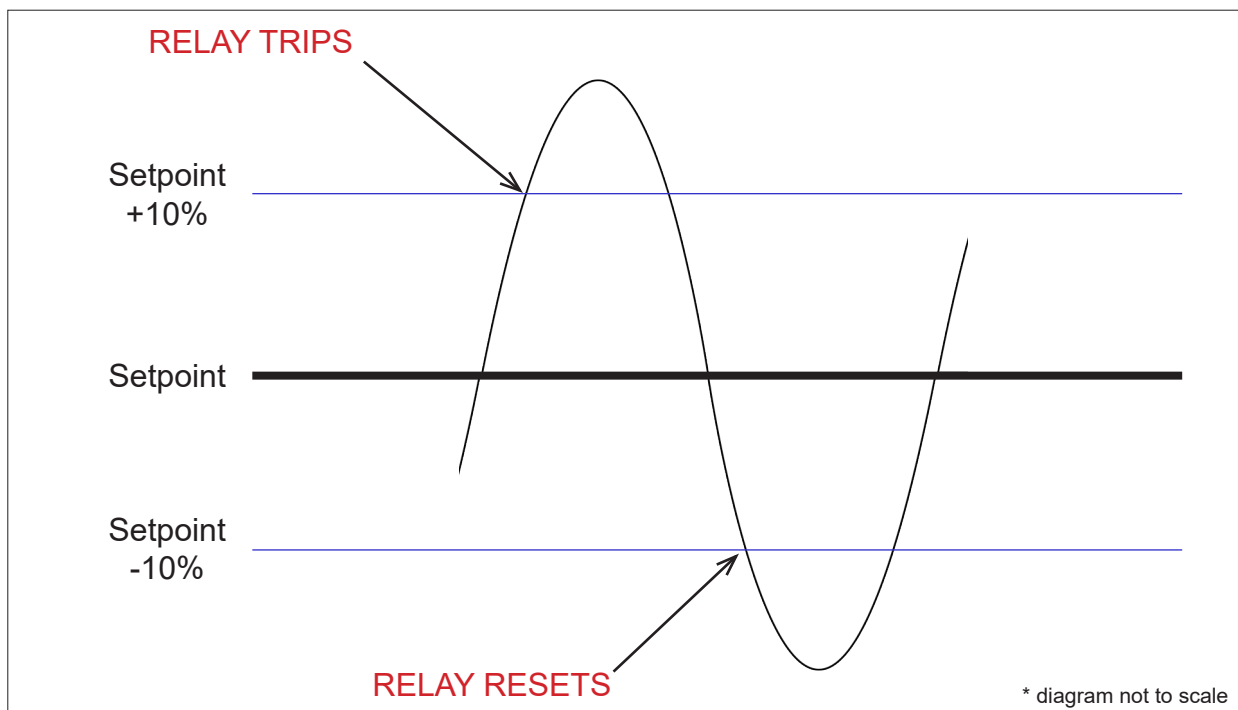# What is deadband?
API TECH SUPPORT - TS1019

DEFINITION

Deadband is the range through which an input can be varied without initiating an observable response. Deadband is usually expressed in percent of span.

EXAMPLE

A 20% total deadband is applied to the setpoint of a monitored parameter. The relay will trip and reset to its untripped state as indicated in the following graph:

RELAY TRIPS

Setpoint +10%

Setpoint

Setpoint -10%

RELAY RESETS

* diagram not to scale

20% TOTAL DEADBAND