PRAHER PLASTICS

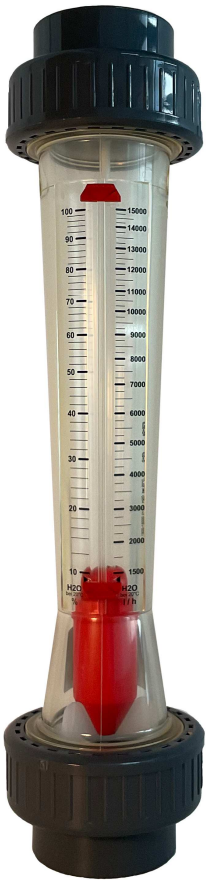
M335

Flow meter

DATASHEET

Flow meter M335

Measuring range 50 – 60,000 L/h



Function

The flow meter M 335 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.

M 335 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

M335 Float-type flow meter

DN (mm)	Inches	Measuring range (Water L/h)	Guide rod material	Measuring tube material	Float material	O-Ring material	Connection type
25	1"	50-500	without	PA (Standard) PSU (Option) PVC (Option)	PVDF Standard)	EPDM (Standard) FPM (Viton) (Option)	adhesive socket (Standard) Threaded (Option) Flange (Option)
25	1"	100-1,000					
32	1 ¼"	150-1,500					
32	1 ½"	250-2,500					
40	1 ½"	200-2,000					
40	1 ½"	300-3,000					
40	1 ½"	600-6,000					
50	2"	600-6,000					
50	2"	1,200-12,000					
50	2"	1,500-150,000	PEEK				
65	2 ½"	2,000-20,000					
65	2 ½"	3,000-30,000					
65	2 ½"	8,000-60,000					

PA : Polyamide Trogamid **PSU :** Polysulfone, **PVDF :** Polyvinylidene Fluoride **PEEK :** Polyether ether ketone

Measuring accuracy

Accuracy Class 4 as defined by VDE/DIN 3513

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

Pressure loss

Measuring range in L/h	50-500	100-1000	150-1500	250-2500	200-2000	300-3000
Pressure loss (mbar)	22.84	22.84	22.84	22.84	24.99	24.99

Measuring range in L/h	600-6,000	1,000-10,000	1,500-150,000	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

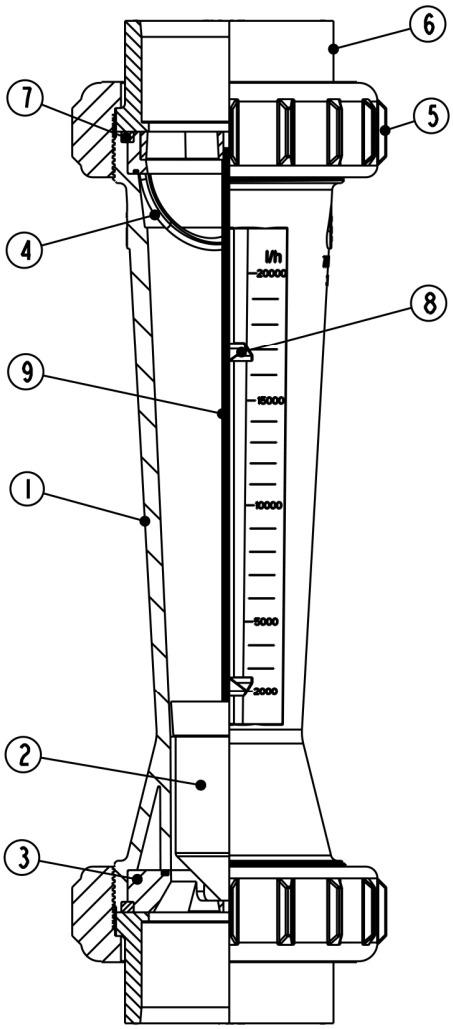
Measuring tube	Max. temperature at 1bar	Float	Top and bottom inserts	O-Ring
PA	+60°C	PVDF	PVDF	EPDM
PVC	+40°C			
PSU	+100°C*			

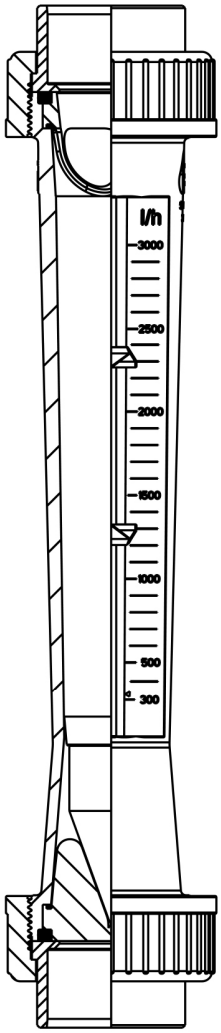
Operating pressure : max. PN 10 at 20°C

* only with PVDF screw connection

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	2	PVC, PP, PVDF
7	O-Ring	2	EPDM, FPM
8	Setpoint indicator	2	PS
9	Guide rod	1	PEEK

