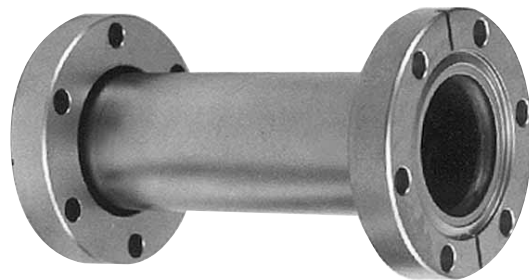
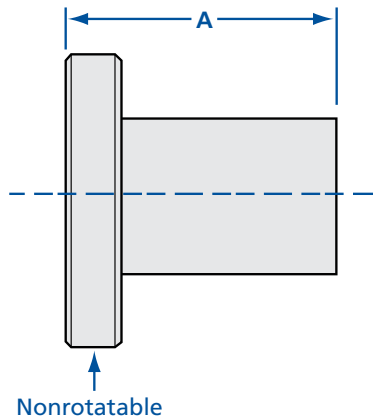


# Flanges & Fittings - CF Half & Full Nipples



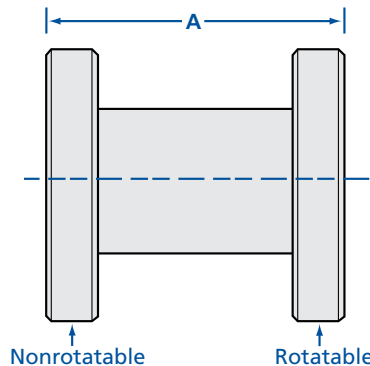
## CF Half Nipples

MODEL NUMBER	FLANGE OD	TUBE OD	A
1N-075	1.33	3/4	1.50
1N-100	2.12	1	2.05
1N-150	2.75	1 1/2	2.46
1N-200	3.38	2	3.22
1N-250	4.50	2 1/2	3.38
1N-250V	4.50	2 1/2	4.12
1N-300	4.62	3	3.53
1N-400	6.00	4	4.32
1N-400V	6.00	4	5.31
1N-600	8.00	6	5.50
1N-600V	8.00	6	6.56
1N-800	10.00	8	7.50
1N-1000	13.25	10	10.00
1N-1200	14.00	12	10.00



## CF Full Nipples

MODEL NUMBER	FLANGE OD	TUBE OD	A
2N-075	1.33	3/4	3.00
2N-100	2.12	1	4.10
2N-150	2.75	1 1/2	4.92
2N-200	3.38	2	6.44
2N-250	4.50	2 1/2	6.76
2N-250V	4.50	2 1/2	8.24
2N-300	4.62	3	7.06
2N-400	6.00	4	8.64
2N-400V	6.00	4	10.62
2N-600	8.00	6	11.00
2N-600V	8.00	6	13.12
2N-800	10.00	8	15.00
2N-1000	13.25	10	20.00
2N-1200	14.00	12	20.00



### 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	1/4 - 28	110
2 3/4	1/4 - 28	110
3 3/8	5/16 - 24	190
4 1/2	5/16 - 24	190
4 5/8	5/16 - 24	190
6	5/16 - 24	190
6 3/4	5/16 - 24	190
8	5/16 - 24	190
10	5/16 - 24	190
12	5/16 - 24	190
13 1/4	3/8 - 24	345
14	3/8 - 24	345
14 1/2	3/8 - 24	345
16 1/2	3/8 - 24	345

\* Specifications for Nor-Cal supplied fasteners only.

