Deadband
Wireless Pneumatic Thermostat
Overview

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Deadband WPT Overview

What is it?

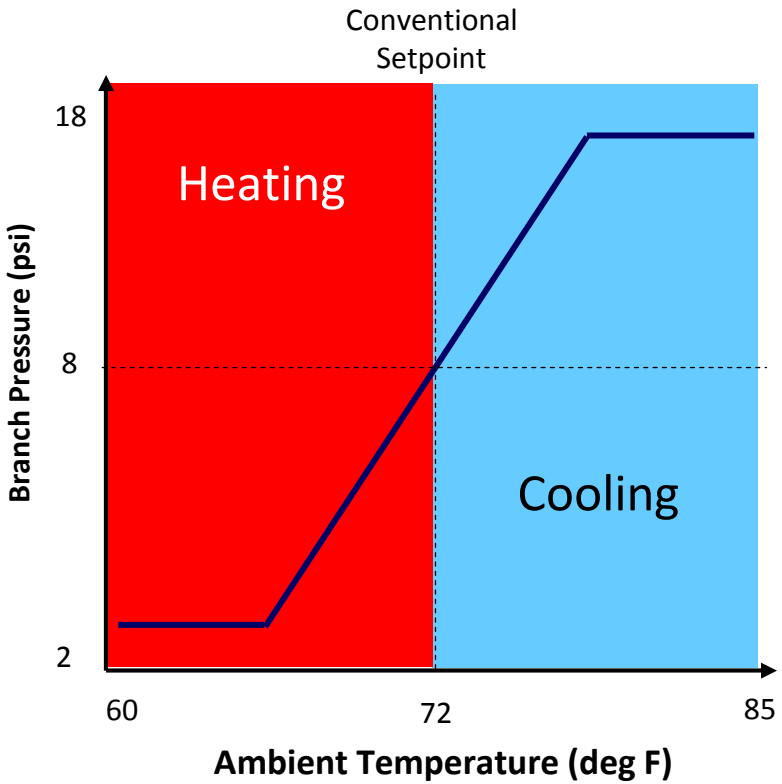
- When ambient temperature is within certain limits e.g. between 68F and 78F, *ALL HEATING AND COOLING IS DISABLED*.
- When ambient temperature is outside these limits, heating and cooling is *ENABLED* to maintain basic comfort.

Why?

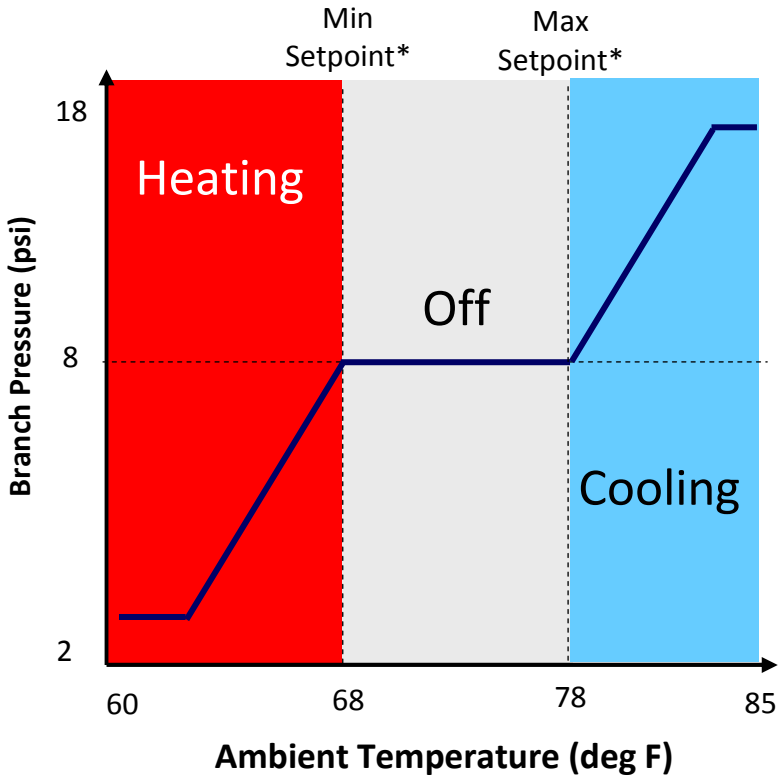
- Up to 60% energy savings potential, for occupants who can tolerate some range of temperature swing.
- Many universities and public institutions have mandated this type of temperature setpoint policy…the Deadband WPT enables and automatically enforces the policy.
- Benefits are INCREMENTAL to Night Setback, Occupancy Override, Demand Response and other energy management strategies available with the standard WPT (and also available on deadband WPT).

