

CF Flanges & Fittings



CF Flanges & Fittings

AdvanTorr offers Conflat flanges in a wide range of sizes from 1.33" to 16.5" in both rotatable and non-rotatable versions. All CF flanges are compatible with other manufacturers' standards and are available in SS304L material as standard, with an option for high-grade SS 316LN ESR.

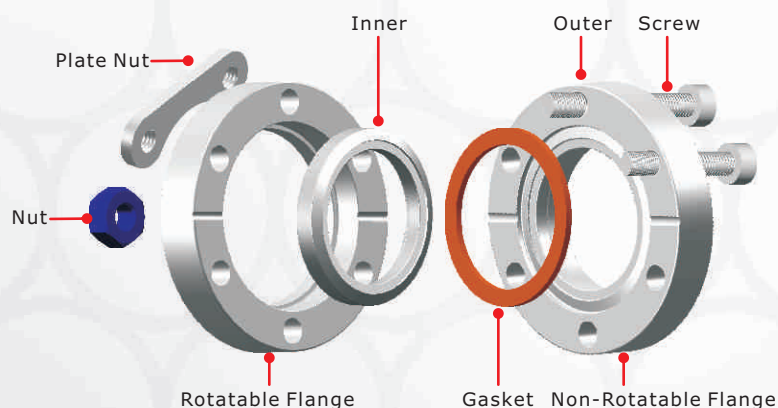
CF flanges utilize an OFHC (Oxygen Free High Conductivity) copper gasket for effective seal up to 1×10^{-10} Torr. Moreover, the copper gasket can sustain a temperature of up to 450°C, but reuse of copper gaskets is not recommended.

For transition from UHV to HV, **AdvanTorr** also offers a complete range of adaptors for CF flange to KF or ISO flange. Please refer to the Adaptor section.

*For custom designed flanges, please contact your local representative or **AdvanTorr** direct.*

Cleaning and Packaging

All products with weld joints are 100% helium leak tested to assure leak free operation prior to use. In addition, to ensure the cleanliness of **AdvanTorr** products, all parts are ultrasonically cleaned to UHV standards using de-ionized water and packaged in contamination free, class 10,000 clean room conditions. Each bag is affixed with a barcode label identifying the component's part number, heat number and batch number for full traceability.



STANDARD SPECIFICATION

Vacuum Rate:	Ultra High Vacuum
Material:	SS304L, SS316LN
Flange Sizes:	CF 1.33" ~ CF 16.5"
Tube Sizes:	1/2" ~ 14.0"
Vacuum Range:	760 Torr ~ 1×10^{-10} Torr for 304L 760 Torr ~ 1×10^{-12} Torr for 316LN
Gasket Material:	OFHC Copper or Silver Plated
Temperature Range:	-190°C ~ 450°C

CF

Rotatable CF flange – When components of several systems are used which may have different flange orientations, rotatable flanges are recommended.

Non-Rotatable CF Flanges – When mating orientation is of no concern, non-rotatable flanges are recommended and less expensive due to containing both sealing surface and bolt holes in one unit. Double-sided CF flanges are also available upon request.

-All dimensions are in millimeters unless otherwise specified.

CF Hardware & Seals

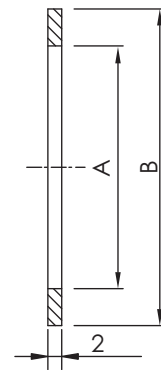
CF

OFHC COPPER GASKETS

*Optional for 10 pcs in 1 pack



Part Number	Size	A	B
CF-CS-133	CF1.33"(DN16)	16.20	21.25
CF-CS-212	CF2.12"(DN25)	25.65	32.77
CF-CS-275	CF2.75"(DN35)	36.80	48.10
CF-CS-275-1	CF2.75"(DN40)	39.00	48.10
CF-CS-338	CF3.38"(DN50)	51.05	61.60
CF-CS-450	CF4.50"(DN63)	63.60	82.35
CF-CS-462	CF4.62"(DN80)	76.45	91.39
CF-CS-600	CF6.00"(DN100)	101.80	120.45
CF-CS-675	CF6.75"(DN130)	127.25	141.40
CF-CS-800	CF8.00"(DN160)	152.60	171.25
CF-CS-1000	CF10.00"(DN200)	203.40	222.05
CF-CS-1200	CF12.00"(DN250)	254.20	272.85
CF-CS-1325	CF13.25"(DN270)	274.00	294.34
CF-CS-1400	CF14.00"(DN300)	300.00	313.00
CF-CS-1650	CF16.50"(DN350)	356.50	376.60

