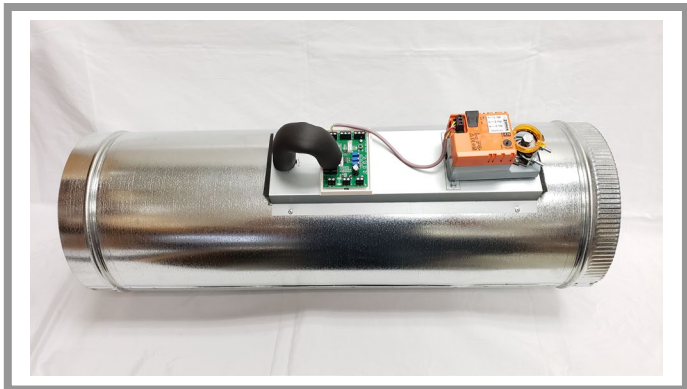


ROUND VRF-SAV (SMART AIR VALVE)

SUBMITTAL



SAV

Round Supply Damper used in VRF or pressure independent applications

DESCRIPTION

The SAV, (Smart Air Valve) is pressure independent, self-balancing damper utilized in VRF applications to deliver specific CFM to each zone in a ducted system. The Smart Air Valve has a built-in pitot tube measuring section that controls adjustable air velocities, that are measured by differential pressure sensors. The SAV velocity setting potentiometers will assign a target air velocity at each SAV. The SAV air delivery will adjust itself to locate the target velocity. Then the SAV will hold this assigned air delivery regardless of static pressure changes in the system.

The VRF-STAT used with a Smart Air Valve can request various preset air volume targets and send specific target request to the SAV. As the room temperature or zone approaches set point the thermostat will reduce the CFM or cooling to the space to the Vent mode to limit on/off compressor operation.

The Smart Air Valve is a new concept in air delivery. This operation emulates the way an indoor VRF unit operates allowing the addition of VAV or variable air volume control in a VRF system controlling up to 20 Smart Air Valves per indoor unit or fan coil.

Zonex VRF-VAV supplies a predictable CFM from each damper in the system.

The 6" – 10" damper cylinders are fabricated from 22-gauge steel; the 12" – 14" cylinders from 20-gauge steel. Each cylinder features two rolled beads, which provide maximum structural integrity. The trailing end is crimped for ease of installation. A positive air seal is accomplished through use of a high-density foam gasket around the blade perimeter. The damper blade is bolted to the hexagonal damper shaft.

Dampers feature 24VAC, full stall motors, which do not require use of end switches to terminate travel. Each SAV is powered and controlled from its respective VRF-STAT.

Damper motors are easily removed for damper shaft and motor inspection. Each actuator hat section is insulated to prevent condensation. The actuator provides minimum open and close stops for air balance.

TECHNICAL DATA

Electrical:

Supply Voltage: 24VAC

Power consumption: 2 VA maximum (1.5 w)

Environmental:

Operating temperature: 20 to 125° F (-7 to 52° C)

Operating humidity: 10-95% non-condensing

Storage temperature: -20 to 130° F (-29 to 54° C)

General:

Shell: 20-22 gauge cold rolled galvanized steel

Shaft: 1/2" dia. aluminum, hexagonal

Bushings: Celcon

Actuator: Power Open/Power Close

Stroke: 60°

Pressure drop: .2" W.C. @ rated CFM

Rev 7/10/2020

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TYPICAL CAPACITIES

	Diameter	*CFM HI	Velocity FPM	AREA sqft	BTU HI
SAV05	5"	116	800	0.136	3,480
SAV06	6"	156	800	0.196	4,680
SAV07	7"	213	800	0.267	6,390
SAV08	8"	278	800	0.349	8,340
SAV09	9"	353	800	0.442	10,590
SAV10	10"	436	800	0.545	13,080
SAV12	12"	628	800	0.785	18,840
SAV14	14"	855	800	1.068	25,650

*Air delivery may vary +/- 10% based on altitude, air density or installation. These air quantities were derived from duct sizing chart .1" friction loss per 100' of duct. All CFMs listed are approximate. The pressure drop for these dampers is .2"

Dimensional Data

	Diameter	Length	Width
SAV06	6"	30"	9"
SAV07	7"	30"	10"
SAV08	8"	30"	11"
SAV09	9"	30"	12"
SAV10	10"	30"	13"
SAV12	12"	30"	15"
SAV14	14"	32"	17"

ORDERING INFORMATION

Part No.	Description
SAV06	Smart Air Valve, 6" diameter
SAV07	Smart Air Valve, 7" diameter
SAV08	Smart Air Valve, 8" diameter
SAV09	Smart Air Valve, 9" diameter
SAV10	Smart Air Valve, 10" diameter
SAV12	Smart Air Valve, 12" diameter
SAV14	Smart Air Valve, 14" diameter