

All Plastic Variable Area Flowmeter



DS1113



Features:

- 3-50,000 L/h liquid in 13 ranges each with 10:1 operating span
- 6 different overall lengths from 165-350mm
- Choice of tube materials depending upon operating temperature and pressure up to 100°C and 10 Bar
- Positive pipe O-ring sealing requiring less tightening effort when installing
- Standard or magnetic floats (where alarms required) of identical mass ensure identical flow ranges when changing

FLOWMETER MODEL DFM

All Plastic construction variable area flowmeters providing excellent chemical resistance and readability, supplied complete with end connections, either for solvent welding to PVC pipe or threaded. Up to three bi-stable alarms can be fitted to each unit or if required, a 4-20 mA transmitter is available.

OPTIONS

Bi-Stable Alarms

Operation	Close on rising/falling options
Contacts	240V/5A max
Electrical Connection	2m PVC lead
Protection	IP65

Transmitter

Output	4 to 20mA (Active)
Range	10 to 100%
Loop Resistance Resolution	1KΩ max
Power Supply Protection	0.1%
Electrical Connection	24VDC, 50mA
	IP65
	6-way DIN45322 plug

TECHNICAL DATA

Tube Material	PVC(Options: Polyamide, Polysulphon)
Float Material	PVDF
Float Trap	PVDF
Union Nut	PVC (Options: Cast Iron, St/steel)
Inserts	PVC (Options: St/steel)
O-rings	EPDM (Options: Viton, Teflon)
Max. Pressure	10 Bar operating (at 20°C)
Installation	Vertical - Flow upwards. For best results ensure pipework vertical to within 2-3°
Nominal Size	DN 25 to DN 65 (1" to 2 1/2")
Temperature	PVC 60°C PA 75°C PSU 100°C
Connections	Rigid PVC socket connections for adhesive pipe coupling, BSP threads available Special stainless steel inserts available

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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SIZING TABLE DFM 165

Nominal Size DN Ins BSP	Socket Bore 'd' mm	Air Range Nm ³ /h 1 Bar Abs 20° C	Water Range L/h 20° C	PVC Tube		Polyamide Tube		Polysulphon Tube	
				Std Float	Mag Float	Std Float	Mag Float	Std Float	Mag Float
3/8"	17.1	0.2-1.0	3-22	47500	47683	46516	47699	47532	47715
3/8"	17.1	0.2-2.5	5-50	47501	47684	46517	47700	47533	47716
3/8"	17.1	0.6-3.6	10-90	47502	47685	46518	47701	47534	47717
3/8"	17.1	0.5-9.0	25-250	47503	47686	46519	47702	47535	47718

SIZING TABLE DFM 170

1/2"	21.4	0.4-2.8	5-50	47504	47687	47520	47703	47536	47719
1/2"	21.4	0.8-6.2	15-150	47505	47688	47521	47704	47537	47720
1/2"	21.4	0.9-9.5	25-250	47506	47689	47522	47705	47538	47721
1/2"	21.4	2.0-15.0	40-400	47507	47690	47523	47706	47539	47722

SIZING TABLE DFM 185

3/4"	26.5	0.5-5.0	15-150	47508	47691	47524	47707	47540	47723
3/4"	26.5	2.0-14	40-400	47509	47692	47525	47708	47541	47724
3/4"	26.5	2.5-22	60-600	47510	47693	47526	47709	47542	47725
3/4"	26.5	4-34	100-1000	47511	47694	47527	47710	47543	47726

SIZING TABLE DFM 200

3/4"	26.5	0.5-5.0	15-150	47508	47691	47524	47707	47540	47723
3/4"	26.5	2.0-14	40-400	47509	47692	47525	47708	47541	47724
3/4"	26.5	2.5-22	60-600	47510	47693	47526	47709	47542	47725
3/4"	26.5	4-34	100-1000	47511	47694	47527	47710	47543	47726