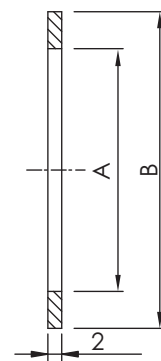


OFHC COPPER GASKETS, SILVER PLATED

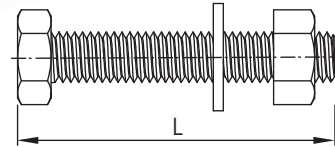
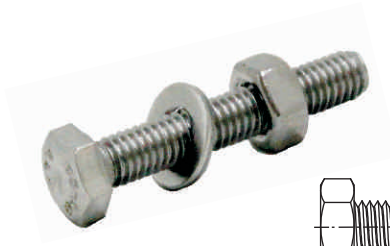
*Optional for 10 pcs in 1 pack



Part Number	Size	A	B
CF-CS-133-S	CF1.33"(DN16)	16.20	21.25
CF-CS-212-S	CF2.12"(DN25)	25.65	32.77
CF-CS-275-S	CF2.75"(DN35)	36.80	48.10
CF-CS-275-1-S	CF2.75"(DN40)	39.00	48.10
CF-CS-338-S	CF3.38"(DN50)	51.05	61.60
CF-CS-450-S	CF4.50"(DN63)	63.60	82.35
CF-CS-462-S	CF4.62"(DN80)	76.45	91.39
CF-CS-600-S	CF6.00"(DN100)	101.80	120.45
CF-CS-675-S	CF6.75"(DN130)	127.25	141.40
CF-CS-800-S	CF8.00"(DN160)	152.60	171.25
CF-CS-1000-S	CF10.00"(DN200)	203.40	222.05
CF-CS-1200-S	CF12.00"(DN250)	254.20	272.85
CF-CS-1325-S	CF13.25"(DN270)	274.00	294.34
CF-CS-1400-S	CF14.00"(DN300)	300.00	313.00
CF-CS-1650-S	CF16.50"(DN350)	356.50	376.60



CF Hardware & Seals



HEX HEAD BOLTS - METRIC THREAD

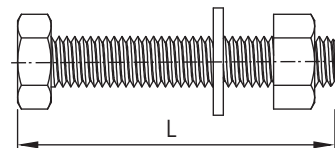
*Material: Stainless Steel
*Set: Bolts, Nuts & Washers

Part Number	Size	Thread	L	No. of Sets
CF-HB-133M	CF1.33"(DN16)	M4xP0.70	20	25
CF-HB-212M	CF2.12"(DN25)	M6xP1.00	35	25
CF-HB-275M	CF2.75"(DN40)	M6xP1.00	35	25
CF-HB-338M	CF3.38"(DN50)	M8xP1.25	45	25
CF-HB-450M	CF4.50"(DN63)	M8xP1.25	45	25
CF-HB-600M	CF6.00"(DN100)	M8xP1.25	50	25
CF-HB-800M	CF8.00"(DN160)	M8xP1.25	60	25
CF-HB-1000M	CF10.0"(DN200)	M8xP1.25	60	25

CF

HEX HEAD BOLTS - INCH THREAD

*Material: Stainless Steel
*Set: Bolts, Nuts & Washers



Part Number	Size	Thread	L	No. of Sets
CF-HB-133	CF1.33"(DN16)	8-32UNC	19.1	25
CF-HB-212	CF2.12"(DN25)	1/4"-28UNF	31.8	25
CF-HB-275	CF2.75"(DN40)	1/4"-28UNF	31.8	25
CF-HB-338	CF3.38"(DN50)	5/16"-24UNF	44.5	25
CF-HB-450	CF4.50"(DN63)	5/16"-24UNF	50.8	25
CF-HB-600	CF6.00"(DN100)	5/16"-24UNF	57.2	25
CF-HB-800	CF8.00"(DN160)	5/16"-24UNF	57.2	25
CF-HB-1000	CF10.0"(DN200)	5/16"-24UNF	63.5	25

