

Materials of Construction and Dimensional Data

The following materials, processes and specifications are used for the construction of all standard Series 6500 expansion Joints.

Slip (Traveling Pipe): Schedule 80 ASME A53 Gr. B pipe through 16" diameter, Schedule 60 ASME A53 Gr. B pipe 18" through 24" diameter. The seal surface is precision machined and coated to a total thickness of 0.002" thick consisting of a 0.001" thick layer of crack free chrome over a 0.001" thick layer of industrial hard chrome in accordance with ASTM B 650.

Over Travel Stop Ring: ASTM A240 austenitic stainless steel.

Body: One piece construction formed by a Hyspan proprietary process made from ASME A53 Gr. B pipe. Schedule is standard weight unless otherwise specified.

Drain Port and Plug: 3000 lb. thread-o-let made from ASME A105 steel forging.

Seal Housing: C1018 steel or ASME A53 Gr. B heavy wall pipe.

Injector Fitting Body: C1018 steel. Optional Injectors with 1/4 turn safety valves include an austenitic stainless steel valve stem.

Injector Fitting Plunger: AISI 1144 high strength steel.

Internal and External Guides: ASME SB169 aluminum bronze abrasion free alloy.

Braided Packing: Braided graphite impregnated carbon fiber yarn.

Injected Packing: Graphite flakes with synthetic oil carrier, Grafoil® Flexible Graphite.

Flanges: ASME/ANSI B16.5 150 lb. or 300 lb. raised face slip-on ASME A105 forged steel.

Weld End Preparation: ASME/ANSI B16.9 beveled 37.5° for standard weight pipe unless otherwise specified.

Grooved End Preparation: ASME/AWWA C606-87.

Anchor Base: ASME A36 steel plate.



Additional packing is available in kits of 13 pellets for maintenance of installed expansion joints.

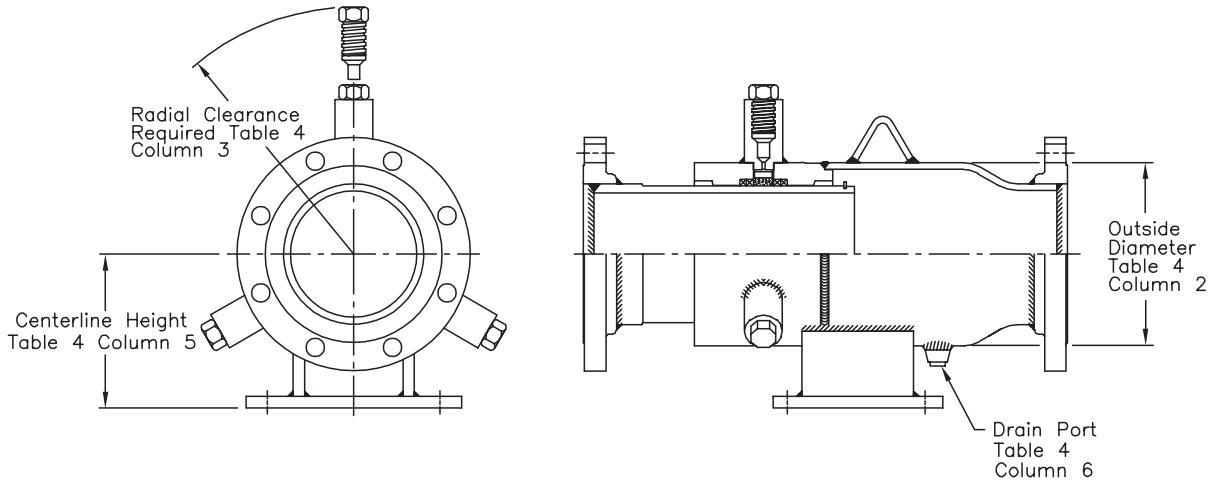
Grafoil is a UCAR registered trademark.

