

# Quanto monopipe EQZK

for measuring sewer gas



## Technical characteristics quanto monopipe EQZK

- Principle of velocity measurement
- Special version for measuring sewer gas (without verification)
- Internal surfaces protected against corrosion with special coating
- Wear-resistant ceramic ball bearings
- Sizes Q 16 up to Q 400
- Dimensions DN 40, 50, 80 and 100
- Different Q-sizes per nominal width:
  - DN 40: Q 16 up to Q 65
  - DN 50: Q 16 up to Q 100
  - DN 80: Q 65 up to Q 250
  - DN 100: Q 100 up to Q 400
- Operational pressure max. 6 bar
- Meter without monopipe fitting EAS can be calibrated
- Pressure extraction connection inside the meter
- Counting device is in gas-free space
- Low starting value
- Designed for simple servicing (measurement-cartridge principle)
- Standard integrated flow strainer
- Short straight inlet lengths (2 × DN)
- Operation temperature range:
  - gas temperature –10°C up to +60°C
  - ambient temperature –20°C up to +70°C

## Options

- Pulse generators:
  - 2 x LF-IPG, 1 x can be retrofitted without breaking the manufacturing seal
  - MF-IPG

## Mounting and maintenance

- Mounting/dismounting of the meter element possible without disconnecting the monopipe fitting
- The monopipe fitting remaining in the pipe network enables mounting/dismounting of the meter element without tension from the pipe network
- Can be installed in any position from horizontal to vertical (turbine axis not suspended and roller counter axle always horizontal)

## Norms

- Developed and produced to Quality Standard ISO 9001

## Technical data quanto monopipe EQZK

| DN (mm) | Size  | Load range                    |                               | Operating pressure $p_{max}$ (bar) | Pulse generators (option)      |                                    |                                |
|---------|-------|-------------------------------|-------------------------------|------------------------------------|--------------------------------|------------------------------------|--------------------------------|
|         |       | $Q_{min}$ (m <sup>3</sup> /h) | $Q_{max}$ (m <sup>3</sup> /h) |                                    | LF<br>1 pulse = m <sup>3</sup> | 2nd LF<br>1 pulse = m <sup>3</sup> | MF<br>1 pulse = m <sup>3</sup> |
| 40/50   | Q 16  | 3                             | 25                            | 6                                  | 1                              | 1                                  | 0,01                           |
| 40/50   | Q 25  | 4                             | 40                            | 6                                  | 1                              | 1                                  | 0,01                           |
| 40/50   | Q 40  | 5                             | 65                            | 6                                  | 1                              | 1                                  | 0,01                           |
| 40/50   | Q 65  | 6                             | 100                           | 6                                  | 1                              | 1                                  | 0,01                           |
| 50      | Q 100 | 10                            | 160                           | 6                                  | 1                              | 1                                  | 0,01                           |
| 80      | Q 65  | 10                            | 100                           | 6                                  | 1                              | 1                                  | 0,01                           |
| 80      | Q 100 | 12                            | 160                           | 6                                  | 1                              | 1                                  | 0,01                           |
| 80      | Q 160 | 15                            | 250                           | 6                                  | 1                              | 1                                  | 0,01                           |
| 80      | Q 250 | 20                            | 400                           | 6                                  | 1                              | 1                                  | 0,01                           |
| 100     | Q 100 | 13                            | 160                           | 6                                  | 1                              | 1                                  | 0,01                           |
| 100     | Q 160 | 15                            | 250                           | 6                                  | 1                              | 1                                  | 0,01                           |
| 100     | Q 250 | 20                            | 400                           | 6                                  | 1                              | 1                                  | 0,01                           |
| 100     | Q 400 | 25                            | 650                           | 6                                  | 1                              | 1                                  | 0,01                           |

### Quanto monopipe EQZK



### Pulse generators

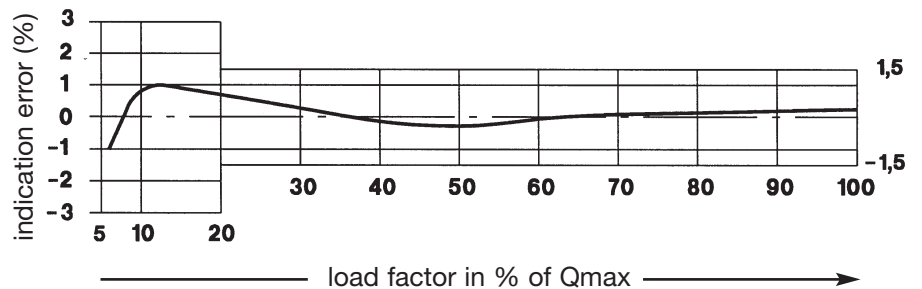
Connection of LF- and MF-pulse generators



