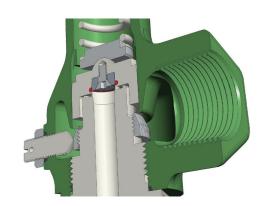


# Flow Safe Soft-Seated Pressure Relief Valves

Flow Safe's soft-seated pressure relief valves provide significant advantages over metal-seated valves to customers and end users.





### Higher operating pressures

- The resilient elastomer or plastic seat materials conform to the imperfections of the seating surface of the bushing/nozzle
- Users can operate their soft seated valves with significantly better seat tightness at operating pressures much closer to set pressure than their counterparts with metal seats, thus increasing operating efficiencies and reducing cost



## Low pressure applications

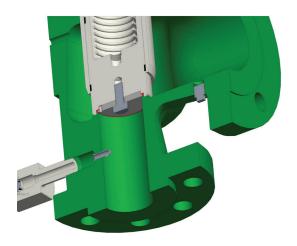
 Soft-seated valves offer advantages in low pressure applications with O-ring seats, where the flexibility of the elastomer helps create a better seal in a low pressure environment

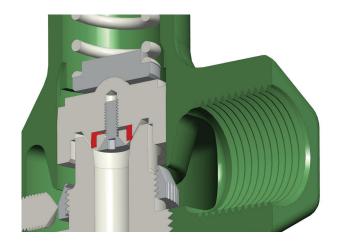


# Cryogenic applications

- Soft-seated valves excel in cryogenic applications where their counterparts' metal seats tend to shrink and cause leaks
- The resiliency of plastic seat materials provides a tight seal even in the most challenging environments

Category	Competitor Metal Seats	Flow Safe Soft Seats	The Flow Safe Advantages
Code Requirements for Seat Tightness	Less stringent requirements per API 527; some leakage allowed.	More stringent requirements per API 527; zero leakage allowed.	Meets and exceeds API 527 requirements.
			Reduction in fugitive emmisions.
Technology	Extremely tight tolerancing & meticulous lapping techniques are required to achieve tight seal.	The resilient elastomer or plastic seat material conforms to the slight imperfections of the seating surface of the bushing/nozzle, promoting enhanced seat tightness.	Users can run systems at higher operating pressures without the worry of PRV leakage, improving operating efficiencies and reducing cost.  Improved seat tightness in the most challenging environments/medias, including cryogenics, small molecule medias (i.e. Hydrogen, Helium, etc.), and both low and high pressure applications.
Field Service	Require significant attention, especially after a relieving event. Includes re-lapping and expensive trim component replacements.	Require less attention over the life of the PRV. Preventative maintenance is often as simple as a cost-effective soft goods kit replacement.	Reduced cost of ownership over the life of the PRV.





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