PRAHER PLASTICS

Technical Data.

Flow Meter.

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Float-type flow meter

DN	Inches	da	Measuring range H_2O	M 335 / M 350	M 123	M 10–13
10	3/8	16	1.5–15		■ ●	◆
10	3/8	16	2.5–25		■ ●	◆
10	3/8	16	5–50		■ ●	◆
10	3/8	16	10–100		■ ●	◆
15	1/2	20	8–80		■ ●	
15	1/2	20	15–150		■ ●	
15	1/2	20	20–200		■ ●	
25	1	32	15–150		■ ●	
25	1	32	30–300		■ ●	
25	1	32	50–500	▲ ■ ●	■ ●	
25	1	32	100–1,000	▲ ■ ●	■ ●	
32	1 1/4	40	150–1,500	▲ ■ ●		
32	1 1/4	40	250–2,500	▲ ■ ●		
40	1 1/2	50	200–2,000	▲ ■ ●		
40	1 1/2	50	300–3,000	▲ ■ ●		
40	1 1/2	50	600–6,000	▲ ■ ●		
50	2	63	600–6,000	▲ ■ ●		
50	2	63	1,500–15,000	▲ ■ ●		
65	2 1/2	75	2,000–20,000	▲ ■ ●		
65	2 1/2	75	3,000–30,000	▲ ■ ●		
65	2 1/2	75	8,000–60,000	▲ ■ ●		

	Connection type	Sealing elements	Float	Connection
Standard	PVC adhesive socket	EPDM	PVDF	M 10–13 R 1/4" female thread
on request	PP-/PE-/PVDF fusion socket PP-/PE-/PVDF butt fusion spigot Va/Tg female thread	FPM (Viton)	Va 1.4571 (M 10–13)	M 11+13 also R 5/8" male thread

Key to symbols

▲ PA (polyamide Trogamid)
■ PSU (polysulphone)
● PVC
◆ PMMA (polymethylmethacrylate “Plexiglas”)
Va 1.4571
Tg Malleable cast iron

Flow meter M 335 / M 350

Measuring ranges 50 – 60,000 l/h

Function

The flow meter M 335 / M 350 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 / M 350 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

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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

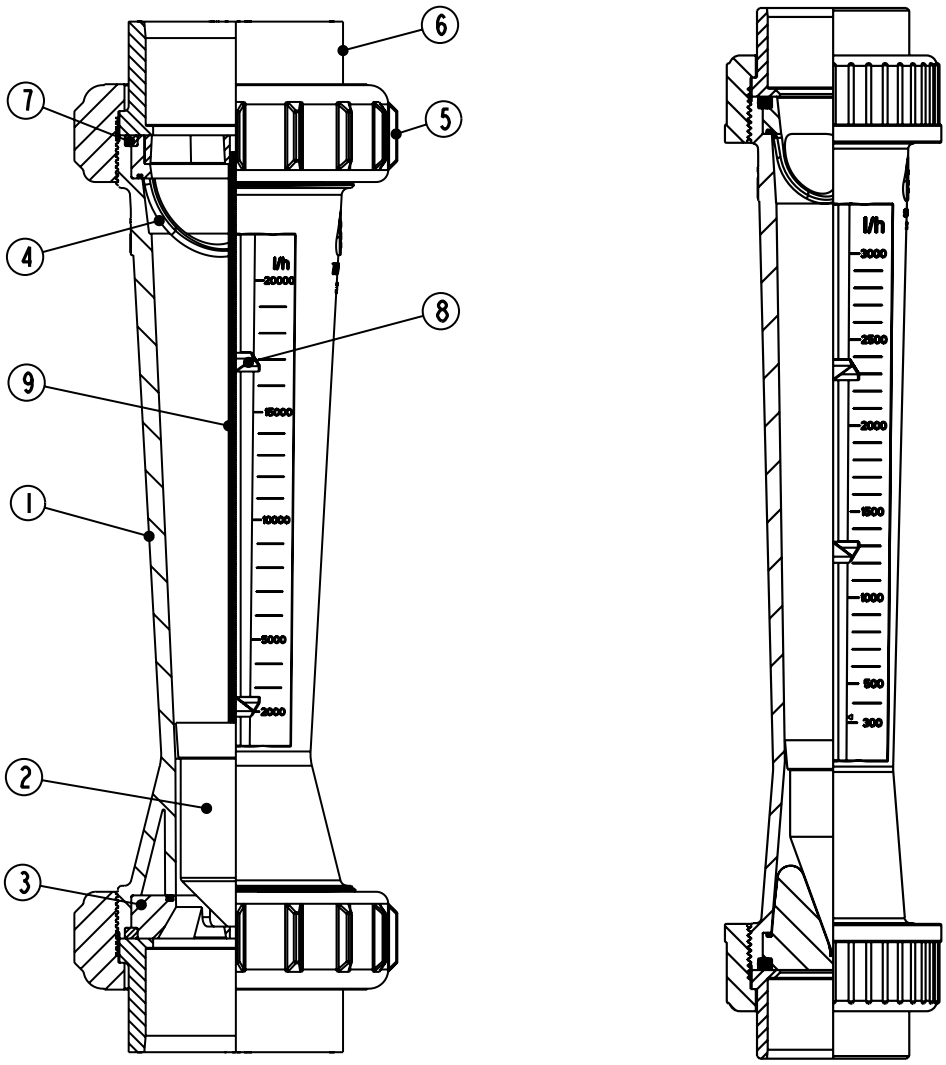
Measuring accuracy Accuracy Class 4 as defined by VDE/DIN 3513 Page 2

