



## Flow Monitor & Flow Indicator DWG-L

Flow monitor and flow indicator for gases according to the float measuring principle



D-EN-DWG-L-20200528

- Wide measuring range
- Sturdy construction
- High switch accuracy



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### Features

- High reliability
- High switch accuracy
- Wide switch range
- Infinitely variable switch point adjustment by operator
- EX-version according to ATEX directive available
- UL Recognized version available
- Scales are burned onto the sight glass
- Threaded connection, special thread on request

### Applications

- Mechanical engineering
- Medical engineering
- Pharmaceutical industry
- Chemical industry
- Research & Development

Operating data	
Operating pressure max.	10 bar
Pressure drop	0,01 – 0,2 bar
Temperature max.	80 °C
Measuring accuracy	± 10 % of full scale
<p>Changed operating data apply to the devices in explosion-proof design according to ATEX directive. Refer to the Operating Instructions for DWG-L Module ATEX.</p> <p>For UL Recognized devices, changed operating data apply. Refer to the Operating Instructions for DWG-L Module BASICS.</p>	

Material		
	Brass, wetted parts	Stainless steel, wetted parts
Float	POM	POM
Sight glass	DURAN® 50	DURAN® 50
Gaskets	NBR (optional FKM, EODM)	FKM (optional NBR, EPDM)
All other wetted parts	Brass, nickel-plated	1.4571
Device housing (non-wetted part)	Aluminum, anodized	Aluminum, anodized

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Measuring ranges			
Type	Switching range for air at 1 bar abs. & 20 °C (1)		
	NI/min	SCFH	SCFM
DWG-L 1,5	3 – 30	6,5 – 63,5	
DWG-L 3	6 – 60	13 – 127	
DWG-L 8	6 – 160	13 – 340	
DWG-L 12	20 – 220	42 – 465	
DWG-L 18	40 – 360	85 - 760	
DWG-L 35	60 – 700		2,1 – 24,7
DWG-L 50	60 – 825		2 – 29
DWG-L 100	200 - 1600		7 – 56,5

(1) The specified measuring / switching ranges are valid for air having a density of 1.205 kg/m<sup>3</sup>, with vertical installation of the device and flow direction 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 air at 20 °C and 1.013 bar absolute: 1.205 kg/m<sup>3</sup>.  
Standard density of air at 0 °C and 1.013 bar absolute: 1.293 kg/m<sup>3</sup>.

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.



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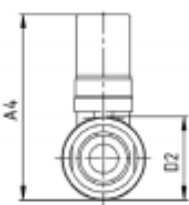
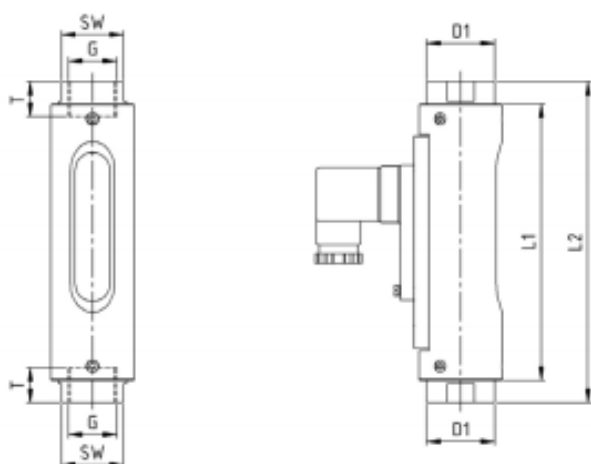
Summary of types													
Type	Overall dimensions (mm)												Weight approx.
	G	DN	SW	L1	L2	T	D1	D2	A1	A2	A3	A4	[g]
DWG-L 1,5	1/4" 3/8" 1/2"	8	32	121	132	10	35	43	-	-	-	~96	800
DWG-L 3		10	32	121	135	15	35	43	-	-	-	~96	800
DWG-L 8		15	32	121	135	14	35	43	-	-	-	~96	800
DWG-L 12													
DWG-L 18	1/2"	15	32	143	161	14	35	43	-	-	-	~96	800
DWG-L 35	3/4"	20	32	143	166	15	35	43	-	-	-	~96	960
DWG-L 50	3/4"	20	41	143	163	15	45	50	-	-	-	~104	1450
DWG-L 100	1"	25	41	143	163	17	45	50	-	-	-	~104	1450
DWG-L 35	1"	25	41	159	205	17	45	50	-	-	-	~104	1450



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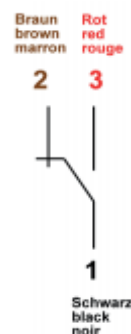
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### Technical drawing



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

Change over (COC)

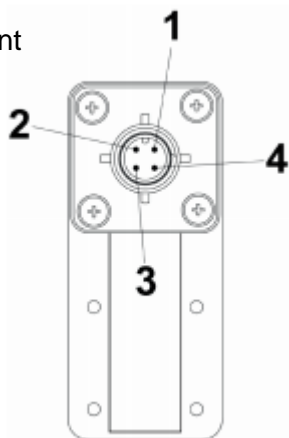


Normally open (NOC)



### M12x1

Pin assignment



Change over (COC)



Normally open (NOC)



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<b>Electrical Data</b>	
Change over (COC)	250 V • 1,5A • 50 VA <sup>(4)</sup>
Normally open (NOC)	250 V • 3A • 100 VA
Change over M 12x1 (-20 °C – 85 °C)	250 V • 1,5A • 50 VA <sup>(4)</sup>
Normally open M 12x1 (-20 °C – 85 °C)	250 V • 3A • 100 VA
<b>EX-version in compliance with ATEX directive</b>	
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
<b>UL recognized switch contacts</b>	
Change over	240 V • 1,5A • 50 VA <sup>(4)</sup>
Normally open	250 V • 3A • 100 VA
(4) Minimum load 3 VA	



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<b>Electrical connection</b>
<ul style="list-style-type: none"><li>• Connector in compliance with EN 175301-803, Form A (DIN 43650, Form A)</li><li>• Connector M12x1</li><li>• Cable (1 m)</li></ul>
<b>EX-version in compliance with ATEX directive</b>
<ul style="list-style-type: none"><li>• Cable (2 m)</li></ul>
<b>UL recognized switch contacts</b>
<ul style="list-style-type: none"><li>• Connector in compliance with EN 175301-803, Form A</li><li>• Cable (1 m)</li></ul>
<b>Ingress protection:</b> IP65: Connector in compliance with EN 175301-803, Form A IP67: cable or connector M12x1
<b>Output signal</b> The contact opens / changes when the flow decreases below the set point.
<b>Power supply</b> Not required (potential-free reed contacts)
<b>Plug types</b> 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](http://www.schmidt-messtechnik.com).