

Construction

The flowmeter operating according to the variable area principle has a metering tube in PVDF suitable for inert or corrosive* media. Male threads moulded onto the ends of the metering tube allow for easy mounting of unions.

O-ring seals at the faces of the tube ensure reliable sealing between metering tube and union and provide stress-free sealing. The floats are available in PVDF.

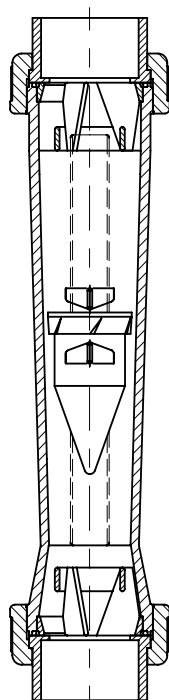
The scale on the metering tube can be suited to the medium and is available e.g. in l/h, m³/h or %. Dovetail sections moulded onto the metering tube allow for easy mounting of adjustable visual flow indicators, limit switches and a continuous readout transmitter.

Advantages

- Good level of accuracy, simple operation
- Corrosion resistant
- Standard and special scales are available with further scales on request
- Clear and large size printed scale
- Versions according to ATEX available on request

* see information on working medium on page 2

Sectional drawing



Technical data

Working medium

Inert liquid media which have no negative impact on the physical and chemical properties of the metering tube, float, seal and union materials.

Operating pressure*

Metering tubes with plastic unions max. 10 bar

*Operating pressure dependent on tube material and operating temperature

Pressure / temperature correlation - variable area flowmeter

Temperature in °C		-20	-10	±0	5	10	20	25	30	40	50	60	70	80	90	100	110	120	
Tube material	Union material	Code	Operating pressure [bar]																
PVDF	PVDF	20	10	10	10	10	10	10	10	9.0	8	7.1	6.3	5.4	4.7	3.6	2.5	1.7	1.2

Pressure loss [mbar]

Typ	DN 32	DN 50
823	13	-
833	13	20.0

Accuracy class: 4 acc. to VDE/VDI 3513, sheet 2, i.e. ± 1% of end value and ± 3% of measured value.

Selection of scales *

Type	DN	Water [m ³ /h]	Tube size (Code)	Measuring range max. (Code)	Weight [kg]
GEMÜ 823 without magnet	32	200 - 2800 [l/h]	63	2800	0,98
GEMÜ 833 with magnet	32	200 - 2800 [l/h]	63	2800	0,98
	50	0.4 - 4.0	72	4000	1,95
	50	0.5 - 7.0	73	7000	1,87

* All scales in this datasheet are based on a medium temperature of 20° C.

Order data

1 Version	
Float material	Type
PVDF, white	823
PVDF, white (with magnet)	833

2 RoHS conformance	
	Code
Conformance to RoHS	D

3 Nominal size	
	Code
DN 32	32
DN 50	50

4 Body configuration	
	Code
2/2-way body	D

5 Connection	
	Code
Union ends with DIN insert (IR butt welding)	78

6 Tube material	
	Code
PVDF	20

7 Seal material	
O-ring	Code
FPM	4

8 Union material	
	Code
Insert PVDF, union nut PVDF	20

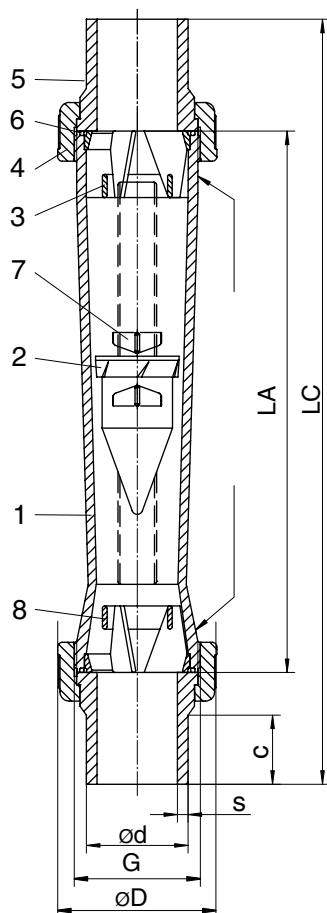
9 Tube size	
	Code
See table page 2	

10 Measuring range	
	Code
See table page 2	
Always state the maximum measuring range value when ordering.	

11 High Purity version	
	Code
High Purity	P

Order example	1	2	3	4	5	6	7	8	9	10	11
	833	R	50	D	75	20	4	20	73	7000	P

Dimensions [mm]



GEMÜ 823, 833, 834

DN	LA	O-ring	øD	ød	s	c	LC
32	343	46.0 x 3.5	74	40	2.4	41	474
50	343	68.0 x 3.5	103	63	3.0	43	486

Designation

Item	Designation	Pieces
1	Metering tube	1
2	Float	1
3	Upper float stop	1
4	Union nut	2
5	Union	2
6	O-ring	2
7	Flow indicator	2
8	Lower float stop	1

For further high purity products, accessories and other products, please see our Product Range catalogue and Price List.
Contact GEMÜ.

GEMÜ® VALVES, MEASUREMENT AND CONTROL SYSTEMS

