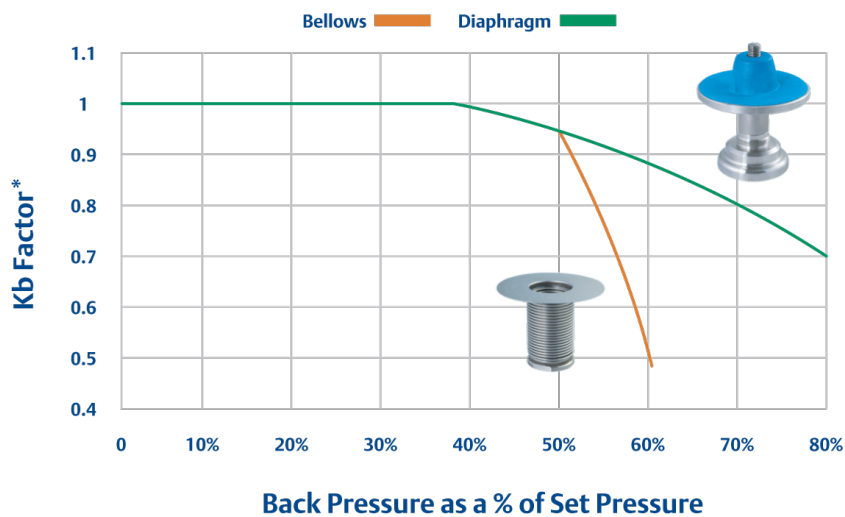


Move Your Process Beyond Bellows With Crosby™ New Balanced Diaphragm PRV Technology

While bellows have been traditionally used in pressure relief valves where variable backpressure is present, over time they may become compromised—potentially contributing to fugitive emissions and product loss while posing a safety risk for systems and operators.

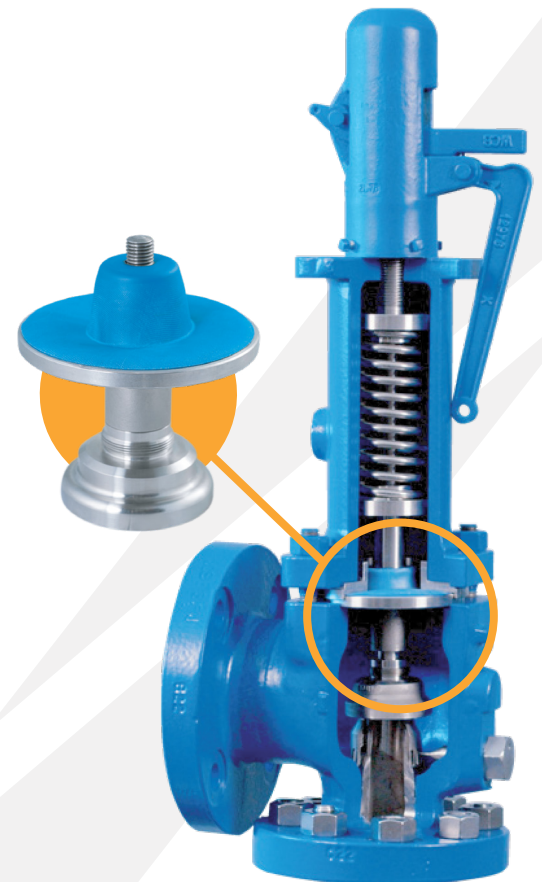
Kb Factor: Bellows vs. Diaphragm



*Kb = Capacity correction factor due to back pressure

Reduce Maintenance Costs, Improve Reliability, Increase Safety, & Lower Emissions

The Crosby J-Series with Balanced Diaphragm technology minimizes these risks by replacing the bellows with a flexible reinforced elastomer diaphragm. Diaphragms are inherently more resilient for higher backpressures and rapid pressure cycling applications. As a result, our new technology extends the backpressure limits to 80% of set pressure and increases the Kb factor up to 15%—expanding the application range of spring-loaded PRVs.



The Crosby Balanced Diaphragm Checks All the Boxes

- ✓ **Reliability:** Robust design ensures balanced operation
- ✓ **Productivity:** Extends backpressure handling while improving Kb factor
- ✓ **Safety:** 100x more resilient than metal bellows for high frequency cycling
- ✓ **Environment Friendly:** Maintains reliable protection against fugitive emissions
- ✓ **Cost Effective:** Yields long-term cost savings relative to traditional PRVs with bellows installed

How It Works

The diaphragm effective area subjected to back pressure has the same area as the nozzle seating area, ensuring balanced operation. Its location is above the guide and not in the main flow path of the media. Therefore, it reduces exposure to the media, improving reliability and valve flow performance. Additionally, the absence of bellows removes its spring rate effect, enhancing stability during operation.



The Crosby Balanced Diaphragm Difference

- 20% greater back pressure handling improves reliability during back pressure surges
- 15% improvement in Kb factor enables sizing of smaller and/or fewer valves
- 100x more resilient than metal bellows for high-frequency cycling, ensuring safety
- Same springs as JOS valves reducing spare parts and inventory costs
- Cycle, burst, and fire tested and independently witnessed by Lloyd's Register
- Easily convert existing Crosby J-Series with Balanced Diaphragm upgrade kits

Get Improved Reliability, Higher Performance,
and Greater Durability With Crosby™

Contact Your Scallon Controls Account Team



Emerson Impact Partner



For over 45 years, Scallon Controls has been serving The Golden Triangle and adjacent counties throughout East and Southeast Texas with quality products, superior service, and an unwavering commitment to our customers. As an Emerson Impact Partner, we are the leader in Control Valves, Natural Gas & Industrial Regulators, Isolation Valves & Valve Automation, Pressure Relief Valves & Tank Management, Industrial Control Systems, and Reliability Solutions. Our extensive 20 acre campus, headquartered in Beaumont, houses our Controls, Valves, and Automation centers of excellence. Scallon is known for our 'customer-first' culture, extensive solutions portfolio, and loyal team of field technicians and engineering experts.

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