

Style 204 Narrow Arch

The Style 204 family of spool-type expansion joints is manufactured with the industry standard narrow arch design. This style is intended to be used in dynamic conditions where both pressure and vacuum concerns are present.

BENEFITS

- » Fully laboratory and field tested for long life and exceptional reliability.
- » High pressure and vacuum resistance offer increased safety and ensure suitability for a wide range of applications.
- » Single and multi-arch designs are available for a range of movement capabilities.
- » Concentric and eccentric reducing configurations can be provided to join piping of unequal diameters.
- » Available in a variety of elastomer and fabric combinations to meet the varied demands of temperature, pressure, and media.

PRESSURE RATING

PIPE I.D.		204		204HP		204EPS		204MAX	
inch	mm	psi	bar	psi	bar	psi	bar	psi	bar
1/2-4	13-100	165	11.4	200	13.8	250	17.2		
5-12	125-300	140	9.7	190	13.1	250	17.2		
14	350	85	5.9	130	9	150	10.3		
16-20	400-500	65	4.5	110	7.6	150	10.3		
22-24	550-600	65	4.5	100	6.9	150	10.3		
26-40	650-1000	55	3.8	90	6.2	100	6.9		
42-66	1050-1650	55	3.8	80	5.5	100	6.9		
68-96	1700-2400	45	3.1	70	4.8	100	6.9		
98-108	2450-2700	40	2.8	60	4.1	80	5.5		
110-120	2750-3000	30	2.1	50	3.4	80	5.5		

Design as Needed

VACUUM RATING - 29.9 In. Hg (750mm Hg.)

- » Full vacuum rating for all sizes and face to face
- » Style 204EVS available for continuous full vacuum service

TEMPERATURE - UP TO 400°F (205°C)

- » Max temperature is based on the lowest temperature of the material selected.

CERTIFICATIONS

- » CRN's all provinces - 204HP (1/2" - 96" ID)
- » 1OCFR50 Appendix B - 204, 204HP, 204EPS
- » ABS Type Approval - 204HP (1/2" - 96" ID)
- » ASTM F-1123 Compliant - 204HP, 204MAX on request



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STANDARD DESIGN

» Tube

- › Chlorobutyl resists cracking due to high temperatures, weathering, oxidation and chemicals
- › Abrupt arch configuration provides maximum movement, and pressure and vacuum resistance
- › Seamless tube creates a positive flange seal without gaskets

» Body

- › Chlorobutyl/polyester construction with welded, treated metal body rings for dimensional stability

» Cover

- › A homogeneous layer of chlorobutyl fully extends to the outside edge of the flange.
- › A durable exterior coating further protects the expansion joint from the effects of weathering and oxidation.

» Flanges

- › The seamless flange face eliminates the need for separate gaskets to facilitate installation in flat face flanges.
- › Multiple flange configurations available:
 - ASME B16.5/B16.47 Series A Class 125/150 (standard)
 - ASME B16.5/B16.47 Series A Class 250/300
 - EN 1092-1 PN10
 - EN 1092-1 PN16
 - Other configurations available upon request

MATERIALS OF CONSTRUCTION

See pages 3 - 5 for tube and cover material options.

MOVEMENT CAPABILITIES

NOMINAL ID		COMPRESSION		ELONGATION		LATERAL	
		inch	mm	inch	mm	inch	mm
1/2-1-1/2	13-40	0.25	6	0.125	3	0.25	6
2-6	50-150	0.5	13	0.25	6	0.5	13
8-18	200-450	0.75	19	0.375	10	0.5	13
20-24	500-600	0.875	22	0.4375	11	0.5	13
26-40	650-1000	1	25	0.5	13	0.5	13
42-120	1050-3000	1.125	29	0.5	13	0.5	13

NOTES:

1. Movements listed are per arch. Movements are reduced by half for filled arches. Movements listed are non concurrent. For concurrent movements, contact Garlock.
2. Pipe sizes through 1½" are supplied with a filled arch, and movements have been reduced accordingly.

STANDARD FACE TO FACE

NOMINAL ID		1 ARCH		2 ARCH		3 ARCH		4 ARCH	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
1/2-8	13-200	6	150	10	250	14	350	18	450
10-20	250-500	8	200	12	300	16	400	20	500
22-40	550-1000	10	250	14	350	18	450	22	550
42-120	1050-3000	12	300	16	400	20	500	24	600

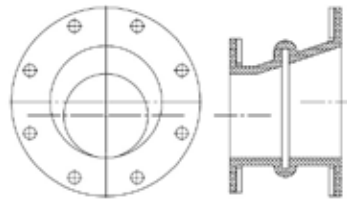
NOTES:

1. Multiple arches not available with GUARDIAN® FEP Liners, or Reducing Expansion Joints
2. For shorter "FF" dimensions, consult Garlock

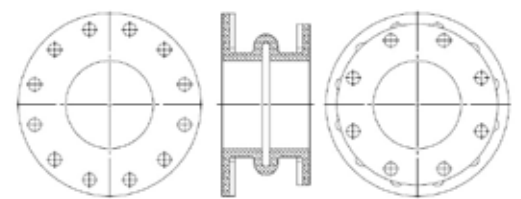
OPTIONAL CONFIGURATIONS



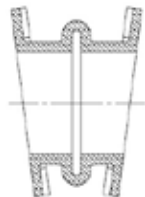
Concentric Reducing



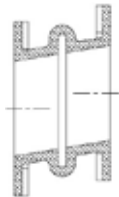
Eccentric Reducing



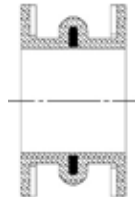
Unique Drill Patterns per flange



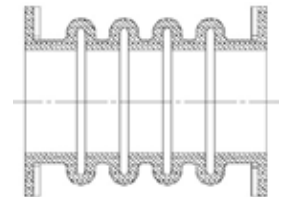
Angular Offset



Lateral Offset



Filled Arches



Multiple Arches

NOTES:

1. GUARDIAN® FEP Liners not available with all options. For specific inquires contact Garlock.