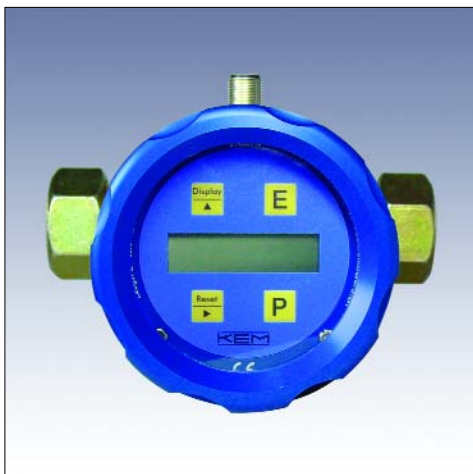
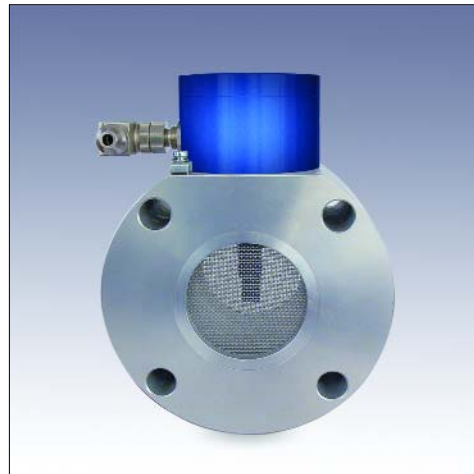




TGM Series Thermal Mass Flow Meter for Gases



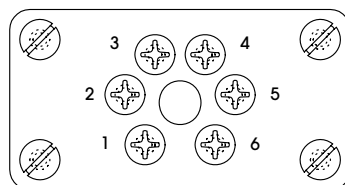
The TGM is suitable for the mass measurement of *pure, non-aggressive* gases and, on request, gas mixtures. It includes a heated sensor element which is cooled by the gas mass flow. The resultant temperature difference is in proportion with the gas mass flow and therefore a standard for the flow rate. The integral electronic provides a flow-proportional divider and analogue signal.

Technical Data

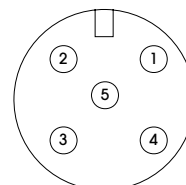
| | |
|---------------------|--|
| Measuring ranges: | TGM 025: 0.10 up to 60 kg/h TGM 040: 0.25 up to 150 kg/h TGM 065: 4.00 up to 250 kg/h |
| Linearity: | 2.0% of actual flow |
| Pressure drop: | <50 mbar |
| Housing: | aluminium |
| Protection class: | standard housing: IP 60 with protective cover and junction box: IP 65 with protective cover and plug: IP 67 |
| Connections: | TGM 025: Ermeto threads GE 28-PLM-ED TGM 040: Ermeto threads GE 42-PLM-ED TGM 065: Wafer ends for installation between flanges as per DIN 2632, DN 65, PN 16 |
| Pressure: | Pmax. 10 bar |
| Medium temperature: | -30 up to +70°C |

Electrical data

| | |
|--------------------------|---|
| Supply voltage: | 24 V DC controlled, $\pm 15\%$ /Imax. < 200 mA |
| Analogue output: | 0/4 up to 20 mA, 2-wire active, potential free, free scaleable |
| Max. load: | 800 Ω |
| Pulse/divider output: | Push pull or open collector: 0.01 - 0.1 - 1 kg, fout max = 2 Hz |
| Adjustable pulse width: | 1 ms/20 ms/50 ms |
| Response time of sensor: | ≤ 50 ms |
| Electrical connection: | junction box (cable sleeve: 7-13 mm) or 5-pin plain plug M12 pin connections 1 = UB +24 VDC, $\pm 15\%$ 2 = pulse/divider output 3 = GND 4 = -I 5 = +I 6 = shield (junction box only) |



