

Pressure Expander

Bladder or diaphragm vessel for pressure stabilization and water hammer control.

Pressure expanders use a bladder or diaphragm to separate system fluid from a compressed gas charge. They absorb pressure surges, accommodate thermal expansion and maintain system pressure in closed-loop heating, cooling and process systems.

KEY FEATURES

- Bladder or diaphragm construction
- Replaceable bladder on larger sizes
- System pressure stabilization
- Water hammer absorption

SPECIFICATION

ITEM	VALUE
Volume range	5–500 L
Pressure range	1–350 bar
Temperature	-20 to 120 °C
Bladder	Butyl or EPDM
Connection	1/2–4 in
Design code	ASME VIII, PED

STANDARDS AND MATERIALS

Standards: ASME Section VIII; PED 2014/68/EU; CRN available.

Materials: Cast iron; Carbon steel; Butyl / EPDM bladder.

ORDERING RANGE

Representative configurations. The full size, material and connection range is confirmed on the order acknowledgement.

VOLUME	PRESSURE	CONNECTION	MATERIAL	PART NUMBER
10 L	10 bar	1"	Cast iron	BGI-PE-010-10-CI
25 L	10 bar	1"	Cast iron	BGI-PE-025-10-CI
50 L	16 bar	1-1/2"	Carbon steel	BGI-PE-050-16-CS
100 L	16 bar	2"	Carbon steel	BGI-PE-100-16-CS
250 L	25 bar	3"	Carbon steel	BGI-PE-250-25-CS

APPLICATIONS

- Closed-loop heating
- Cooling systems
- Process pressure control
- Water hammer control

ORDERING NOTES

Confirm size, pressure class, facing or connection, material and quantity when ordering. For critical service, include the project specification, NDE requirements and documentation package. Alternative materials, coatings, tappings and special dimensions are quoted on request.

Range: Expanders. Document reference: DS-PRESSURE-EXPANDER · Rev. 04.

Ordering and technical support

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Quotations are prepared against the released specification. Certified drawings are issued with the order.