SIZING TABLE DFM 335

1"	33.6	0.7-5.5	15-150	46271	47575	46298	47602	46325	47629
1"	33.6	2.5-20	6-600	46272	47576	46299	47603	46326	47630
1"	33.6	4-34	100-1000	46273	47577	46300	47604	46327	47631
1 1/2"	48.3	8-70	200-2000	46282	47586	46309	47613	46336	47640
1 1/2"	48.3	10-90	300-3000	46283	47587	48310	47614	46337	47641
2"	60.3	22-190	600-6000	46287	47591	46314	47618	46341	47645
2"	60.3	35-300	1000-10000	46288	47592	46315	47619	46342	47646
2 1/2"	75.2	80-720	2500-25000	46293	47597	46320	47624	46347	47651
2 1/2"	75.2	400-1500	10000-50000	46294	47598	46321	47625	46348	47652

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SIZING TABLE DFM 350

Nominal Size DN Ins BSP	Socket Bore 'd' mm	Air Range Nm ³ /h 1 Bar Abs 20 °C	Water Range L/h 20 °C	PVC Tube		Polyamide Tube		Polysulphon Tube	
				Std Float	Mag Float	Std Float	Mag Float	Std Float	Mag Float
1"	33.6	0.7-5.5	15-150	46274	47578	46301	47605	46328	47632
1"	33.6	1.0-10.0	30-300	46275	47579	46302	47606	46329	47633
1"	33.6	2.5-20	60-600	46276	47580	46303	47607	46330	47634
1"	33.6	4-34	100-1000	46277	47581	46304	47608	46331	47635
1 ¼"	42.2	5-50	150-1500	46279	47583	48306	47610	46333	47637
1 ¼"	42.2	8.5-76	250-2500	46280	47584	46307	47611	46334	47638
1 ½"	48.3	8-70	200-2000	46284	47588	46311	47615	46338	47642
1 ½"	48.3	10-90	300-3000	46285	47589	46312	47616	46339	47643
2"	60.3	14-125	400-4000	46289	47593	46316	47620	46343	47647
2"	60.3	22-190	600-6000	46290	47594	46317	47621	46344	47648
2"	60.3	35-300	1000-10000	46291	47595	46318	47622	46345	47649
2 ½"	75.2	50-500	1500-15000	46295	47599	46322	47626	46349	47653
2 ½"	75.2	80-720	2500-25000	46296	47600	46323	47627	46350	47654
2 ½"	75.2	400-1500	10000-50000	46297	47601	46324	47628	46351	47655

SERIES DFM 335-350

SERIES DFM 165 - 170 - 185 - 200

Part	No.	Description
1	1	Measuring Tube
2	1	Float
3	2	Float Trap
4	2	Union nut
5	2	Insert
6	2	O-rings
7	2	Set-point Indicator

Part	No.	Description
1	1	Measuring Tube
2	1	Float
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5	2	Insert
6	2	O-rings
7	2	Set-point Indicator

SERIES DFM 335-350

	Standard	Option
Tube	PVC	Polyamide, Polysulphon
Float	PVDF	
Float Trap	PVDF	
Union nut	PVC	Cast Iron, St/steel
Insert	PVC	St/steel
O-rings	EPDM	Viton, Teflon

