Tech Tip: Pilot Valve Selection Simplified



Selecting the correct pilot valve for your VAC positioner can seem confusing, but a few simple rules will help you pick the correct pilot valve the first time, every time. VAC pilot valves for the V100 and V200 series positioners are selected using 3 factors and 3 basic rules.

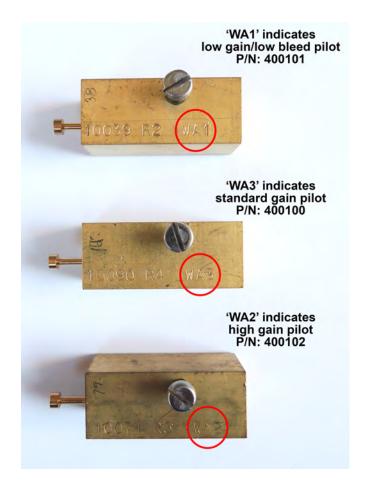
Selection Factors:

Bleed Rate (also called steady state air consumption)
 Gain
 Air Capacity

Selection Rules:

- 1. Is there a requirement for low bleed rate?
- 2. What is the actuator bore size?
 - 3. Is there a speed stroke requirement?

Typically as performance increases (gain and capacity), so does the bleed rate. The standard pilot valve for both V100 and V200 positioners is appropriate for use on most control valves with an actuator bore size 8" or less. Use of the optional pilots is driven by special requirements such as reduced air consumption, increased sensitivity, and faster stroke speeds.



V100 Pilot Valve Options:

- 1. Low Bleed/Low Gain: Suitable for applications using actuator sizes 8" bore or less that require minimal steady-state air consumption.
- 2. Standard (medium) Gain: Suitable for most applications using actuators sizes 8" or less.
- 3. High Gain: Suitable for applications requiring higher performance on actuator sizes 4" bore minimum, and actuators over 8" bore.



V200 Pilot Valve Options:

- 1. Standard Gain/Low Bleed: Best all-around option on actuator sizes 8" bore or less. Has industry leading low bleed rate as standard.
- 2. High Gain: Ultra-high performance on valve packages requiring outstanding sensitivity on actuators 4" bore minimum, and actuators over 8" bore.
- 3. Super High Flow/High Gain: Provides industry-leading 51 scfm air capacity for very fast stroke times on large actuators with bores over 12".