

# PLOVÁKOVÝ HLÍDAČ PRŮTOKU **DWM**

#### Flow Monitor











### OVERVIEW

#### Operation

Float measuring principle

#### **Application**

- Cooling systems and cooling circuits
- 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
- High pressure resistance
- Threaded connection, special thread on request

#### Installation information

The operating instructions for DWM Module BASICS / ...ATEX must be observed!

### OPERATING DATA

Onerating pressure may	200 bar (Brass version)	
Operating pressure, max.	300 bar (Stainless steel version)	
Pressure drop	0,02 - 0,2 bar	
Temperature, max.	100 °C (optional 160 °C)	
Measuring accuracy	±5 % of full scale	

Changed operating data apply to the device in explosion-proof design according to ATEX directive. Refer to the Operating Instructions for DWM Module ATEX.

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

Download: www.meister-flow.com

## ■ MEASURING RANGES

Туре	Switch range for $\rm H_2O$ at 20 °C <sup>(1)</sup>				
	l/min	gph	gpm		
DWM-1,5	0,1 - 1,5	1,5 - 23,8			
DWM-3	0,2 - 3	3 - 47,5			
DWM-8	0,3 - 8	5 - 127			
DWM-12	1 – 12	16 – 190			
DWM-18	2 – 18	32 - 285			
DWM-35	3 – 35	50 - 555			
DWM-50	4 - 50	65 – 790			

(1) The specified measuring- / switch ranges are valid for water having a density of 1.00 kg/dm³, 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  $^{\circ}$ C and 1.013 bar (absolute value): 1.00 kg/dm³.

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

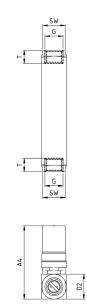
Brass version, wetted parts					
Float:	Brass, nickel-plated				
Gaskets:	NBR (optional FKM, EPDM) (2)				
Threaded rings:					
only DWM-35 (1"), DWM-50 (1")	Brass				
Centering disc:					
only DWM-35, DWM-50	Brass, nickel-plated				
Process connections:					
not for DWM-35 (1"), DWM-50 (1"	') Brass, nickel-plated				
all other wetted parts:	Brass, nickel-plated				

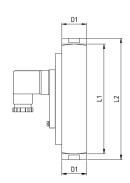
Float:	1.4571
Gaskets:	FKM (optional NBR, EPDM) (2)
Threaded rings:	
only DWM-35 (1"), DWM-50 (1")	1.4571
Centering disc:	
only DWM-35, DWM-50	1.4571
Process connections:	
not for DWM-35 (1"), DWM-50 (1"	1.4571
all other wetted parts:	1.4571

Stainless steel version, wetted parts

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

# ■ TECHNICAL DRAWING





# ■ SUMMARY OF TYPES

Туре	Overall dimensions [mm]											Weight approx.	
	G	DN	sw	L1	L2	т	D1	D2	<b>A</b> 1	<b>A2</b>	А3	<b>A</b> 4	[g]
DWM-1,5													800
DWM-3	1/4" 3/8"	8 10	27 27	117 117	131 131	10 15	30 30	30 30	-	<u>-</u>	- -	~88 ~88	800
DWM-8	1/2"	15	27	117	131	14	30	30	_	_	_	~88	800
DWM-12													800
DWM-18	1/2"	15	27	132	146	14	30	30	_	-	-	~88	800
	3/4"	20	32	132	174	15	35	30	-	_	-	~88	960
DWM-35	3/4"	20	34	130	152	15	40	40	_	_	_	~98	1450
	1"	25	40	156	156	17	40	40	_	_	_	~98	1450
DWM-50	3/4"	20	34	130	152	15	40	40	_	_	_	~98	1450
	1"	25	40	156	156	17	40	40	_	_	_	~98	1450

### ELECTRICAL DATA

Change over (COC)	250V · 1,5A · 50VA <sup>(3)</sup>
Normally open (NOC)	250V · 3A · 100VA
Change over M12x1 (-20 °C - 85 °C)	250V · 1,5A · 50VA <sup>(3)</sup>
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 <sup>(3)</sup>
Normally open	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

