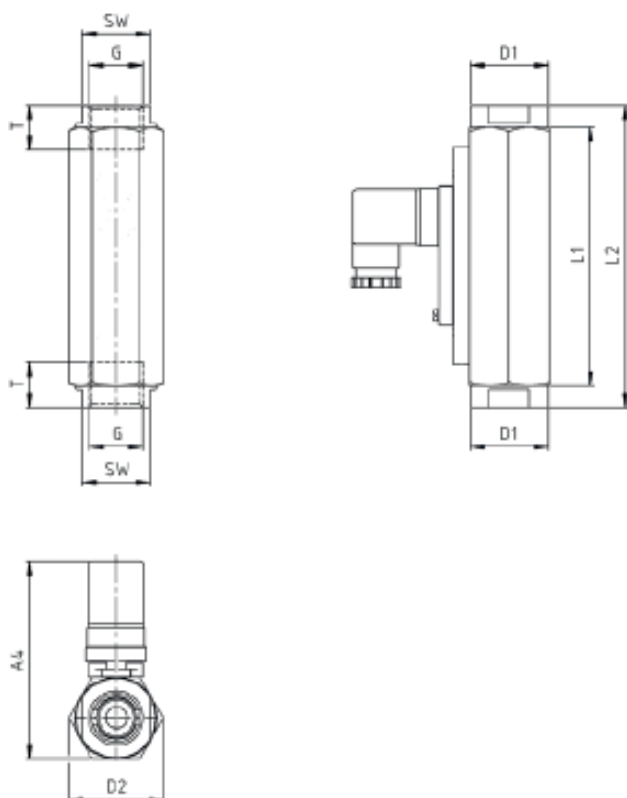
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Flow monitor according to the float principle for monitoring air / gases

Technical drawing
Brass version (6-sided)



Summary of types (6-sided)

Type	Overall dimensions [mm]												Weight approx . [g]
	G	DN	SW	L1	L2	T	D1	D2	A1	A2	A3	A4	
RVM/U-L10080	¾"	20	34	130	152	15	40	47	-	-	-	~99	1240
	1"	25	41	130	-	17	-	47	-	-	-	~99	1030
RVM/U-L10300	¾"	20	34	130	152	15	40	47	-	-	-	~99	1240
	1"	25	41	130	-	17	-	47	-	-	-	~99	1030
RVM/U-L10650	¾"	20	34	130	152	15	40	47	-	-	-	~99	1240
	1"	25	41	130	-	17	-	47	-	-	-	~99	1030

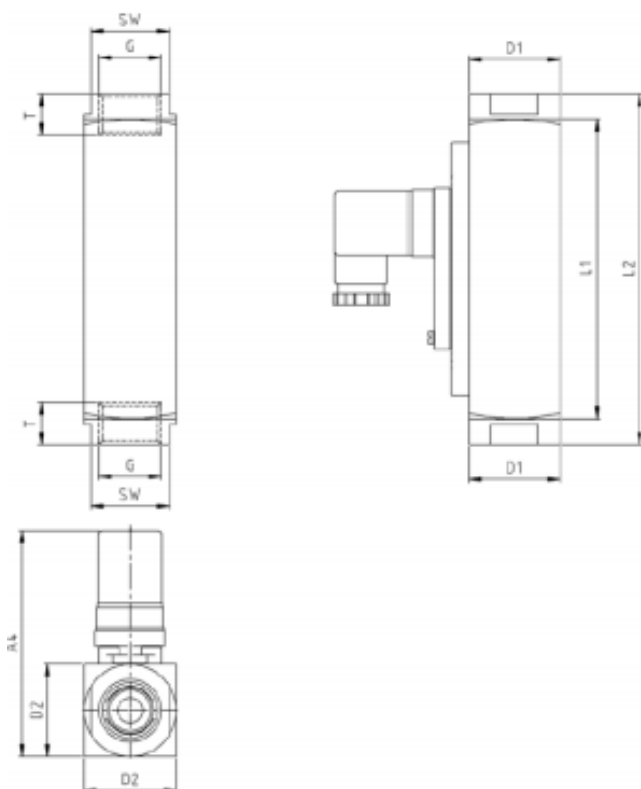
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Flow Monitor RVM/U-L1

Flow monitor according to the float principle for monitoring air / gases

Technical drawing
Stainless steel version (4-sided)



Summary of types (stainless steel version, 4-sided)

Type	Overall dimensions [mm]												Weight approx . [g]
	G	DN	SW	L1	L2	T	D1	D2	A1	A2	A3	A4	
RVM/U-L10080	¾"	20	34	130	152	15	40	40	-	-	-	~98	1320
	1"	25	40	130	-	17	-	40	-	-	-	~98	1130
RVM/U-L10300	¾"	20	34	130	152	15	40	40	-	-	-	~98	1320
	1"	25	40	130	-	17	-	40	-	-	-	~98	1130
RVM/U-L10650	¾"	20	34	130	152	15	40	40	-	-	-	~98	1320
	1"	25	40	130	-	17	-	40	-	-	-	~98	1130

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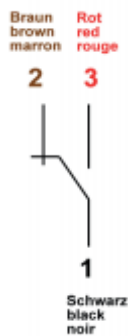


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Connector in compliance with EN 175301-803
Form A and cable

Change over (COC)

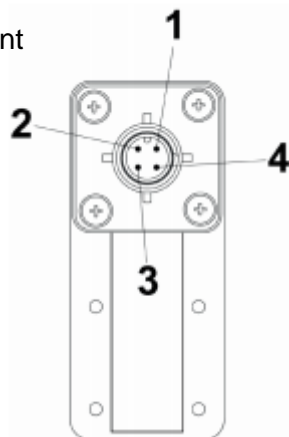


Normally open (NOC)



M12x1

Pin assignment



Change over (COC)



Normally open (NOC)



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Electrical Data	
Change over (COC)	250 V • 1,5A • 50 VA ⁽⁴⁾
Normally open (NOC)	250 V • 3A • 100 VA
Change over M 12x1 (-20 °C – 85 °C)	250 V • 1,5A • 50 VA ⁽⁴⁾
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 ⁽⁴⁾
Normally open	250 V • 3A • 100 VA
(4) Minimum load 3 VA	



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Electrical connection
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • Cable (2 m)
UL recognized switch contacts
<ul style="list-style-type: none"> • Connector in compliance with EN 175301-803, Form A • Cable (1 m)
Ingress protection:
<p>IP65: Connector in compliance with EN 175301-803, Form A IP67: cable or connector M12x1</p>
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

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.