Table 4 Dimensional Data

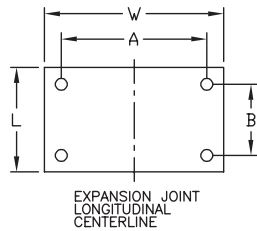
Nominal Size (NPS)	Body Outside Diameter (inches)	Radial Clearance Required (inches)	Number of Packing Fittings	Centerline Height (inches) 6501AB 6502AB 6505 6506	Drain Port Size (NPS)	Anchor Base Pattern 6501AB, 6502AB, 6505, 6506				
						Hole Diameter (inches)	Base Length (L) (inches)	Base Width (W) (inches)	Hole Spacing (inches)	
									A	B
2	3.50	8.88	2	3.88	1/2	0.625	6.0	7.0	5.0	4.0
2 1/2	4.00	9.00	2	4.88	1/2	0.625	6.0	7.0	5.0	4.0
3	4.50	9.31	2	4.88	1/2	0.625	6.0	7.5	5.5	4.0
4	5.56	9.88	2	5.50	1/2	0.625	6.0	9.5	7.5	4.0
5	6.63	10.38	3	6.50	1/2	0.875	6.0	9.5	7.5	4.0
6	8.63	11.38	3	6.50	3/4	0.875	8.0	12.0	10.0	6.0
8	10.75	12.50	4	9.25	3/4	1.125	9.0	13.0	10.0	6.0
10	12.75	13.50	4	9.75	3/4	1.125	11.0	17.0	14.0	8.0
12	14.00	14.00	5	12.00	3/4	1.375	12.0	20.0	16.0	8.0
14	16.00	15.00	5	15.50	3/4	1.375	12.0	22.0	18.0	8.0
16	18.00	16.00	6	15.50	1	1.375	14.0	22.0	18.0	10.0
18	20.00	17.00	6	16.25	1	1.375	14.0	22.0	18.0	10.0
20	22.00	18.00	8	18.00	1	1.625	19.0	27.0	22.0	14.0
24	26.25	20.18	8	20.00	1	1.625	19.0	27.0	22.0	14.0
1	2	3	4	5	6	7	8	9	10	11

Note: Add 1.25" to the values in Column 3 for injectors with optional 1/4 turn valves.

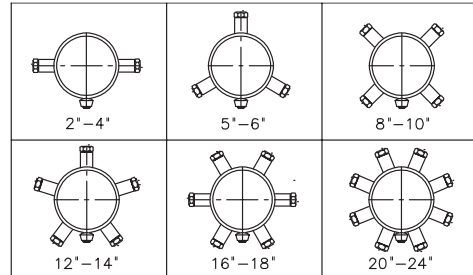
Type 6501 & 6502 expansion joints are available with full thrust anchor bases.



Anchor Base drilling dimensions. Refer to Columns 7–11 of Table 4 for details.



Injector Fitting orientation

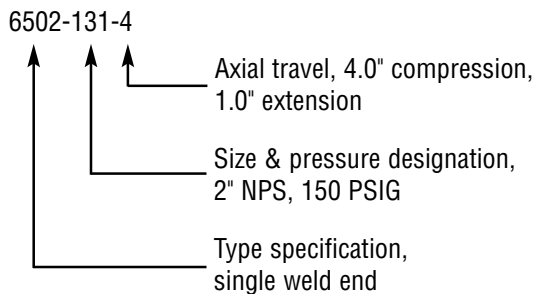


Ordering Instructions

Refer to Tables 5 through 8 to select the configuration and service conditions required for your application. If the travel required is unknown see the method of calculation on Page 5.

Example

2" NPS
Single Expansion Joint
Steel pipe weld ends
150 psig at 500°F maximum
4.0" axial travel maximum



Single expansion joints, 6501 and 6502, ordered with anchor based are identified as 6501AB and 6502AB. Anchor bases are standard on dual anchor base joints, 6505 and 6506, and do not require the AB suffix.

Optional features must be specified by a written description accompanying the part number. Options that are available include:

- Higher rated pressure and temperature
- Vent or instrumentation ports
- Service outlets (size and orientation must be specified)
- 1/4 Turn valve on each injector fitting
- Alternate materials
- Factory preset of overall length
- Grooved end attachments
- Threaded adjusting rods for field preset