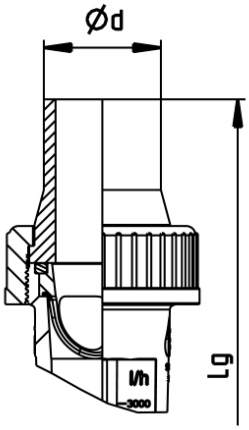




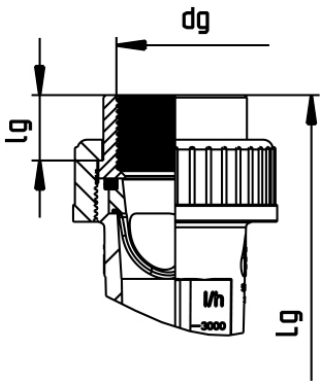
Dimension and weights

Measuring range Water (L/h)						Adhesive socket			Threaded socket			Spigot PP			Weight (Kg)
	DN	Ød	G	D_u	L	d_m	Z	L_m	d_g	L_G	l_G	d	L_G	S SDR 11	
50 - 500 100 - 1,000	25	32	1 ½"	60	335	32	341	385	1"	385	17	32	455	2.9	0.52
150 - 1,500 250 - 2,500	32	40	2"	72	335	40	341	393	1 ¼"	393	19	40	461	3.7	0.60
200 - 2,000 300 - 3,000 600 - 6,000	40	50	2 ¼"	83	335	50	341	403	1 ½"	403	23	50	467	4.6	1.22
600 – 6,000 1,000 – 10,000 1,500 – 15,000	50	63	2 ¾"	103	335	63	341	417	2"	417	23	63	473	5.8	1.68
2,000 – 20,000 3,000 – 30,000 8,000 – 60,000	65	75	3 ½"	122	335	75	341	429	2 ½"	--	--	75	587	6.9	2.90

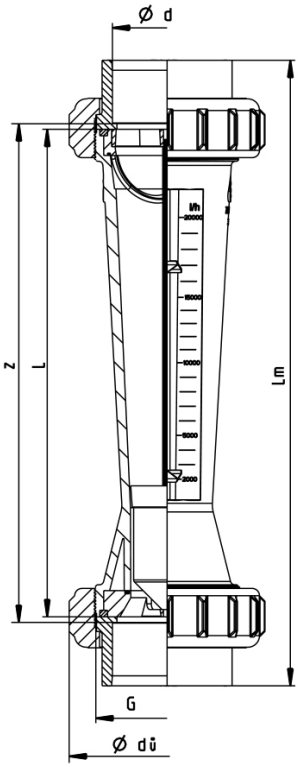
Dimensions in mm



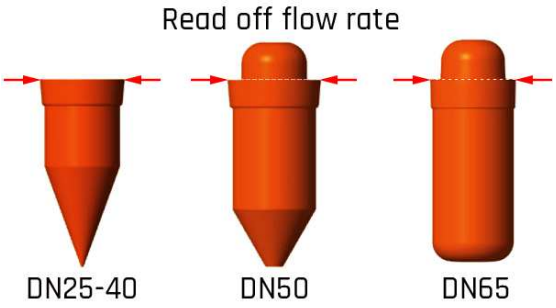
Screw connection with Fusion spigot



Screw connection with Threaded Socket



Read off flow rate



Accessories

- Limit switch Z40 min. (N.C)
- Limit switch Z42 max. (N.O)

Limit Switch

Limit Switch Technical Data

Switching voltage*	max. 250VAC
Switching capacity*	max. 10W/10VA
Switching current*	max. 0.5 A
Contact resistance	<150 mΩ
Insulation resistance	>1011Ω
Permissible ambient	0 to 55°C
Protection class acc.	DIN 40050-P 65
Switch-on and switch-off hysteresis	1-2 mm float travel

* Even a brief overshoot is not permissible. Especially with inductive or capacitive peaks, such as solenoid valves, this is uncontrollable. It is recommended to use a limit switch or a contact protection relay.

Switching State

Limit Switch	Float (above)	Float (below)
Z40 min. (Code : 77287)	Open	Closed
Z42 max. (Code : 77288)	Closed	Open