

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

| | | |
|----------------------------|---|---|
| Switch | optional reed switch | |
| Nominal width | DN 10.0.25 | |
| Process connection | malleable cast iron, female thread Rp 3/8 " .. Rp 1 " PVC glue socket Ø16..32 (further process connections available on request) | |
| Metering range | water: 20..640 l/min | for details see table "Ranges" |
| Q_{max.} | air: 0,02..16 m ³ /h | |
| | water: to 640 l/min air: to 16 m ³ /h | |
| Tolerance | ±1 % of the full scale value and ±3 % of the measured 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 |
|-------------------|-----------------------|----------|-----------------|-----------------|
| | | With out | with | |
| DN 10 Rp 3/8 " | 2 - 25 | ● | | GK-010GTW0025PO |
| | | | ○ | GK-010GTW0025PM |
| | 2 - 40 | ● | | GK-010GTW0040PO |
| | | | ○ | GK-010GTW0040PM |
| | 5 - 60 | ● | | GK-010GTW0060PO |
| | | | ○ | GK-010GTW0060PM |
| 10 - 110 | ● | | GK-010GTW0110PO | |
| | | ○ | GK-010GTW0100PM | |
| DN 15 Rp 1/2 " | 15 - 160 | ● | | GK-010GTW0160PO |
| | | | ○ | GK-010GTW0160PM |
| | 20 - 250 | ● | | GK-015GTW0160PO |
| | | ○ | GK-015GTW0160PM | |
| DN 20 Rp 3/4 " | 10 - 160 | ● | | GK-020GTW0160PO |
| | | | ○ | GK-020GTW0160PM |
| | 20 - 250 | ● | | GK-020GTW0250PO |
| | | | ○ | GK-020GTW0250PM |
| | 40 - 400 | ● | | GK-020GTW0400PO |
| | | | ○ | GK-020GTW0400PM |
| 60 - 640 | ● | | GK-020GTW0640PO | |
| | | ○ | GK-020GTW0640PM | |
| DN 25 Rp 1 " | 20 - 250 | ● | | GK-025GTW0250PO |
| | | | ○ | GK-025GTW0250PM |
| | 40 - 400 | ● | | GK-025GTW0400PO |
| | | | ○ | GK-025GTW0400PM |
| | 60 - 640 | ● | | GK-025GTW0640PO |
| | | | ○ | GK-025GTW0640PM |

Medium water / float stainless steel

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

| | Metering range l/h | Magnet | | Type |
|------------------|-----------------------|--------------|-----------------|-----------------|
| | | with- out | with | |
| DN 10 Rp 3/8" | 4 - 40 | ○ | | GK-010.TW0040KO |
| | | | ○ | GK-010.TW0040KM |
| | 5 - 60 | ○ | | GK-010.TW0060KO |
| | | | ○ | GK-010.TW0060KM |
| | | ○ | | GK-010.TW0100KO |
| 10 - 100 | ○ | | GK-010.TW0100KM | |
| | ○ | | GK-010.TW0160KO | |
| DN 15 Rp 1/2" | 20 - 160 | ○ | | GK-015.TW0160KO |
| | | | ○ | GK-015.TW0160KM |
| DN 20 Rp 3/4" | 20 - 250 | ○ | | GK-015.TW0250KO |
| | | | ○ | GK-015.TW0250KM |
| | 30 - 400 | ○ | | GK-020.TW0250KO |
| | | | ○ | GK-020.TW0250KM |
| 60 - 600 | ○ | | GK-020.TW0400KO | |
| | | ○ | GK-020.TW0400KM | |
| | ○ | | GK-020.TW0600KO | |
| DN 25 Rp 1" | 40 - 400 | ○ | | GK-020.TW0600KM |
| | | | ○ | GK-025.TW0400KO |
| | 50 - 650 | ○ | | GK-025.TW0400KM |
| | | ○ | | GK-025.TW0650KO |
| | | | ○ | GK-025.TW0650KM |

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.