CF Hardware & Seals

PLATE NUTS - METRIC THREAD

*Material: Stainless Steel



CF

Part Number	Size	Diagram	A	B	C	D	F
CF-PN-133M	CF1.33"(DN16)	A	20.30	7.62	13.46	3.20	M4xP0.7
CF-PN-275M	CF2.75"(DN40)	A	41.16	12.70	29.46	5.10	M6xP1.0
CF-PN-338M	CF3.38"(DN50)	B	44.45	12.70	27.69	5.30	M8xP1.25
CF-PN-450M	CF4.50"(DN63)	B	51.56	12.70	35.30	5.30	M8xP1.25
CF-PN-462M	CF4.62"(DN80)	B	45.80	12.70	31.60	5.30	M8xP1.25
CF-PN-600M	CF6.00"(DN100)	B	41.65	12.70	25.40	5.30	M8xP1.25
CF-PN-800M	CF8.00"(DN160)	B	44.45	12.70	28.45	5.30	M8xP1.25
CF-PN-1000M	CF10.00"(DN200)	B	44.45	12.70	30.23	5.30	M8xP1.25

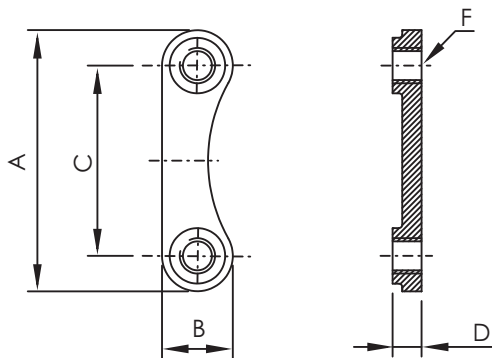


Diagram A

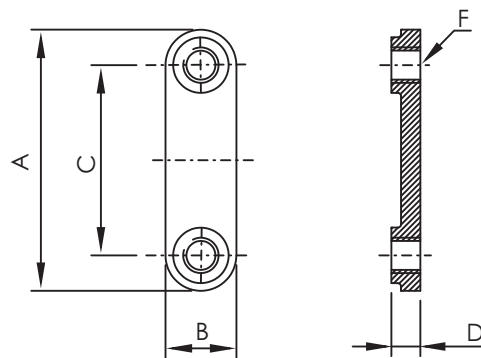


Diagram B

CF Hardware & Seals

PLATE NUTS - INCH THREAD

*Material: Stainless Steel



Part Number	Size	Diagram	A	B	C	D	F
CF-PN-133	CF1.33"(DN16)	A	20.30	7.62	13.46	3.20	8-32
CF-PN-275	CF2.75"(DN40)	A	42.16	12.70	29.46	5.10	1/4-28
CF-PN-338	CF3.38"(DN50)	B	44.45	12.70	27.69	5.30	5/16-24
CF-PN-450	CF4.50"(DN63)	B	51.56	12.70	35.30	5.30	5/16-24
CF-PN-462	CF4.62"(DN80)	B	45.80	12.70	31.60	5.30	5/16-24
CF-PN-600	CF6.00"(DN100)	B	41.65	12.70	25.40	5.30	5/16-24
CF-PN-800	CF8.00"(DN160)	B	44.45	12.70	28.45	5.30	5/16-24
CF-PN-1000	CF10.00"(DN200)	B	44.45	12.70	30.23	5.30	5/16-24