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



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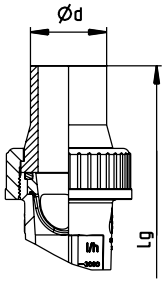
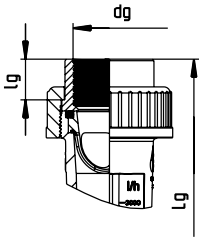
Dimensions and weights

Type M 335	Dimensions in mm																				Weight in kg/unit. approx.
Measuring range l/h H_2O						Adhesive socket			Fusion socket			Spigot PP			Spigot PVDF			Threaded socket			
	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	PA PSU PVC
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

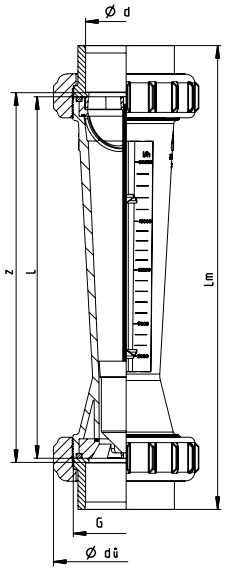
Type M 350	Dimensions in mm																				Weight in kg/unit. approx.
Measuring range l/h H_2O						Adhesive socket			Fusion socket			Spigot PP			Spigot PVDF			Threaded socket			
	DN	d_a	G	$d_ü$	L	d_m	z	L_m	d_m	z	L_m	d	L_g	S SDR 11	d	L_g	S SDR 33	d_g	L_g	l_g	PA PSU PVC
50–500 100–1,000	25	32	1 1/2"	60	350	32	356	400	32	360	396	32	460	2.9	32	458	2.4	1"	400	17	0.52
150–1,500 250–2,500	32	40	2"	72	350	40	356	408	40	360	400	40	476	3.7	40	476	2.4	1 1/4"	408	19	0.60
200–2,000 300–3,000 600–6,000	40	50	2 1/4"	83	350	50	356	418	50	360	406	50	482	4.6	50	474	3	1 1/2"	418	23	1.22
600–6,000 1,000–10,000 1,500–15,000	50	63	2 3/4"	103	350	63	356	432	63	360	414	63	488	5.8	63	476	3	2"	432	23	1.8
2,000–20,000 3,000–30,000 8,000–60,000	65	75	3 1/2"	122	350	75	356	444	75	360	422	75	602	6.9	75	468	3.6	2 1/2"	444	–	2.90



