

PROCO

STYLE

231/221

single wide arch spool type
rubber expansion joints



Table 2: Sizes • Movements • Forces • Weights

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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 lb-inches per 1" rated Angular	Thrust Factor ³ Inz / (cmz)	Positive PSIG/ (Bar)	Vacuum Inches of Hg/ (mm of Hg)	Expansion Joint Assembly	Retaining Ring Set	Control ⁶ Rod Assembly	
1 1.25 1.5	(25) (32) (40)	6 (152) 231	1.2 (30)	0.6 (15)	0.6 (15)	50.4	2.0	U N D E R C U R R E N T T E S T I N G	5.12 (33)	200 (14.0)	26 (660)	2.0 (0.8)	2.0 (0.8)	2.3 (1.0)				
		6 (152) 231	1.2 (30)	0.6 (15)	0.6 (15)	43.1	2.0		6.20 (40)	200 (14.0)	26 (660)	2.5 (1.1)	2.5 (1.1)	2.3 (1.0)				
		6 (152) 231	1.2 (30)	0.6 (15)	0.6 (15)	38.1	2.0		7.44 (48)	200 (14.0)	26 (660)	3.0 (1.4)	2.5 (1.1)	2.3 (1.0)				
		7 (178) 231																
2	(50)	8 (203) 231	1.4 (35)	0.7 (18)	0.6 (15)	34.2	2.0		12.40 (80)	200 (14.0)	26 (660)	4.0 (1.8)	4.0 (1.8)	2.8 (1.3)				
		9 (229) 231																
		10 (254) 231																
		12 (305) 231																
2.5	(65)	6 (152) 231							C U R R E N T T E S T I N G	15.66 (101)	200 (14.0)	26 (660)	4.5 (2.0)	4.5 (2.0)	2.8 (1.3)			
		7 (178) 231																
		8 (203) 231	1.4 (35)	0.7 (18)	0.6 (15)	27.6	2.0											
		9 (229) 231																
3	(80)	10 (254) 231						19.38 (125)		200 (14.0)	26 (660)	5.5 (2.5)	5.5 (2.5)	2.8 (1.3)				
		12 (305) 231																
		6 (152) 231																
		7 (178) 231																
3.5	(90)	8 (203) 221	0.6 (15)	0.3 (8)	0.56 (14)	9.0	2.0	23.18 (150)		200 (14.0)	26 (660)	6.0 (2.7)	6.0 (2.7)	2.8 (1.3)				
		9 (229) 221																
		10 (254) 221																
		12 (305) 221																
4	(100)	6 (152) 231						T E S T I N G	27.90 (180)	200 (14.0)	26 (660)	8.0 (3.6)	8.0 (3.6)	2.8 (1.3)				
		7 (178) 231																
		8 (203) 231	1.4 (35)	0.7 (18)	0.6 (15)	18.8	2.0											
		9 (229) 231																
4	(100)	10 (254) 231																
		12 (305) 231																

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