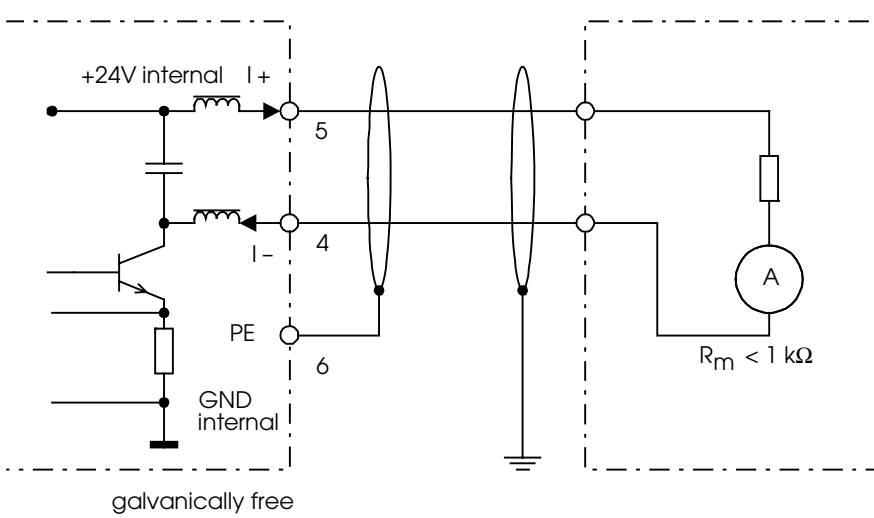
junction box



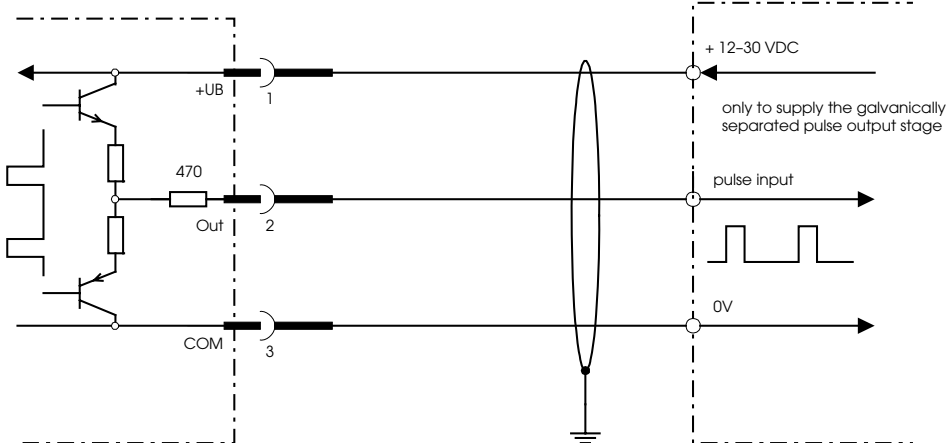
5-pin plug

Wiring Diagrams

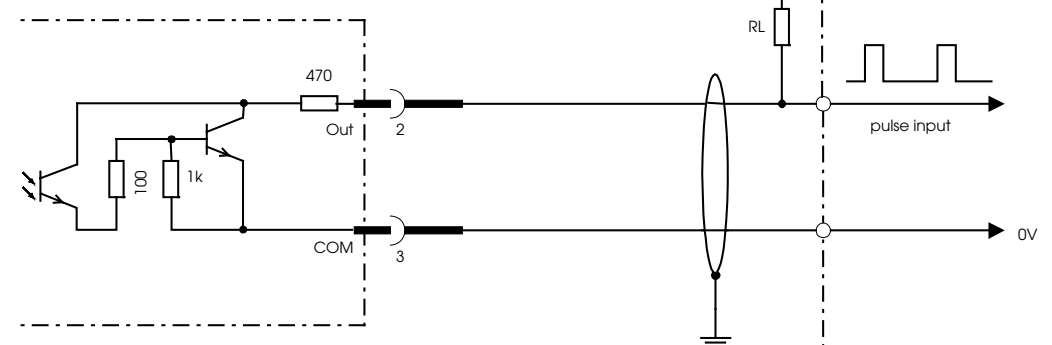
current output 0/4...20 mA



push pull output - J7 in position A

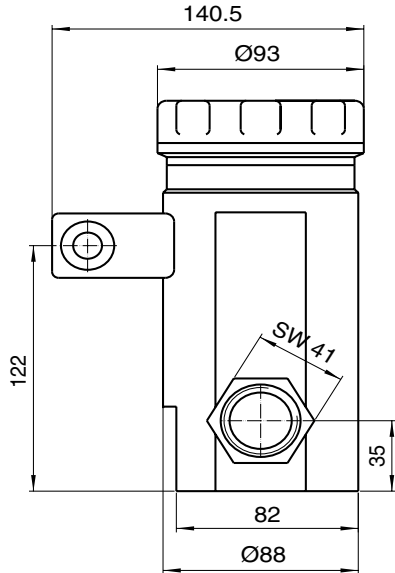


