

Thermal Expansion Joint

High-temperature bellows joint for thermal growth in process piping.

Thermal expansion joints are designed for the axial growth of hot piping between anchors. The bellows alloy, insulation and liner are selected for the operating temperature and cycle life, with optional external covers for personnel protection.

KEY FEATURES

- Designed for thermal growth
- High-temperature alloys and liners
- Insulation and personnel covers
- Cycle life verified by calculation

SPECIFICATION

ITEM	VALUE
Size range	4–36 in
Pressure class	150 psi
Axial movement	±3 to ±4 in
Temperature	-20 to 1,000 °F
Bellows	316L, 321, alloy on request
Accessories	Liner, cover, insulation

STANDARDS AND MATERIALS

Standards: EJMA; ASME B31.3; ASTM A240 / A312.
Materials: ASTM A312 TP316L; ASTM A240 321; Alloy 625 on request.

ORDERING RANGE

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

SIZE	PRESSURE	MOVEMENT	TEMPERATURE	PART NUMBER
6"	150 psi	±4 in	750 °F	BGI-TJ-0600-150-316L
10"	150 psi	±4 in	750 °F	BGI-TJ-1000-150-316L
12"	150 psi	±3 in	1,000 °F	BGI-TJ-1200-150-321
18"	150 psi	±3 in	1,000 °F	BGI-TJ-1800-150-321

APPLICATIONS

- Hot process piping
- Steam distribution
- Refinery units
- Power plant 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-THERMAL-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.