Taha Kimia Tajhiz Co.

Core Lab

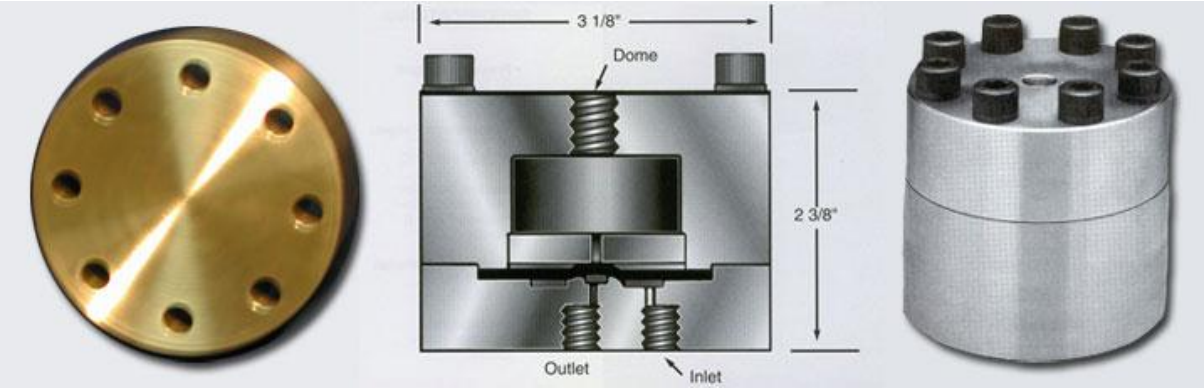
Back Pressure Regulators- BP & BPR Series

Datasheet

Accessories

Taha Kimia Tajhiz Co. , www.tahakimia.ir , www.oilinst.ir , info@tahakimia.com , Tel: 66431041, Fax: 66430339
2nd Floor, No 35, Behzadi Dd. End, Before Labafinejad St., Jamalzadeh St., Jomhoori Ave., Tehran

Back Pressure Regulators- BP & BPR Series



Core Laboratories offers two series of back pressure regulators for the maintenance of pressure in laboratory test systems. These regulators are used in maintaining the pressure in flow studies, PVT studies, Supercritical Fluids tests, and batch and continuous flow reactors. Our regulators are used to control the flow of either single or multi-phase flow. They operate via a balanced pressure system.

Gas, at the desired set point pressure, is injected into the dome of the regulator. This pressure seals off the fluid or gas flow from the process. Once the process pressure into the regulator exceeds the dome pressure, the diaphragm will flex and allow the fluids and gas to pass, thus maintaining the process pressure. When the pressure of the process drops below the dome pressure, the diaphragm will again seal off the process and maintain the pressure.

The BP series offers either an elastomeric diaphragm or a Teflon®diaphragm. The elastomers used are either Buna-N or Viton®. These elastomers are recommended for lower pressure applications, up to 1,000 psi. For higher pressures to 5,000 or 10,000 psi, the Teflon® diaphragm is recommended. In the event that solids may pass through the regulator, the flow ports can be enlarged to prevent possible plugging of the regulator.

The BPR series offers a thin metal diaphragm with a needle assembly attached to the diaphragm. As the diaphragm flexes, the needle assembly is pulled off the seat and fluids and gases can pass through the regulator. This design is recommended for two phase flow or where very precise pressure regulation is required.