

# Electronic Back Pressure Regulator

AN INNOVATIVE, SELF-CONTAINED, ELECTRONICALLY ADJUSTABLE BACK PRESSURE REGULATOR FOR FLOW CHEMISTRY

Vapourtec's eBPR is designed to deliver precise control of back pressure in the range 0.5 to 20 bar [gauge] over a flow rate range of 0.05 to 30 mL/min. The eBPR does not require an external reference pressure.



## Key features of the eBPR

- Pressure control 0.5 bar to 20 bar (gauge)
- Electronically set reference pressure
- Handles working fluids at temperatures up to 100 °C
- Suitable for concentrated acids. Wetted surfaces are PTFE & PFA only
- RS-232 serial protocols
- Can be mounted on an E-Series or R-Series flow chemistry system
- Reaction pressure can now be used as a variable for automated optimization
- Patent pending

## Rugged, reliable and compact

In addition to flow chemistry applications, the eBPR has applications in most chemical processes for providing pressure relief for liquid, gas or mixed fluids.

The wetted flow path of the Vapourtec eBPR has only Polytetrafluoroethylene (PTFE) and Perfluoroalkoxy alkanes (PFA) fluoropolymers contact surfaces.



Precision back pressure regulators enhance reproducibility, scalability, and safe operation, making them indispensable tools for modern chemical synthesis and process optimization.

The specifications are impressive with Vapourtec's eBPR delivering precise control of back pressure in the range 0.5 to 20 bar (g) over a flowrate range of 0.05 mL/min to 30 mL/min. It works with fluid temperatures up to 100 °C.

For precise control of lower pressures a high precision version is available with pressure control 0.1 bar to 5 bar (gauge).

## Compatibility

Available with or without a user interface, the eBPR can be mounted on both the E-Series and R-Series and includes serial communication via RS-232 protocols.



eBPR with user interface  
mounted on an E-Series system



eBPR without user interface mounted  
on an R-Series system

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SF-10+ heated laboratory pump



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