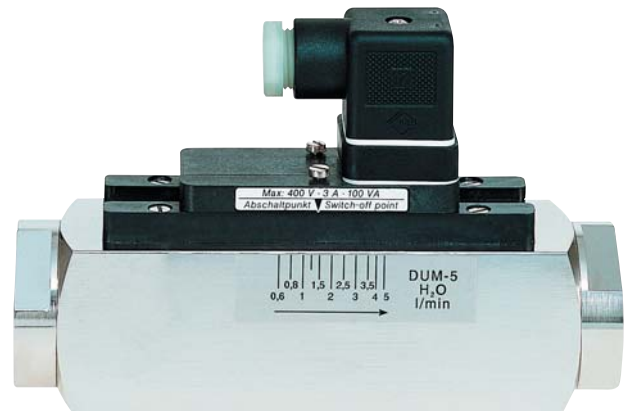
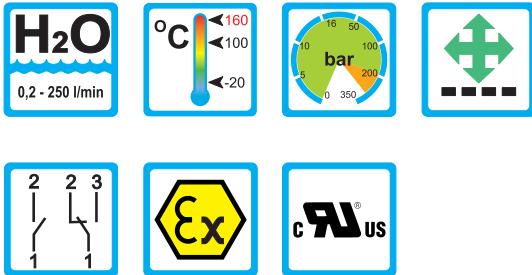


# Flow Monitor

## DUM



### Range of Applications

#### Operation

- Float measuring principle

#### Application

- Cooling systems and cooling circuits
- Mechanical Engineering
- Medicine technology
- Pharma industry
- Chemical industry
- Research and development

#### Features

- Universal orientation
- High reliability
- High switch accuracy
- Wide switch range
- Infinitely variable switchpoint adjustment through user
- EX-version to ATEX available
- High pressure resistance
- Threaded connection, special threads on request

#### Installation hints

- The operating instructions for DUM must be observed!
- Download: [www.meister-flow.com](http://www.meister-flow.com)

### Operating Data

Operating pressure max.	200 bar (brass) 300 bar (stainless steel)
Pressure drop	0,02 - 0,8 bar
Maximum temperature	100 °C (optional 160 °C)
Accuracy	±5 % of full scale

### Measuring Ranges

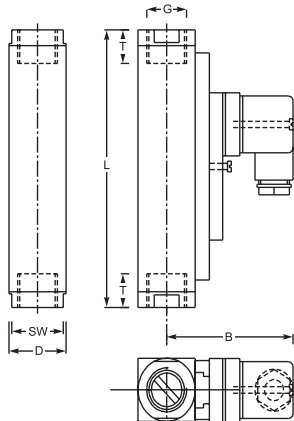
Type	Flow ranges for H <sub>2</sub> O at 20 °C <sup>(1)</sup>		
	[l/min]	[gph]	[gpm]
DUM-4	0,2 - 4	3,0 - 63,5	
DUM-5	0,6 - 5	9,5 - 79,0	
DUM-8	0,5 - 8	8,0 - 127,0	
DUM-14	1 - 14	15,0 - 222,0	
DUM-28	1 - 28	15,0 - 445,0	
DUM-40	2 - 40	30,0 - 635,0	
DUM-55	4 - 55	60,0 - 870,0	
DUM-70	1 - 70		0,3 - 18,5
DUM-90	8 - 90		2,1 - 23,8
DUM-110	5 - 110		1,3 - 29,0
DUM-150	10 - 150		2,6 - 39,5
DUM-220	35 - 220		9,0 - 58,0
DUM-250	35 - 250		9,0 - 66,0

(1) The specified data are switch-off points, other switch ranges on request.

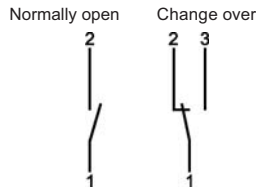


# Technical Data

## Mechanical drawing



## Connection diagram



## Summary of types

Type:	Overall dimensions [mm]							Weight approx. [g]
	SW	D	B	G	DN	T	L	
<b>DUM-4</b>								
<b>DUM-5</b>				1/4"	8			
<b>DUM-8</b>	27	30	71	3/8"	10	14	131	850
<b>DUM-14</b>				1/2"	15			
<b>DUM-28</b>								
<b>DUM-40</b>	27	30	71	1/2"	15	14	146	900
<b>DUM-55</b>	32	35	71	3/4"	20	16	174	
<b>DUM-70</b>								
<b>DUM-90</b>	34	40	76	3/4"	20	18	152	1400
<b>DUM-110</b>	40	40	76	1"	25	19	156	1100
<b>DUM-150</b>								
<b>DUM-220</b>	50	50	76	1 1/4"	32	21	200	2750
<b>DUM-250</b>	50	50	81	1 1/4"	32	21	200	3000
<b>DUM-250</b>	60	60	82	1 1/2"	40	24	200	3800

## Electrical Data

<b>Change over</b>	250V • 1,5A • 50VA <sup>(2)</sup>
<b>Normally open</b>	250V • 3A • 100VA

**ATEX II 2 G Ex mb II T6 & ATEX II 2 D Ex tD A21 IP67 T80 °C**

**ATEX II 2 G Ex mb II T5 & ATEX II 2 D Ex tD A21 IP67 T100 °C**

**Change over** 250V • 1A • 30VA

**Normally open** 250V • 2A • 60VA

**Change over M 12x1 (-20 °C - 85 °C)** 250V • 1,5A • 50VA <sup>(2)</sup>

**Normally open M 12x1 (-20 °C - 85 °C)** 250V • 3A • 100VA

**Change over SPS** 250V • 1A • 60VA

### Ingress Protection:

IP65: plug connection DIN 43650 Form A

IP67: 1 m sealed in cable, (with EEx-version 2 m)

or plug connection M 12x1

### Output Signal

The contact opens / changes when the flow decreases below the set point.

### Power supply

Not required (potentialfree reed contacts)

### Plug types

Other plug types oder cable lengths on request

<sup>(2)</sup> Minimum load 3 VA

## Material

### Brass version

#### Wetted parts:

Spring:	1.4571
Gaskets:	NBR
	(optional FKM, EPDM) <sup>(3)</sup>

#### Threaded rings:

DUM-70, DUM-90, DUM-110 (only 1")	Brass
DUM-150, DUM-220, DUM-250	

#### Centering washer:

DUM-70, DUM-90, DUM-110	Brass nickel-plated
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All other wetted parts: Brass nickel-plated

### Stainless steel version

#### Wetted parts:

Spring:	1.4571
Gaskets:	FKM
	(optional NBR,EPDM) <sup>(3)</sup>

#### Threaded rings:

DUM-70, DUM-90, DUM-110 (only 1")	1.4571
DUM-150, DUM-220, DUM-250	

#### Centering washer:

DUM-70, DUM-90, DUM-110	1.4571
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All other wetted parts: 1.4571

<sup>(3)</sup> Other gasket materials on request

