

Flow Meter GKL



- Large, easily visible scale
- Set-point indicator
- Optionally switching output

Characteristics

A float moves in a transparent conical measurement tube, relative to the flow. The position of the float depends on the volume flow (weight force versus resistance to flow), and indicates the flow rate on the scaled measurement tube.

Technical data

Switch	optional reed switch	
Nominal width	DN 25..50	
Process connection	malleable cast iron, female thread Rp 1 " ..Rp 2 " PVC glue socket Ø32..63	
Metering range	water: 100..6400 l/min	for details see table "Ranges"
	air: 1..250 m ³ /h	
Q_{max.}	water: to 6400 l/min	
	air: to 250 m ³ /h	
Tolerance	±3 % of full scale value	
Pressure resistance	malleable cast iron	PS 15 bar
	PVC	PS 10 bar
Medium temperature	malleable cast iron	-20..+60 °C optionally 5..100 °C measurement tube made from PSU
	PVC	5..60 °C
Ambient temperature	malleable cast iron	-20..+60 °C
	PVC	5..60 °C
Media	water, gases	
Electrical data	see "Additional devices for GK / GKL"	

Materials medium-contact	<i>malleable cast iron connection:</i> PA 6-3-T, malleable cast iron, Viton float made from PP or 1.4571 optionally, measurement tube made from PSU	<i>PVC connection:</i> PA 6-3-T, PVC, Viton float made from PP or 1.4571 optionally, measurement tube made from PSU
Non-medium-contact materials	PA	
Weight	see table "Dimensions and weights"	
Installation location	vertical inwards flow from below	

Ranges

●=Standard ○=Optional

Medium water / float PP

The details in the table correspond to a vertical inwards flow from below.

	Metering range l/h	Magnet		Type
		without	with	
DN 25 Rp 1 "	100 - 1000	●		GKL-025.TW1000PO
			○	GKL-025.TW1000PM
●			GKL-032.TW1000PO	
		○	GKL-032.TW1000PM	
DN 32 Rp 1 1/4 "	150 - 1600	●		GKL-032.TW1600PO
			○	GKL-032.TW1600PM
DN 40 Rp 1 1/2 "	200 - 2500	●		GKL-040.TW1600PO
			○	GKL-040.TW1600PM
	300 - 3300	●		GKL-040.TW2500PO
			○	GKL-040.TW2500PM
DN 50 Rp 2 "	200 - 2500	●		GKL-050.TW2500PO
			○	GKL-050.TW2500PM
	400 - 4000	●		GKL-050.TW4000PO
			○	GKL-050.TW4000PM
600 - 6400	●		GKL-050.TW6400PO	
		○	GKL-050.TW6400PM	

Medium water / float stainless steel

The details in the table correspond to a vertical inwards flow from below.

	Metering range l/h	Magnet		Type
		without	with	
DN 25 Rp 1 "	100 - 1000	○		GKL-025.TW1000KO
			○	GKL-025.TW1000KM
DN 32 Rp 1 1/4 "	150 - 1600	○		GKL-032.TW1500KO
			○	GKL-032.TW1500KM
DN 40 Rp 1 1/2 "	300 - 2500	○		GKL-040.TW2500KO
			○	GKL-040.TW2500KM
DN 50 Rp 2 "	400 - 4000	○		GKL-050.TW4000KO
			○	GKL-050.TW4000KM
600 - 6400	600 - 6400	○		GKL-050.TW6400KO
			○	GKL-050.TW6400KM

Medium air / float PP

The details in the table correspond to a vertical inwards flow from below, with the medium at a temperature of 0 °C and a pre-pressure of 1.013 bar.

Rp	Metering range m ³ /h	Magnet		Type
		without	with	
DN 25	1 - 10	○		GKL-025.TL0100PO
Rp 1 "	1.25 - 10		○	GKL-025.TL0100PM
	1.5 - 16	○		GKL-025.TL0160PO
			○	GKL-025.TL0160PM
	3 - 25		○	GKL-025.TL0250PM
DN 32	1.5 - 16	○		GKL-032.TL0160PO
Rp 1 1/4 "	2 - 25	○		GKL-032.TL0250PO
	4 - 40	○		GKL-032.TL0400PO
			○	GKL-032.TL0400PM
	6 - 64		○	GKL-032.TL0640PM
DN 40	2 - 25	○		GKL-040.TL0250PO
Rp 1 1/2 "	4 - 40	○		GKL-040.TL0400PO
	5 - 50	○		GKL-040.TL0500PO
	5 - 60		○	GKL-040.TL0600PM
DN 50	4 - 40	○		GKL-050.TL0400PO
Rp 2 "	5 - 65	○		GKL-050.TL0640PO
	10 - 100	○		GKL-050.TL1000PO
	15 - 160		○	GKL-050.TL1600PM
	20 - 250		○	GKL-050.TL2500PM

