# **ROUND MODULATING DAMPER**

# <u>SUBMITTAL</u>





#### Round Modulating Supply Damper \*Controlled by Wireless Programmable Thermostat

Part #WST

### **DESCRIPTION**

The **WST** is a round medium pressure power open, power close modulating, pressure dependent supply damper. The damper is equipped with a communicating damper board (CDB) designed to support and communicate with a Zonex wireless programmable thermostat. The dampers are available from 6" - 18"round, with a maximum pressure differential of 1.75" W.C.

Round dampers feature an elliptical blade for linear air volume delivery throughout the dampers range of travel.

The 6" - 10" damper cylinders are fabricated from 22 gauge steel; the 12" - 18" 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.

Round dampers feature 24V ac, full stall motors, which do not require use of end switches to terminate travel. Each damper is powered and controlled from its respective wireless zone thermostat.

Round dampers are factory pre-wired with wireless damper board that communicates with Zonex Wireless Thermostats. Damper controller energizes damper operation and Auxiliary or supplemental Heat operations based on wireless communications with thermostats. Each actuator hat section is insulated to protect from condensation, damper provides minimum open and closed stops for air balance or achieve minimum CFM requirements.

Round dampers can be slaved or wired in parallel to provide additional zone CFM capacity if required.

### **TECHNICAL DATA**

#### Electrical:

Supply Voltage: 24VAC Power consumption: 2 VA maximum

#### Environmental:

**Operating temperature**: 25 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 modulating control
Stroke: 60°
Pressure drop: < .04" W.C. @ rated CFM</li>

#### **Communication:**

Proprietary wireless network protocol, with up to 100' transmission range.

Communicating Damper Board (CDB) maybe mounted remotely from the damper to increase transmission range, if required.

#### Notes:

\*Compatible only with GEN III VVT, GEN X and SubZone wireless systems.

## TYPICAL CAPACITIES\*

	Diameter	Nominal CFM	Velocity FPM	∆P "WC
WST06	6"	110	540	.014
WST08	8"	250	700	.015
WST10	10"	410	750	.015
WST12	12"	660	850	.015
WST14	14"	1000	925	.035
WST16	16"	1450	1070	.036
WST18	18"	2000	1100	.036

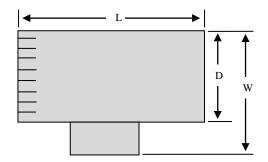
\* Capacities are for reference only. Duct friction rate should be established by use of ACCA Manual D, Manual Q or equivalent.

#### **Dimensional Data**

Part No.

	Diameter	Length	Width
WST06	6"	10"	9"
WST08	8"	10"	11"
WST10	10"	12"	13"
WST12	12"	14"	15"
WST14	14"	16"	17"
WST16	16"	18"	19"
WST18	18"	23 1/2"	21"

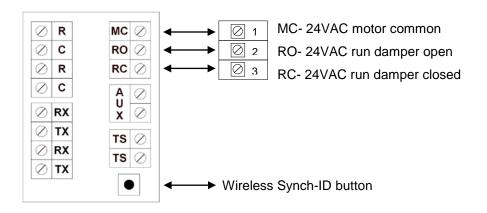
Description



### **ORDERING INFORMATION**

WST06 WST08	Modulating - Medium pressure zone damper, round, 6" diameter. Modulating - Medium pressure zone damper, round, 8" diameter.
WST10	Modulating - Medium pressure zone damper, round, 10" diameter.
WST12	Modulating - Medium pressure zone damper, round, 12" diameter.
WST14	Modulating - Medium pressure zone damper, round, 14" diameter.
WST16	Modulating - Medium pressure zone damper, round, 16" diameter.
WST18	Modulating - Medium pressure zone damper, round, 18" diameter.

### **TERMINAL FUNCTIONS**



#### **TERMINAL CONNECTIONS**

R - 24VAC power input In / Out

C - 24VAC power common In / Out

- RO Damper run open signal
- RC Damper run closed signal
- MC 24VAC motor common
- TS Duct temperature sensor
- TS Duct temperature sensor
- AUX Auxiliary Heat RX - Data Receive In / Out
- TX Data Transmit In / Out