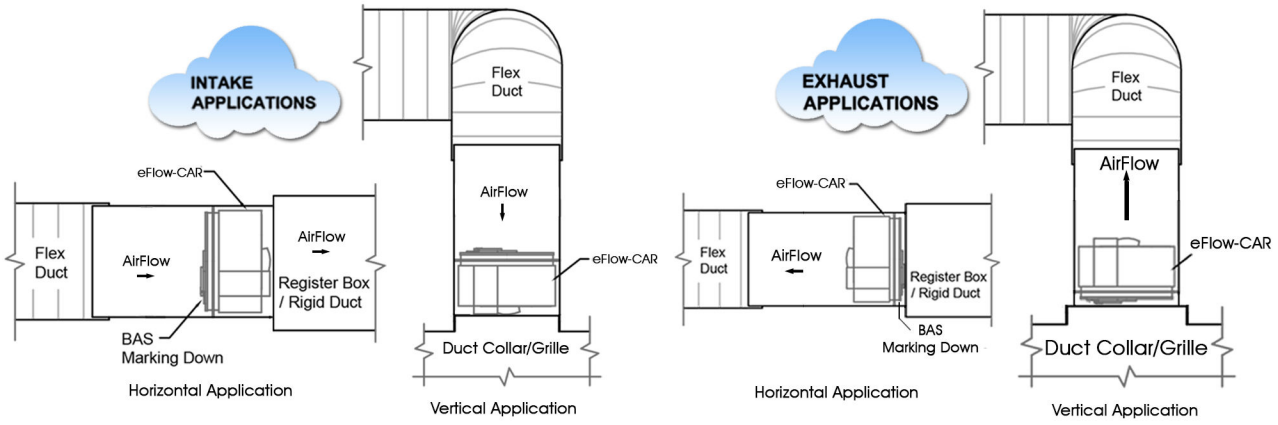
INSTALLATION AND MAINTENANCE INSTRUCTIONS

Use and Operations:

The eFlow-Constant Airflow Regulator is a device that automatically regulates airflow in duct systems to constant levels. eFlow-CAR responds automatically to duct pressure changes to regulate airflow in supply or exhaust applications. The eFlow-CAR adjusts the amount of free area therefore controlling constant velocity and airflow. The passive control element responds to duct pressure and requires no electric or pneumatic sensors or controls. Airflow adjustment range is controlled with a bit Torx T10. eFlow-CAR is a low-cost solution to balancing forced-air systems for heating, air conditioning and ventilation, eliminating the need for in-site balancing.

Installation:

- eFlow-CAR may be installed either in horizontal or vertical round duct. If installed horizontally, the BAS marking must face downward.
- Device to be installed in registered boxes, rigid ducts, or duct collars through a friction fit caused by the rubber gasket. The gasket also creates an air seal. DO NOT USE FASTENERS TO INSTALL THIS PRODUCT.
- If installed in the intake position, the CAR must be set back at least three times the duct diameter from intake grills. The CAR must also be set back at least three times the duct diameter from duct connections duct bends, or other places with turbulent air.
- If installed in an exhaust position, the CAR must be set back at least the distance of the duct diameter from exhaust grilles. The CAR must also be set back the distance of the duct diameter from duct connections, duct bends, or other places with turbulent air.
- Install with future access for removal or inspection.
- Avoid using fasteners in the duct where the CAR is placed to prevent ineffective operation and damage.
- Avoid contact between the CAR and gypsum board duct.
- Install in accordance with necessary mechanical and building codes.
- Install CAR following the correct airflow direction of the duct.



Job Name:	❑
Location:	
Architect:	
Engineer:	
Contractor:	

DRAWN BY:	DATE:	REV. DATE:	REV. NO.	APPROVED BY:	DWG. NO.:
IL	12-08-2018			EL	

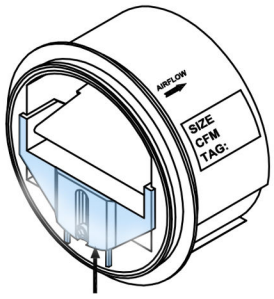
Maintenance:

eFlow-CAR requires no maintenance when used in normal conditions. However, if the device is installed in filterless exhaust application, maintaining access for future cleaning and inspection is recommended. To clean the CAR, remove CAR, wash it with soap and warm water, dry the CAR, and reinstall the product.

