

## Flow Monitor & Flow Indicator

# DWG-L



## OVERVIEW

### Operation

- Float measuring principle

### Application

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

### 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

### Installation information

- The operating instructions for DWG-L Module BASICS / ...ATEX must be observed!
- **Download: [www.meister-flow.com](http://www.meister-flow.com)**

## OPERATING DATA

<b>Operating pressure, max.</b>	10 bar
<b>Pressure drop</b>	0,01 – 0,2 bar
<b>Temperature, max.</b>	80 °C
<b>Measuring accuracy</b>	±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 DWG-L Module ATEX.

For UL Recognized devices, changed operating data apply. Refer to the Operating Instructions for DWG-L Module BASICS.

Download: [www.meister-flow.com](http://www.meister-flow.com)

## MEASURING RANGES

Type	Switch range for Air at 1 bar abs. & 20 °C <sup>(1)</sup>		
	NI/min	SCFH	SCFM
DWG-L1,5	3 – 30	6,5 – 63,5	
DWG-L3	6 – 60	13 – 127	
DWG-L8	6 – 160	13 – 340	
DWG-L12	20 – 220	42 – 465	
DWG-L18	40 – 360	85 – 760	
DWG-L35	60 – 700		2,1 – 24,7
DWG-L50	60 – 825		2 – 29
DWG-L100	200 – 1600		7 – 56,5

<sup>(1)</sup> The specified measuring- / switch ranges are valid for air having a density of 1.205 kg/m<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 air at 20 °C and 1.013 bar (absolute value): 1.205 kg/m<sup>3</sup>

Standard density for air (at 0 °C and 1.013 bar (absolute value): 1.293 kg/m<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- /switch ranges are available upon request.

## MATERIALS

### Brass version, wetted parts

Float:	POM
Sight glass:	DURAN® 50
Gaskets:	NBR (optional FKM, EPDM) <sup>(2)</sup>
all other wetted parts:	Brass, nickel-plated

### Brass version, non-wetted parts

Device housing:	Aluminium, anodized
-----------------	---------------------

### Stainless steel version, wetted parts

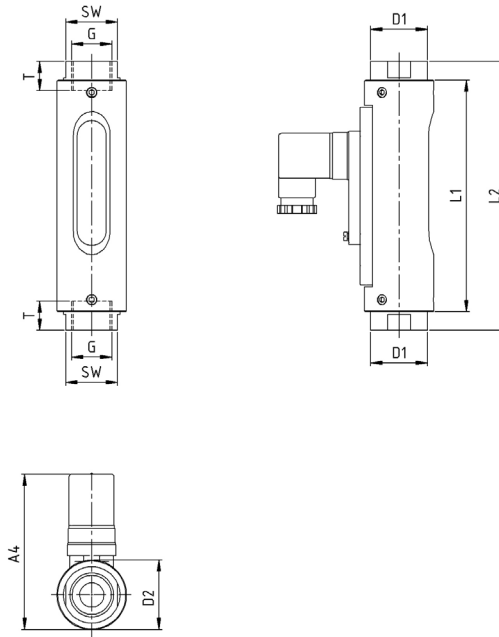
Float:	POM
Sight glass:	DURAN® 50
Gaskets:	FKM (optional NBR, EPDM) <sup>(2)</sup>
all other wetted parts:	1.4571

### Stainless steel version, non-wetted parts

Device housing:	Aluminium, anodized
-----------------	---------------------

<sup>(2)</sup> Other gasket materials on request

## TECHNICAL DRAWING



## 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													
DWG-L3	1/4"	8	32	121	132	10	35	43	-	-	-	~96	800
	3/8"	10	32	121	135	15	35	43	-	-	-	~96	800
DWG-L8	1/2"	15	32	121	135	14	35	43	-	-	-	~96	800
DWG-L12													
DWG-L18	1/2"	15	32	143	161	14	35	43	-	-	-	~96	800
	3/4"	20	32	143	166	15	35	43	-	-	-	~96	960
DWG-L35	3/4"	20	41	143	163	15	45	50	-	-	-	~104	1450
DWG-L50	1"	25	41	143	163	17	45	50	-	-	-	~104	1450
DWG-L100	1"	25	41	159	205	17	45	50	-	-	-	~104	1450

## ELECTRICAL DATA

<b>Change over (CO)</b>	250V · 1,5A · 50VA <sup>(3)</sup>
<b>Normally open (NO)</b>	250V · 3A · 100VA
<b>Change over M12x1 (-20 °C – 85 °C)</b>	250V · 1,5A · 50VA <sup>(3)</sup>
<b>Normally open M12x1 (-20 °C – 85 °C)</b>	250V · 3A · 100VA
<b>Change over PLC</b>	250V · 1A · 60VA

### EX-version in compliance with ATEX directive

<b>ATEX II 2 G Ex mb IIC T6 Gb &amp; ATEX II 2 D Ex tb IIIC T80 °C Db</b>	
<b>ATEX II 2 G Ex mb IIC T5 Gb &amp; ATEX II 2 D Ex tb IIIC T100 °C Db</b>	
<b>Change over</b>	250V · 1A · 30VA <sup>(3)</sup>
<b>Normally open</b>	250V · 2A · 60VA

### UL Recognized switch contacts

<b>Change over</b>	240V · 1,5A · 50VA <sup>(3)</sup>
<b>Normally open</b>	250V · 3A · 100VA

<sup>(3)</sup> Minimum load 3VA

## 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: Cable 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)

### Connector types

Other connector types or cable lengths on request

## CONNECTION DIAGRAM