Screw connection with fusion spigot



Screw connection with threaded socket



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Article Numbers

			Type M335		Type M350	
		Measuring Tube	PA		PA	
da	DN	Measuring Range l/h	Float PVDF Art. No.	Float PVDF/magnetic Art. No.	Float PVDF Art. No.	Float PVDF/magnetic Art. No.
32	25	**50-500**	77084	77097	79700	79713
32	25	**100-1.000**	77085	77098	79701	79714
40	32	**150-1.500**	77086	77099	79702	79715
40	32	**250-2.500**	77087	77100	79703	79716
50	40	**200-2.000**	77088	77101	79704	79717
50	40	**300-3.000**	77089	77102	79705	79718
50	40	**600-6.000**	77090	77103	79706	79719
63	50	**600-6.000**	77091	77104	79707	79720
63	50	**1.000-10.000**	77092	77105	79708	79721
63	50	**1.500-15.000**	77093	77106	79709	79722
75	65	**2.000-20.000**	77094	77107	79710	79723
75	65	**3.000-30.000**	77095	77108	79711	79724
75	65	**8.000-60.000**	77096	77109	79712	79725

		Measuring Tube	PSU		PSU	
32	25	**50-500**	77162	77175	79778	79791
32	25	**100-1.000**	77163	77176	79779	79792
40	32	**150-1.500**	77164	77177	79780	79793
40	32	**250-2.500**	77165	77178	79781	79794
50	40	**200-2.000**	77166	77179	79782	79795
50	40	**300-3.000**	77167	77180	79783	79796
50	40	**600-6.000**	77168	77181	79784	79797
63	50	**600-6.000**	77169	77182	79785	79798
63	50	**1.000-10.000**	77170	77183	79786	79799
63	50	**1.500-15.000**	77171	77184	79787	79800
75	65	**2.000-20.000**	77172	77185	79788	79801
75	65	**3.000-30.000**	77173	77186	79789	79802
75	65	**8.000-60.000**	77174	77187	79790	79803

		Measuring Tube	PVC		PVC	
32	25	**50-500**	77240	77253	79856	79869
32	25	**100-1.000**	77241	77254	79857	79870
40	32	**150-1.500**	77242	77255	79858	79871
40	32	**250-2.500**	77243	77256	79859	79872
50	40	**200-2.000**	77244	77257	79860	79873
50	40	**300-3.000**	77245	77258	79861	79874
50	40	**600-6.000**	77246	77259	79862	79875
63	50	**600-6.000**	77247	77260	79863	79876
63	50	**1.000-10.000**	77248	77261	79864	79877
63	50	**1.500-15.000**	77249	77262	79865	79878
75	65	**2.000-20.000**	77250	77263	79866	79879
75	65	**3.000-30.000**	77251	77264	79867	79880
75	65	**8.000-60.000**	77252	77265	79868	79881

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Special scales

Measuring range		Air 0 bar		Air 1 bar		Air 2 bar		Air 3 bar
H_2O l/h	Art. No.	N m³/h	Art. No.	N m³/h	Art. No.	N m³/h	Art. No.	N m³/h
50–500	00.005.526	1.5–14	00.005.602	3–20	00.005.615	3–24	00.005.628	3–28
100–1,000	00.005.527	2.5–29	00.005.603	4–41	00.005.616	5–50	00.005.629	5–58
150–1,500	00.005.528	4–45	00.005.604	6–63	00.005.617	7–77	00.005.630	8–90
250–2,500	00.005.529	7–79	00.005.605	10–111	00.005.618	12–136	00.005.631	14–158
200–2,000	00.005.530	6–58	00.005.606	9–82	00.005.619	11–100	00.005.632	12–116
300–3,000	00.005.531	9–108	00.005.607	13–152	00.005.620	16–186	00.005.633	18–216
600–6,000	00.005.532	17–174	00.005.608	24–246	00.005.621	30–301	00.005.634	34–348
600–6,000	00.005.533	17–175	00.005.609	24–247	00.005.622	30–302	00.005.635	34–350
1,000–10,000	00.005.534	29–301	00.005.610	41–425	00.005.623	51–520	00.005.636	58–602
1,500–15,000	00.005.535	53–405	00.005.611	75–572	00.005.624	92–700	00.005.637	106–810
2,000–20,000	00.005.536	55–545	00.005.612	78–770	00.005.625	96–942	00.005.638	110–1,090
3,000–30,000	00.005.537	80–758	00.005.613	113–1,072	00.005.626	139–1,311	00.005.639	160–1,516
8,000–60,000	00.005.538	–	00.005.614	–	00.005.627	–	00.005.640	–

