



Air Relief Valve Technical Information

Applies to 2180, 2182 and 3180 series valves



Dixon Bayco air relief valves are designed and built to provide accurate and consistent operation; however periodic inspection, cleaning, and maintenance of these valves is required to ensure continued trouble-free service.

When these valves are used in applications that subject them to particulate laden air there is potential for contamination of the valve when larger particles such as grains, plastic pellets, etc. can get trapped between the valve seating surfaces.

Applications involving fine particles such as cement, fly ash, lime, flour etc. can result in a cementing of hardened product on the valve seat or poppet surface. These situations can prevent the valve from fully reseating or prevent it from opening leading to early opening or leakage from the valve.

How it Works:

Air relief valves contain a spring-loaded poppet valve that seals against a rigid annular valve seat. When the system pressure reaches the valve opening pressure the poppet lifts and system air passes under the poppet and out to the atmosphere. When a sufficient volume of air has been relieved, the system pressure will drop and the poppet will reseat.

Inspection, Cleaning and Maintenance Recommendations:

To prevent system pressure drop and the poppet reseating, Dixon advises that air / vacuum relief valves be regularly inspected, cleaned and maintained. At a minimum, the valve seat and poppet sealing surface should be inspected and cleaned, and the small air vent hole in the top casting checked for blockage.

The inspection, cleaning, and maintenance should be carried out with the valve removed from the system to a clean environment.

Please call our tech hotline at 877.582.3569 if you have any questions.

Dixon Bayco

800 High Street • Chestertown, MD 21620
ph: 410.778.2000
dixonvalve.com

Dixon Group Canada Ltd.

2315 Bowman Street • Innisfil, Ontario L9S 3V6
ph: 800.355.1991
canada.dixonvalve.com