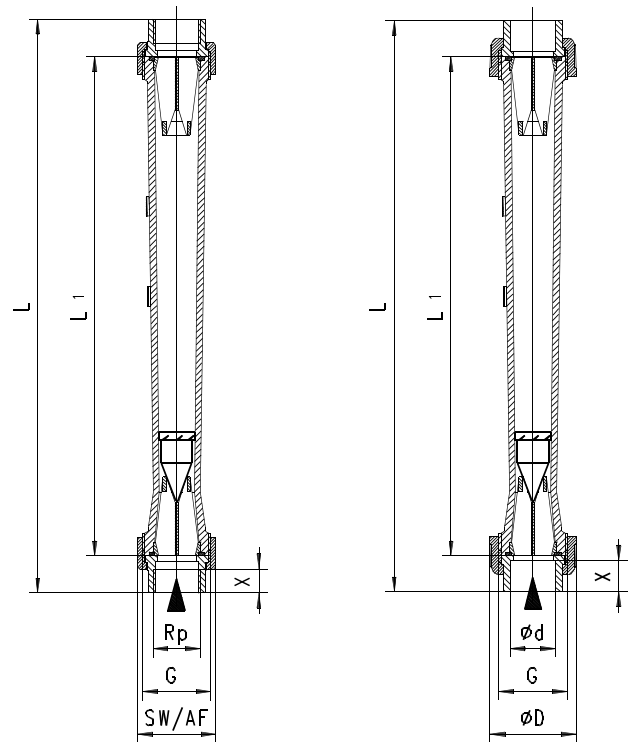
Dimensions and weights

Connection malleable, cast iron female thread

Rp	Types	L	L1	G	SW	X	Weight kg
Rp 1 "	GKL-025G..	402	350	G 1 1/2	55	17	0.8
Rp 1 1/4 "	GKL-032G..	410	350	G 2	66	19	1.3
Rp 1 1/2 "	GKL-040G..	414	350	G 2 1/4	74	20	1.8
Rp 2 "	GKL-050G..	420	350	G 2 3/4	90	24	2.4

Connection PVC, glue socket

DN	Types	d	G	L	L1	X	D	Weight kg
25	GKL-025M..	32	G 1 1/2	400	350	17	60	0.4
32	GKL-032M..	40	G 2	408	350	19	74	0.8
40	GKL-040M..	50	G 2 1/4	418	350	20	83	1.1
50	GKL-050M..	63	G 2 3/4	433	350	24	103	1.5



Handling and operation

- Include straight calming section of 5 x DN in inlet and outlet
- If the media are dirty, install a filter (use magnetic filter for ferritic components).
- Pay attention to the operating temperature/pressure

Connection		Pressure range in bar			
		malleable cast iron		PVC	
Measurement tube		PA 6-3-T	PSU	PA 6-3-T	PSU
Temperature °C	-20	15.0	-	-	-
	-10	15.0	-	-	-
	0	15.0	-	-	-
	5	15.0		10.0	
	10	15.0		10.0	
	20	15.0		10.0	
	25	15.0		10.0	
	30	13.5	15.0	8.0	
	40	12.0	13.0	6.0	
	50	10.7	12.0	3.5	
	60	9.5	11.0	1.5	
	70	-	9.7	-	
	80	-	8.5	-	
	90	-	7.7	-	
100	-	6.0	-		

Ordering code

GKL - 1. 2. 3. 4. 5.

●=Standard ○=Option

1. Nominal width							
025	DN 25 - Rp 1" or Ø32						
032	DN 32 - Rp 1 1/4" or Ø40						
040	DN 32 - Rp 1 1/2" or Ø50						
050	DN 50 - Rp 2" or Ø63						
3. Process connection							
G	female thread, Rp made from malleable cast iron						
M	screw connection with glue socket made of PVC						
3. Switching current tube							
T	PA 6-3-T						
P	PSU						
4. Display range H ₂ O for vertical inwards flow							
W1000	100 - 1000 l/h	●	○				●
		●	○	○	○		●
W1600	150 - 1600 l/h	●	○				●
		●	○	○	○		●
W2500	200 - 2500 l/h	●	○			●	●
	300 - 2500 l/h			○	○	○	
W3300	300 - 3300 l/h	●	○				●
W4000	400 - 4000 l/h	●	○	○	○	●	
W6400	600 - 6400 l/h	●	○	○	○	●	

Display range air (0 °C 1.013 bar abs.) for vertical inwards flow

L0100	1.00 - 10 m³/h	○					○
	1.25 - 10 m³/h		○				○
L0160	1.50 - 16 m³/h	○	○				○
		○					○
L0250	2.00 - 25 m³/h	○				○	○
	3.00 - 25 m³/h		○				○
L0400	4.00 - 40 m³/h	○	○				○
L0500	5.00 - 50 m³/h	○					○
L0600	5.00 - 60 m³/h		○				○
L0640	6.00 - 64 m³/h		○				○
		○					○
L1000	10.00 - 100 m³/h	○				○	
L1600	15.00 - 160 m³/h		○			○	
L2500	20.00 - 250 m³/h		○			○	
5. Float							
PO	PP						
PM	PP with magnet						
KO	stainless steel						
KM	stainless steel with magnet						

Options

- Metering ranges and special scales under defined operating pressures / temperatures

Accessories

- GKEH-1251 / GKEL-1252
- GKK-1270
- GKI-1272

Ordering information

- Specify direction of flow, medium, and display range.
- For gases, state pressure (relative or absolute), temperature and medium (e.g. air) (request display range)