

# ROUND MODULATING DAMPER

## SUBMITTAL



## **Round Modulating Supply Damper**

**\*Controlled by Wireless Programmable Thermostat**

**Part #WSTX**

## DESCRIPTION

The **WSTX** is a round medium pressure power open, power close modulating, pressure dependent supply damper. The damper is equipped with a communicating damper board (CDBX) 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

### **Communication:**

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

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

### **Notes:**

\*Compatible only with GEN X and Retro-Zone wireless systems.

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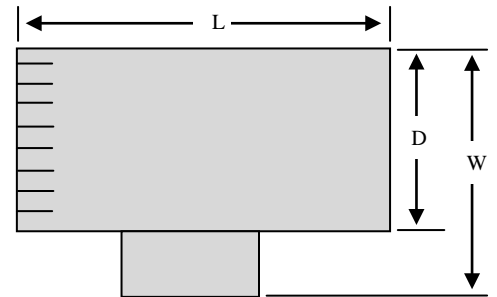
## TYPICAL CAPACITIES\*

	Diameter	Nominal CFM	Velocity FPM	$\Delta P$ "WC
WSTX06	6"	110	540	.014
WSTX08	8"	250	700	.015
WSTX10	10"	410	750	.015
WSTX12	12"	660	850	.015
WSTX14	14"	1000	925	.035
WSTX16	16"	1450	1070	.036
WSTX18	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

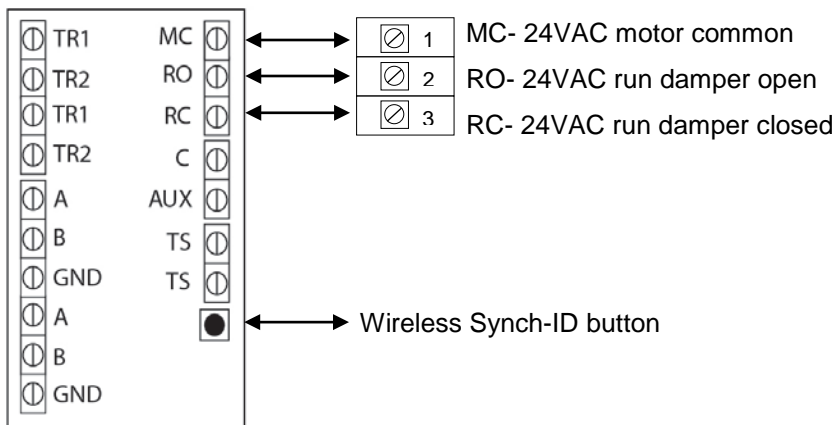
	Diameter	Length	Width
WSTX06	6"	10"	9"
WSTX08	8"	10"	11"
WSTX10	10"	12"	13"
WSTX12	12"	14"	15"
WSTX14	14"	16"	17"
WSTX16	16"	18"	19"
WSTX18	18"	23 1/2"	21"



## ORDERING INFORMATION

Part No.	Description
WSTX06	Modulating - Medium pressure zone damper, round, 6" diameter.
WSTX08	Modulating - Medium pressure zone damper, round, 8" diameter.
WSTX10	Modulating - Medium pressure zone damper, round, 10" diameter.
WSTX12	Modulating - Medium pressure zone damper, round, 12" diameter.
WSTX14	Modulating - Medium pressure zone damper, round, 14" diameter.
WSTX16	Modulating - Medium pressure zone damper, round, 16" diameter.
WSTX18	Modulating - Medium pressure zone damper, round, 18" diameter.

## TERMINAL FUNCTIONS



## TERMINAL CONNECTIONS

TR1 - 24VAC power input In / Out  
 TR2 - 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  
 A - Data Receive In / Out  
 B - Data Transmit In / Out  
 GND- Signal Wire In / Out