

**Product information**

**GKL-025..050G/M**

# Variable area 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**

<b>Switch</b>	optional reed switch		
<b>Nominal width</b>	DN 25..50		
<b>Process connection</b>	malleable cast iron, female Rp 1 " ..Rp 2 " PVC glue socket Ø32..63		
<b>Metering range</b>	water: 20..6400 l/h air: 0,4..250 Nm³/h	For details see table „ranges“	
<b>Q<sub>max.</sub></b>	water: up to 6400 l/min air: up to 250 Nm³/h		
<b>Tolerance</b>	±3 % of full scale value		
<b>Max. process pressure</b>	malleable cast iron 15 bar up to 25°C PVC 10 bar up to 25°C	See also table „ pressure ranges in bar“	
<b>Medium temperature</b>	malleable cast iron -20..+60 °C optional 5..100 °C metering tube PSU PVC 5..60 °C		
<b>Ambient temperature</b>	malleable cast iron -20..+60 °C PVC 5..60 °C		
<b>Media</b>	water, gases		
<b>Electrical data</b>	See "Additional devices for GK / GKL"		
<b>Materials medium-contact</b>	Malleable cast iron connection: PA 6-3-T, malleable cast iron, FPM float PP or ss.1.4571 Optionally measuring tube made of PSU	PVC - connection: PA 6-3-T, PVC, FPM float PP or ss.1.4571 optionally measuring tube PSU	
<b>Non-medium-contact materials</b>	PA		
<b>Weights</b>	see table "Dimensions and weights"		
<b>Installation</b>	vertical, flow from bottom to top		

**Ranges**

**Medium water / float PP**

The details in the table corresponds to vertical installation, flow from bottom to top.

●=Standard ○=optional

	Metering range	Magnet		Type code	
		none	with		
DN 25 Rp 1 "	20 – 250 l/h	●		GKL-025..W0250PO	
			○	GKL-025..W0250PM	
	40 – 400 l/h	●		GKL-025..W0400PO	
			○	GKL-025..W0400PM	
60 – 640 l/h	●		GKL-025..W0640PO		
		○	GKL-025..W0640PM		
100 – 1000 l/h	●		GKL-025..W1000PO		
		○	GKL-025..W1000PM		
	DN 32 Rp 1 ¼ "	100 – 1000 l/h	●		GKL-032..W1000PO
				○	GKL-032..W1000PM
150 – 1600 l/h	●		GKL-032..W1600PO		
			○	GKL-032..W1600PM	
200 – 2500 l/h	●		GKL-032..W2500PO		
			○	GKL-032..W2500PM	
DN 40 Rp 1 ½ "	150 – 1600 l/h	●		GKL-040..W1600PO	
				○	GKL-040..W1600PM
	200 – 2500 l/h	●		GKL-040..W2500PO	
				○	GKL-040..W2500PM
300 – 3300 l/h	●		GKL-040..W3300PO		
			○	GKL-040..W3300PM	
DN 50 Rp 2 "	0.2 – 2.5 m³/h	●		GKL-050..W0025PO	
				○	GKL-050..W0025PM
	0.4 – 4 m³/h	●		GKL-050..W0040PO	
				○	GKL-050..W0040PM
	0.6 – 6.4 m³/h	●		GKL-050..W0064PO	
				○	GKL-050..W0064PM

**Medium water / float stainless steel**

The details in the table corresponds to vertical installation, flow from bottom to top.

●=Standard ○=optional

	Metering range	Magnet		Type-code
		none	with	
DN 25 Rp 1 "	40 – 400 l/h	●		GKL-025..W0400KO
				○
	60 – 640 l/h	●		GKL-025..W0640KO
				○
	100 – 1000 l/h	●		GKL-025..W1000KO
				○

## Product information

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### Medium water / float stainless steel

The details in the table corresponds to vertical installation, flow from bottom to top. ●=Standard ○=optional

	Metering range	Magnet		Type-code
		none	with	
DN 32 Rp 1 1/4 "	150 – 1600 l/h	●		GKL-032..W1600KO
			○	GKL-032..W1600KM
	200 – 2500 l/h	●		GKL-032..W2500KO
			○	GKL-032..W2500KM
DN 40 Rp 1 1/2 "	200 – 2500 l/h	●		GKL-040..W2500KO
			○	GKL-040..W2500KM
	400 – 4000 l/h	●		GKL-040..W4000KO
			○	GKL-040..W4000KM
	500 – 5000 l/h	●		GKL-040..W5000KO
			○	GKL-040..W5000KM
DN 50 Rp 2 "	0.4 – 4 m³/h	●		GKL-050..W0040KO
			○	GKL-050..W0040KM
	0.6 – 6.4 m³/h	●		GKL-050..W0064KO
			○	GKL-050..W0064KM
	1 – 10 m³/h	●		GKL-050..W0100KO
			○	GKL-050..W0100KM

### Medium air / float PP

The details in the table corresponds to vertical installation, flow from bottom to top with air temperature 20°C and absolute pressure 1.013 bar ●=Standard ○=optional

