eFlowUSA
ECONOMICAL | EFFICIENT | EASY

SUBMITTAL DATA

eFlow-Constant Airflow Regulater (CAR)
Dual Flow (Motorized))

eFlow-CAR Dual Flow self-regulating motorized dampers are designed to introduce flexibility and dynamic control to central ventilation systems. Used in both large and small systems, the eFlow-CAR Dual Flow, regulates ventilation without the need for individual fans. The module opens and closes via a blade controlled by an electric motor, eliminating the need for expensive pneumatic electronic control systems. eFlow-CAR Dual Flow is available in 5", 6" and 8" diamater. eFlow-CAR Dual Flow features two built in eFlow-CARs to allow for minimum and maximum flow. It combines low-flow indoor air quality ventilation and on-demand high-flow ventilation while using the same central fan system. In the "off cycle" position, the factory-calibrated eFlow-CAR allows for steady, low-flow ventilation. In the "on cycle", the maximum flow rate is ensured. eFlow-CARs are factory set Constant Airflow Regulators that are designed to save significant amount of energy by precisely controlling airflow into or out of a space. This is done regardless of static pressure. The use of eFlow CARs helps ensure High Indoor Air Quality (IAQ). eFlow-CARs are composed of UL94V-0 ABS plastic and are UL 2043 safety classified (labeled for flame and smoke generation). They feature a self-regulating aero-wing and spring piston design to maintain factory preset air flows.
For more information about eFlow-CARs please visit eflowusa.net .

FEATURES

- Closed position ('off' cycle): a portion of the nominal flow rate is delivered via a solid blade with a built-in dia. 3" or 4" eFlow-CAR
- Open position ('on' cycle): the nominal flow rate is controlled by eFlow-CAR fitted upstream of the damper blade
- Spring return to original position and power off
- Specific flow rate controlled by the two flow regulators across a pressure range of 0.2" w.c. to 1.0" w.c.

OVERVIEW

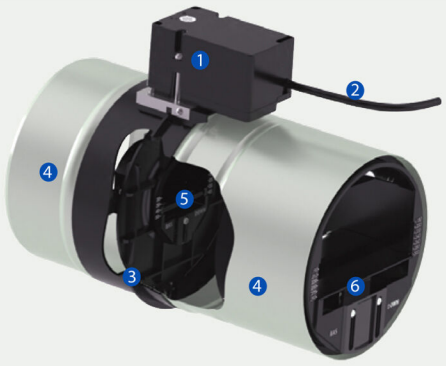
The minimum flow rate is ensured by eFlow-CAR built into the blade when the dampers are in the closed position ('off' cycle). Conversely, the maximum flow rate is ensured by eFlow-CAR fitted upstream of the dampers when they are in the open position ('on' cycle). The dampers are returned to their original position (minimum flow) by a spring when the motor is powered off.

AVAILABLE FLOW RATES

The maximum and minimum flow rates possible with eFlow-CAR dual-flow motorised dampers are given in the table opposite

eFlow-CAR dual flow diameter	Min. flow rate ('off' cycle)	Max. flow rate ('on' cycle)
5"	10-30 CFM	30-105 CFM
6"	10-60 CFM	60-175 CFM
8"	10-60 CFM	60-295 CFM

COMPONENTS



1. Electric motor unit
2. Connection cable (approx. length: 8")
3. Body and blade made of plastic
4. Galvanised steel casings
5. eFlow-CAR built into the blade (minimum flow rate)
6. Upstream eFlow-CAR (maximum flow rate)

CHARACTERISTICS

- 24V power supply
- Power consumption: 2.5 W (1.2 W at 24 VAC/DC)
- Operating pressure: P ≤ 1.0" W.C.
- Number of duty cycles: 30,000
- Maximum operating temperature: 140°F
- Torque: 0.3 Nm

Response time	
Open	8 seconds
Close	8 seconds

INSTALLATION

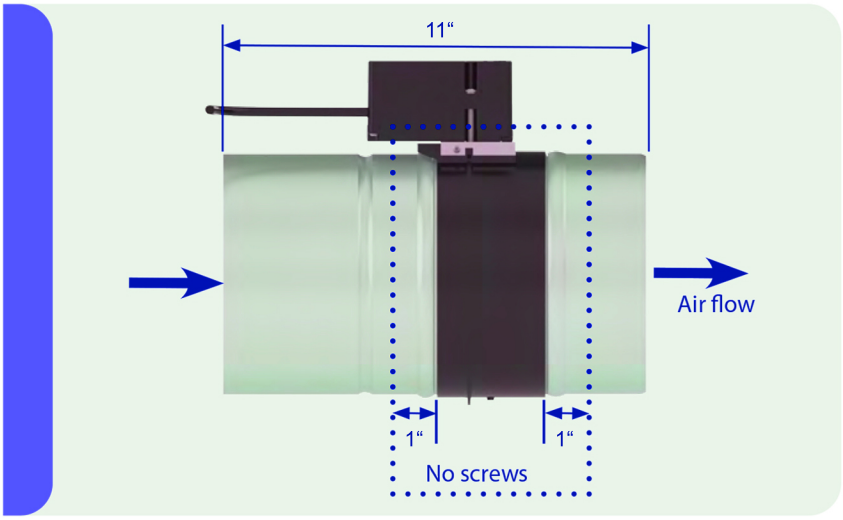
RECOMMENDATIONS

These dampers fit all 5" - 8" mm round ducts. They must remain easily accessible for maintenance.

Slide the ends of the ducts over the metal casings up to the edges of the plastic body of the damper. Secure the ducts with mastic, adhesive tape, or clamps.

If the dampers are fitted in horizontal ducts, make sure that the DOWN marking on the front of the regulator is facing in the correct direction (motor at top).

Identify the correct air flow direction indicated on the dampers before fitting.



Do not insert screws into the plastic body or into a 1" area on either side of it. Doing so may jam the damper blade. Screws with a maximum length of 1" may be inserted beyond this area.

Never turn the blade by hand. Doing so may damage the motor.

Never remove the metal casings from the plastic body of the damper.

These dampers are set to be fully open or fully closed. They cannot be placed in intermediate positions. Do not fit stops to prevent the dampers from fully opening or closing.

Never operate the dampers for extended periods in conditions of high humidity and never above a relative humidity of 90%.

ELECTRICAL CONNECTIONS

For safety purposes, install a 1-amp phase-neutral circuit breaker in the distribution board.

Connect the cable to a nearby junction box.

Caution: Always disconnect the power to the circuits of the dampers before attempting to service them.

SELECTION

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☐	6"	10-60 CFM	60-175 CFM
☐	8"	10-60 CFM	60-295 CFM

Job Name:	☐ eFlow- Constant Airflow Regulator (CAR) Dual Flow (Motorized)
Location:	
Architect:	
Engineer:	
Contractor:	

DRAWN BY:	DATE:	REV. DATE:	REV. NO.	APPROVED BY:	DWG. NO.:
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