

**EXPANSION JOINT SPECIFICATION  
LOW CORRUGATION, SINGLE METAL BELLOWS  
HYFLEX SERIES 1507, 1508, 1509, and 1510**

Expansion Joints will be Hyspan 1500 Series Hyflex configuration incorporating a single bellows and end fittings. End fittings may be fixed, vanstone, or lap joint flanges; weld ends, grooved ends, and others as stated on the project schedule. Hyflex expansion joints primarily absorb axial motion, with small amounts of lateral motion allowed. Additional hardware including liners, shrouds, rods, and other equipment may be included. The Expansion Joint Manufacturers Association (EJMA) must certify the expansion joint manufacturer. Non-certified manufacturers are NOT ACCEPTED. Expansion joints will be Hyspan series 1500 Hyflex.

Bellows will be one-to-four plies as required of austenitic stainless steel. Specify Alloy 625 bellows material when chloride-ion stress-corrosion cracking is a concern, or other corrosion resisting material appropriate for the intended service.

Flanges, if required, are A105 forged or carbon steel plate, with ANSI B16.5 drilling and outside diameter, other specified dimensions. Fixed flanges are 1507 Series. Vanstone flanges, 1508 Series, provide all wetted surfaces matching the bellows material.

Butt weld-ends, 1509 Series, if specified are schedule standard A53 Gr. B, or the schedule and material grade specified.

Flange x Weld End designs are 1510 Series. Flow direction is required.

As a minimum, internal flow liners are required when flow velocities exceed values stated below. NOTE: In accordance with EJMA, liner thickness must be adjusted for lengths greater than 18", velocities greater than 100 feet per second, systems with less than 10 pipe diameters of straight pipe upstream, and design temperatures above 300 F. For any of these conditions contact the Hyspan representative for assistance:

GAS		LIQUID	
SIZE	VELOCITY	SIZE	VELOCITY
Up to 6" diameter	4 feet/second per inch of diameter	Up to 6" diameter	2 feet/second per inch of diameter
Over 6" diameter	25 feet/second	Over 6" diameter	10 feet second
<b>ALL VELOCITIES ABOVE 100 FEET PER SECOND REQUIRE SPECIAL LINER DESIGN – CONSULT HYSPAN</b>			

Unless specified or scheduled otherwise, the following catalog standard parameters apply to 500 F.:

<b>Design Pressure (PSI)</b>	50	150	300
<b>Test Pressure (PSI)</b>	75	225	450

NOTE: TORSIONAL MOTION NOT ALLOWED – CONSULT HYSPAN IF TORSION EXISTS