

Flow Sensors



with
ProxiTeach
teach function

Flow monitoring of
liquid and gaseous media



Compact sensor for monitoring aeriform and gaseous flows. The air flow monitor is installed as a stationary sensor with a supplied flange or pressure-proof with a M32 fitting in the flow to be monitored. The calorimetric device with integrated evaluation electronics enables maintenance-free operation.

A housing with an outstanding ceramic sensor and a smoothly enclosed plastic housing are supplied. The flow limit value to be monitored can be adjusted with a potentiometer or is automatically adjusted by means of the teach-in process in proportion to the existing flow.

| Ub | Connection | Housing | Output | Adjustment | Type | |
|------------------|--------------------|------------------|---------------------|-----------------|-----------------|--------------|
| 24 V DC | Cable | Ø 20 mm | PNP normally open | Poti | FKM 230.13 G | |
| | | Ø 20 mm | PNP normally open | ProxiTeach* | FKM 231.13 G | |
| | | Ø 20 mm | PNP normally closed | Poti | FKM 230.12 G | |
| | | Ø 20 mm | PNP normally closed | ProxiTeach* | FKM 231.12 G | |
| | | Ø 20 mm | NPN normally open | Poti | FKM 230.11 G | |
| | | Ø 20 mm | NPN normally closed | Poti | FKM 230.10 G | |
| | | Ø 20 mm | Analog 0 - 10 V | | FKM 230.19 | |
| | | Ø 20 mm | Analog 0 - 20 mA | | FKM 230.190 | |
| | | Ø 20 mm | Analog 4 - 20 mA | | FKM 230.194 | |
| | M12 plug connector | Ø 20 mm | PNP normally open | Poti | FKM 230.13 G S4 | |
| | | Ø 20 mm | PNP normally open | ProxiTeach* | FKM 231.13 G S4 | |
| | | Ø 20 mm | PNP normally closed | Poti | FKM 230.12 G S4 | |
| | | Ø 20 mm | PNP normally closed | ProxiTeach* | FKM 231.12 G S4 | |
| | | Ø 20 mm | NPN normally open | Poti | FKM 230.11 G S4 | |
| | | Ø 20 mm | NPN normally closed | Poti | FKM 230.10 G S4 | |
| | | Ø 20 mm | Analog 0 - 10 V | | FKM 230.19 S4 | |
| | | Ø 20 mm | Analog 0 - 20 mA | | FKM 230.190 S4 | |
| | | Ø 20 mm | Analog 4 - 20 mA | | FKM 230.194 S4 | |
| | Terminal chamber | Ø 20 mm | PNP normally open | Poti | FKM 130.13 GD | |
| | | Ø 20 mm | PNP normally closed | Poti | FKM 130.12 GD | |
| | | Ø 20 mm | NPN normally open | Poti | FKM 130.11 GD | |
| | | Ø 20 mm | NPN normally closed | Poti | FKM 130.10 GD | |
| | 115 V AC | Cable | Ø 20 mm | Normally open | Poti | FKM 130.53 |
| | | | Ø 20 mm | Normally closed | Poti | FKM 130.52 |
| | | Terminal chamber | Ø 20 mm | Normally open | Poti | FKM 130.53 D |
| | | | Ø 20 mm | Normally closed | Poti | FKM 130.52 D |
| | 230 V AC | Cable | Ø 20 mm | Normally open | Poti | FKM 130.83 |
| Ø 20 mm | | | Normally closed | Poti | FKM 130.82 | |
| Terminal chamber | | Ø 20 mm | Normally open | Poti | FKM 130.83 D | |
| | | Ø 20 mm | Normally closed | Poti | FKM 130.82 D | |

*ProxiTeach is a registered trademark for the easy-to-operate adjustment system developed by Proxitron.

Flow sensors for liquid media

The flow sensor monitors liquid media and signals flow stoppage or deviation from freely adjustable flow speed. The sensor head is made of sturdy stainless steel and is available in different thread designs. The calorimetric measuring principle with integrated electronics enables easy start-up by means of the teach-in function and reliable condition sensing with maintenance-free operation. A model for the connection of external sensor heads offers an additional temperature monitoring function.



