



# STEEL PIPES & FITTINGS

(PTY) LTD

Your One Stop Steel Tubing and Hardware Shop

## RUBBER EXPANSION BELLOWS

Type FSF.

### Available Styles / Materials

Material Code	Cover Elastomer	Tube Elastomer	Maximum Operating Temp °C
BB	Chloro Butyl	Chloro Butyl	105*
EE	EPDM	EPDM	105*
NH	Neoprene	Hypalon	100*
NN	Neoprene	Neoprene	105*
NP	Neoprene	Nitrile (Buna)	100*

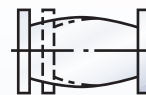
NOMINAL DIAM	7kg/cm <sup>2</sup>	10kg/cm <sup>2</sup>	14kg/cm <sup>2</sup>	16kg/cm <sup>2</sup>
1"	25mm			x
1-1/4	32			x
1-1/2	40			x
2	50			x
2-1/2	65			x
3	80			x
4	100			x
5	125			x
6	150		x	x
8	200		x	x
10	250		x	x
12	300	x	x	x
14	350	x		
16	400	x		
18"	450	x		
20	500	x		
22	550	x		
24	600	x		
28	700	x		
30	750	x		

\* NOTE X USE CONTROL RODS



Press/Temp Correction Factor	Operating Temperatures					
	80°C	85°C	90°C	95°C	100°C	105°C
Maximum Working Pressure (x factor)	x1.0	x.92	x.83	x.75	x.67	x.60

Nominal Diameter		Installed Length mm		Travel mm	Allowable Movements from Neutral			
inch	mm	Natural Length	Minimum Maximum Installed	Total Compressed Extended	Axial Compression	Axial Extension	* Laterar Deflection	* Angular Deflection
1-1/4	32	95	89 - 97	87 - 99	8	4	8	15°
1-1/2	40	95	89 - 97	87 - 99	8	4	8	15°
2"	50	105	99 - 107	99 - 110	8	5	8	15°
2-1/2	65	115	107 - 118	103 - 121	12	6	10	15°
3"	80	130	122 - 133	118 - 133	12	6	10	15°
4"	100	135	122 - 140	117 - 145	18	10	12	15°
5"	125	170	156 - 176	152 - 180	18	10	12	15°
6"	150	180	167 - 185	162 - 190	18	10	12	15°
8"	200	205	186 - 212	180 - 220	25	14	22	15°
10"	250	240	221 - 247	215 - 254	25	14	22	15°
12"	300	260	241 - 267	235 - 274	25	14	22	15°
14"	350	265	246 - 273	235 - 274	25	14	22	15°
16"	400	265	246 - 273	240 - 281	25	14	22	15°
18"	450	265	246 - 273	240 - 281	25	14	22	15°
20"	500	265	246 - 273	240 - 281	25	14	22	15°



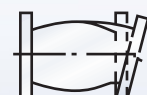
Axial Compression



Axial Elongation



Transverse Movement



Angular Movement