| | Metering range m³/h | Magnet | | Type |
|------------------|------------------------|--------------|------|-----------------|
| | | with- out | with | |
| DN 10 Rp 3/8" | 0.02 - 0.36 | ○ | | GK-010.TL0003PO |
| | 0.05 - 0.55 | ○ | | GK-010.TL0005PO |
| | 0.10 - 0.90 | ○ | | GK-010.TL0009PO |
| | 0.15 - 1.50 | ○ | | GK-010.TL0015PO |
| | 0.20 - 2.40 | ○ | | GK-010.TL0024PO |
| DN 15 Rp 1/2" | 0.40 - 3.80 | ○ | | GK-015.TL0038PO |
| | 0.40 - 4.80 | ○ | | GK-015.TL0048PO |
| DN 20 Rp 3/4" | 0.20 - 2.50 | ○ | | GK-020.TL0025PO |
| | 0.25 - 3.75 | ○ | | GK-020.TL0037PO |
| | 0.50 - 5.50 | ○ | | GK-020.TL0055PO |
| DN 25 Rp 1" | 0.75 - 6.50 | | ○ | GK-020.TL0065PM |
| | 0.40 - 4.00 | ○ | | GK-025.TL0040PO |
| | 0.50 - 6.00 | ○ | | GK-025.TL0060PO |
| | | ○ | | GK-025.TL0100PO |
| 1.00 - 10.00 | | | ○ | GK-025.TL0100PM |
| | 1.00 - 16.00 | ○ | | GK-025.TL0160PO |
| | | ○ | | GK-025.TL0160PM |

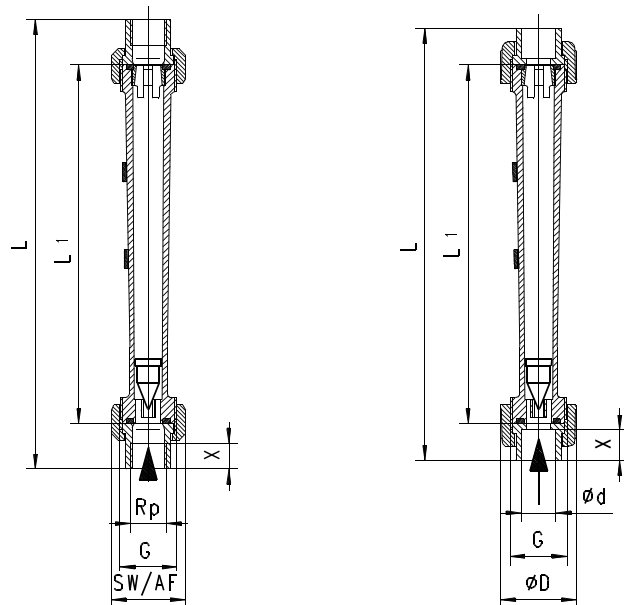
Dimensions and weights

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 |



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 | - | - | |

Ordering code

GK - 1. 2. 3. 4. 5.

●=Standard ○=Option

| 1. Nominal width | |
|---|---|
| 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 |
| 2. 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 | |
| W0025 | 2 - 25 l/h ● ○ ● |
| W0040 | 2 - 40 l/h ● ○ ● |
| | 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 ○ ○ ○ ○ ○ |

| Display range air (0 °C 1.013 bar abs.) for vertical inwards flow | | | | | | | | | |
|---|--------------|---|---|--|--|--|---|---|--|
| L0003 | 0.02 - 0.36 | ○ | | | | | | | |
| L0005 | 0.05 - 0.55 | ○ | | | | | | | |
| L0009 | 0.10 - 0.90 | ○ | | | | | | | |
| L0015 | 0.15 - 1.50 | ○ | | | | | | | |
| L0024 | 0.20 - 2.40 | ○ | | | | | | | |
| L0025 | 0.20 - 2.50 | ○ | | | | | ○ | | |
| L0037 | 0.25 - 3.75 | ○ | | | | | ○ | | |
| L0038 | 0.40 - 3.80 | ○ | | | | | | ○ | |
| L0040 | 0.40 - 4.00 | ○ | | | | | ○ | | |
| L0048 | 0.40 - 4.80 | ○ | | | | | | ○ | |
| L0055 | 0.50 - 5.50 | ○ | | | | | | ○ | |
| L0060 | 0.50 - 6.00 | ○ | | | | | ○ | | |
| L0065 | 0.75 - 6.50 | | ○ | | | | | ○ | |
| L0100 | 1.00 - 10.00 | ○ | ○ | | | | | ○ | |
| | 1.00 - 16.00 | | | | | | | ○ | |
| L0160 | 2.00 - 16.00 | ○ | ○ | | | | | ○ | |
| | | | | | | | | | |

| 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-1256 / GKEL-1257
- GKEH-1251 / GKEL-1252
- GKK-1271
- GKI-1273

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)