| Ub | Connection | Sensor | Output | Adjustment | Type |
|-----------------------|--------------------|--|---|-------------|------------------|
| 24 V DC | Cable | G 1/4" | PNP normally open+Normally closed | ProxiTeach* | FKC 604.18 G |
| | | NPT 1/4" | PNP normally open+Normally closed | ProxiTeach* | FKCN 604.18 G |
| | | G 1/2" | PNP normally open+Normally closed | ProxiTeach* | FKE 604.18 G |
| | | NPT 1/2" | PNP normally open+Normally closed | ProxiTeach* | FKEN 604.18 G |
| | | G 3/4" | PNP normally open+Normally closed | ProxiTeach* | FKF 604.18 G |
| | | NPT 3/4" | PNP normally open+Normally closed | ProxiTeach* | FKFN 604.18 G |
| | M12 plug connector | G 1/4" | PNP normally open+Normally closed | ProxiTeach* | FKC 604.18 G S4 |
| | | NPT 1/4" | PNP normally open+Normally closed | ProxiTeach* | FKCN 604.18 G S4 |
| | | G 1/2" | PNP normally open+Normally closed | ProxiTeach* | FKE 604.18 G S4 |
| | | NPT 1/2" | PNP normally open+Normally closed | ProxiTeach* | FKEN 604.18 G S4 |
| | | G 3/4" | PNP normally open+Normally closed | ProxiTeach* | FKF 604.18 G S4 |
| | | NPT 3/4" | PNP normally open+Normally closed | ProxiTeach* | FKFN 604.18 G S4 |
| 115 V AC | Cable | G 1/4" | Normally open/Normally closed | Poti | FKC 704.56 G |
| | | NPT 1/4" | Normally open/Normally closed | Poti | FKCN 704.56 G |
| | | G 1/2" | Normally open/Normally closed | Poti | FKE 704.56 G |
| | | NPT 1/2" | Normally open/Normally closed | Poti | FKEN 704.56 G |
| | | G 3/4" | Normally open/Normally closed | Poti | FKF 704.56 G |
| | | NPT 3/4" | Normally open/Normally closed | Poti | FKFN 704.56 G |
| 230 V AC | Cable | G 1/4" | Normally open/Normally closed | Poti | FKC 704.86 G |
| | | NPT 1/4" | Normally open/Normally closed | Poti | FKCN 704.86 G |
| | | G 1/2" | Normally open/Normally closed | Poti | FKE 704.86 G |
| | | NPT 1/2" | Normally open/Normally closed | Poti | FKEN 704.86 G |
| | | G 3/4" | Normally open/Normally closed | Poti | FKF 704.86 G |
| | | NPT 3/4" | Normally open/Normally closed | Poti | FKFN 704.86 G |
| 115/230 V AC, 24 V DC | Terminals | Evaluation unit | Relay change-over contact | Poti | FSP 604.6R |
| | M12 plug connector | Sensor head G 1/4" | Matching sensor heads for evaluation unit FSP 604 | | FAC 601 |
| | | Sensor head NPT 1/4" | | FACN 601 | |
| | | Sensor head G 1/2" | | FAE 601 | |
| | | Sensor head NPT 1/2" | | FAEN 601 | |
| | | Sensor head G 3/4" | | FAF 601 | |
| | | Sensor head NPT 3/4" | | FAFN 601 | |
| | | Matching connection cable, length 5 m, between sensor head and evaluation unit FSP 604 | | ST 041/4-5 | |

Flow sensors for liquid and gaseous media

Proxitron flow sensors control the flow speed of liquid and gaseous media. In an enclosed housing a heat resistance generates a low temperature increase. The cooling effect of the flow is evaluated electronically. The calorimetric measuring principle enables wear-free and low-maintenance operation. Different designs offer an optimum technical and economic solution for many industrial applications.

Models with different cable lengths as well as customized variants are available.

We recommend special designs with separate sensor heads for applications with fast changes of temperature.

Please specify your requirements.

We would be pleased to advise you!

Applications

Coolant and lubricant flow in steel and rolling mills

Ventilator shutdown and filter soiling in air conditioning and ventilation technology

Suction devices in sawmills and wood working plants

Bearing cooling systems of drive motors

Inlets and outlets of containers and mixing plants.

Oil and water mixtures for roller conveyor lubrication

Irrigation plants in horticulture and in greenhouses.

Valve positions in distribution systems

Pumps in sewage plants

General Data

| | Gaseous media | Liquid media |
|-------------------------------|---------------------------|---------------------------|
| Adjustable flow limit value | 0 - 10 m/s | 30 - 3000 mm/s |
| Flow range, analog | 0 - 16 m/s | |
| Medium temperature | 0 - 60 °C | 0 - 60 °C |
| Medium | Air, gaseous | Water, hydraulic oil |
| Continuous current load AC/DC | 0,5 - 300 mA / 0 - 200 mA | 0,5 - 400 mA / 0 - 400 mA |

Product range

Inductive Proximity Switches

WG 210 **Sensing distance < 20 mm**
 WG 220 **Sensing distance 20-60 mm**
 WG 230 **Sensing distance 60-120 mm**
 WG 240 **Sensor strips**
 WG 241 **Surface sensors**
 WG 250 **Ring sensors**
 WG 260 **Inductive analog sensors and evaluation electronics**

Further Sensors

WG 100 **Capacitive sensors**
 WG 510 **Piros light barriers**
 WG 610 **Piros infrared sensors**
 WG 620 **Piros for fibre optic cables**
 WG 630 **Piros infrared pyrometers**
 WG 800 **Flow sensors, air**
 WG 830 **Flow sensors, liquid**

Proxitron
 SENSOREN FÜR AUTOMATION