General Note

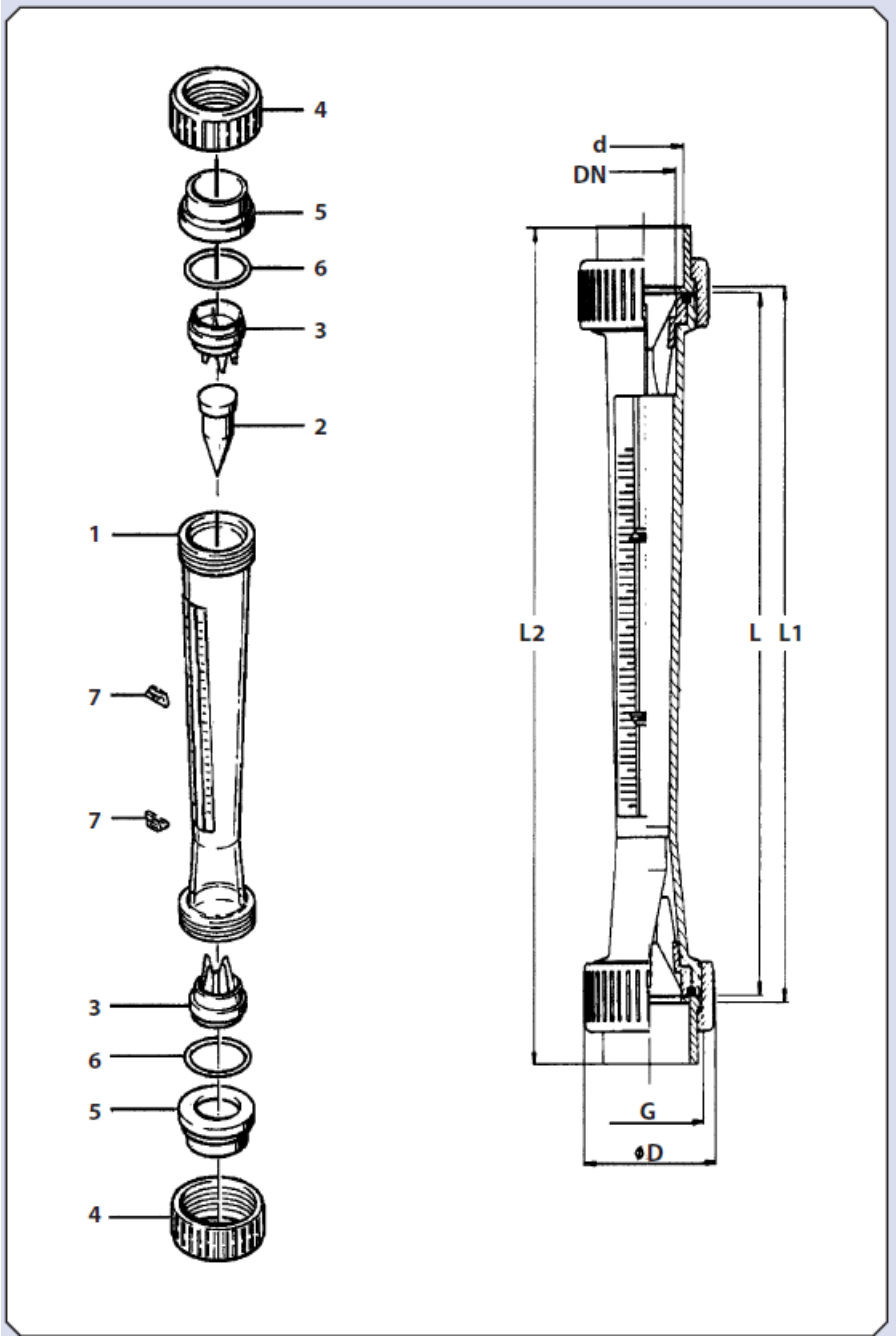
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Series	Dimensional mm		BSPF						P(1)	Weight in grams
	DN	D	DN Inches	G	D	L	L1	L2		
165	10	16	3/8"	3/4"	35	165	171	199	4.6	78
170	15	20	1/2"	1"	43	170	176	208	4.5	95
185	20	25	3/4"	1 1/4"	53	185	191	229	6.1	125
200	25	32	1"	1 1/2"	60	200	206	250	8.3	250
335	25	32	1"	1 1/2"	60	335	341	385	16.2	435
335	40	50	1 1/2"	2 1/4"	83	335	341	430	16.2	1.005
335	50	63	2"	2 3/4"	103	335	341	417	27.6	1.470
335	65	75	2 1/2"	3 1/2"	122	335	341	429	40.7	1.900
350	25	32	1"	1 1/2"	60	350	356	400	16.2	475
350	32	40	1 1/4"	2"	72	350	356	408	16.2	710
350	40	50	1 1/2"	2 1/4"	83	350	356	418	16.2	1.050
350	50	63	2"	2 3/4"	103	350	356	432	27.6	1.530
350	65	75	2 1/2"	3 1/2"	122	350	356	444	40.7	2.100

- (1) Pressure loss with water at 20°C
- (2) PVDF version approx. +40%

Every effort has been made during the preparation of this document to ensure the accuracy of statements and specifications. However, we do not accept liability for damage, injury, loss or expense caused by errors or omissions made. We reserve the right to withdraw or amend products or documentation without notice.



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