

# Water

## Pressure control valves for Leaks Minimization

### Water saver

Fixtures and pipes with low pressure grade might leak or even burst if high unwanted pressure reaches them. For this reason, appliances must be protected by pressure reducing systems to work properly for long periods of time. There are constant changes to the water demand in a building water supply throughout the day that affects the pressure. The key to a successful, cost-effective drinking water system high water consuming buildings is to install pressure safety valves in conjunction with pressure reducing valves. When there is a sudden rise in pressure, an emergency safety valve kicks in to regulate the pressure. Sometimes, a high flow rate in the system might be reduced to zero in a matter of seconds when a large fixture is turned off and this can create a water hammer. During all these flow variations, the pressure reducing systems in the building must react to regulate pressure.



### Potential Use in Hotel Industry

- Controlling water pressure in each floor
- Controlling water levels in water reservoirs

Advantages	Disadvantages
Simple to implement	Space requirements
Long-term experience in pressure regulating	
Leak and pipe bursting prevention	
systems are fairly straightforward	



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## Pressure control valves for Leaks Minimization

Category (wastewater reuse, grey water, cooling water, smarty irrigation, water savers)

### Part 2 –Performance, Case studies

Avoid excessive pressure	Install pressure reducers at relevant points and adjust to the minimum pressure sufficient to supply the maximum flow rate required at those points.	All accommodations
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Source : Best Environmental Management Practice in the Tourism Sector

Hydraulically operated, diaphragm actuated pressure reducing system, consisting of a BERMAD BC-720-P PRV, the system reduces a high upstream pressure to a lower, constant downstream pressure, regardless of fluctuating demand or varying upstream pressure.



### Part 3 –Companies manufacturing/implementing the technology

Bermad , <https://www.bermad.com/products/buildings-constructions/potable/>