Measuring range		Air 4 bar		Air 5 bar		Air 6 bar		Air 7 bar
H_2O l/h	Art. No.	N m³/h	Art. No.	N m³/h	Art. No.	N m³/h	Art. No.	N m³/h
50–500	00.005.641	4–31	00.005.654	4–34	00.005.667	5–37	00.005.680	5–39
100–1,000	00.005.642	6–65	00.005.655	7–71	00.005.668	7–76	00.005.681	8–82
150–1,500	00.005.643	9–100	00.005.656	10–110	00.005.669	11–119	00.005.682	12–127
250–2,500	00.005.644	16–177	00.005.657	18–193	00.005.670	19–209	00.005.683	20–223
200–2,000	00.005.645	14–130	00.005.658	15–142	00.005.671	16–153	00.005.684	17–164
300–3,000	00.005.646	21–241	00.005.659	23–264	00.005.672	24–286	00.005.685	26–305
600–6,000	00.005.647	39–389	00.005.660	42–426	00.005.673	45–461	00.005.686	49–492
600–6,000	00.005.648	39–392	00.005.661	42–428	00.005.674	45–463	00.005.687	49–495
1,000–10,000	00.005.649	65–674	00.005.662	72–737	00.005.675	77–797	00.005.688	83–851
1,500–15,000	00.005.650	119–907	00.005.663	130–992	00.005.676	141–1,073	00.005.689	150–1,146
2,000–20,000	00.005.651	124–1,220	00.005.664	135–1,335	00.005.677	146–1,444	00.005.690	156–1.542
3,000–30,000	00.005.652	180–1,697	00.005.665	197–1,857	00.005.678	212–2,008	00.005.691	227–2,145
8,000–60,000	00.005.653	–	00.005.666	–	00.005.679	–	00.005.692	–

Measuring range		Air 8 bar		HCl 30–33 %		NaOH 30 %		NaOH 50 %
H_2O l/h	Art. No.	N m³/h	Art. No.	l/h	Art. No.	l/h	Art. No.	l/h
50–500	00.005.693	4.5–42	00.005.539	20–405	00.005.552	4–226	00.005.565	1–55
100–1,000	00.005.694	7.5–87	00.005.540	55–866	00.005.553	15–600	00.005.566	3–192
150–1,500	00.005.695	12–135	00.005.541	90–1,340	00.005.554	30–970	00.005.567	6–365
250–2,500	00.005.696	21–237	00.005.542	165–2,310	00.005.555	70–1,800	00.005.568	15–770
200–2,000	00.005.697	18–174	00.005.543	115–1,660	00.005.556	35–1,240	00.005.569	8–520
300–3,000	00.005.698	27–324	00.005.544	190–3,050	00.005.557	75–2,370	00.005.570	15–1,170
600–6,000	00.005.699	51–522	00.005.545	420–4,900	00.005.558	230–4,000	00.005.571	50–2,270
600–6,000	00.005.700	51–525	00.005.546	430–5,090	00.005.559	240–4.700	00.005.572	55–2,300
1,000–10,000	00.005.701	87–903	00.005.547	750–9,460	00.005.560	475–7,340	00.005.573	140–4,340
1,500–15,000	00.005.702	159–1.215	00.005.548	1,415–11,570	00.005.561	1,030–10,330	00.005.574	420–5,820
2,000–20,000	00.005.703	165–1.635	00.005.549	1,500–17,300	00.005.562	915–11,720	00.005.575	245–7,590
3,000–30,000	00.005.704	240–2.274	00.005.550	2,175–24,120	00.005.563	1,195–16,040	00.005.576	400–11,120
8,000–60,000	00.005.705	–	00.005.551	–	00.005.564	–	00.005.577	–

Special scales as requested by the customer

Details required: Medium, spec. weight in g/cm³, viscosity in cP or mPas, operating temperature in °C, desired measuring range in l/h.

Application instructions for special scales

When applying special scales later, ensure that the marking ◄ on the scale corresponds with the one on the measuring tube.

Accessories

Limit value contact Z 40 min.
Limit value contact Z 42 max.
For further information, refer to the separate data sheets.

Installation and assembly instructions

- Install the flow meter into the pipeline system vertically and without tension.
- Provide an inlet and outlet section, Inlet approx. 10 x DN, outlet approx. 5 x DN.

