



Rotameter (float-type flow meter)

- Flow measurement for translucent liquids and gases
- DN 10 to DN 65 mm

Product variants described in the data sheet may differ from the product presentation and description.

Can be combined with



Type TEU007
Limit value switch

Type description

If a medium with sufficient flow rate flows from bottom to top through a vertically inserted measuring tube, then the floated element is raised so far, and the equilibrium between the lift strength of the medium itself and the weight of the floated element is adjusted. Since the average flow rate is proportional to the flow quantity per time unit, the determined equilibrium corresponds to the flow volume. Flow meters with solenoid floated elements can be equipped with limit value contacts.



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1. General technical data

Note:

Other variants, non standard scales for gases, mediums with special viscosity or special measuring units on request

Product properties	
Dimensions	Further information can be found in chapter "4. Dimensions" on page 4.
Material	
Measuring tube	PVC-U, TROGAMID (PA), polysulfone (PSU)
Float	Stainless steel 1.4571, standard for water (without and with solenoid) PP (polypropylene), standard for air (without and with solenoid)
Inserts	PVDF
Connection	Standard PVC-U glued socked, metric On request: - PVC-U glued socked according to ASTM/ANSI - PVC-U thread according to ISO 228/1, RP DIN 2999 - PP-H weld socket according to DIN 16962 - PP welded connection - Malleable cast iron thread according to ISO 228/1, RP DIN 2999 - Stainless steel 1.4571 thread according to ISO 228/1, RP DIN 2999
Seal (O-ring)	EPDM (FPM on request)
Nominal diameter	DN 10...DN 65
Nominal pressure	Measurement tube in PVC-U: up to + 25 °C max. 10 bar ¹⁾ , at + 60 °C max. 1.5 bar ¹⁾ Measurement tube in TROGAMID: up to + 50 °C max. 10 bar ¹⁾ Measurement tube in polysulfone: up to + 70 °C max. 10 bar ¹⁾ , at + 100 °C max. 6 bar ¹⁾
Indicating scale	Absolute in l/h for water 2 adjustable limit indicators
Option	Control switches
Performance data	
Measuring range	3...50,000 l/h
Measuring accuracy	
Measuring accuracy for overall length up to 200 mm, Class 4	Total error of measured value: ± 3 % Total error of final value: ± 1 % According to VDE/VDI 3513 sheet 2
Measuring accuracy for overall length 350 mm, Class 2.5	Total error of measured value: ± 1.875 % Total error of final value: ± 0.625 % According to VDE/VDI 3513:1:2014 and 3513 - 2:2008
Medium data	
Operating medium	Neutral and aggressive fluids
Environment and installation	
Installation	Vertical, medium flow from bottom to top
Ambient temperature	Max. + 60 °C

1.) Pressure data: overpressure to atmospheric pressure

2. Approvals and conformities

2.1. General notes

- The approvals and conformities listed below must be stated when making enquiries. This is the only way to ensure that the product complies with all required specifications.
- Not all available variants can be supplied with the below mentioned approvals or conformities.

2.2. Conformity

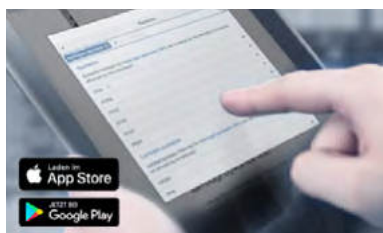
In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

2.3. Standards

The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

3. Materials

3.1. Bürkert resistApp



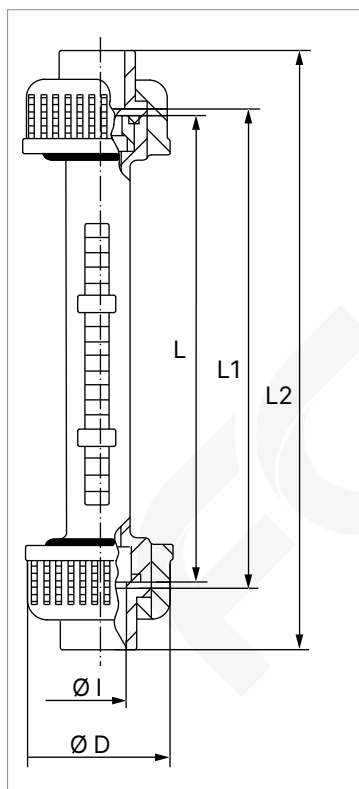
Bürkert resistApp – Chemical resistance chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start chemical resistance check](#)

