

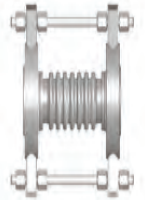


**Unlimited Possibilities**

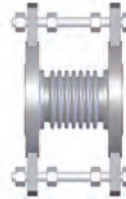
Expansion Joint Products



**US** *Unrestrained Single*



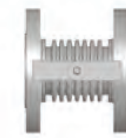
**TS** *Tied Single*



**LS** *Limit Single*



**SHS** *Slotted Hinged Single*



**HS** *Hinged Single*



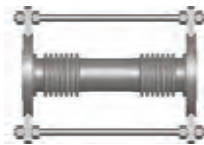
**UU** *Unrestrained Universal*



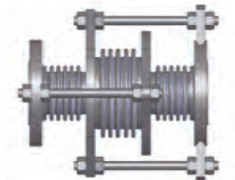
**GS** *Gimbale Single*



**PBS** *Pressure-Balanced, Elbow Single*



**TU** *Tied Universal*



**PBI** *Pressure-Balanced In-Line*



**PBU** *Pressure-Balanced, Elbow, Universal*



**EPD** *Externally Pressurized Dual*



**EPS** *Externally Pressurized Single*



## Specifications

**Size Range** from 2 in. - 120 in. diameter pipe sizes (tube sizes also available).  
Single and multi-ply

### Alloys

- Stainless steels including - T304, T304L, T309, T310, T321, T316, T316L
- Nickel alloys including - 400, 600, 625, 625LCF, 800, 800H, Nickel 200, C276
- Other alloys are available upon request

**Pressure** from full vacuum to 3000 psi

**Temperature** range -450° F. to 2000° F.

## Designs

**Pre-Engineered Expansion Joints** are 15, 50, 150 or 300 psi bellows, stocked and ready for rapid shipment. Accounting for many basic expansion joint applications, pre-engineered designs include:

- Standard Bellows
- Unrestrained Single
- Limit Single
- Tied Single
- Unrestrained Universal
- Tied Universal

Pre-Engineered expansion joints are available in sizes ranging from 2 in. - 30 in. and in 321 and 316 stainless steel.

Pre-Engineered expansion joints can be constructed using any type of end fitting or accessory. Standard accessories include stainless cover, single drop-in liner, single welded liner, or custom metal tags.

**Custom-Designed Expansion Joints** are available in an array of alloys and end fittings to suit any expansion joint application. Because of their many options, Custom-Designed expansion joints are designed to suit specific needs and are engineered through our Inside Sales Department.

Custom-Designed expansion joints are available in sizes ranging from 2 in. - 120 in. and all alloys (as listed above).

Custom-Designed expansion joints can be constructed using any type of end fittings or product options including:

- 321 stainless steel cover
- Single welded liner
- Telescoping welded liner
- Single drop-in liner
- Smooth transition/Full-flow liner
- Telescoping drop-in liner
- Custom metal tag



**Rapid Deliveries** - An aggressive material stocking program provides exceptional service with the best standard delivery time. Expedited next-day deliveries are available upon request.

**3-D CAD Drawings** - Available upon request with any inquiry.

**Certifications** - ABS, ASME IX, B31.1, and B31.3

All expansion joints are designed and manufactured to EJMA standards.



**HOSE MASTER**

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