Comparison: Standard Pneumatic vs. Deadband

Standard Pneumatic Thermostat Behavior (Typical, Direct Acting)



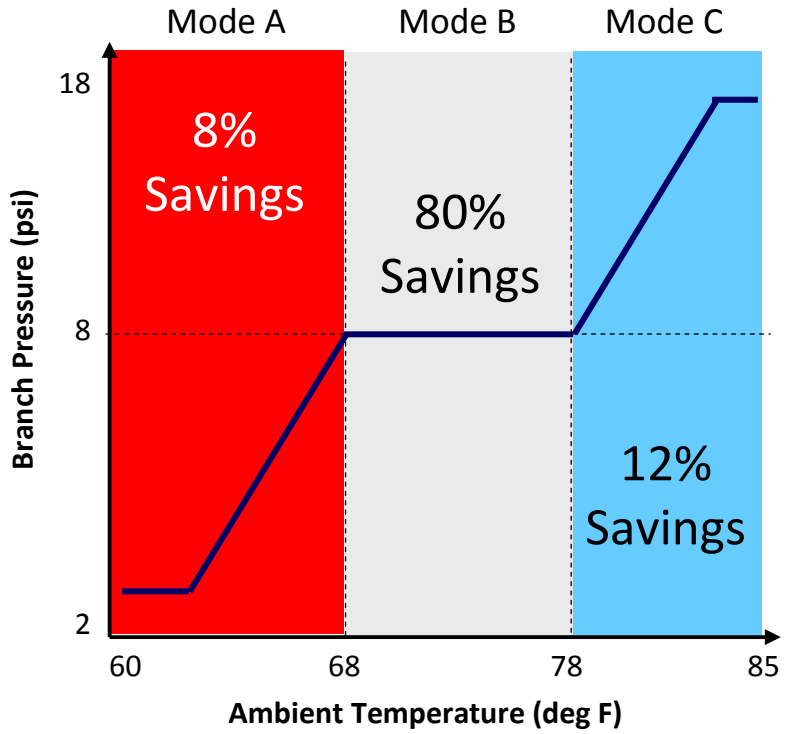
Deadband Pneumatic Thermostat Behavior (Typical, Direct Acting)



*Minimum and Maximum Setpoints are selectable by user or building manager

Energy Savings Enabled by Deadband

Significant Savings!



	% of time operating in:			Est. Energy Savings
	Mode A	Mode B	Mode C	
Location 1 (e.g. San Diego, CA)	20%	70%	10%	59%
Location 2 (e.g. Fargo, ND)	75%	20%	5%	23%
Location 3 (e.g. Miami, FL)	20%	50%	30%	45%

Deadband Savings By Mode vs. Standard Stat

- Mode A – Min Setpoint 4F below conventional Setpoint => 8% energy savings.*
- Mode B – Only ventilation fans running, no heat or cool => 80% energy savings.**
- Mode C – Max Setpoint 6F above conventional Setpoint => 12% energy savings.*

* Every degree of setback equals 2% energy savings. Source: ACEEE.
** Ventilation uses about 20% of the energy in HVAC even when cooling or heating is not active.
Souce: US Energy Information Administration.

Deadband Features

- Adjustable Deadband Minimum and Maximum Setpoints
- Adjustable Neutral Pressure
- Available in Direct or Reverse Acting Versions
- Available in Single or Two-Pipe Configurations
- Directly Compatible with Existing Deadband Stats from Major Vendors