Notes on operation

- Avoid pressure surges, as these can damage the unit.
- Exercise caution when installing. The measuring tube must not come into contact with solvent.
- Before start-up, make sure that the connected parts are sufficiently tightened.
- The union nuts must not be mixed up on a measuring tube made from the material PVDF. The overall length also does not correspond to the dimensions table.

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

Special scales H_2O with other units of measurement

		Measuring range Series M 335 / M 350			
d mm	DN mm	l/h	l/min	m³/h	US GPM
32	25	50 – 500	0.8 – 8	0.05 – 0.5	0.22 – 2.2
32	25	100 – 1,000	1,7 – 17	0.1 – 1	0.44 – 4.4
40	32	150 – 1,500	2.5 – 25	0.15 – 1.5	0.66 – 6.6
40	32	250 – 2,500	4 – 41	0.25 – 2.5	1.1 – 11
50	40	200 – 2,000	3.3 – 33	0.2 – 2	0.66 – 6.6
50	40	300 – 3,000	5 – 50	0.3 – 3	1.32 – 13.2
50	40	600 – 6,000	10 – 100	0.6 – 6	2.64 – 26.4
63	50	600 – 6,000	10 – 100	0.6 – 6	2.64 – 26.4
63	50	1,000 – 10,000	16 – 166	1 – 10	4.4 – 44.02
63	50	1,500 – 15,000	25 – 250	1.5 – 15	6.6 – 66.04
75	65	2,000 – 20,000	33 – 330	2 – 20	8.8 – 88
75	65	3,000 – 30,000	50 – 500	3 – 30	13.2 – 132
75	65	8,000 – 60,000	133 – 1,000	8 – 60	35.2 – 264

Pressure corr. table for gases: Calibration pressure 0 bar

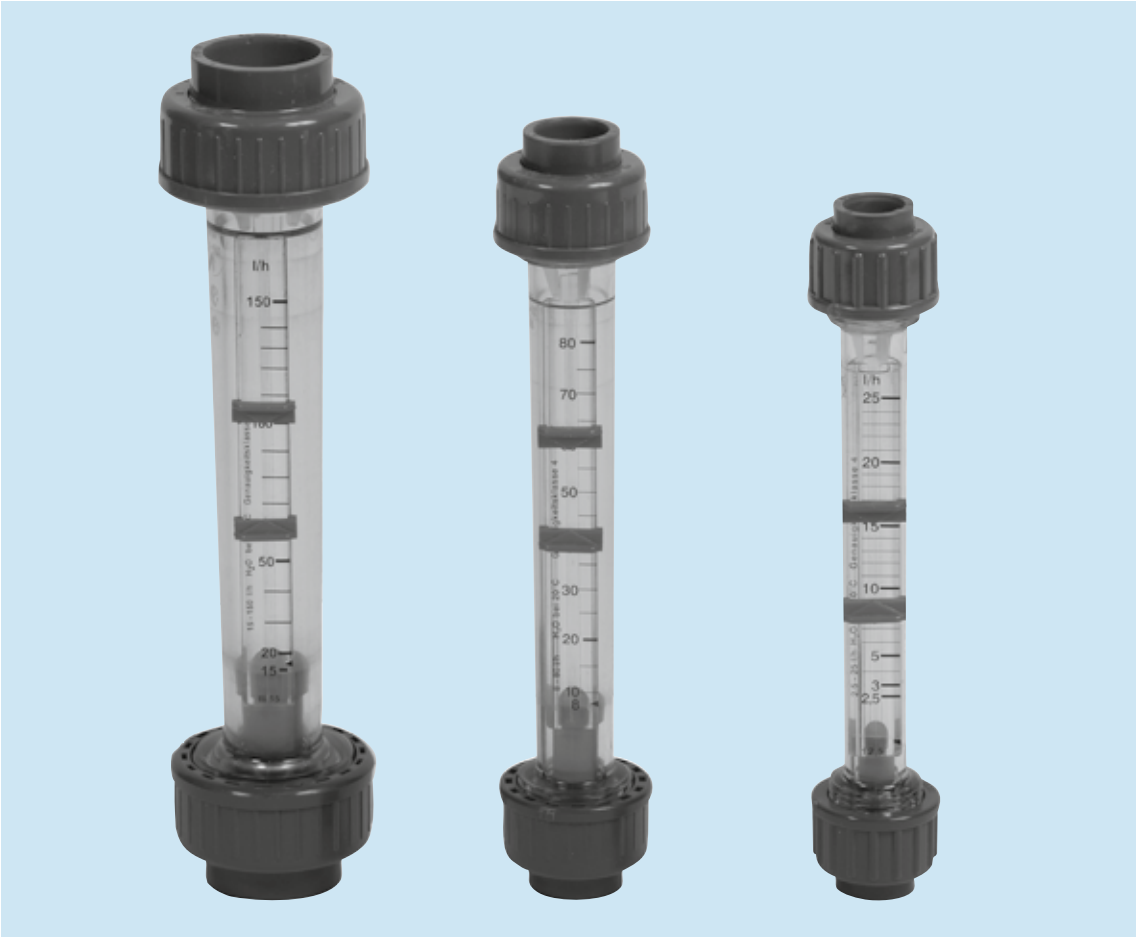
Operating pressure bar	Factor x display value	Operating pressure bar	Factor x display value
0.0	1.000	3.0	2.000
0.2	1.095	4.0	2.240
0.4	1.184	5.0	2.450
0.6	1.265	6.0	2.650
0.8	1.340	7.0	2.830
1.0	1.414	8.0	3.000
1.5	1.580	9.0	3.165
2.0	1.730	10.0	3.320

