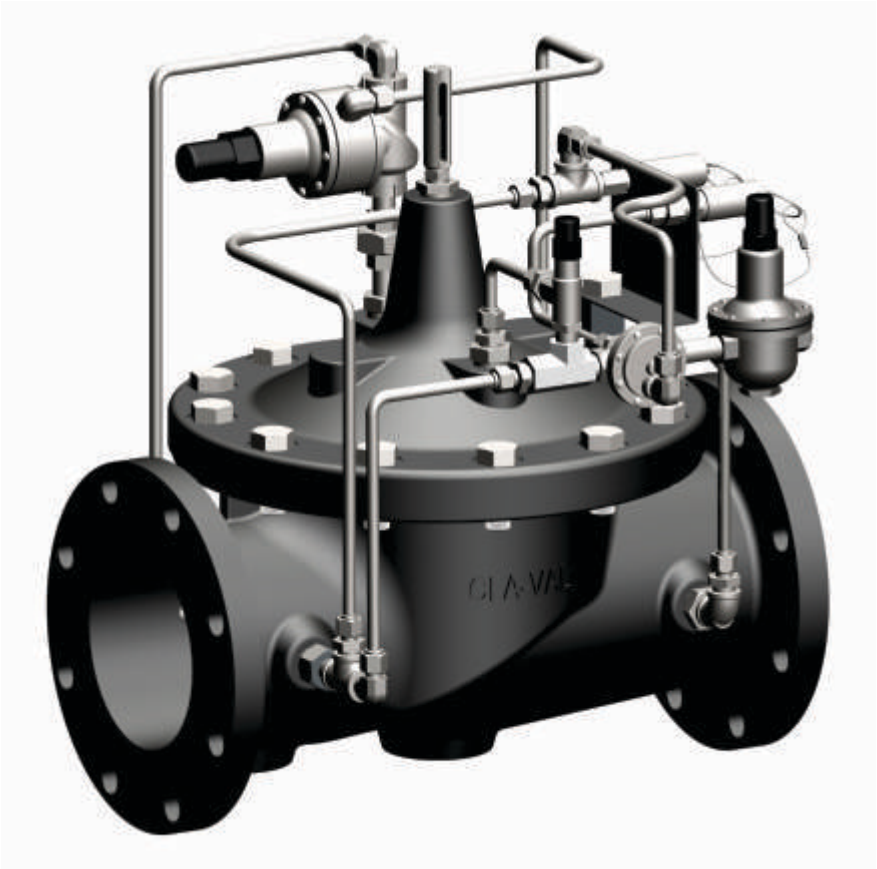

PRESSURE REDUCING VALVES

A pressure reducing valve (PRV) has the function of maintaining a constant delivery pressure regardless of its varying inlet pressure. PRV's are indispensable to fire protection - in the case of high demand, the PRV will open to meet fire flow demand.

PRV's are oftentimes subjected to severe operating conditions which lead to cavitation damage. Simply defined, cavitation is the formation of bubbles or cavities in liquid, developed in areas of relatively low pressure within a PRV. The imploding or collapsing of these bubbles trigger intense shockwaves inside the housing causing significant damage to the internal components of the valve. Where possible it is advisable to drop pressures in a series of stages rather than across one valve. This will save wear and tear on the valves by distributing the pressure drop across several valves.