



All Products are reinforced with Nylon Tire Cord.

Available Materials			
EFP Code	Cover Elastomer	Tube Elastomer	Max Operating Temp.
EE	EPDM	EPDM	250°F
NN	Neoprene	Neoprene	225°F
NP	Neoprene	Nitrile	212°F
BB	Chlorobutyl	Chlorobutyl	250°F

****When installing against a raised face flange - the use of a ring gasket is recommended.****

Dimensions			Flange Drilling			Motion Ratings				Operating Conditions		Approx. Weights		
Nominal Pipe Size	F-Length of Joint	G-Flange Thickness	A-Flange O.D.	Flange Bolt Hole Circle	Number & Hole Size	Axial Compression	Axial Extension	Lateral Deflection	Angular Movements	Pressure Rating (PSIG @ 170°F)	Vacuum Rating (In/Hg)	Expansion Joint (lbs)	Control 2-Rod Set	Total Approx. wght (lbs)
1"	6"	0.55"	4.25"	3.13"	4 - 0.62"	0.5"	0.375"	0.5"	37°	225	26	3.8	3.3	7.1
1.25"	6"	0.55"	4.63"	3.5"	4 - 0.62"	0.5"	0.375"	0.5"	31°	225	26	5	3.3	8.3
1.5"	6"	0.55"	5"	3.88"	4 - 0.62"	0.5"	0.375"	0.5"	27°	225	26	6.1	4.6	10.7
2"	6"	0.63"	6"	4.75"	4 - 0.75"	0.5"	0.375"	0.5"	20°	225	26	12.3	7.6	19.9
2.5"	6"	0.71"	7"	5.5"	4 - 0.75"	0.5"	0.375"	0.5"	17°	225	26	12.3	7.6	19.9
3"	6"	0.71"	7.5"	6"	4 - 0.75"	0.5"	0.375"	0.5"	14°	225	26	14	8.3	22.3
3.5"	6"	0.71"	8.5"	7"	8 - 0.75"	0.5"	0.375"	0.5"	12°	225	26	17.6	7.4	25
4"	6"	0.71"	9"	7.5"	8 - 0.75"	0.75"	0.5"	0.5"	14°	225	26	18.3	7.4	25.7
5"	6"	0.79"	10"	8.5"	8 - 0.88"	0.75"	0.5"	0.5"	11°	225	26	22.8	8.3	31.1
6"	6"	0.87"	11"	9.5"	8 - 0.88"	0.75"	0.5"	0.5"	9°	225	26	26.8	10.4	37.2
8"	6"	0.87"	13.5"	11.75"	8 - 0.88"	0.75"	0.5"	0.5"	7°	225	26	40.6	13.4	54
10"	8"	0.95"	16"	14.25"	12 - 1"	1"	0.625"	0.75"	7°	225	26	56.6	21.3	77.9
12"	8"	0.95"	19"	17"	12 - 1"	1"	0.625"	0.75"	6°	225	26	83	27	110
14"	8"	1.02"	21"	18.75"	12 - 1.13"	1"	0.625"	0.75"	6°	150	26	115	28	143
16"	8"	1.10"	23.5"	21.25"	16 - 1.13"	1"	0.625"	0.75"	4°	125	26	165	26.8	191.8
18"	8"	1.18"	25"	22.75"	16 - 1.25"	1"	0.625"	0.75"	4°	125	26	168	31.4	199.4
20"	8"	1.18"	27.5"	25"	20 - 1.25"	1"	0.625"	0.75"	3°	125	26	170	32.4	202.4
24"	10"	1.18"	32.06"	29.5"	20 - 1.38"	1"	0.625"	0.75"	3°	110	26	255	45.5	300.5
30"	10"	1.26"	38.75"	36"	28 - 1.38"	1"	0.625"	0.75"	2°	110	26	295	57	352

WARNING: Control units must be used to protect this part from excessive movement if piping is not properly anchored. Expansion Joints may operate in pipelines or equipment carrying fluids and/or gases at elevated temperature and pressures. Normal precautions should be taken to make sure these parts are installed correctly and inspected regularly. Precautions should be taken to protect personnel in the event of leakage or splash.

NOTE:
 WWW.ENGINEEREDFLEX.COM FOR INSTALLATION INSTRUCTIONS. JOINT MUST BE INSTALLED AT ITS NEUTRAL LENGTH. BOLTS MUST BE PROPERLY TORQUED. NOT SUITABLE FOR STEAM APPLICATIONS. **IF CONNECTING PIPE IS NOT ANCHORED AND GUIDED, CONTROL RODS MUST BE USED.**

CUSTOMER: _____
 PROJECT: _____

NSF 372 - LEAD FREE
 The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight. Material complies with state codes and standards, where applicable, requiring reduced lead content.

REV. _____ DRAWN BY: CL Date: 11/27/2023

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(301 Series) Single Sphere Exp. Joints

Table 6: Control Units/Unanchored

Control Units must be installed when pressures (test • design • surge • operating) exceed rating below:

Pipe Size	Series 301 P.S.I.G.	Series 302 P.S.I.G.
1" thru 4"	180	135
5" thru 10"	135	135
12" thru 14"	90	90
16" thru 24"	45	45
30"	35	35

Table 7:		Maximum Surge or Test Pressure of the System			
Nominal Pipe Size Expansion Joint I.D. Inch /(mm)		Number of Control Rods Recommended			
		2	4	6	8
1	(25)	949	•	•	•
1.25	(32)	830	•	•	•
1.5	(40)	510	•	•	•
2	(50)	661	•	•	•
2.5	(65)	529	•	•	•
3	(75)	441	•	•	•
4	(100)	311	622	•	•
5	(125)	235	470	•	•
6	(150)	186	371	•	•
8	(200)	163	326	•	•
10	(250)	163	325	488	•
12	(300)	160	320	481	•
14	(350)	112	223	335	•
16	(400)	113	227	340	453
18	(450)	94	187	281	375
20	(500)	79	158	236	315
24	(600)	74	147	221	294
30	(750)	70	141	211	281

Note:

Pressures listed above do not relate to the actual design pressure of the expansion joint products, but are the maximum surge or pressure for a specific control rod nominal pipe size.