

M335

FLOWMETER SPECIFICATION



PRAHER

Flow meter M335

Measuring ranges 50–60,000 l/h



Function

The flow meter M335 operates on the float principle and is used for flow rate measurements in closed pipelines. The medium flows through the vertically installed flow meter from bottom to top. This raises the float and shows the current flow rate on the scale on the measuring device. The read-off edge corresponds to the largest diameter of the float.

M335 flow meters come as standard with a water scale and a % scale, and two setpoint indicators.

Special features:

- Fracture-proof and corrosion-resistant
- Radially removable
- Special adhesive scales for liquid and gaseous media
- Holder for accessories (limit value contacts)
- Measuring tube carries the DN label, and also the measuring range and material
- PVDF floats and stops as standard
- Measuring ranges 50–60,000 l/h

Materials

Measuring tube	max. temp. at 1 bar	Float	Top and bottom inserts	O-ring
PA	+ 60 °C	PVDF (standard)	PVDF	EPDM
PVC	+ 40 °C			FPM (Viton)
PSU	+ 100 °C*			

Operating pressure: max. PN 10 at 20 °C

*only with PVDF screw connection

Connection possibilities

Socket	Spigot	Plastic female thread	Metal female thread
PVC adhesive socket (standard)	PP fusion spigot	PVC	Stainless steel V4A
PP fusion socket	PVDF fusion spigot	PP	Malleable cast iron
PVDF fusion socket	PE fusion spigot	PVDF	

Pressure loss

Measuring range l/h	50–500	100–1,000	150–1,500	250–2,500	200–2,000	300–3,000
Pressure loss mbar	22.84	22.84	22.84	22.84	24.99	24.99

Measuring range l/h	600–6,000	1,000–10,000	1,500–15,000	2,000–20,000	3,000–30,000	8,000–60,000
Pressure loss mbar	24.99	24.99	28.23	45.67	45.67	47.24

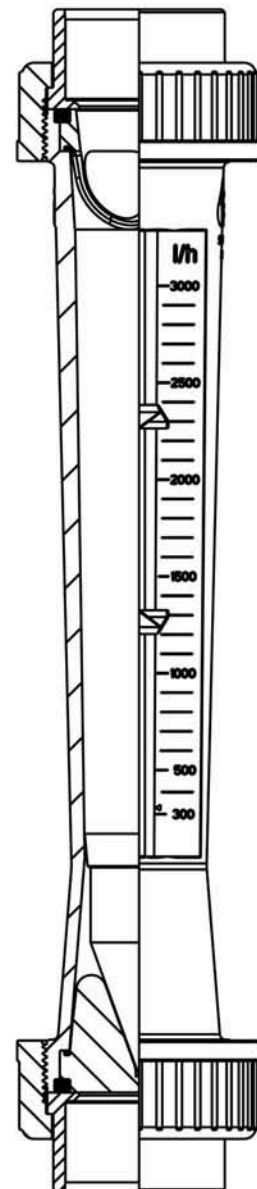
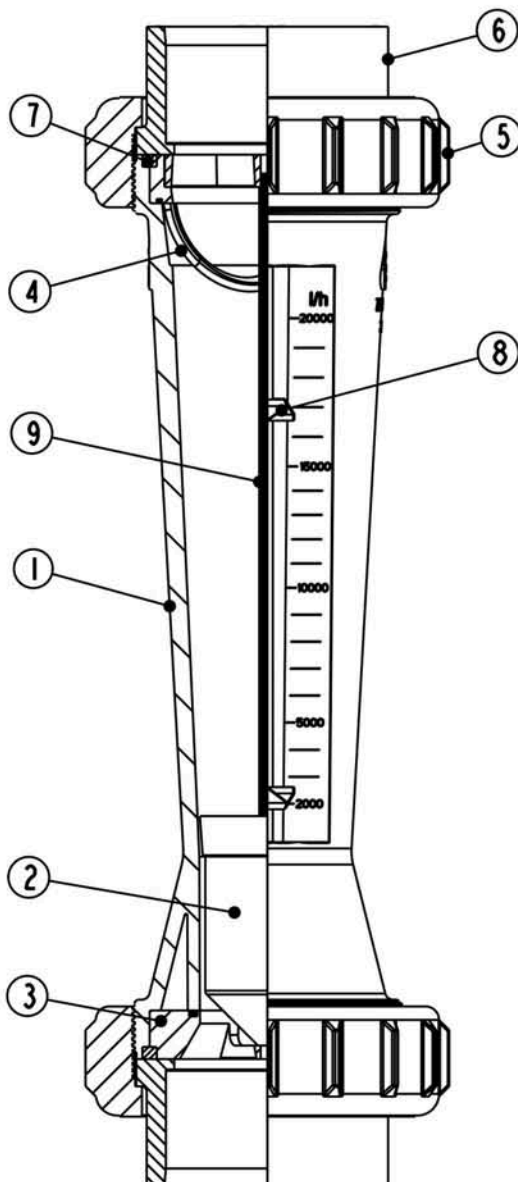
Measuring accuracy Accuracy Class 4 as defined by VDE/DIN 3513 Page 2

Flow in %	10	20	30	40	50	60	70	80	90	100
Total measured value error in %	13.00	8.00	6.33	5.50	5.00	4.67	4.43	4.25	4.11	4.00
Total limit value error in %	1.3	1.6	1.9	2.2	2.5	2.9	3.1	3.4	3.7	4.0