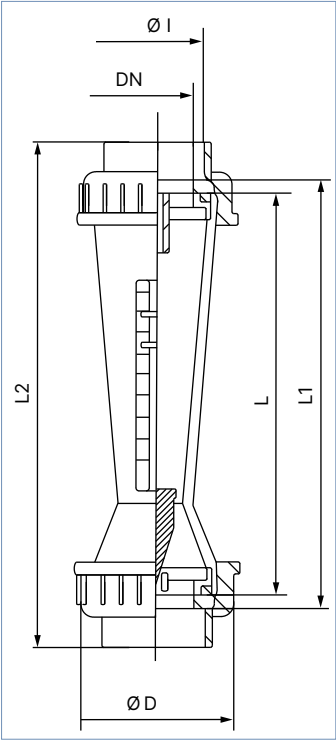
4. Dimensions

4.1. Overall length 165, 170, 185, 200 mm



DN	Ø I (internal socket)	L	L1	L2	Ø D
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
10	16	165	171	199	35
15	20	170	176	208	43
20	25	185	191	229	60
25	32	200	206	250	68

4.2. Overall length 350 mm



DN	Ø I (internal socket)	D	L	L1	L2
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
20	25	60	350	356	394
25	32	68	350	356	400
32	40	72	350	356	408
40	50	83	350	356	418
50	63	103	350	356	432
65	75	122	350	356	444