Adjustments:

eFlow-CAR's have an airflow adjustment range, controlled with a bit Torx T10. To change the airflow rate, unscrew the set screw and slide the CAR section of the regulator up or down. Move up to decrease airflow rate. Move down to increase airflow rate.

Airflow Adjustment

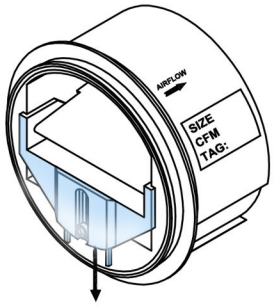


MOVE UP TO DECREASE AIRFLOW

Issues and Solutions:

If Airflow is too low:

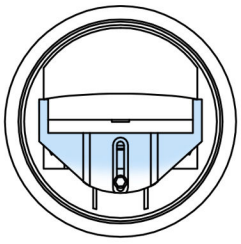
- Wrong eFlow-CAR installed; check CFM requirements against CAR label, replace or adjust airflow rate if necessary.
- CAR operating incorrectly; check CAR for damage and replace if necessary.
- Duct pressure too low; increase fan speed or replace fan if necessary.
- Duct air leakage too high; seal any gaps with tape.



MOVE DOWN TO INCREASE AIRFLOW

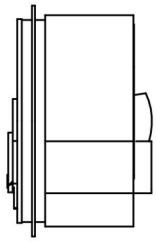
If Airflow or Noise is too high:

- Wrong eFlow-CAR installed; check CFM requirements against CAR label, replace or adjust airflow rate if necessary.
- CAR operating incorrectly; check CAR for damage and replace if necessary.
- Duct pressure too high; decrease fan speed or replace fan if necessary.
- CAR too close to fan; separate the two with manual damper to lower pressure through eFlow-CAR, or move CAR further away from fan.



FRONT VIEW

AIRFLOW



SIDE VIEW

Job Name:	❑
Location:	
Architect:	
Engineer:	
Contractor:	

DRAWN BY:	DATE:	REV. DATE:	REV. NO.	APPROVED BY:	DWG. NO.:
IL	12-08-2018			EL	

ATTENTION: eFlow-CAR Reference points are indicated in Cubic Meter/ Hour measure (CMH)

To set desired Cubic Foot/Minute (CFM) setpoint, please refer to conversion chart below.

Cubic Foot/Minute (CFM) -Cubic Meter/Hour (CMH) Conversion Chart

eFlow-CAR 3"		eFlow-CAR 4"		eFlow-CAR 5"		eFlow-CAR 6"		eFlow-CAR 8"		eFlow-CAR 10"	
CFM	CMH	CFM	CMH	CFM	CMH	CFM	CMH	CFM	CMH	CFM	CMH
10	15	30	50	60	100	105	180	175	300	295	500
12	20	35	60	65	110	111	190	182	310	300	510
15	25	41	70	70	120	118	200	188	320	306	520
18	30	44	75	77	130	124	210	194	330	312	530
21	35	47	80	82	140	130	220	200	340	318	540
24	40	53	90	88	150	141	240	206	350	330	560
26	45	60	100	95	160	147	250	212	360	335	570
30	50			100	170	153	260	218	370	341	580
				105	180	159	270	224	380	347	590
						165	280	230	390	353	600
						170	290	235	400	360	610
						175	300	241	410	365	620
								247	420	370	630
								253	430	377	640
								259	440	383	650
								265	450	388	660
								270	460	394	670
								277	470	400	680
								283	480	406	690
								288	490	410	700
								295	500	470	800

Note: 1 CMH=0.588578 CFM, 1 CFM=1.699011 CMH

Job Name:	❑
Location:	
Architect:	
Engineer:	
Contractor:	

DRAWN BY:	DATE:	REV. DATE:	REV. NO.	APPROVED BY:	DWG. NO.:
IL	12-08-2018			EL	