



## Flow Monitor / Flow Indicator for Liquids DWG

Float measuring principle



- High reliability
- High switch accuracy
- Wide switch range
- Infinitely variable switch point adjustment through user
- EX-version to ATEX available
- Scales are burned into the sight glass
- Threaded connection, special threads on request

D-EN-DWG-20200527



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#### Features

- High reliability
- High switch accuracy
- Wide switch range
- Infinitely variable switch point adjustment by the operator
- EX-version to ATEX available
- UL recognized version available
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- Threaded connection, special threads on request

#### Application

- Cooling systems and cooling circuits
- Mechanical engineering
- Medical technology
- Pharmaceutical industry
- Chemical industry
- Research and development

#### Installation information

The operating instruction for DWG must be observed.

Operating Data	
Operating pressure max.	10 bar
Pressure drop	0,01 – 0,2 bar
Temperature max.	100°C (optional 160°C)
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 Module ATEX.</p> <p>For UL Recognized devices, changed operating data apply. Refer to the Operating Instructions for DWG Module BASICS.</p>	

Material	Brass version	Stainless steel version
Wetted parts:		
• Float	Brass, nickel-plated	1.4571
• Sight glass	Duran® 50	Duran® 50
• Gaskets	NBR (optional FKM, EPDM) (1)	FKM (optional NBR, EPDM) (1)
• All other wetted parts	Brass, nickel-plated	1.4571
Not wetted parts:		
Housing	Aluminum anodized	Aluminum anodized

(1) Other gasket materials on request



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Measuring Ranges			
Type	Switch range for H <sub>2</sub> O at 20 °C (2)		
	[l/min]	[gph]	[gpm]
DWG-1,5	0,1 – 1,5	1,6 – 23,8	
DWG-3	0,2 – 3	3,2 – 47,5	
DWG-8	0,3 – 8	5,0 – 127,0	
DWG-12	1 – 12	16,0 – 190,0	
DWG-18	2 – 18	32,0 – 285,0	
DWG-35	3 – 35	48,0 – 550,0	
DWG-50	4 - 50	60,0 – 790,0	

(2) The specified measuring ranges / switch ranges are valid for water having a density of 1.00 kg/dm<sup>3</sup>, 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/dm<sup>3</sup>.

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 ranges / switch ranges are available on request.



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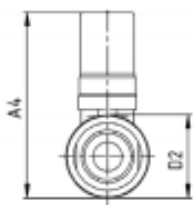
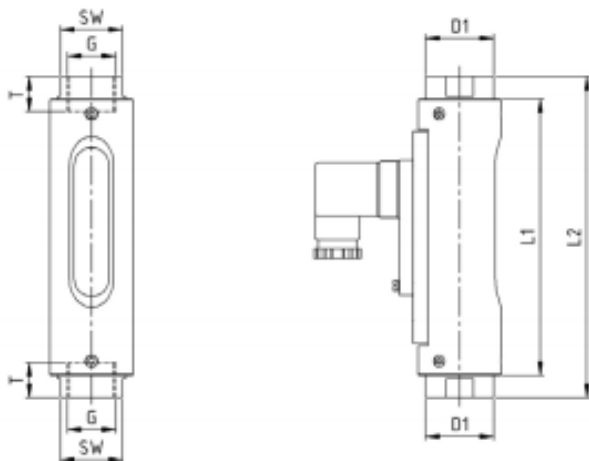
Summary of types													
Type	Overall dimensions [mm]												Weight approx. [g]
	G	DN	SW	L1	L2	T	D1	D2	A1	A2	A3	A4	
DWG-L1,5	1/4" 3/8" 1/2"	8 10 15	32 32 32	121 121 121	132 135 135	10 15 14	35 35 35	43 43 43	-	-	-	~96 ~96 ~96	800 800 800
DWG-L3													
DWG-L8													
DWG-L12													
DWG-L18	1/2" 3/4"	15 20	32 32	143 143	161 166	14 15	35 35	43 43	- -	- -	- -	~96 ~96	800 960
DWG-L35	3/4" 1"	20 25	41 41	143 143	163 181	15 17	45 45	50 50	- -	- -	- -	~104 ~104	1450 1450
DWG-50	3/4" 1"	20 25	41 41	143 143	163 181	15 17	45 45	50 50	- -	- -	- -	~104 ~104	1450 1450



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### Technical drawing



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

Change over (COC)

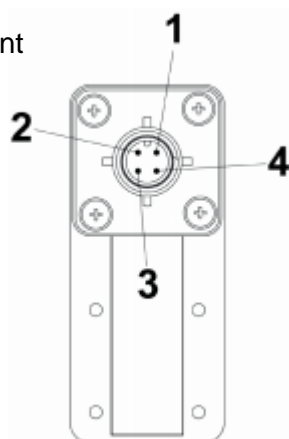


Normally open (NOC)



### 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>(3)</sup>
Normally open (NOC)	250 V • 3A • 100 VA
Change over M 12x1 (-20 °C – 85 °C)	250 V • 1,5A • 50 VA <sup>(3)</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>(3)</sup>
Normally open	250 V • 3A • 100 VA
(3) 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

### 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).