Individual parts

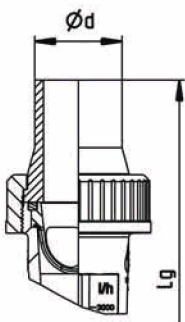
Pos.	Designation	Qty.	Material
1	Measuring tube	1	PA, PVC, PSU, PVDF
2	Float	1	PVDF
3	Insert, bottom	1	PVDF
4	Insert, top	1	PVDF
5	Union nut	2	PVC, PP, PVDF
6	Insertion part (socket, spigot)	2	PVC, PP, PVDF
7	O-ring	2	EPDM, FPM
8	Setpoint indicator	2	PS
9	Guide rod	1	PEEK*

*from DN 50 1,500–15,000 l/h

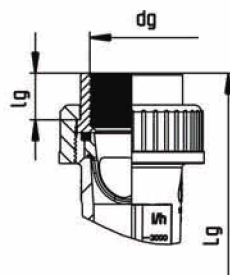


Dimensions and weights

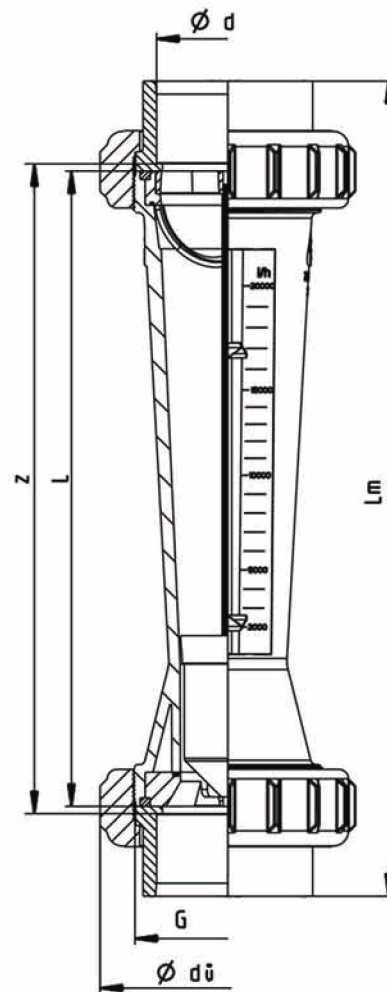
Type	Dimensions in mm																			Weight in kg/unit. approx.	
Measuring range l/h H ₂ O						Adhesive socket			Fusion socket			Spigot PP			Spigot PVDF			Threaded socket			PA PSU PVC
	DN	d _a	G	d _ü	L	d _m	z	L _m	d _m	z	L _m	d	L _g	S SDR 11	d	L _g	S SDR 33	d _g	L _g	l _g	
50–500 100–1,000	25	32	1 1/2"	60	335	32	341	385	32	345	381	32	455	2.9	32	443	2.4	1"	385	17	0.52
150–1,500 250–2,500	32	40	2"	72	335	40	341	393	40	345	385	40	461	3.7	40	461	2.4	1 1/4"	393	19	0.60
200–2,000 300–3,000 600–6,000	40	50	2 1/4"	83	335	50	341	403	50	345	391	50	467	4.6	50	459	3	1 1/2"	403	23	1.22
600–6,000 1,000–10,000 1,500–15,000	50	63	2 3/4"	103	335	63	341	417	63	345	399	63	473	5.8	63	461	3	2"	417	23	1.68
2,000–20,000 3,000–30,000 8,000–60,000	65	75	3 1/2"	122	335	75	341	429	75	345	407	75	587	6.9	75	453	3.6	2 1/2"	–	–	2.90



Screw connection
with fusion spigot



Screw connection
with threaded
socket



Limit value contact Z₄₀ min. and Z₄₂ max.

For float-type flow meters M₃₃₅/M₃₅₀/M₁₂₃

Use

The limit value contacts Z₄₀ and Z₄₂ are used for external monitoring of limited flow values on our float-type flow meters. They are pushed onto the guide located on the flow measuring device and can be set to any desired value of the corresponding scale.

Function

A solenoid installed in the float closes or opens a reed contact permanently cast in the limit value contact. The switching function is bistable. This means that the switching state is maintained even if the solenoid float moves away from the contact.

Switching states

	Float above	Float below
Z ₄₀ min	open	closed
Z ₄₂ max	closed	open

Attention

When retrofitting limit value contacts, ensure that the standard float is replaced with a solenoid float. The solenoid float is clearly identified by a "M" on the top.

Technical data

Switching voltage*	max. 230 V~
Switching rating*	max. 10 W/12 VA
Switching current*	max. 0.5 A
Contact resistance	< 200 mOhm
Leakage resistance	> 10 ¹¹ Ohm
Permissible ambient temperature	0 to +55 °C
Protection type	in acc. with DIN 40050-IP 65
Switching hysteresis	1–2 mm float travel



Order numbers

Z ₄₀ min.	17.100.686
Z ₄₂ max.	17.100.687

We reserve the right to make technical changes in the interest of improvement.

* Even a brief overshoot is not permitted. This is uncontrollable with inductive or capacitive peaks, e.g. with contactors or solenoid valves. It is therefore recommended to use a limit value switch or a contact protection relay.