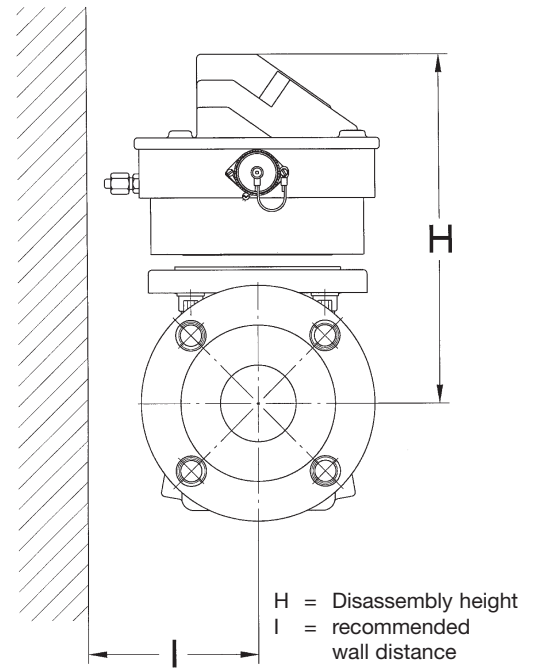
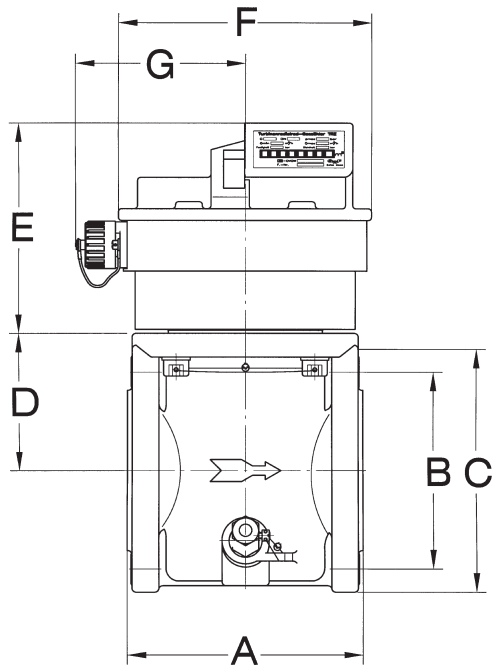
LF-pulse generator can be fitted by user without breaking the manufacturing seal



### Error curve



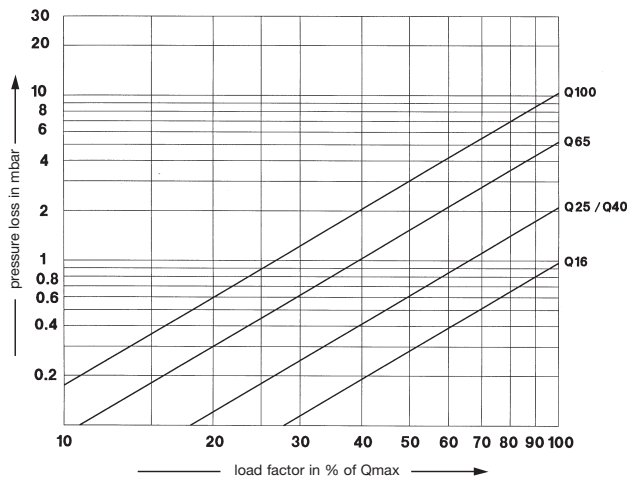
## Dimensional drawing



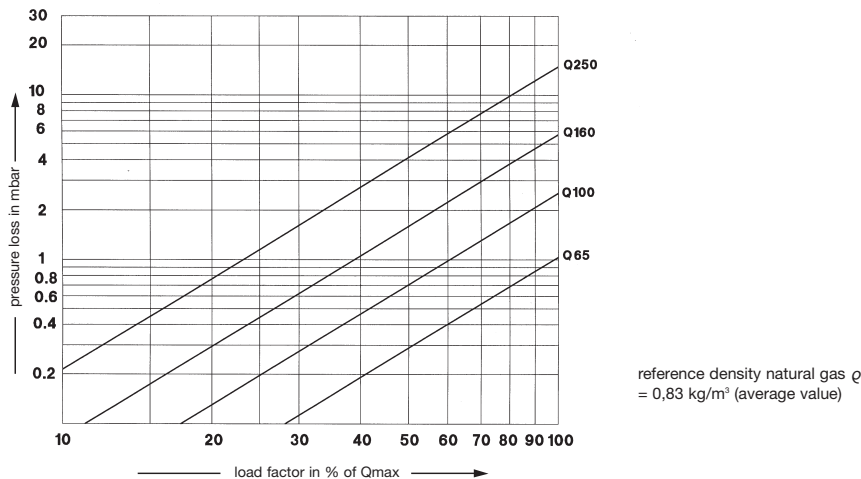
## Dimensions and weights monopipe fitting and quanto monopipe EQZK

