

Airflow measuring transducer FS

FS-K3



FS-3



Technical data **Application**

<p>Flow measuring range:</p> <p>0 ... 10m/s 0 ... 15m/s 0 ... 20m/s</p> <p>Overload capacity:</p> <p>up to 30m/s</p> <p>Output signal:</p> <p>Can be selected by means of an internal plug-in bridge</p> <p>0 ... 10 V <1.0 mA (linear, 3-wire technique), 4 ... 20 mA, RI <500 Ω</p> <p>Measuring principle:</p> <p>hot film anemometer</p> <p>Operating principle:</p> <p>The air flow acts in a cooling manner on a heated sensor housed in a sensor tube. The stronger the air flow, the higher the cooling effect on the sensor. A second sensing element serves to compensate the effect of the air temperature.</p> <p>Flow measuring accuracy at 20°C, 45 % r.h., 1013 hPA:</p> <p>measuring range 0 ... 10m/s: ±(0.3 m/s + 3 % of measured value) measuring range 0 ... 15 m/s: ±(0.3 m/s + 3 % of measured value) measuring range 0 ... 20 m/s: ±(0.3m/s + 4 % of measured value)</p> <p>Power supply:</p> <p>24 V~/=± 10 %, max. 150 mA</p> <p>Reaction time t₉₀ at 10 m/s:</p> <p>typical: 2 sec or 0.2 sec</p> <p>Anisotropy at 10 m/s:</p> <p><3 % of measured value at Δα <10°</p> <p>Connection:</p> <p>screw terminals (up to 1.5 mm²)</p> <p>Electromagnetic compatibility in compliance with:</p> <p>EN 50081-1 EN 50082-2</p> <p>Housing material:</p> <p>ABS</p> <p>Degree of protection:</p> <p>IP 65 (standard)</p> <p>Temperature range:</p> <p>operation: -10 ... +50°C</p> <p>Storage temperature:</p> <p>-30 ... +60°C</p> <p>Colour:</p> <p>grey (upper part RAL 7016, bottom part RAL 7035)</p>	<p>can be selected by means of an internal plug-in bridge</p> <p>For the detection of air velocities and the commutation of these measurable variables to an electric standard signal within the range from 0 to 10 V or 4 to 20 mA. Specially suited for the application as duct sensor in the refrigeration-, air conditioning-, ventilation engineering and process technology sphere.</p>
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Type	Item No.	Equipment	Output	PG
FS-K3	G8000297	Duct sensor for the sensing of flows (sensor length 200 mm)	0 ... 10 V or 4 ... 20 mA	J
FS-3	G8000298	Duct sensor for the sensing of flows incl. remote sensor and 1 m long cable (sensor length 150 mm)	0 ... 10 V or 4 ... 20 mA	J