This table is used to correct values displayed for gases by the flow meter if the operating pressure deviates from the pressure used as a basis for the calibration. The values displayed on the flow meter are simply multiplied by the factor corresponding to the operating pressure.

We supply special scales for operating pressures of between 1 and 8 bar (see Page 10).

Flow meter M 123

Measuring ranges 15 – 1,000 l/h



Function

The M 123 flow meter works on the float principle and is used to measure the flow rate 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 123 flow meters have a water scale and 2 setpoint indicators as standard.

Special features:

- Fracture-proof and corrosion-resistant
- Radially removable
- Adhesive special 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 1.5 – 1,000 l/h
- Less space required thanks to short overall length

Materials

Measuring Tube	Max. Temp. at 1 bar	Float	Insert, Top and Bottom	O-ring
PVC	+ 60 °C	PVDF	PVDF	EPDM
PSU	+ 100 °C			FPM
PVDF	+ 140 °C			

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

Water l/h	1,5-15	2,5-25	5-50	10-100	8-80	15-150	20-200	15-150	30-300	50-500	100-1.000
Pressure Loss (mm WC)	46,0	46,0	46,0	46,0	44,7	44,7	44,7	82,8	82,8	82,8	82,8

Operating pressure: max. PN 10 at 20 °C

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

Article Numbers

			Type M123			
		Measuring Tube	PSU		PVC	
da	DN	Measuring Range l/h	Float PVDF Art. No.	Float PVDF/magnetic Art. No.	Float PVDF Art. No.	Float PVDF/magnetic Art. No.
16	10	**1,5-15**	73471	73648	74161	74183
16	10	**2,5-25**	73472	73649	74162	74184
16	10	**5-50**	73473	73650	74163	74185
16	10	**10-100**	73474	73651	74164	74186
20	15	**8-80**	73475	73652	74165	74187
20	15	**15-150**	73476	73653	74166	74188
20	15	**20-200**	73477	73654	74167	74189
32	25	**15-150**	73478	73655	74168	74190
32	25	**30-300**	73479	73656	74169	74191
32	25	**50-500**	73480	73657	74170	74192
32	25	**100-1.000**	73481	73658	74171	74193

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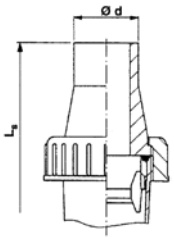
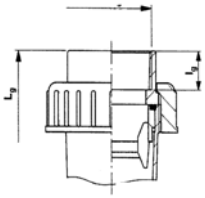
Individual parts

