Proxitron

SENSORS MADE IN GERMANY

Monitoring of exhaust systems

To monitore the secure function of exhaust systems with air flow sensors

Air Flow Sensor FKM 230

According to the new, stricter provisions of the German Ordinance on Hazardous Substances, laboratories, schools and industrial facilities which work with aggressive chemical materials must be equipped with special exhaust air systems. In accordance with the DIN 1946-7/7-2009 standard the air flow must be monitored directly and electronically. Monitoring the ventilating fans is not enough, because blockage or malfunctions cannot be detected in this way.

A company, which specialises in air technology, equipment and environmental technology as well as plastic processing, needed air flow sensors for their exhaust systems. Because the exhaust systems were to be used with chemically aggressive materials in particular, air flow sensors which are resistant to these aggressive materials were needed. They also had to be robust and easy to install in the exhaust duct.

On account of the technical specifications of the sensor, which also had to be resistant to sulphur-containing exhaust from galvanic baths, the company chose the Proxitron FKM 230 air flow sensor. Unlike mechanical sensors, where sensing elements (membranes or wind vanes) move and become unusable due to dirt, grease or emulsions, Proxitron air flow sensors are protected from wear thanks to their calorimetric functioning principle and the integrated electronics into the plastic housing.

All Proxitron air flow sensors feature easy installation and maintenance-free function. If the flow rate falls below the minimum level, the sensor interrupts the output signal. The adjustable set flow rate can thus give an early warning if the flow rate is dropping below the minimum flow and initiate the timely servicing of the exhaust system.

An assembly flange is included in the scope of supply. Alternatively suitable clamps or a M32-cable screw connection can be used for pressure-resistant assembly.

Different cable lengths or a plug version are available.

At a glance
- Corrosion-resistant plastic housing
- Adjustable flow limit value or easy commissioning with Teach-In function
- Maintenance-free operation
- Pressure-resistant assembly possible with M32 screw connection
- Different versions available

Technical data
- Adjusting range: 1 - 10 m/s
- Factory setting: 3 m/s
- Ambient temperature: -10 to +60 °C
- Function display: LED
- Operating voltage: 24 V DC
- Output function: normally closed or normally open

Optionally
- Teach-In version
- analog output