

# PROCO

STYLE

# 233/223

triple wide arch spool type  
rubber expansion joints



Table 4: Sizes • Movements • Forces • Weights

See Notes Page 4

EXPANSION JOINT SIZE Nom. I.D. X Inch / (mm)	NEUTRAL LENGTH Inch / (mm)		EXPANSION JOINT STYLE	233 / 223 Movement Capability: From Neutral Position					Spring Rate Capability Based on 1" of Movement at Zero Pressure Conditions					Operating <sup>4</sup> Conditions		Weights <sup>5</sup> lbs / (kgs)		
				Axial Compression Inch / (mm)	Axial Extension Inch / (mm)	Lateral Deflection Inch / (mm)	Angular <sup>1</sup> Deflection Degrees	Torsional <sup>2</sup> Rotation Degrees	Force lbs per 1" rated Compression	Force lbs per 1" rated Extension	Force lbs per 1" rated Lateral Deflection	Force lb-inches per 1" rated Angular	Thrust Factor <sup>3</sup> In <sup>2</sup> / (cm <sup>2</sup> )	Positive PSIG/ (Bar)	Vacuum Inches of Hg/ (mm of Hg)	Expansion Joint Assembly	Retaining Ring Set	Control <sup>6</sup> Rod Assembly
1.5 (40)	12 (305)	223	1.3 (33)	0.7 (18)	1.5 (38)	41.5	2.0	U N D E R  C U R R E N T  T E S T I N G	6.20 (40)	200 (14.0)	26 (660)	4.0 (1.8)	2.5 (1.1)	6.0 (2.7)				
	14 (356)	233	3.5 (90)	1.8 (45)	1.9 (48)	67.4	2.0		7.44 (48)	200 (14.0)	26 (660)	4.0 (1.8)	2.5 (1.1)	6.0 (2.7)				
2 (50)	12 (305)	223	1.3 (33)	0.7 (18)	1.5 (38)	33.5	2.0		7.79 (50)	200 (14.0)	26 (660)	5.5 (2.5)	4.0 (1.8)	7.0 (3.2)				
	14 (356)	233	4.1 (105)	2.0 (51)	1.9 (48)	63.9	2.0		12.40 (80)	200 (14.0)	26 (660)	5.5 (2.5)	4.0 (1.8)	7.0 (3.2)				
2.5 (65)	12 (305)	223	1.3 (33)	0.7 (18)	1.5 (38)	27.9	2.0		14.73 (95)	200 (14.0)	26 (660)	6.0 (2.7)	4.5 (2.0)	7.0 (3.2)				
	14 (356)	233	4.1 (105)	2.0 (51)	1.9 (48)	58.5	2.0		15.66 (101)	200 (14.0)	26 (660)	6.0 (2.7)	4.5 (2.0)	7.0 (3.2)				
3 (80)	12 (305)	223	1.3 (33)	0.7 (18)	1.5 (38)	23.8	2.0		17.52 (113)	200 (14.0)	26 (660)	7.0 (3.2)	5.5 (2.5)	7.3 (3.4)				
	14 (356)	233	4.1 (105)	2.0 (51)	1.9 (48)	53.4	2.0		19.38 (125)	200 (14.0)	26 (660)	7.0 (3.2)	5.5 (2.5)	7.3 (3.4)				
4 (100)	12 (305)	223	1.3 (33)	0.7 (18)	1.5 (38)	22.5	2.0		26.66 (172)	200 (14.0)	26 (660)	9.0 (4.1)	8.0 (3.6)	8.0 (3.6)				
	14 (356)	233	4.1 (105)	2.0 (51)	1.9 (48)	45.6	2.0		27.90 (180)	200 (14.0)	26 (660)	9.0 (4.1)	8.0 (3.6)	8.0 (3.6)				
5 (125)	12 (305)	223	1.7 (43)	0.8 (20)	1.5 (38)	18.3	2.0		36.43 (235)	190 (13.0)	26 (660)	11.0 (5.0)	8.5 (3.9)	8.0 (3.6)				
	14 (356)	233	4.1 (105)	2.0 (51)	1.9 (48)	39.2	2.0		38.13 (246)	190 (13.0)	26 (660)	11.0 (5.0)	8.5 (3.9)	8.0 (3.6)				
6 (150)	12 (305)	223	1.7 (43)	0.8 (20)	1.5 (38)	15.4	2.0		47.71 (308)	190 (13.0)	26 (660)	13.5 (6.1)	9.5 (4.3)	10.0 (4.5)				
	14 (356)	233	4.1 (105)	2.0 (51)	1.9 (48)	34.2	2.0		49.91 (322)	190 (13.0)	26 (660)	13.5 (6.1)	9.5 (4.3)	10.0 (4.5)				
	16 (406)	233	4.1 (105)	2.0 (51)	1.9 (48)	34.2	2.0		49.91 (322)	190 (13.0)	26 (660)	13.5 (6.1)	9.5 (4.3)	12.0 (5.4)				
8 (200)	12 (305)	223	2.2 (56)	1.1 (28)	1.5 (38)	15.0	2.0		82.28 (530)	190 (13.0)	26 (660)	18.0 (8.2)	14.5 (6.6)	12.0 (5.4)				
	14 (356)	233	4.1 (105)	2.0 (51)	1.9 (48)	27.0	2.0		77.97 (503)	190 (13.0)	26 (660)	18.0 (8.2)	14.5 (6.6)	12.0 (5.4)				
	16 (406)	233	4.1 (105)	2.0 (51)	1.9 (48)	27.0	2.0		77.97 (503)	190 (13.0)	26 (660)	18.0 (8.2)	14.5 (6.6)	12.0 (5.4)				
10 (250)	14 (356)	223	2.2 (56)	1.1 (28)	1.5 (38)	12.1	2.0		116.97 (755)	190 (13.0)	26 (660)	31.0 (14.1)	17.0 (7.7)	15.0 (6.8)				
	16 (406)	223	2.2 (56)	1.1 (28)	1.1 (28)	12.1	2.0		116.97 (755)	190 (13.0)	26 (660)	31.0 (14.1)	17.0 (7.7)	15.0 (6.8)				
12 (300)	18 (457)	233	4.7 (120)	2.4 (61)	2.4 (61)	25.6	2.0	119.97 (774)	190 (13.0)	26 (660)	31.0 (14.1)	17.0 (7.7)	16.0 (7.2)					
	14 (356)	223	2.2 (56)	1.1 (28)	1.5 (38)	10.1	2.0	157.74 (1018)	190 (13.0)	26 (660)	40.0 (18.1)	24.5 (11.0)	16.0 (7.2)					
	16 (406)	223	2.2 (56)	1.1 (28)	1.1 (28)	10.1	2.0	157.74 (1018)	190 (13.0)	26 (660)	40.0 (18.1)	24.5 (11.0)	16.0 (7.2)					
14 (350)	18 (457)	233	4.7 (120)	2.4 (61)	2.4 (61)	5.6	2.0	161.98 (1045)	190 (13.0)	26 (660)	40.0 (18.1)	24.5 (11.0)	16.0 (7.2)					
	16 (406)	223	2.2 (56)	1.1 (28)	1.5 (38)	9.1	2.0	204.61 (1320)	130 (9.0)	26 (660)	48.5 (22.0)	27.0 (12.3)	16.0 (7.2)					
18 (457)	233	4.7 (120)	2.4 (61)	2.4 (61)	9.1	2.0	210.18 (1358)	130 (9.0)	26 (660)	48.5 (22.0)	27.0 (12.3)	16.0 (7.2)						