JCM Expansion Joints for Industrial Service

JCM Fabricated Expansion Joints

JCM Expansion Joints permit up to 10” of concentrated pipe movement that provides for normal expansion/contraction of pipelines subject to variations of both environmental and line content temperatures. JCM Expansion Joints are manufactured using a telescoping design that consists of a fabricated steel body, or housing, that accommodates an inserted internal “slip pipe” that moves in and out of the body. This free movement absorbs the linear, or axial, movement of the section of pipe. The fabricated steel body houses a “packing” area of alternating rings of lubricated flax and rubber that provides the water tight seal during the cycling of the joint. JCM Expansion Joints offer several design options including end connections, coatings, limit rods, stainless steel fabrication and others. JCM Expansion Joints are manufactured for each specific application allowing for the incorporation of special options or engineered features required for the installation.

Heavy Duty Construction - The heavy duty, durable exterior body provides the protective shell for the slip pipe and packing system. For corrosive or acidic environments, the expansion joint may be epoxy coated or fabricated of stainless steel.

Externally Guided Slip Pipe - The chromed slip pipe furnishes a hard, corrosion resistant surface that reduces friction between the slip pipe and packing material. For corrosive environments or line contents, slip pipe is available fabricated of stainless steel.

Adjustable Packing Gland - Alternating rings of lubricated flax and rubber are packed tightly into the packing area of the body by the adjustable packing gland. This packing gland maintains a consistent compression of the flax/rubber rings to ensure a tight, leak proof seal between the slip pipe and body.

Lubricated Packing - The rings of lubricated flax provide the “lubrication” to the slip pipe ensuring a smooth expanding/contracting movement while the square rubber rings secure the water tight seal. This packing area is easily accessible, without disruption of service, should repacking be required.

Limit Rods - For applications incorporating more than one expansion joint, limit rods should be included to facilitate the expansion/contraction movement from one expansion joint to the next allowing the units to cycle properly in the adjustment of expansion/contraction needed.

HOW TO ORDER
For pricing and engineering, the following information must be furnished:
JCM 801 and 802 are available fabricated of 304 stainless steel or 316 stainless steel

- Type of pipe
- Outside diameter of pipe
- Type of End Connections
- Line Contents
- Minimum and maximum temperatures
- Maximum working pressure
- Material and Coating specifications

JCM 802 Double End Expansion Joints are designed for special applications such as middle of line use where expansion joint body can be anchored. This fitting permits up to 10” total pipe movement, 5” on each end, with properly anchored body.
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JCM Expansion Joints are available as Model 801 Single End design or Model 802 Double End Expansion Joint and are available with the following options:

(1) Weld-On Ends without Limit Rods
(2) Weld-On Ends with Limit Rods
(3) Flanged Ends without Limit Rods
(4) Flanged Ends with Limit Rods
(5) Mechanical Joint Ends without Limit Rods
(6) Mechanical Joint Ends with Limit Rods

Other end connections available

Increased or decreased amounts of pipe movement capability

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**JCM 801 Single End Expansion Joint**

**JCM 802 Double End Expansion Joint**

<table>
<thead>
<tr>
<th>End Option</th>
<th>Description</th>
<th>Maximum Length Fitting Open</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Weld-On Ends without Limit Rods</td>
<td>38”</td>
</tr>
<tr>
<td>2</td>
<td>Weld-On Ends with Limit Rods</td>
<td>40-1/2”</td>
</tr>
<tr>
<td>3</td>
<td>Flanged Ends without Limit Rods</td>
<td>39”</td>
</tr>
<tr>
<td>4</td>
<td>Flanged Ends with Limit Rods</td>
<td>50-1/2”</td>
</tr>
<tr>
<td>5</td>
<td>Mechanical Joint Ends without Limit Rods</td>
<td>43”</td>
</tr>
<tr>
<td>6</td>
<td>Mechanical Joint Ends with Limit Rods</td>
<td>54-1/2”</td>
</tr>
</tbody>
</table>

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**JCM Expansion Joint - Material Specifications**

**Body Material:** ASTM A-36 Carbon Steel. Optional 304 or 316 Stainless Steel

**Slip Pipe:** ASTM A53B Machined, chrome plated. Optional 304 or 316 Stainless Steel.

**Gasket And Flax:** Square packing Buna-N rubber, 55 - 60 durometer, compounded for use with water, salt solutions, mild acids, bases and sewage. Flax: Gurlock waxed, braided cord (hemp).

**Limit Rods:** Grade B-5.

**Finish:** Heavy coat of corrosion resistant primer.