

## Installation Preset

Series 6500 expansion joints can be ordered from the factory preset; however, if it is necessary to change the travel during installation, the shipping bars must be removed and the length adjusted. Table 9 is a tabulation of the thermal expansion or contraction for various pipe run lengths corresponding to temperature differences from 70°F. For example, if the expansion joint is used as a replacement in a system that has not cooled down, and the pipe temperature is 170°F over a 200 foot run, the joint must be compressed 1.53". Refer to Table 3 for the friction force required to compress or extend the joint. Series 6500 expansion joints can be ordered with factory installed threaded adjusting rods for field presetting.

## Maintenance

The packing system incorporated into the Series 6500 expansion joints provides combined sealing and lubrication. Packing can be added under full line pressure; however, this is only necessary if a leak occurs, and only enough packing should be added to stop the leak.

1. Standard Injectors: Remove the Plunger nearest the leak and add one packing plug. Inject the packing by resetting the Plunger. Continue this process by adding packing to the remaining Injectors until the leak stops.

**Table 9 Installation Preset (SteelPipe)**

Temperature Difference	Distance Between Anchors—Feet					
	50	100	150	200	250	300
70°F	0.08	0.15	0.23	0.31	0.38	0.46
80	0.11	0.23	0.34	0.46	0.57	0.69
90	0.15	0.31	0.46	0.61	0.76	0.92
100	0.19	0.68	0.57	0.76	0.95	1.15
110	0.23	0.46	0.69	0.92	1.15	1.37
120	0.27	0.53	0.80	1.07	1.34	1.60
130	0.31	0.61	0.92	1.22	1.53	1.83
140	0.34	0.69	1.03	1.37	1.72	2.06
150	0.38	0.76	1.15	1.53	1.91	2.29
160	0.42	0.84	1.26	1.68	2.10	2.52
170	0.46	0.92	1.37	1.83	2.29	2.75
180	0.53	1.07	1.60	2.14	2.67	3.20
190	0.61	1.22	1.83	2.44	3.05	3.66
200	0.69	1.37	2.06	2.75	3.43	4.12
210	0.76	1.53	2.29	3.05	3.82	4.57
1	2	3	4	5	6	7

2. Injectors with Safety Valves: As an optional feature a 1/4 turn valve can be incorporated into the Injector. If the valve is installed it should be turned 90° (off) prior to removing the Plunger. Insert the packing and start the Plunger. Open the valve and inject the packing. Follow the procedure from Paragraph 1.

## Five (5) Year Limited Warranty

This warranty is given by HYSpan PRECISION PRODUCTS, INC. (HYSpan) for the benefit of the first purchasers for use of its Series 6500 Packed Expansion Joints manufactured by HYSpan to standard catalog construction. The product is warranted to be free from defects in material and workmanship, and to be leak-free for a period of five (5) years from the date of shipment by HYSpan in accordance with the following conditions:

1. The design pressure and temperature are not exceeded –including surge and upset conditions.
2. The installation conforms to HYSpan installation instructions and approved practice for anchoring, supporting and guiding, and generally accepted good piping practice.
3. Substances in contact with all internal and external surfaces must be compatible with the materials of construction, including all contaminants.
4. The warranty shall be limited to the replacement by HYSpan of the same model Series 6500 expansion joint, and payment for transportation by the least expensive method. Labor, material and other costs related to the failure or replacement of the expansion joint are not included. HYSpan shall not be liable for damage or delay suffered by the purchaser regardless of whether such damages are general, special or consequential in nature, whether caused by defective material or workmanship, or whether caused by HYSpan's negligence regardless of the degree.
5. HYSpan warrants satisfactory leak-free performance. If leakage occurs through the packing and cannot be prevented by the addition of packing by the user in accordance with the field packing installation instructions, HYSpan will repair or replace the expansion joint within the terms of this warranty.
6. This warranty is expressed in lieu of all other warranties, expressed or implied, including the warranty of merchantability, the implied warranty of fitness for a particular purpose, and all other obligations or liabilities on the part of HYSpan, and it neither assumes nor authorizes any other persons to assume for HYSpan any other liabilities in connection with the sale of the products.
7. The warranty is limited to installations in the United States, Puerto Rico and Canada.

The purchaser shall advise the HYSpan factory of any warranty claim including the nature of the failure and the serial number of the expansion joint (permanently located adjacent to the lifting lug). HYSpan shall provide return goods authorization and shipping directions to return the failed joint to the factory. A mutually agreeable delivery schedule and method of shipping the replacement shall be established. The purchaser shall furnish a confirming purchase order and is obligated to the current replacement cost of the joint and shipping expense. Upon receipt of the failed product, the cause of failure shall be determined by the factory at no expense to the purchaser. A credit shall be issued by the factory for the replacement cost and least expensive shipping for valid warranty claims. In the event of a dispute, HYSpan shall furnish the failed product to the purchaser or their representative for failure analysis.