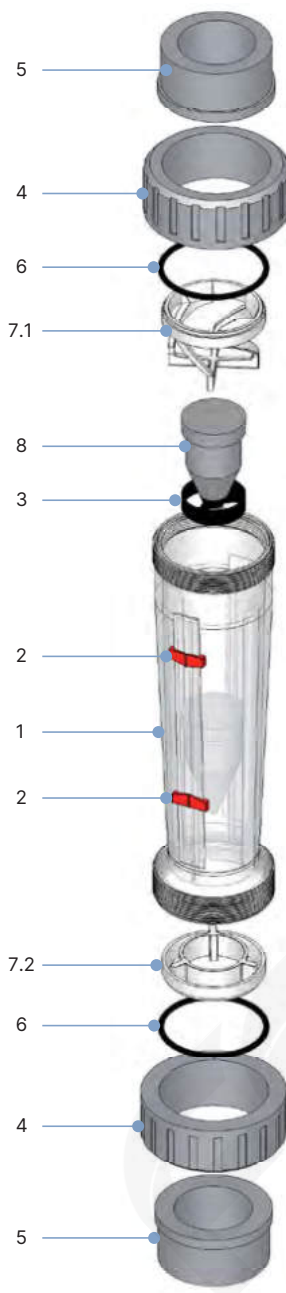
5. Performance specifications

5.1. Pressure/temperature relation

Temperature [°C]		-20	-10	0	+5	+10	+20	+25	+30	+40	+50	+60	+70	+80	+90	+100
Tube material	Connection material	Operating pressure [bar]														
PVC-U	PVC-U	–	–	–	10	10	10	10	8	6	3.5	1.5	–	–	–	–
	PVC-C	–	–	–	10	10	10	10	8	6	3.5	1.5	–	–	–	–
	PP	–	–	–	10	10	10	10	8	6	3.5	1.5	–	–	–	–
	Malleable cast iron	–	–	–	10	10	10	10	8	6	3.5	1.5	–	–	–	–
	Stainless steel	–	–	–	10	10	10	10	8	6	3.5	1.5	–	–	–	–
TROGAMID (PA)	PVC-U	–	–	–	10	10	10	10	8	6	3.5	1.5	–	–	–	–
	PVC-C	–	–	–	10	10	10	10	8.5	6.5	5	3.5	–	–	–	–
	PP	–	–	–	10	10	10	10	8.5	7	5.5	4	–	–	–	–
	Malleable cast iron	15	15	15	15	15	15	15	13.5	12	10.7	9.5	–	–	–	–
	Stainless steel	15	15	15	15	15	15	15	13.5	12	10.7	9.5	–	–	–	–
Polysulfone (PSU)	PVC-U	–	–	–	10	10	10	10	8	6	3.5	1.5	–	–	–	–
	PVC-C	–	–	–	10	10	10	10	8.5	6.5	5	3.5	2.5	1.5	–	–
	PP	–	–	10	10	10	10	10	8.5	7	5.5	4	2.7	1.5	0.8	–
	Malleable cast iron	15	15	15	15	15	15	15	14	13	12	11	9.7	8.5	7.7	6
	Stainless steel	15	15	15	15	15	15	15	14	13	12	11	9.7	8.5	7.7	6

6. Product design and assembly

6.1. Product assembly



No.	Element	Material	Quantity
1	Tube	Transparent PVC-U	1
		TROGAMID (PA)	
		Polysulfone (PSU)	
2	Visual display	PVDF	2
3 ¹⁾	Float wing	PVDF	1
4	Union nut	PVC-U	2
		PVC-C	
		PP	
		Stainless steel	
5	Insert component	Malleable cast iron	2
		PVC-U	
		PVC-C	
		PP	
		Stainless steel	
6	O-ring	EPDM	2
		FPM	
7.1	Upper floating stop	PVDF	1
7.2 ²⁾	Lower floating stop	PVDF	1
8	Float	Stainless steel	1
		PP	

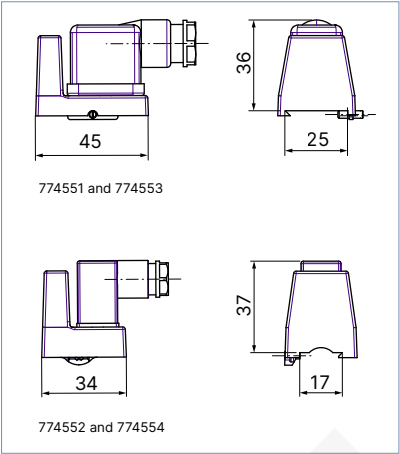
1. Only for measured value 10,000...50,000 l/h
2. From DN 25 onwards

7. Product accessories

7.1. Control switches

Technical data	
Switching voltage	250 V AC/DC
Inrush current	Max. 0.5 A
Switching capacity	Max. 30 W
Contact assembly	Micro switch, bistable
Contact resistance	< 200 mΩ
Insulation resistance	> 10 ¹¹ Ω
Protection class	IP65
Installation	On guide rod of the flow meter

Variant	Switching hysteresis float way	Control switches		For float flow meter
		Closed, when float is:	Opened, when float is:	
Min. contact	1...2 mm	Below contact	Above contact	See "8. Ordering information" on page 8
	1...2 mm	Above contact	Below contact	See "8. Ordering information" on page 8



8. Ordering information

8.1. Bürkert eShop



Bürkert eShop – Easy ordering and quick delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

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8.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

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8.3. Ordering chart

Overall length 165 mm, measuring tube in PSU

Note:

Dimensions see [“4. Dimensions” on page 4](#)

Nominal diameter	Connection Ø I	Measuring range water	Pressure loss	Article no.	
	[mm]	[l/h]	[mbar]	Without solenoid	With solenoid
10	16	3...30	7	774479 	774482 
10	16	4...40	7	774480 	774483 
10	16	10...100	7	774481 	774484 

Overall length 170 mm, measuring tube in PSU

Note:

Dimensions see [“4. Dimensions” on page 4](#)

