

truckflow

**New:**  
**Air, exhaust gas and EGR mass sensor**  
**for utility vehicles**

**truckflow**  
made by **systemc**



*Clever messen!*  
**systemc**  
CONTROLS

## Air, exhaust gas and EGR mass sensor for utility vehicles

Only the precise air and EGR mass control enables modern utility vehicle engines to meet the stringent exhaust emission regulations in Europe and North America. For this task, system Controls has developed Truckflow. This new and yet proven sensor technology can measure gas masses accurately, very

economically and with a high long-term stability. The measurement is highly resistant to corrosion and dirt. Unlike traditional gas mass sensors, the measurement has a much higher long-term stability. This ensures an optimum motor management in long-term operation.

### The best ideas are often very simple

Truckflow works according to the differential pressure principle. The patented measurement profile of Truckflow projects into the tube section and, during flow around it, generates a precise and exactly repeatable differential pressure. The remaining pressure drops of Truckflow are practically negligible. The differential pressure sensor produces a voltage signal. In the motor management, the flow can be very easily calculated from it.



Truckflow with  
snap-in dp-transmitter

### The main advantages of this measuring system:

- An appropriate choice of materials and coatings enables Truckflow to be used both in air and in dirty and hot gases (EGR, exhaust gas).
- It can be mounted upstream from the compressor in the fresh-air inlet as well as in the exhaust gas recirculation
- Particles and coatings on the surface do not cause any appreciable drift of the measured value.
- Using an intelligent measurement strategy, the long-term drift of the measured values is drastically reduced. Even after several years, a high measurement quality is ensured.
- Due to the optional separation of measuring probe and differential pressure sensor, Truckflow can be used even at very high temperatures up to far above 500°C.
- Truckflow is hardly bigger than a pressure or temperature sensor and enables a compact motor packaging.
- Truckflow is designed for the truck-lifetime.
- Truckflow is very cost-effective.

# Truckflow

## Solid measuring technology by experience

systeme Controls has been manufacturing flow sensors for extreme applications in the exhaust gas, steam, air, and sewage areas in their factory in Puchheim near Munich since 1994. Since many years, sensors from systeme Controls have proved successful under harshest conditions in world-wide industrial applications. Reference sensors are already in use in engine test stands since the mid-90's.

Since 2006, the sensor concept is now proving successful for the first time in use in a utility vehicle series: Truckflow is the sensor, which can really measure EGR! Truckflow is immediately available in series.

systeme Controls accompanies with competence your design, packaging, engine tests, flow simulation up to the implementation in your motor management.

## Technical data / Test samples

We can provide you with detailed technical data and samples for testing.



*Aluminium Truckflow for separate dp-transmitter mount*



## For more than 30 years abreast of their time!

Founded in 1974 as Planning and Engineering Agency, the members of the systec Group offer now innovative products for the most differentiated markets. With a staff of about 100 skilled and qualified people in the home plant at Puchheim near Munich we develop, produce and sale sophisticated solutions for the world market.

The systec Controls Mess- und Regeltechnik GmbH, established 1994, has dedicated its efforts to the innovation of process-compatible flow -measuring and environmental measuring techniques. systec Controls developed in close cooperation with renowned universities and research centres high-tech measuring engineering systems.

The uncompromising quality and unsurpassed consultancy service account for the ever increasing market potentials of systec Controls.

### Development, Production, Service and Consultation at a High Level

The measuring systems, service and consulting of systec Controls are uncompromisingly adapted to the exigencies and the specific problems of their clients. Their activities are targeted on process compatibility and accuracy with emphasis on ease of handling and optimum documentation to which research, development and production are geared.

### Innovative and Cooperative

It is our endeavour to be always a step ahead of our competitors. This maxim applies to all of systec companies. Ever since its foundation systec Controls works closely in conjunction with renowned universities and research institutes. This combined effort created field-proven metrological solutions.

### Tested and Certified

New and improved systems are prior to production and marketing exposed to stringent field tests. Measuring systems of systec Controls are again and again tested by independent research institutes such as German Federal Physics-Technical Institut, the TÜV Bavaria, TÜV Nord (TÜV = Technical Inspectorate), A.M.U or the University Erlangen. All tests have so far proved to be fully successful. The complete staff of systec Controls spares no efforts to maintain this enviable record by constant improving efficiency and ingenuity of their products. systec Controls are certified according to DIN EN ISO 9001:2000, DIN EN 7 29-3, AD 2000, EN 97/23/PED and complies among others with the directives:  accord. to PED (formerly TRD), CE accord. to EMV, ATEX 100 (formerly Ex, VbF, WhG).



*systec Controls, the innovative partner for the decision makers in all spheres of flow metering techniques*



*systec Controls systems have proved their utility in gas volume measuring under extreme dusty environments*



*Measuring of the fluid and gas flow for the sewage treatment are primary tasks*



The head office of the systec Controls company is located in Puchheim near Munich. Here, we develop and manufacture our products according to DIN EN ISO 9000:2000. But innovation and product quality alone are not enough for us. We have also had our systems tested by independent institutes – with a clear, provable success. And of course, we are there

for you even after the installation of your plant. You can get us on our Hotline **24 hours a day and 7 days a week.** systec Controls - the specialist in flow measurement technology.

handed over by

*Clever messen!*  
**systec**  
CONTROLS

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