

What is valve authority?

In the case of a PICV, the authority is calculated by comparing the pressure lost across the flow control element with the controlled pressure differential; these two values are nearly equal resulting in an authority close to 1. Depending on the design of the PICV, the authority of the flow control element may change as the valve is regulated. This loss of authority is exhibited as a change in the valve's characteristic curve. Figure 5 shows the effect of loss of authority on an equal percentage valves.

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