

GREYSTONE
ACCURACY BY DESIGN



AIR FLOW TRANSDUCER ESF-35-2



ESF is an air flow transducer with a broad application area. It can be used for control, surveillance, and regulation of the flow rate in fresh-air and ventilation systems, etc.

FEATURES:

- Converts airspeed into a 4 – 20mA or a 0 – 10 VDC signal
- Linear output signal
- Made with corrosion resistant material
- Fully electronic registration of airflow speed
- AC or DC voltage supply
- Compensates for changes of air temperature
- Telescopic sensor facilitates installation
- Temperature output signal 0 – 10 VDC
- Fuse protected

***Peace of mind
through reliable
air velocity monitoring***

GREYSTONE IS AN **ISO 9000** REGISTERED COMPANY

APPLICATION:

The ESF-35-2 airflow transducer can be used in a wide range of applications such as:

- Measurements of airflow speed via PLC/outstation/EMS
- Regulation of airflow speed
- Monitoring of airflow speed

INSTALLATION:

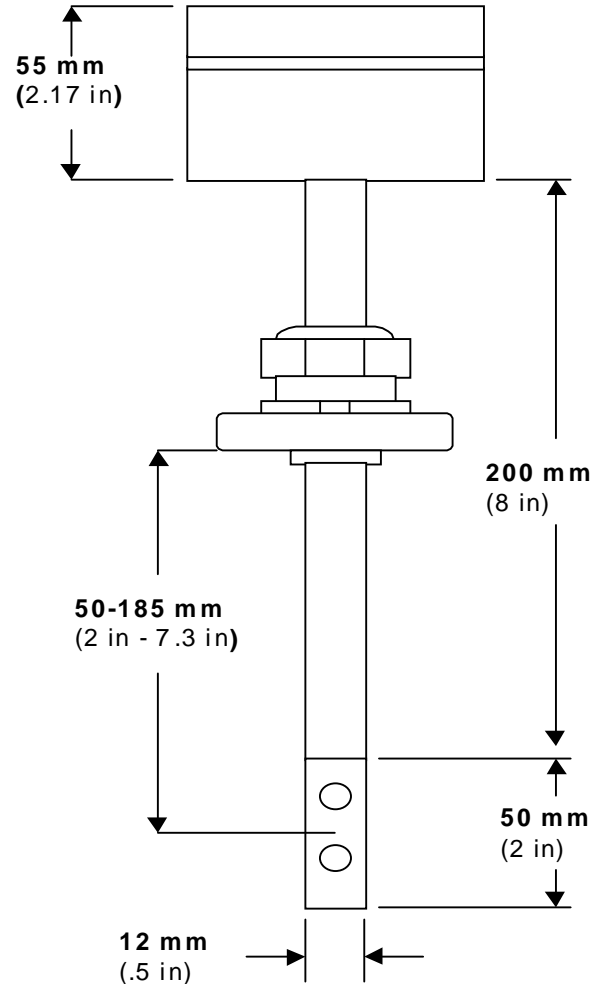
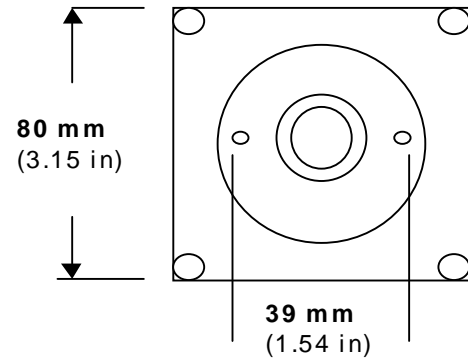
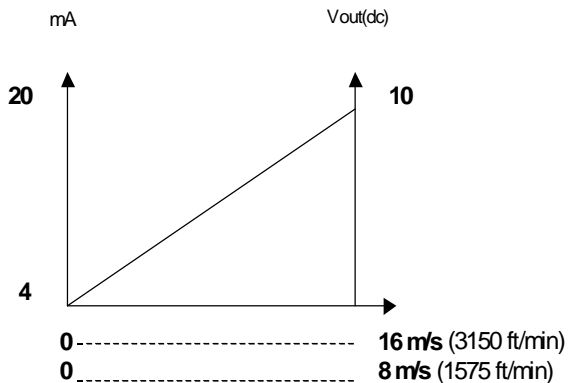
The airflow transducer ESF-35-2 is installed in such a way that the current of air passes through the gap of the sensor head. Conductors to and from the transducer should be kept isolated from high-power conductors where powerful transient voltage spikes may appear.

TECHNICAL DATA:

Airflow speed	0 – 16 m/s (3150 ft/min), (jumper selectable) 0 – 8 m/s (1575 ft/min)
Output signal (flow)	4 – 20 mA, 0 – 10 VDC
Output signal (temperature)	0 – 10 VDC
Temperature range	0 – 50°C (32°F – 122°F)
Air temperature	-10°C – 60°C (14°F – 140°F)
Ambient temperature	-20°C – 50°C (-4°F – 122°F)
AC voltage supply	24 VAC (120mA)
DC voltage supply	16 – 30 VDC (80mA)
Absolute accuracy	±5%
Rise time	20 sec
Time constant	5 sec
Depth of insertion in channel	50 – 200 mm (2 – 8 in.)
Dimensions (H x W x D)	80 x 80 x 55 mm (3.15 x 3.15 x 2.17 in.)

FUNCTION:

The ESF-35-2 transducer registers the airflow speed according to a thermal principle based on the fact that the cooling action of air increases with airspeed. The action is measured and converted to a 4 – 20 mA or a 0 – 10 V signal corresponding to airflow speeds from 0 – 8 m/s (0 – 1575 ft/min) or 0 – 16 m/s (0 – 3150 ft/min).



Greystone Energy Systems Inc., established in 1983, is Canada's largest manufacturer of HVAC sensors and transducers for Building Automation Management Systems.

We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9002 certified, assuring our customers of consistent product reliability.