

**Product Information**

**GK-010..025G / M**

# Variable area Flow Meter GK



- 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 10..25	
<b>Process connection</b>	malleable cast iron, female thread Rp 3/8 " ..Rp 1 " PVC glue socket Ø16..32 (further process connections available on request)	
<b>Metering range</b>	water: 2..650 l/min Air: 0,02..37,5 Nm³/h	for details see table "Ranges"
<b>Q<sub>max</sub></b>	water: to 650 l/min air: to 37,5 Nm³/h	
<b>Tolerance</b>	±1 % of the full scale value and ±3 % of the measured 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 optionally +5..+100 °C measurement tube made from 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 made from PP or s.s.1.4571 optionally, measurement tube made from PSU	PVC connection: PA 6-3-T, PVC, FPM float made from PP or s.s.1.4571 optionally, measurement tube made from PSU
<b>Non-medium-contact materials</b>	PA	
<b>Weight</b>	see table "Dimensions and weights"	
<b>Installation location</b>	vertical inwards flow from below	

**Ranges**

**Medium water / float PP**

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

●=Standard ○=Optional

	Metering range l/h	Magnet		Type
		With out	with	
DN 10 Rp 3/8 "	2 - 25	●		GK-010..W0025PO
			○	GK-010..W0025PM
	2 - 40	●		GK-010..W0040PO
			○	GK-010..W0040PM
	5 - 60	●		GK-010..W0060PO
			○	GK-010..W0060PM
10 - 100	●		GK-010..W0100PO	
		○	GK-010..W0100PM	
15 - 160	●		GK-010..W0160PO	
		○	GK-010..W0160PM	
DN 15 Rp 1/2 "	20 - 250	●		GK-015..W0160PO
			○	GK-015..W0160PM
	20 - 250	●		GK-015..W0250PO
		○	GK-015..W0250PM	
DN 20 Rp 3/4 "	10 - 160	●		GK-020..W0160PO
			○	GK-020..W0160PM
	20 - 250	●		GK-020..W0250PO
			○	GK-020..W0250PM
	40 - 400	●		GK-020..W0400PO
			○	GK-020..W0400PM
60 - 640	●		GK-020..W0640PO	
		○	GK-020..W0640PM	
DN 25 Rp 1 "	20 - 250	●		GK-025..W0250PO
			○	GK-025..W0250PM
	40 - 400	●		GK-025..W0400PO
			○	GK-025..W0400PM
	60 - 640	●		GK-025..W0640PO
			○	GK-025..W0640PM

## Product Information

GK-010..025G / M

### Medium water / float stainless steel

The details in the table correspond to a vertical inwards flow from below, and increasing flow rate.

●=Standard ○=Optional

	Metering range l/h	Magnet		Type
		with- out	with	
DN 10 Rp 3/8 "	4 - 40	●		GK-010..W0040KO
			○	GK-010..W0040KM
	5 - 60	●		GK-010..W0060KO
			○	GK-010..W0060KM
	10 - 100	●		GK-010..W0100KO
			○	GK-010..W0100KM
15 - 160	●		GK-010..W0160KO	
		○	GK-010..W0160KM	
DN 15 Rp 1/2 "	20 - 160	●		GK-015..W0160KO
			○	GK-015..W0160KM
20 - 250	●		GK-015..W0250KO	
		○	GK-015..W0250KM	
	●		GK-020..W0250KO	
		○	GK-020..W0250KM	
DN 20 Rp 3/4 "	40 - 400	●		GK-020..W0400KO
			○	GK-020..W0400KM
	60 - 600	●		GK-020..W0600KO
DN 25 Rp 1 "	40 - 400	●		GK-025..W0400KO
			○	GK-025..W0400KM
	50 - 650	●		GK-025..W0650KO
			○	GK-025..W0650KM

### Medium air / float PP

The details in the table correspond to a vertical inwards flow from below, with the medium at a temperature of 20 °C and absolute pressure of 1.013 bar.

●=Standard ○=Optional

	Metering range Nm <sup>3</sup> /h	Magnet		Type
		with- out	with	
DN 10 Rp 3/8 "	0.02 - 0.36	●		GK-010..L0003PO
	0.05 - 0.55	●		GK-010..L0005PO
	0.10 - 0.90	●		GK-010..L0009PO
	0.15 - 1.50	●		GK-010..L0015PO
	0.20 - 2.40	●		GK-010..L0024PO
DN 15 Rp 1/2 "	0.10 - 0.90	●		GK-015..L0009PO
	0.15 - 1.50	●		GK-015..L0015PO
	0.20 - 2.40	●		GK-015..L0024PO
	0.40 - 3.80	●		GK-015..L0038PO
	0.40 - 4.80	●		GK-015..L0048PO
DN 20 Rp 3/4 "	0.20 - 2.50	●		GK-020..L0025PO
	0.25 - 3.75	●		GK-020..L0037PO
	0.50 - 5.50	●		GK-020..L0055PO
	0.75 - 6.50		○	GK-020..L0065PM
DN 25 Rp 1 "	1.00 - 10.00	●		GK-020..L0100PO
	0.40 - 4.00	●		GK-025..L0040PO
	0.50 - 6.00	●		GK-025..L0060PO
	1.00 - 10.00	●		GK-025..L0100PO
			○	GK-025..L0100PM
	1.00 - 16.00	●		GK-025..L0160PO
	1.00 - 15.00		○	GK-025..L0150PM
	3.00 - 24.00		○	GK-025..L0240PM
	5.00 - 37.50		○	GK-025..L0375PM

