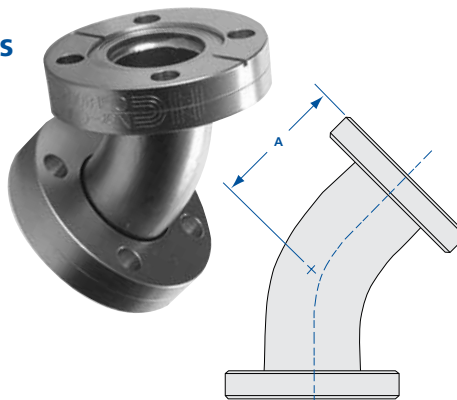


Flanges & Fittings - CF 45° Radius & 90° Radius & Mitered Elbows



CF 45° Radius Elbow with Tangents

MODEL NUMBER	FLANGE OD	TUBE OD	A
2KL-075	1.33	3/4	0.94
2KL-100	2.12	1	1.14
2KL-150	2.75	1 1/2	1.74
2KL-200	3.38	2	2.07
2KL-250	4.50	2 1/2	3.37
2KL-300	4.62	3	3.96
2KL-400	6.00	4	5.22



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

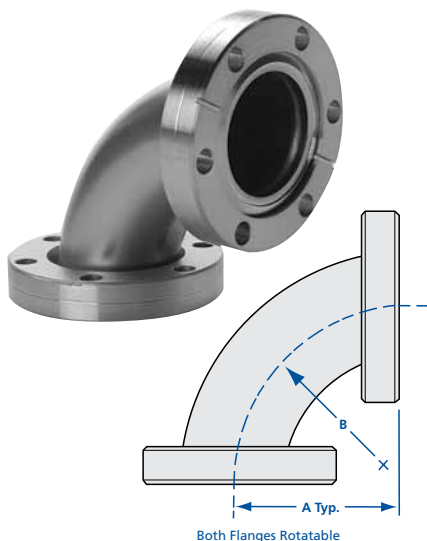
Temperature range

Metal seal: -200°C to 450°C

Elastomer: -20°C to 150°C

CF 90° Radius Elbows

MODEL NUMBER	FLANGE OD	TUBE OD	A	B
2E-075	1.33	3/4	1.50	1.00
2E-100	2.12	1	1.67	1.50
2E-150	2.75	1 1/2	2.46	2.25
2E-200	3.38	2	3.22	3.00
2E-250	4.50	2 1/2	4.12	3.75
2E-300	4.62	3	4.78	4.50
2E-400	6.00	4	6.44	6.00
2E-600	8.00	6	9.50	9.00
2E-800	10.00	8	12.50	12.00
2E-1000	13.25	10	15.50	15.00



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.

CF 90° Mitered Elbows

MODEL NUMBER	FLANGE OD	TUBE OD	A
2E-075M	1.33	3/4	1.50
2E-100M	2.12	1	2.05
2E-150M	2.75	1 1/2	2.46
2E-200M	3.38	2	3.22
2E-250M	4.50	2 1/2	3.38
2E-250MV	4.50	2 1/2	4.12
2E-300M	4.62	3	3.53
2E-400M	6.00	4	4.32
2E-400MV	6.00	4	5.31
2E-500M	6.75	5	4.71
2E-600M	8.00	6	5.50
2E-600MV	8.00	6	6.56
2E-800M	10.00	8	7.50
2E-1000M	13.25	10	10.00

