

Young Regulator Co.

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Submit 9100 – 1-10

Model 9100-E

Variable Air Volume Ceiling Diffusers

Application and Design

The Young Regulator 9100 series (Model 9100-E) VAV ceiling diffusers are used to vary air volume from a wall-mounted thermostat. The diffusers are designed to maintain coanda effect of discharge air along the ceiling. This provides a sustained discharge velocity throughout the volume range, and effectively induces room air to achieve true VAV in both heating and cooling modes.

A direct-coupled actuator, installed outside the airstream on the neck of the diffuser, modulates to vary the supply air discharge opening. This varies the supply air volume in response to changes in the room temperature. Locating the actuator outside of the airstream makes servicing and troubleshooting convenient.

Operating diffusers from individual wall thermostats enables users to choose their own desired comfort level. This eliminates the problem of having to rely on inaccurate, slow acting, waxtype thermally powered actuators.



Plaque not shown to show modulating disk.

STANDARD CONSTRUCTION		
Back Cone	Unitary Stamped Seamless Steel Construction w/ 4 Way Discharge Pattern	
Face Plate	Removable	
Finish	Baked Enamel	
SIZE INFORMATION		
Size	24" x 24" 6" Neck through 14" Neck, -1/4" Nominal 12" x 12" 6" and 8" Neck, -1/4" Nominal	
Frame	Surface mount standard, lay in optional	
Thermostats	T-312-CE	
Master	9100-AC	

HONEYWELL ML6161 ACTUATOR

Non-spring return direct-coupled actuators. Floating actuators used with single pole / double throw (SPDT) proportional and integral thermostats.

Volts	24V	
Watts	2.0	
VA	2.2	
Amp	0.085	
Timing	7 Min.	
Torque	35 in. lb.	
Built in motor stop for minimum and maximum air		

Optional Relief Ring

QUANTITY	DIAMETER	NOTES

PROJECT	LOCATION
CONTRACTOR	DESIGN SPECIFIER