Nominal diameter	Connection Ø I	Measuring range water	Pressure loss	Article no.	
	[mm]	[l/h]	[mbar]	Without solenoid	With solenoid
15	20	10...100	9	774485 	774488 
15	20	15...160	9	774486 	774489 
15	20	20...250	9	774487 	774490 

Overall length 185 mm, measuring tube in PSU

Note:

Dimensions see "4. Dimensions" on page 4

Nominal diameter	Connection Ø I	Measuring range water	Pressure loss	Article no.	
	[mm]	[l/h]	[mbar]	Without solenoid	With solenoid
20	25	25...250	12	774883 	774887 
20	25	40...400	12	774884 	774888 
20	25	50...600	12	774885 	774889 
20	25	100...1100	12	774886 	774890 

Overall length 200 mm, measuring tube in PSU

Note:

Dimensions see "4. Dimensions" on page 4

Nominal diameter	Connection Ø I	Measuring range water	Pressure loss	Article no.	
	[mm]	[l/h]	[mbar]	Without solenoid	With solenoid
25	32	40...400	15	774491 	774494 
25	32	50...600	15	774492 	774495 
25	32	100...1000	15	774493 	774496 

Overall length 350 mm, measuring tube in PVC-U

Note:

Dimensions see "4. Dimensions" on page 4

Nominal diameter	Connection Ø I	Measuring range water	Pressure loss	Article no.	
	[mm]	[l/h]	[mbar]	Without solenoid	With solenoid
25	32	40...400	16	774497 	774499 
25	32	60...640	16	774498 	774500 
25	40	100...1000	16	770431 	770444 
32	40	150...1600	22	774501 	774503 
32	40	200...2500	22	774502 	774504 
40	50	200...2500	25	774505 	774508 
40	50	400...4000	25	774506 	774509 
40	50	500...5000	25	774507 	774510 
50	63	600...6000	33	770437 	774511 
50	63	1000...10000	33	770438 	774512 
65	75	2000...20000	42	770440 	774514 
65	75	10000...50000	42	774513 	774515 

Overall length 350 mm, measuring tube in PA

Note:

Dimensions see "4. Dimensions" on page 4

Nominal diameter	Connection Ø I	Measuring range water	Pressure loss	Article no.	
	[mm]	[l/h]	[mbar]	Without solenoid	With solenoid
25	32	40...400	16	774516 	774518 
25	32	60...640	16	774517 	774519 
25	32	100...1000	16	770379 	770392 
32	40	150...1600	22	774520 	774522 
32	40	200...2500	22	774521 	774523 
40	50	200...2500	25	774524 	774527 
40	50	400...4000	25	774525 	774528 
40	50	500...5000	25	774526 	774529 
50	63	6000...6000	33	770385 	770398 
50	63	1000...10000	33	770386 	770399 
65	75	2000...20000	42	770388 	770401 
65	75	10000...50000	42	774530 	774531 

Overall length 350 mm, measuring tube in PSU

Note:

Dimensions see "4. Dimensions" on page 4

Nominal diameter	Connection Ø I	Measuring range water	Pressure loss	Article no.	
	[mm]	[l/h]	[mbar]	Without solenoid	With solenoid
25	32	40...400	16	774532 	774534 
25	32	60...640	16	774533 	774535 
25	32	100...1000	16	770405 	770418 
32	40	150...1600	22	774536 	774538 
32	40	200...2500	22	774537 	774539 
40	50	200...2500	25	774540 	774543 
40	50	400...4000	25	774541 	774544 
40	50	500...5000	25	774542 	774545 
50	63	600...6000	33	770411 	770424 
50	63	1000...10000	33	770412 	770425 
65	75	2000...20000	42	770414 	770427 
65	75	10000...50000	42	774546 	774547 

8.4. Ordering chart accessories

Control switches

Variant	For float flow meter	Article no.
Min. contact	Overall length 200 and 350 mm	774551 
	Overall length 165, 170 and 185 mm	774552 
Max. contact	Overall length 200 and 350 mm	774553 
	Overall length 165, 170 and 185 mm	774554 