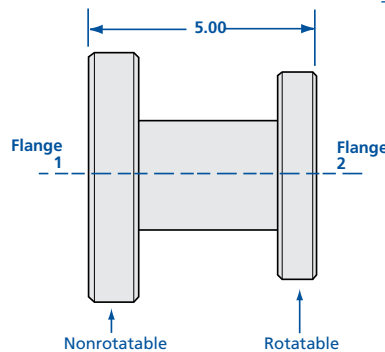


Flanges & Fittings - CF Reducer & Conical Reducer Nipples



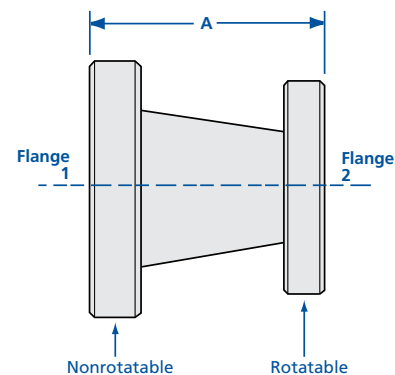
CF Reducer Nipples

MODEL NUMBER	FLANGE 1 OD	FLANGE 2 OD	TUBE OD
2NR-600-275	6.00	2 ³ / ₄	1.50
2NR-800-275	8.00	2 ³ / ₄	1.50
2NR-800-450	8.00	4 ¹ / ₂	2.50
2NR-800-600	8.00	6	4.00
2NR-1000-275	10.00	2 ³ / ₄	1.50
2NR-1000-450	10.00	4 ¹ / ₂	2.50
2NR-1000-600	10.00	6	4.00
2NR-1000-800	10.00	8	6.00
2NR-1325-1000	13.25	10	8.00
2NR-1400-1200	14.00	12	10.00



CF Conical Reducer Nipples

MODEL NUMBER	FLANGE 1 OD	FLANGE 1 TUBE OD	FLANGE 2 OD	FLANGE 2 TUBE OD	A
2NRC-212-133	2.12	1	1.33	3 ³ / ₄	2.04
2NRC-275-133	2.75	1 ¹ / ₂	1.33	3 ³ / ₄	3.08
2NRC-275-212	2.75	1 ¹ / ₂	2.12	1	2.75
2NRC-338-212	3.38	2	2.12	1	2.77
2NRC-338-275	3.38	2	2.75	1 ¹ / ₂	2.81
2NRC-450-275	4.50	2 ¹ / ₂	2.75	1 ¹ / ₂	2.96
2NRC-450-338	4.50	2 ¹ / ₂	3.38	2	2.98
2NRC-462-275	4.62	3	2.75	1 ¹ / ₂	4.12
2NRC-462-338	4.62	3	3.38	2	4.13
2NRC-462-450	4.62	3	4.50	2 ¹ / ₂	4.28
2NRC-600-338	6.00	4	3.38	2	4.29
2NRC-600-450	6.00	4	4.50	2 ¹ / ₂	4.44
2NRC-600-462	6.00	4	4.62	3	4.34



SPECIFICATIONS

General: Rotatable or nonrotatable with clearance bolt holes

Materials

Tube / Flanges: 304 stainless steel
(316L available on request)

Gaskets: Viton, copper or silver plated

Bolts: 18-8 stainless steel or silver plated

Torque: Refer to specific flange specs

Vacuum range

Metal seal: $\geq 1 \times 10^{-13}$ Torr - UHV

Elastomer seal: $\geq 1 \times 10^{-8}$ Torr - High vacuum

Temperature range

Metal seal: -200°C to 450°C

Elastomer: -20°C to 150°C

Torque Specifications*

NOMINAL OD	BOLT SIZE	TORQUE IN INCH / LBS
1 ¹ / ₃	8-32	28
2 ¹ / ₈	1 ¹ / ₄ - 28	110
2 ³ / ₄	1 ¹ / ₄ - 28	110
3 ³ / ₈	5 ¹ / ₁₆ - 24	190
4 ¹ / ₂	5 ¹ / ₁₆ - 24	190
4 ⁵ / ₈	5 ¹ / ₁₆ - 24	190
6	5 ¹ / ₁₆ - 24	190
6 ³ / ₄	5 ¹ / ₁₆ - 24	190
8	5 ¹ / ₁₆ - 24	190
10	5 ¹ / ₁₆ - 24	190
12	5 ¹ / ₁₆ - 24	190
13 ¹ / ₄	3 ³ / ₈ - 24	345
14	3 ³ / ₈ - 24	345
14 ¹ / ₂	3 ³ / ₈ - 24	345
16 ¹ / ₂	3 ³ / ₈ - 24	345

* Specifications for Nor-Cal supplied fasteners only.

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