

Product information

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

Switch	optional reed switch	
Nominal width	DN 25..50	
Process connection	malleable cast iron, female Rp 1 " ..Rp 2 " PVC glue socket Ø32..63	
Metering range	water: 20..6400 l/h air: 0,4..250 Nm³/h	For details see table „ranges“
Q_{max.}	water: up to 6400 l/min air: up to 250 Nm³/h	
Tolerance	±3 % of full scale value	
Max. process pressure	malleable cast iron 15 bar up to 25°C PVC 10 bar up to 25°C	See also table „ pressure ranges in bar“
Medium temperature	malleable cast iron -20..+60 °C optional 5..100 °C metering tube 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	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
Non-medium-contact materials	PA	
Weights	see table "Dimensions and weights"	
Installation	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	
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
			○	GKL-025..W0400KM
	60 – 640 l/h	●		GKL-025..W0640KO
			○	GKL-025..W0640KM
100 – 1000 l/h	●		GKL-025..W1000KO	
		○	GKL-025..W1000KM	

Product information

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
		●		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	

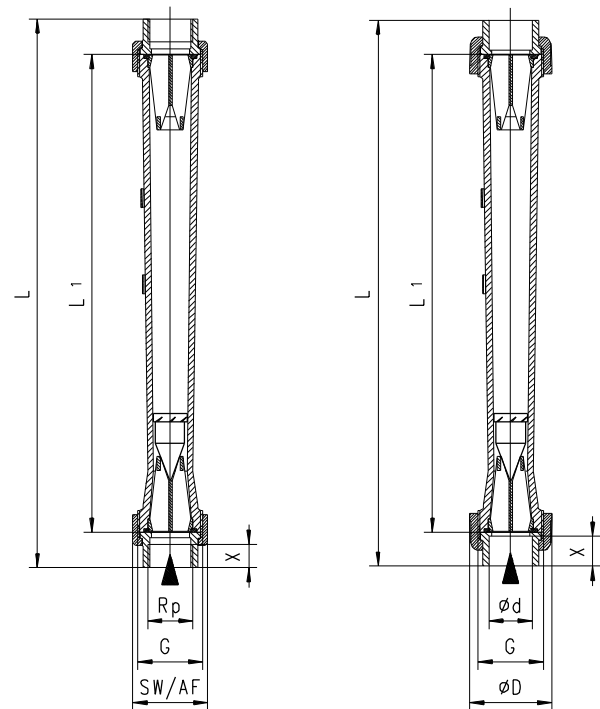
Dimensions and weights

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



Product information

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 0,2 A 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".

1. Nominal width	
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
2. Process connection	
G	female thread Rp, malleable cast iron
M	Screw connection with glue socket PVC
3 Metering tube	
T	PA crystal clear
P	PSU
4. Display range H ₂ O for vertical inwards flow	
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 ³ /h
W0040	0.4 – 4 m ³ /h
W0064	0.6 – 6.4 m ³ /h
W0100	1 – 10 m ³ /h
Display range air (20 °C 1,013 bar abs.) for vertical inwards flow	
L0040	0.4 – 4.0 Nm ³ /h
L0065	0.5 – 6.5 Nm ³ /h
L0100	1 - 10 Nm ³ /h
L0100	1.25 – 10 Nm ³ /h
L0160	1.5 – 16 Nm ³ /h
L0250	2 – 25 Nm ³ /h
L0250	3 – 25 Nm ³ /h
L0400	4 – 40 Nm ³ /h
L0500	5 – 50 Nm ³ /h
L0600	5 – 60 Nm ³ /h
L0640	6 – 64 Nm ³ /h
L1000	10 – 100 Nm ³ /h
L1200	15 – 120 Nm ³ /h
L1600	15 – 160 Nm ³ /h
L2500	20 – 250 Nm ³ /h
5. Float	
PO	PP without magnet
PM	PP with magnet
KO	Stainless steel without magnet
KM	Stainless steel with magnet