

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!

OPERATING DATA

Operating pressure, max.	10 bar
Pressure drop	0,01 – 0,2 bar
Temperature, max.	80 °C
Measuring accuracy	±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

MEASURING RANGES

Type	Switch range for Air at 1 bar abs. & 20 °C ⁽¹⁾		
	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

⁽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.

MATERIALS

Brass version, wetted parts

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

Brass version, non-wetted parts

Device housing:	Aluminium, anodized
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Stainless steel version, wetted parts

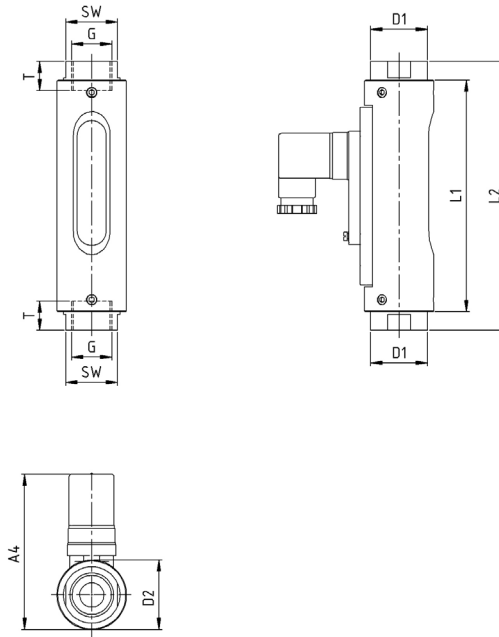
Float:	POM
Sight glass:	DURAN® 50
Gaskets:	FKM (optional NBR, EPDM) ⁽²⁾
all other wetted parts:	1.4571

Stainless steel version, non-wetted parts

Device housing:	Aluminium, anodized
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⁽²⁾ 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

Change over (COC)	250V · 1,5A · 50VA ⁽³⁾
Normally open (NOC)	250V · 3A · 100VA
Change over M12x1 (-20 °C – 85 °C)	250V · 1,5A · 50VA ⁽³⁾
Normally open M12x1 (-20 °C – 85 °C)	250V · 3A · 100VA
Change over PLC	250V · 1A · 60VA

EX-version in compliance with ATEX directive

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

UL Recognized switch contacts

Change over	240V · 1,5A · 50VA ⁽³⁾
Normally open	250V · 3A · 100VA

⁽³⁾ 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