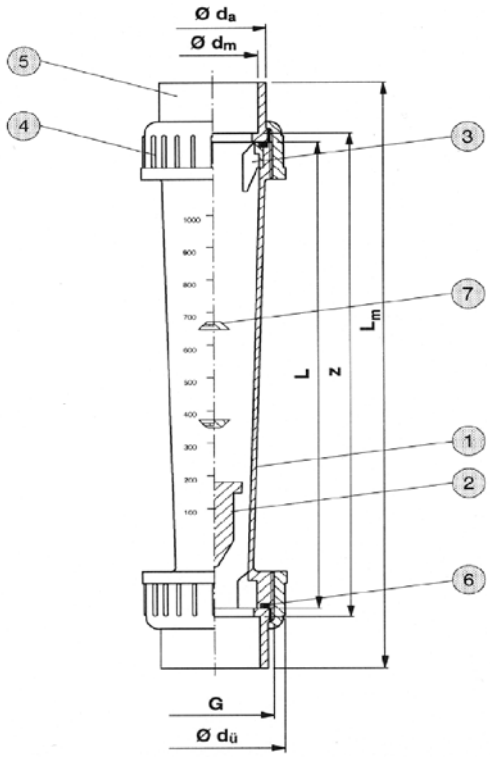
Pos.	Designation	Qty.	Material
1	Measuring tube	1	PSU, PVC, PVDF
2	Float	1	PVDF
3	Insert, top	2	PVDF
4	Union nut	2	PVC, PP, PVDF
5	Insertion part	2	PVC, PP, PVDF
6	O-ring	2	EPDM, FPM
7	Setpoint indicator	2	PS



Screw connection
with fusion spigot



Screw connection
with threaded socket



Dimensions and weights

																	Dimensions in mm	Weight in kg/unit
Measuring range l/h H_2O					Adhesive socket			Fusion socket			Spigot PP			Threaded socket				
	DN	$d_ü$	G	L	d_m	z	L_m	d_m	z	L_m	d	L_s	s	d_g	L_g	l_g		PSU
1.5–15 2.5–25 5–50 10–100	10	35	3/4"	165	16	171	199	15.5	175	201				3/8"	199	11		0.08
8–80 15–150 20–200	15	43	1"	185	20	191	223	19.5	195	223	20	293	1.9	1/2"	223	13		0.13
15–150 30–300 50–500 100–1,000	25	60	1 1/2"	200	32	206	250	31.5	210	246	32	320	3.0	1"	250	17		0.24

Special scales

Measuring range		Air 0 bar		Air 1 bar		Air 2 bar		Air 3 bar
H_2O l/h	Art. No.	N m³/h	Art. No.	N m³/h	Art. No.	N m³/h	Art. No.	N m³/h
1.5–15	00.000.998	0.10–0.55	00.001.050	0.15–0.80	00.001.051	0.17–0.9	00.001.052	0.20–1.1
2.5–25	00.001.059	0.2–0.95	00.001.060	0.25–1.3	00.001.061	0.3–1.6	00.001.062	0.4–1.9
5–50	00.001.070	0.5–1.9	00.001.071	0.7–2.7	00.001.072	0.8–3.4	00.001.073	1.0–3.8
10–100	00.001.081	0.8–3.0	00.001.082	1.0–4.2	00.001.083	1.2–5.4	00.001.084	1.4–6.4
8–80	00.001.092	0.6–2.8	00.001.093	0.8–4	00.001.094	1.0–5.0	00.001.095	1.2–5.6
15–150	00.001.103	1.4–5.6	00.001.104	2–8	00.001.105	2–10	00.001.106	3–12
20–200	00.001.114	1.5–7.0	00.001.115	2–10	00.001.116	3–13	00.001.117	3–15
15–150	00.001.125	1.0–6.5	00.001.126	1–9	00.001.127	1.5–11	00.001.128	2–13
30–300	00.001.136	1.5–11	00.001.137	2–15	00.001.138	2.5–18	00.001.139	3–22
50–500	00.001.147	3–18	00.001.148	4–25	00.001.149	5–30	00.001.150	5–35
100–1,000	00.001.158	6–30	00.001.159	8–44	00.001.160	10–54	00.001.161	12–62