Rp	Metering range Nm³/h	Magnet		Type code	
		none	with		
DN 25 Rp 1 "	0.4 – 4	●		GKL-025..L0040PO	
	0.5 – 6.5	●		GKL-025..L0065PO	
	1 – 10	●		GKL-025..L0100PO	
	1.25 – 10			○	GKL-025..L0100PM
		1.5 – 16	●		GKL-025..L0160PO
				○	GKL-025..L0160PM
				○	GKL-025..L0250PM
			○	GKL-025..L0400PM	
DN 32 Rp 1 1/4 "	1.5 – 16	●		GKL-032..L0160PO	
	2 – 25	●		GKL-032..L0250PO	
	4 – 40		●		GKL-032..L0400PO
				○	GKL-032..L0400PM
	6 – 64		○	GKL-032..L0640PM	
10 – 100		○	GKL-032..L0100PM		
DN 40 Rp 1 1/2 "	2 – 25	●		GKL-040..L0250PO	
	4 – 40	●		GKL-040..L0400PO	
	5 – 50	●		GKL-040..L0500PO	
	5 – 60		○	GKL-040..L0600PM	
	10 – 100		○	GKL-040..L1000PM	
	15 – 120		○	GKL-040..L1200PM	
DN 50 Rp 2 "	4 – 40	●		GKL-050..L0400PO	
	6 – 64	●		GKL-050..L0640PO	
	10 – 100		●		GKL-050..L1000PO
				○	GKL-050..L1000PM
	15 – 160		○	GKL-050..L1600PM	
20 – 250		○	GKL-050..L2500PM		

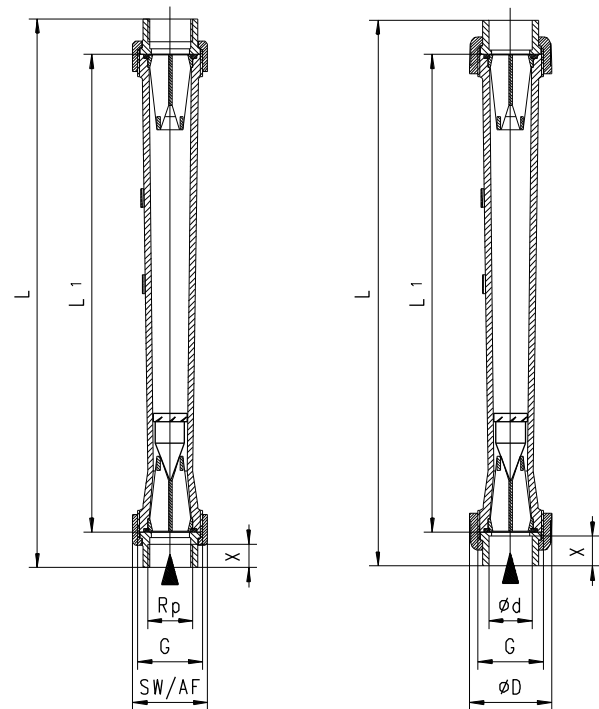
### Dimensions and weights

#### Connection malleable cast iron and female thread

Rp	Type	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	Type	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



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### 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	
Measuring 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	-		

### Options

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

### Accessories

- GKEH-1251 / GKEL-1252  
Limit switch N.O. / N.C. 250 V AC 0,2A 10 VA
- GKK-1270  
Transducer 0...10 kOhm
- GKI-1272  
Transducer 4...20 mA

### 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)

### Ordering code

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

Available combinations of nominal size, measuring ranges and floats can be found in the tables above under "Ranges".

<b>1. Nominal width</b>	
025	DN 25 - Rp 1 " or Ø32
032	DN 32 - Rp 1 1/4 " or Ø40
040	DN 40 - Rp 1 1/2 " or Ø50
050	DN 50 - Rp 2 " or Ø63
<b>2. Process connection</b>	
G	female thread Rp, malleable cast iron
M	Screw connection with glue socket PVC
<b>3 Metering tube</b>	
T	PA crystal clear
P	PSU
<b>4. Display range H<sub>2</sub>O for vertical inwards flow</b>	
W0250	20 – 250 l/h
W0400	40 – 400 l/h
W0640	60 – 640 l/h
W1000	100 - 1000 l/h
W1600	150 - 1600 l/h
W2500	200 – 2500 l/h
W3300	300 – 3300 l/h
W4000	400 – 4000 l/h
W5000	500 – 5000 l/h
W0025	0.2 – 2.5 m <sup>3</sup> /h
W0040	0.4 – 4 m <sup>3</sup> /h
W0064	0.6 – 6.4 m <sup>3</sup> /h
W0100	1 – 10 m <sup>3</sup> /h
<b>Display range air (20 °C 1,013 bar abs.) for vertical inwards flow</b>	
L0040	0.4 – 4.0 Nm <sup>3</sup> /h
L0065	0.5 – 6.5 Nm <sup>3</sup> /h
L0100	1 - 10 Nm <sup>3</sup> /h
L0100	1.25 – 10 Nm <sup>3</sup> /h
L0160	1.5 – 16 Nm <sup>3</sup> /h
L0250	2 – 25 Nm <sup>3</sup> /h
L0250	3 – 25 Nm <sup>3</sup> /h
L0400	4 – 40 Nm <sup>3</sup> /h
L0500	5 – 50 Nm <sup>3</sup> /h
L0600	5 – 60 Nm <sup>3</sup> /h
L0640	6 – 64 Nm <sup>3</sup> /h
L1000	10 – 100 Nm <sup>3</sup> /h
L1200	15 – 120 Nm <sup>3</sup> /h
L1600	15 – 160 Nm <sup>3</sup> /h
L2500	20 – 250 Nm <sup>3</sup> /h
<b>5. Float</b>	
PO	PP without magnet
PM	PP with magnet
KO	Stainless steel without magnet
KM	Stainless steel with magnet