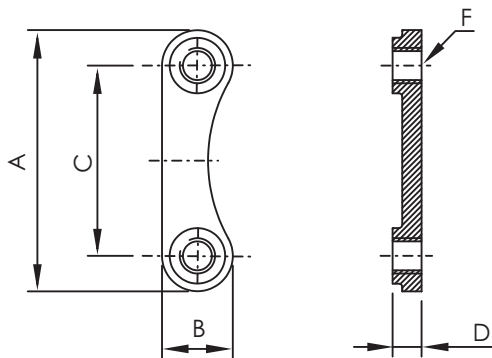


Diagram A

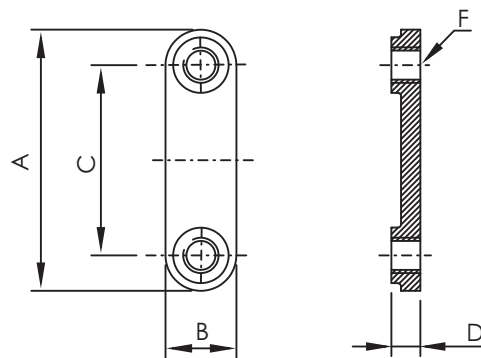


Diagram B

CF

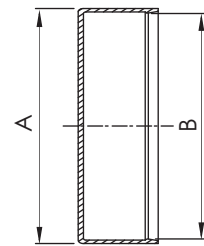
CF Hardware & Seals



CF FLANGE PLASTIC CAP

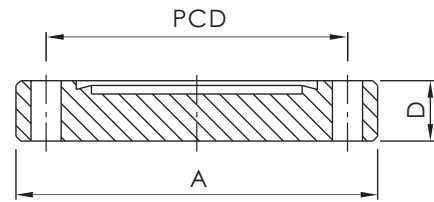
*Material: PE

Part Number	Size	A	B
CF-PC-133	CF1.33"(DN16)	36.20	34.20
CF-PC-212	CF2.12"(DN25)	56.40	54.00
CF-PC-275	CF2.75"(DN40)	72.10	70.10
CF-PC-338	CF3.38"(DN50)	88.50	85.90
CF-PC-450	CF4.50"(DN63)	118.30	113.50
CF-PC-462	CF4.62"(DN80)	120.50	117.60
CF-PC-600	CF6.00"(DN100)	156.40	151.60
CF-PC-675	CF6.75"(DN130)	173.80	171.60
CF-PC-800	CF8.00"(DN160)	206.00	202.00
CF-PC-1000	CF10.00"(DN200)	258.00	254.00
CF-PC-1200	CF12.00"(DN250)	309.00	304.60
CF-PC-1325	CF13.25"(DN270)	341.10	336.70
CF-PC-1400	CF14.00"(DN300)	360.10	355.70



