

231/221 continued



Table 2: Sizes • Movements • Forces • Weights

See Notes Page 7

EXPANSION JOINT SIZE Nom. I.D. X Inch / (mm)	NEUTRAL LENGTH Inch / (mm)	EXPANSION JOINT STYLE	231 / 221 Movement Capability: From Neutral Position					Spring Rate Capability Based on 1" of Movement at Zero Pressure Conditions					Operating ⁴ Conditions		Weights ⁵ lbs / (kgs)			
			Axial Compression Inch / (mm)	Axial Extension Inch / (mm)	Lateral Deflection Inch / (mm)	Angular ¹ Deflection Degrees	Torsional ² Rotation Degrees	Force lbs per 1" rated Compression	Force lbs per 1" rated Extension	Force lbs per 1" rated Lateral Deflection	Force ft-lbs per 1" rated Angular	Thrust Factor ³ Inz / (cm2)	Positive PSIG/ (Bar)	Vacuum Inches of Hg/ (mm of Hg)	Expansion Joint Assembly	Retaining Ring Set	Control ⁶ Rod Assembly	
5	(125)	6 (152)	231															
		7 (178)	231															
		8 (203)	231	1.4	0.7	0.6	15.2	2.0			38.13	190	26	9.0	8.5	4.0		
		9 (229)	231	(35)	(18)	(15)					(246)	(13.0)	(660)	(4.1)	(3.9)	(1.8)		
		10 (254)	231															
		12 (305)	231															
6	(150)	6 (152)	231															
		7 (178)	231															
		8 (203)	231	1.4	0.7	0.6	12.8	2.0			49.91	190	26	11.0	9.5	4.0		
		9 (229)	231	(35)	(18)	(15)					(322)	(13.0)	(660)	(5.0)	(4.3)	(1.8)		
		10 (254)	231															
		12 (305)	231															
8	(200)	6 (152)	231															
		7 (178)	231															
		8 (203)	231															
		9 (229)	231	1.4	0.7	0.6	9.7	2.0			77.97	190	26	15.0	14.5	8.0		
		10 (254)	231	(35)	(18)	(15)					(503)	(13.0)	(660)	(6.8)	(6.6)	(3.6)		
		12 (305)	231															
10	(250)	6 (152)	221	0.7	0.4	0.5	4.1	2.0			116.97	190	26	23.0	17.0	10.0		
		7 (178)	221	(18)	(10)	(13)					(755)	(13.0)	(660)	(10.4)	(7.7)	(4.5)		
		8 (203)	231															
10	(250)	9 (229)	231															
		10 (254)	231	1.6	0.8	0.8	9.1	2.0			119.97	190	26	23.0	17.0	10.0		
		12 (305)	231	(40)	(20)	(20)					(774)	(13.0)	(660)	(10.4)	(7.7)	(4.5)		
12	(300)	14 (356)	231															
		6 (152)	221	0.7	0.4	0.5	3.4	2.0			157.74	190	26	26.5	24.5	10.0		
		7 (178)	221	(17)	(10)	(13)					(1018)	(13.0)	(660)	(12.0)	(11.0)	(4.5)		
12	(300)	8 (203)	231															
		9 (229)	231															
		10 (254)	231	1.6	0.8	0.8	7.6	2.0			161.18	190	26	34.0	24.5	10.0		
		12 (305)	231	(40)	(20)	(20)					(1045)	(13.0)	(660)	(15.4)	(11.0)	(4.5)		
14	(350)	14 (356)	231															
		8 (203)	231															
		9 (229)	231															
		10 (254)	231	1.6	0.8	0.8	6.5	2.0			210.18	130	26	40.0	27.0	12.0		
12 (305)	231	(40)	(20)	(20)					(1356)	(9.0)	(660)	(18.1)	(12.3)	(5.4)				

Series 230



Call Toll Free: 1-866-711-4673
 WebSales@GoodyearRubberProducts.com

We Ship World Wide