Measuring range		Air 4 bar		Air 5 bar		Air 6 bar		Air 7 bar
H_2O l/h	Art. No.	N m³/h	Art. No.	N m³/h	Art. No.	N m³/h	Art. No.	N m³/h
1.5–15	00.001.053	0.25–1.20	00.001.054	0.25–1.3	00.000.999	0.26–1.45	00.001.055	0.30–1.5
2.5–25	00.001.063	0.4–2.1	00.001.064	0.5–2.4	00.001.065	0.5–2.5	00.001.066	0.5–2.7
5–50	00.001.074	1.2–4.2	00.001.075	1.2–4.6	00.001.076	1.2–5.0	00.001.077	1.4–5.4
10–100	00.001.085	1.6–7.0	00.001.086	1.6–7.4	00.001.087	2.0–8.0	00.001.088	2–8.8
8–80	00.001.096	1.4–6.4	00.001.097	1.4–7.0	00.001.098	1.5–7.5	00.001.099	1.5–8.0
15–150	00.001.107	3–13	00.001.108	3–14	00.001.109	3.5–15	00.001.110	3.5–16.5
20–200	00.001.118	4–17	00.001.119	4–18	00.001.120	4–20	00.001.121	5–21
15–150	00.001.129	2–14.5	00.001.130	2–16	00.001.131	2–17	00.001.132	2.5–18
30–300	00.001.140	3–24	00.001.141	4–26	00.001.142	4–28	00.001.143	4–30
50–500	00.001.151	6–40	00.001.152	6–44	00.001.153	8–48	00.001.154	8–50
100–1,000	00.001.162	12–70	00.001.163	15–75	00.001.164	15–80	00.001.165	15–85

Measuring range		Air 8 bar		Air 9 bar		Air 10 bar
H_2O l/h	Art. No.	N m³/h	Art. No.	N m³/h	Art. No.	N m³/h
1.5–15	00.001.056	0.3–1.6	00.001.057	0.3–1.7	00.001.058	0.35–1.8
2.5–25	00.001.067	0.6–2.9	00.001.068	0.6–3.0	00.001.069	0.6–3.2
5–50	00.001.078	1.4–5.8	00.001.079	1.6–6.0	00.001.080	1.6–6.4
10–100	00.001.089	2.0–9.0	00.001.090	2–10	00.001.091	2–10
8–80	00.001.100	1.5–8.5	00.001.101	2.0–9.0	00.001.102	2.0–9.5
15–150	00.001.111	4–17	00.001.112	4–18	00.001.113	4–19
20–200	00.001.122	5–23	00.001.123	5–23	00.001.124	5–25
15–150	00.001.133	2.5–19.5	00.001.134	3–20	00.001.135	3–21
30–300	00.001.144	4–33	00.001.145	5–34	00.001.146	5–35
50–500	00.001.155	8–54	00.001.156	8–56	00.001.157	10–60
100–1,000	00.001.166	20–90	00.001.167	20–95	00.001.168	20–100

PRAHER PLASTICS

Limit value contact Z 40 min. and Z 42 max.

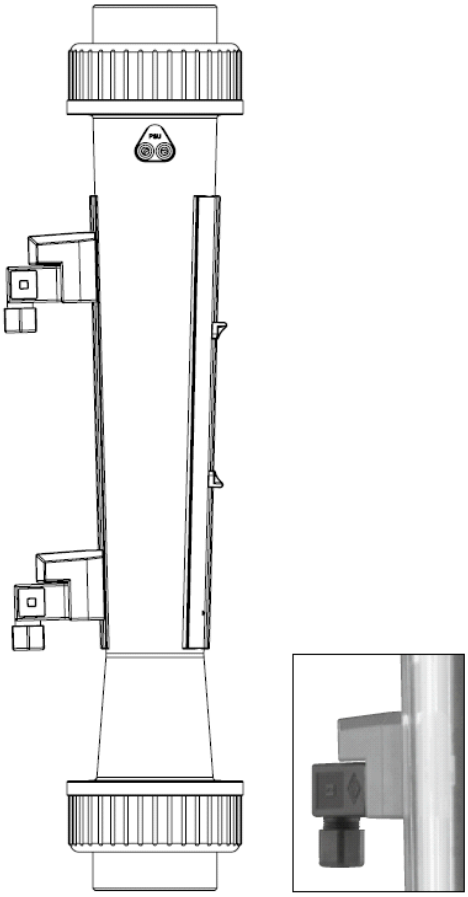
For float-type flow meters M 335 / M 350 / M 123

Use

The limit value contacts Z 40 and Z 42 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.

Order numbers

Z 40 min.	17.100.686
Z 42 max.	17.100.687

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

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.