open collector - J7 in position B

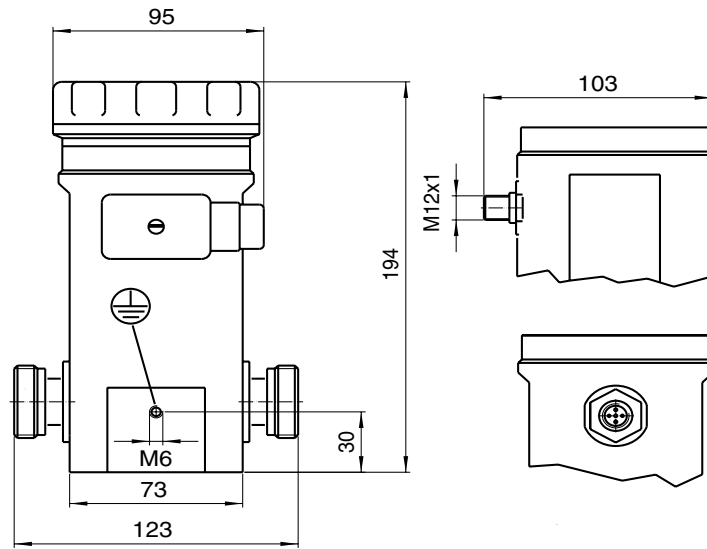


Dimensional Drawing TGM 025 (mm)

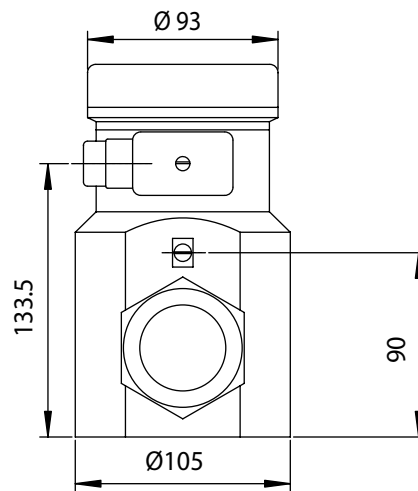
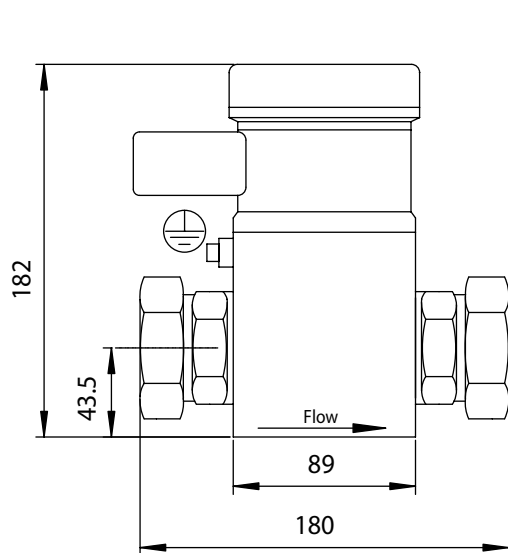
with junction box



with plug



Dimensional Drawing TGM 040 (mm)



Dimensional Drawing TGM 065 (mm)

