

Pressure Balanced Expansion Joint

Balanced bellows arrangement that removes pressure thrust from anchors.

Pressure balanced expansion joints use a balancing bellows and tie rods to contain pressure thrust internally. This reduces anchor and guide loads, making them suitable for high-pressure lines and equipment with limited nozzle load capacity.

KEY FEATURES

- Pressure thrust contained within the joint
- Reduced anchor and nozzle loads
- Suitable for high-pressure lines
- Available with purge connections

SPECIFICATION

ITEM	VALUE
Size range	8–48 in
Pressure class	150 / 250 psi
Axial movement	±4 to ±5 in
Balancing	Balancing bellows and tie rods
Accessories	Purge, drain, liner
Design code	EJMA

STANDARDS AND MATERIALS

Standards: EJMA; ASME B31.3; ASTM A240 / A312.
Materials: ASTM A312 TP316L; ASTM A240 321.

ORDERING RANGE

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

SIZE	PRESSURE	MOVEMENT	MATERIAL	PART NUMBER
12"	150 psi	±5 in axial	TP316L	BGI-PB-1200-150-316L
16"	150 psi	±5 in axial	TP316L	BGI-PB-1600-150-316L
20"	250 psi	±4 in axial	321	BGI-PB-2000-250-321
24"	250 psi	±4 in axial	321	BGI-PB-2400-250-321

APPLICATIONS

- High-pressure steam
- Turbine connections
- Equipment nozzle protection
- Retrofit piping

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-BALANCED-EXPANSION-JOINT · Rev. 04.

Ordering and technical support

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