

Gimbal Expansion Joint

Two-plane angular movement with gimbal rings and pinned hinges.

Gimbal expansion joints absorb angular movement in any plane using a pair of gimbal rings and pins. They are used in multi-directional piping systems where axial and lateral movement is restrained by anchors and guides.

KEY FEATURES

- Angular movement in any plane
- Gimbal rings and pins carry pressure thrust
- Bellows protected from torsion
- Tie rods and limit rods available

SPECIFICATION

ITEM	VALUE
Size range	4–48 in
Pressure class	150 / 300 psi
Angular movement	±8° to ±10°
Bellows	2–6 ply, 304/316L/321
Accessories	Tie rods, limit rods, liners
Design code	EJMA

STANDARDS AND MATERIALS

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

Materials: ASTM A312 TP304; 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
6"	150 psi	±10°	TP304	BGI-GJ-0600-150-304
10"	150 psi	±10°	TP304	BGI-GJ-1000-150-304
14"	300 psi	±8°	TP316L	BGI-GJ-1400-300-316L
20"	300 psi	±8°	TP316L	BGI-GJ-2000-300-316L

APPLICATIONS

- Multi-plane piping
- Turbine exhaust
- Steam lines
- Refinery 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-GIMBAL-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.