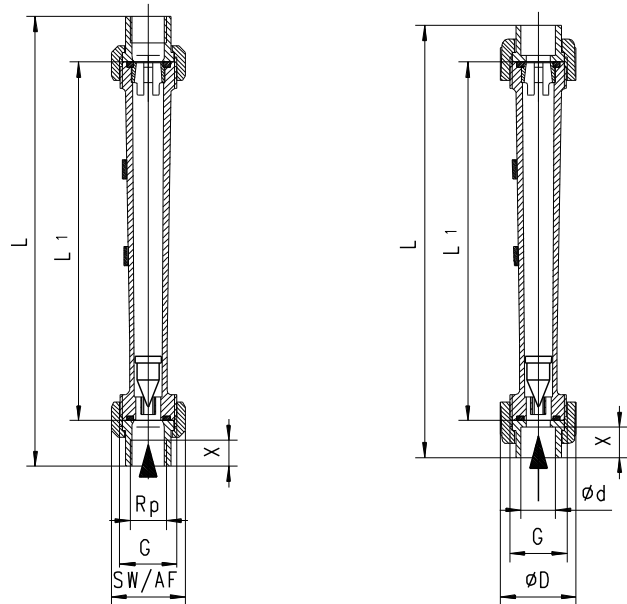
### Dimensions and weights

#### Connection malleable, cast iron female thread

Rp	Types	L	L1	G	SW	X	Weight kg
Rp 3/8 "	GK-010G..	207	165	G 3/4	32	12	0.2
Rp 1/2 "	GK-015G..	215	170	G 1	41	13	0.3
Rp 3/4 "	GK-020G..	230	185	G 1 1/4	50	16	0.5
Rp 1 "	GK-025G..	250	200	G 1 1/2	55	19	0.7

#### Connection PVC, glue socket

DN	Types	d	G	L	L1	X	D	Weight kg
10	GK-010M..	16	G 3/4	201	165	12	35	0.1
15	GK-015M..	20	G 1	208	170	13	43	0.2
20	GK-020M..	25	G 1 1/4	229	185	16	53	0.6
25	GK-025M..	32	G 1 1/2	250	200	19	59	0.7



## Product Information

GK-010..025G / M

### 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).
- It must be ensured that the values given for voltage, current, and power are not exceeded.
- When switched on, a load must be connected in series.
- The electrical details apply to ohmic loads. Capacitive, inductive and lamp loads must be operated using a protective circuit.
- Pay attention to the operating temperature/pressure

Connection		Pressure range in bar			
		Maleable 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	-		

### Options

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

### Accessories

- GKEH-1256 / GKEL-1257  
Limit switch n.o. / n.c. 250 V AC 0.2 A 10 VA for types GK-010 / GK-015 / GK-020
- GKEH-1251 / GKEL-1252  
Limit switch n.o. / n.c. 250 V AC 0.2 A 10 VA for type GK-025
- GKK-1271  
transducer 0...10 kOhm for types GK-010 / GK-015 / GK-020 / GK 025
- GKI-1273  
transducer 4...20 mA; for types GK-010 / GK-015 / GK-020
- GKI-1273-1  
ransducer 4...20mA; for type GK-025

Data sheets for accessories of limit switches / transducers can be found at separate category "Accessoires for GK / GKL".

### 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

GK -  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.</b>	<b>Nominal width</b>	
	010	DN 10 - Rp $\frac{3}{8}$ " or Ø16
	015	DN 15 - Rp $\frac{1}{2}$ " or Ø20
	020	DN 20 - Rp $\frac{3}{4}$ " or Ø25
	025	DN 25 - Rp 1" or Ø32
<b>2.</b>	<b>Process connection</b>	
	G	female thread Rp; malleable cast iron
	M	Screw donnection with glue socket PVC
<b>3.</b>	<b>Metering tube</b>	
	T	PA crystal clear
	P	PSU
<b>4.</b>	<b>Display range H<sub>2</sub>O for vertical inwards flow</b>	
	W0025	2 - 25 l/h
	W0040	2 - 40 l/h
	W0040	4 - 40 l/h
	W0060	5 - 60 l/h
	W0100	10 - 100 l/h
	W0160	15 - 160 l/h
	W0250	20 - 250 l/h
	W0400	40 - 400 l/h
	W0600	60 - 600 l/h
	W0640	60 - 640 l/h
	W0650	50 - 650 l/h
	<b>Display range air (20 °C 1,013 bar abs.) for vertical inwards flow</b>	
	L0003	0.02 - 0.36 Nm <sup>3</sup> /h
	L0005	0.05 - 0.55 Nm <sup>3</sup> /h
	L0009	0.10 - 0.90 Nm <sup>3</sup> /h
	L0015	0.15 - 1.50 Nm <sup>3</sup> /h
	L0024	0.20 - 2.40 Nm <sup>3</sup> /h
	L0025	0.20 - 2.50 Nm <sup>3</sup> /h
	L0037	0.25 - 3.75 Nm <sup>3</sup> /h
	L0038	0.40 - 3.80 Nm <sup>3</sup> /h
	L0040	0.40 - 4.00 Nm <sup>3</sup> /h
	L0048	0.40 - 4.80 Nm <sup>3</sup> /h
	L0055	0.50 - 5.50 Nm <sup>3</sup> /h
	L0060	0.50 - 6.00 Nm <sup>3</sup> /h
	L0065	0.75 - 6.50 Nm <sup>3</sup> /h
	L0100	1.00 - 10.00 Nm <sup>3</sup> /h
	L0150	1.00 - 15.00 Nm <sup>3</sup> /h
	L0160	1,00 - 16.00 Nm <sup>3</sup> /h
	L0240	3.00 - 24.00 Nm <sup>3</sup> /h
	L0375	5.00 - 37.50 Nm <sup>3</sup> /h
<b>5.</b>	<b>Float</b>	
	PO	PP without magnet
	PM	PP with magnet
	KO	Stainless steel without magnet
	KM	Stainless steel with magnet