| Art. No.  | Monopipe fitting EAS |           |                          | Dimensions (mm) |     |     |     |     |     |     |     | Weight (kg) |               |      |
|-----------|----------------------|-----------|--------------------------|-----------------|-----|-----|-----|-----|-----|-----|-----|-------------|---------------|------|
|           | Pipe connection      | For meter | Thread (G)<br>Flange (F) | A               | B   | C   | D   | E   | F   | G   | H   | I           | Meter element | EAS  |
| 82.50038  | G 1 1/2"             | DN 40     | PN 4 - G                 | 140             | -   | -   | 87  | 134 | 161 | 109 | 226 | 150         | 3,3           | 5,5  |
| 89.500014 | G 2"                 | DN 50     | PN 4 - G                 | 185             | -   | -   | 70  | 136 | 161 | 109 | 209 | 150         | 3,3           | 3,1  |
| 82.50039  | G 2"                 | DN 50     | PN 4 - G                 | 185             | -   | -   | 87  | 134 | 161 | 109 | 226 | 150         | 3,3           | 5,8  |
| 82.5036   | DN 50                | DN 50     | PN 16 - F<br>4-hole      | 150             | 125 | 165 | 87  | 134 | 161 | 109 | 226 | 150         | 3,3           | 10   |
| 89.5038   | DN 65                | DN 50     | PN 16 - F<br>4-hole      | 340             | 145 | 185 | 87  | 134 | 161 | 109 | 226 | 150         | 3,3           | 13   |
| 89.5039   | DN 80                | DN 50     | PN 16 - F<br>8-hole      | 380             | 160 | 200 | 87  | 134 | 161 | 109 | 226 | 150         | 3,3           | 16   |
| 82.8036   | DN 80                | DN 80     | PN 16 - F<br>8-hole      | 240             | 160 | 200 | 120 | 150 | 190 | 115 | 275 | 200         | 5,9           | 16   |
| 82.0036   | DN 100               | DN 100    | PN 16 - F<br>8-hole      | 300             | 180 | 220 | 130 | 170 | 220 | 125 | 305 | 200         | 9,1           | 24,2 |

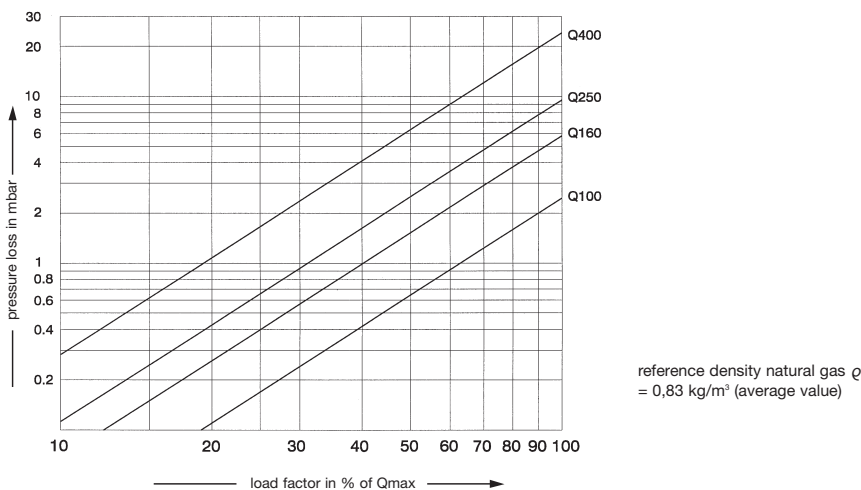
## Pressure loss gas meter DN 40/50



## Pressure loss gas meter DN 80



## Pressure loss gas meter DN 100



## Corrosion / Guarantee

All international components of the special version designed for bio- and sewer gas have a surface treatment, a so-called passive corrosion protection (surface treated monopipe adaptors available on request).

For the operation of EQZK with sewage gas we cannot grant any warranty of durability as the chemical condition of the gas has an important influence to the working life of the meter.

Factors as:

- sulfurated hydrogen
- humidity
- dirt
- dew point of gas

lead often to an unknown aggressiveness of the gas.

Ammonia in the sewer gas attack all nonferrous metals. Therefore, all surfaces of meter parts in contact with the biogas are PTFE-coated (Teflon).

## Installation and operation

- The sewer gas meter EQZK may not be used upstream the gas-storage unit.
- The gas should be filtered before passing the meter, so that the gas can be measured in dry condition and without impurities.
- The meter should not be installed at the lowest point of an installation in order to avoid any accumulation of condensate inside the meter.
- In case of strong condensation, a condensate drain should be provided upstream and downstream the meter.

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