



MASON INDUSTRIES, Inc.

MERCER RUBBER Co.

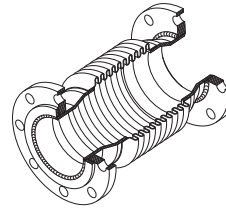
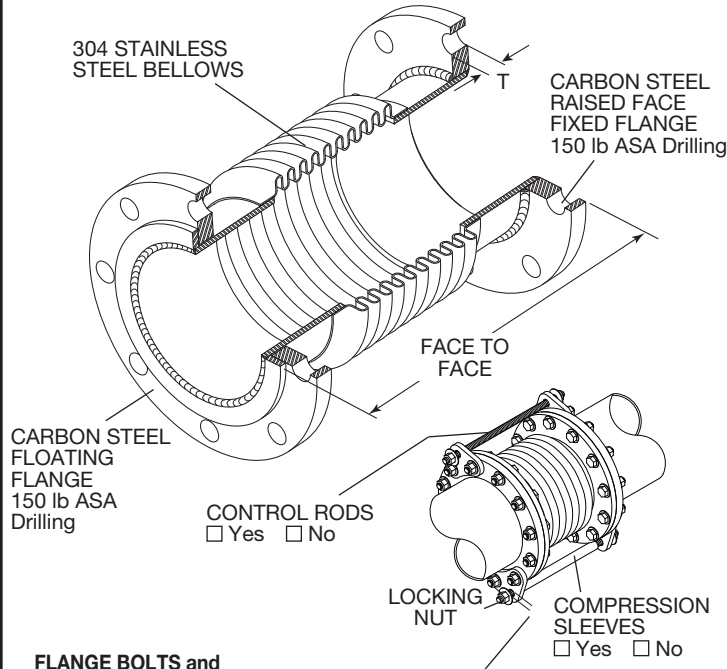
350 Rabro Drive, Hauppauge, NY 11788  
 Mason- 631/348-0282 • Info@Mason-Ind.com  
 Mercer- 631/582-1524 • Info@Mercer-Rubber.com  
 FAX 631/348-0279



JOB NAME \_\_\_\_\_  
 CUSTOMER \_\_\_\_\_  
 CUSTOMER P.O. \_\_\_\_\_  
 MASON M. \_\_\_\_\_  
 DWG No. \_\_\_\_\_

**EFL250**

250 psi FULL VACUUM  
 BELLOWS  
 EXPANSION  
 JOINT with FIXED  
 and FLOATING  
 FLANGES 150 lb ASA



Our 2" - 4" designs use 5" stainless bellows between reducers for greater stability.

**EFL250 RATED PRESSURES @ ELEVATED TEMPERATURES**

Temperature (°F)	Temperature (°C)	Rated Pressure (psi)	Rated Pressure (kg/cm <sup>2</sup> )
200	93	227	15.9
250	121	220	15.4
300	149	212	14.9
400	204	195	13.7
500	260	192	13.4
600	316	190	13.3
700	371	185	13.0
800	427	Not Recommended	

**FLANGE BOLTS and NUTS REQUIREMENT**

EFL250 Size	Quantity per End	Size & Length
2 & 2 1/2	8	5/8 x 3
3	8	5/8 x 3 1/4
4	16	5/8 x 3 1/4
5 & 6	16	3/4 x 3 1/2
8	16	3/4 x 4
10 & 12	24	7/8 x 4 1/4
14	24	1 x 4 1/2
16	32	1 x 4 1/2

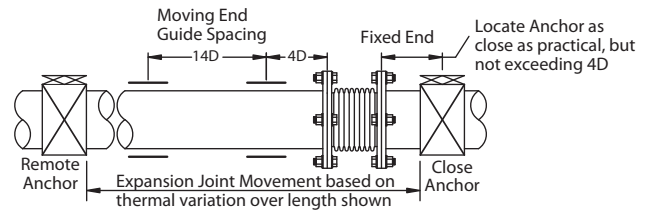
GAP SETTING (Equal to axial extension for anchored systems or zero for unanchored systems)

**CARBON STEEL PLATE FLANGES**

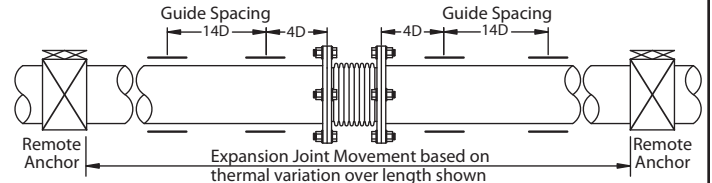
Pipe Size (in)	Pipe Size (mm)	Flange Thickness T (in)	Flange Thickness T (mm)
2 thru 4	20 thru 100	5/8	16
5 thru 6	125 thru 150	3/4	19
8 thru 16	200 thru 406	1	25

**GUIDE SPACING - Referencing Pipe Diameter "D"**

**Guides and Anchors for Joint located near Anchor**



**Guides and Anchors for Joint located between Remote Anchors**



**EFL250 DIMENSIONS AND PRESSURE RATINGS 2" (50mm) COMBINED AXIAL MOVEMENT, 1/4" (6mm) LATERAL DEFLECTION**

Type & Size	Pipe Size		Face to Face		Axial Spring Rate		Lateral Spring Rate		Thrust <sup>1</sup> @ 250 psi		Rated Pressure @70°F @21°C		Ship Wt.	
	(in)	(mm)	(in)	(mm)	(lbs/in)	(kg/cm)	(lbs/in)	(kg/cm)	(lbs)	(kg)	(psi)	(kg/cm <sup>2</sup> )	(lbs)	(kg)
EFL250-2	2	50	21	533	1500	268	2040	364	7070	3207	250	17	30	14
EFL250-2 1/2	2 1/2	65	21	533	1500	268	2040	364	7070	3207	250	17	34	16
EFL250-3	3	80	21	533	1500	268	2040	364	7070	3207	250	17	36	17
EFL250-4	4	100	21	533	1500	268	2040	364	7070	3207	250	17	37	17
EFL250-5	5	125	14 1/4	362	1500	268	2040	364	7070	3207	250	17	38	18
EFL250-6	6	150	16 1/2	419	1960	350	2450	438	9620	4364	250	17	49	23
EFL250-8	8	200	17 1/4	438	2040	364	3980	711	15910	7217	250	17	84	39
EFL250-10	10	250	18	457	2500	446	7790	1391	23760	10777	250	17	116	53
EFL250-12	12	300	19	483	3530	630	14300	2554	33190	15055	250	17	155	71
EFL250-14	14	350	20	508	3700	660	17600	3143	44180	20040	250	17	203	92
EFL250-16	16	400	20 1/2	521	4660	832	30650	5473	56750	25741	250	17	249	113

EFL may be used for 2" Expansion or 2" Compression from neutral length or any combined 2" from neutral. i.e. (+ 1 1/2, - 1/2) (+ 1, - 1) (+ 1/4, - 13/4) etc. Total movement should never exceed 2".

<sup>1</sup>Lower Thrust Forces in proportion at lower pressures, i.e. 100 psi Force = 100/250 x published Thrust. Anchors must resist Thrust Force plus Spring Force. Spring Force is determined by multiplying the joint Spring Rate by its Thermal Movement (in/mm).

EFL's installed in piping systems must be anchored on both sides of the joint. EFL's installed in unanchored piping must have control rods.

When using EFL products in copper or brass water or steam systems, dielectric flanges must be used on each end to prevent leakage from galvanic action.

QTY	SIZE	TAG

QTY	SIZE	TAG