

Modul8 – Smart Air Control Valve

O X Y G E N 8

A Fresh Take on the Traditional VAV and Air Damper:

Modul8 is Easier to Design | More Intelligent | Easier to Install | Energy Efficient

Disruptive Technology

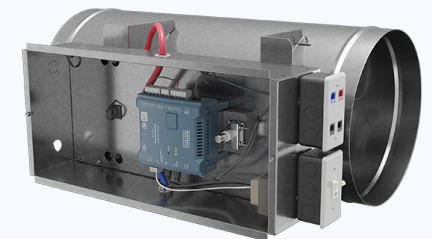
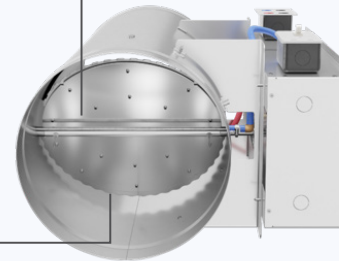
- Enhanced airflow accuracy and 100:1 turndown ratio
- Factory-programmed, tested, balanced, and packaged
- Eliminates on-site balancing

All About Math: A Solution to a Complex Fluid Dynamics

- Toricelli's Theorem – Vena Contracta (1643)
- Accurate air flow measurements at turbulence zones and very low flow conditions >4% accuracy below 200 FPM, +/- 8 FPM
- Advanced software algorithm
- Patents issued

Optimally located sensor
in the stagnation zone
behind the damper shift
accurately measure the
multiple Vena Contracta

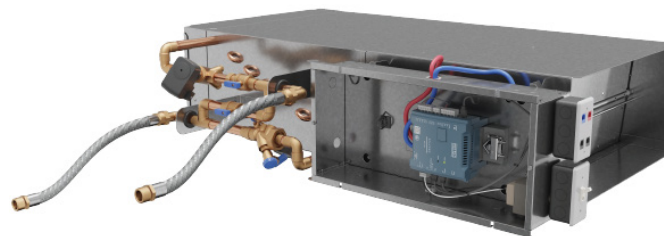
Damper edges
generate multiple
Vena Contracta



Eclipse Connected Thermostat



Allure EC-Smart-Vue



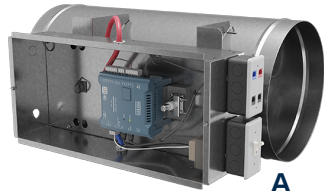
Operating Temperature: 32 – 122°F
Relative Humidity: 0 – 90% non-condensing

Specs & Communication

- Distech ECLYPSE Controller
- Voltage: 24VAC/DC or 120V
- BACnet IP
- Cable Type: Cat 5e
- Web Server Protocol: HTML5
- WiFi Communication Protocol: IEEE 802.11b/g/n
- Hydronic cooling & heating coil options with valve and actuators

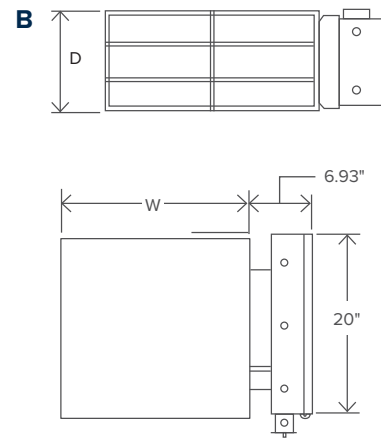
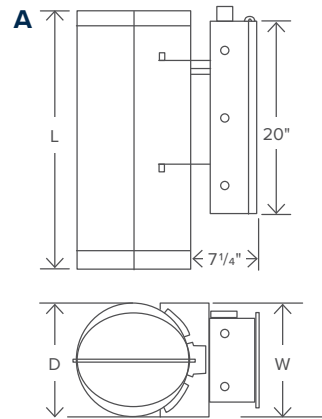
Modul8 – Smart Air Control Valve

O X Y G E N 8



A

B



Modul8 Smart Air Control Valve – Round

Unit	Airflow Range				Dimensions			Flange		Weight
	Max Flow cfm	Max Ultra Quiet Flow cfm	Min Flow cfm	Flow Sensor Inlet Area sq. ft.	D in	L in	W in	B/C in	O.D in	
4	205	147	0.49	0.08	3.875	10	5	5.25	6	10
5	325	234	0.78	0.13	4.875	11.5	6	6.25	7	12
6	490	350	1.20	0.20	5.875	14.81	7.625	7.25	8	15
8	875	630	2.0	0.35	7.875	16	10	9.25	10	20
12	1965	1415	5.0	0.79	11.875	26.81	12	13.25	14	25
16	3490	2515	11.0	1.40	15.875	27.50	15.875	17.75	19	34

Modul8 Smart Air Control Valve – Rectangular

Unit	Airflow Range				Dimensions			Weight
	Max Flow cfm	Max Ultra Quiet Flow cfm	Min Flow cfm	Flow Sensor Inlet Area sq. ft.	D in	L in	W in	
6 x 16	1665	1199	4	0.67	6	16	14	20
10 x 15	2600	1875	8	1.04	10	19	15	35

Materials (Within Air Stream)

Standard Construction

20-gauge galvanized steel casing
18-gauge galvanized steel casing
20-gauge galvanized steel orifice (optional)
Stainless steel pitot tubes
Advanced low-leak aerospace damper gasket

Flanges (Round models only)

Complies with SMACNA specifications
Stainless steel only

Factory installed and calibrated patented airflow sensing system

Patented variable orifice plate technology

Flow Measurement*

±4% of actual flow from 2500 fpm to 150 fpm
±6 fpm from 150 fpm to 6 fpm

Airflow Measurement

Pneumatic tubing – UL 94 rated
Sensor Type A – Pitot
Sensor Type B – Orifice (Round models only)

Controls Communication Options

Subnet Wiring

Allure Series sensors

Communications Wiring (BACnet IP)

Wired Connection
Wireless Connection

Power Connection

208V/1 or 24V AC