CF

CF Flanges



CF BLANK FLANGE

*Material: SS 304L

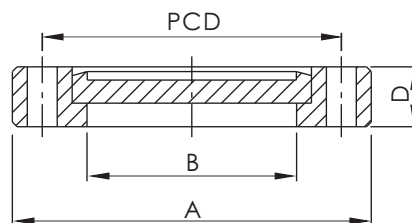
*Tapped and Through Holes

Part Number	Flange Size	A (mm)	D (mm)	PCD (mm)	Bolt Holes	Diameter (mm) / Thread Type
CF-BL-133	CF1.33"(DN16)	33.70	7.60	26.97	6	4.37
CF-BL-133T	CF1.33"(DN16)	33.70	7.60	26.97	6	8-32
CF-BL-133M	CF1.33"(DN16)	33.70	7.60	26.97	6	M4
CF-BL-212	CF2.12"(DN25)	53.80	11.90	41.28	4	6.73
CF-BL-212T	CF2.12"(DN25)	53.80	11.90	41.28	4	1/4-28
CF-BL-212M	CF2.12"(DN25)	53.80	11.90	41.28	4	M6
CF-BL-275	CF2.75"(DN40)	69.30	12.70	58.72	6	6.73
CF-BL-275T	CF2.75"(DN40)	69.30	12.70	58.72	6	1/4-28
CF-BL-275M	CF2.75"(DN40)	69.30	12.70	58.72	6	M6
CF-BL-338	CF3.38"(DN50)	85.30	16.00	72.39	8	8.43
CF-BL-338T	CF3.38"(DN50)	85.30	16.00	72.39	8	5/16-24
CF-BL-338M	CF3.38"(DN50)	85.30	16.00	72.39	8	M8
CF-BL-450	CF4.50"(DN63)	113.50	17.30	92.15	8	8.43
CF-BL-450T	CF4.50"(DN63)	113.50	17.30	92.15	8	5/16-24
CF-BL-450M	CF4.50"(DN63)	113.50	17.30	92.15	8	M8
CF-BL-462	CF4.62"(DN80)	117.00	19.10	102.36	10	8.43
CF-BL-462T	CF4.62"(DN80)	117.00	19.10	102.36	10	5/16-24
CF-BL-462M	CF4.62"(DN80)	117.00	19.10	102.36	10	M8
CF-BL-600	CF6.00"(DN100)	151.60	19.80	130.25	16	8.43
CF-BL-600T	CF6.00"(DN100)	151.60	19.80	130.25	16	5/16-24
CF-BL-600M	CF6.00"(DN100)	151.60	19.80	130.25	16	M8
CF-BL-675	CF6.75"(DN130)	170.69	21.30	151.61	18	8.43
CF-BL-675T	CF6.75"(DN130)	170.69	21.30	151.61	18	5/16-24
CF-BL-675M	CF6.75"(DN130)	170.69	21.30	151.61	18	M8
CF-BL-800	CF8.00"(DN160)	202.44	22.35	181.05	20	8.43
CF-BL-800T	CF8.00"(DN160)	202.44	22.35	181.05	20	5/16-24
CF-BL-800M	CF8.00"(DN160)	202.44	22.35	181.05	20	M8
CF-BL-1000	CF10.00"(DN200)	253.24	24.60	231.85	24	8.43
CF-BL-1000T	CF10.00"(DN200)	253.24	24.60	231.85	24	5/16-24
CF-BL-1000M	CF10.00"(DN200)	253.24	24.60	231.85	24	M8
CF-BL-1200	CF12.00"(DN250)	304.40	25.90	283.97	32	8.43
CF-BL-1200T	CF12.00"(DN250)	304.40	25.90	283.97	32	5/16-24
CF-BL-1200M	CF12.00"(DN250)	304.40	25.90	283.97	32	M8
CF-BL-1325	CF13.25"(DN270)	335.79	28.45	306.32	30	10.49
CF-BL-1325T	CF13.25"(DN270)	335.79	28.45	306.32	30	3/8-24
CF-BL-1325M	CF13.25"(DN270)	335.79	28.45	306.32	30	M10
CF-BL-1400	CF14.00"(DN300)	354.84	28.45	325.37	30	10.49
CF-BL-1400T	CF14.00"(DN300)	354.84	28.45	325.37	30	3/8-24
CF-BL-1400M	CF14.00"(DN300)	354.84	28.45	325.37	30	M10
CF-BL-1650	CF16.50"(DN350)	418.34	28.45	388.87	36	10.49
CF-BL-1650T	CF16.50"(DN350)	418.34	28.45	388.87	36	3/8-24
CF-BL-1650M	CF16.50"(DN350)	418.34	28.45	388.87	36	M10

*Note: SS 316LN Material Available on Request.

CF

CF Flanges



CF BLANK FLANGE, ROTATABLE

*Material: SS 304L

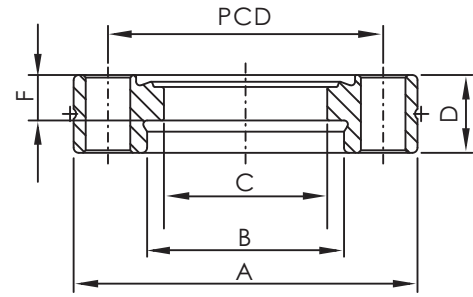
*Tapped and Through Holes

CF

Part Number	Flange Size	A (mm)	B (mm)	D (mm)	PCD (mm)	Bolt Holes	Diameter (mm) / Thread Type
CF-BL-133R	CF1.33" (DN1 6)	33.70	19.41	7.60	26.97	6	4.37
CF-BL-133RT	CF1.33" (DN1 6)	33.70	19.41	7.60	26.97	6	8-32
CF-BL-133RM	CF1.33" (DN1 6)	33.70	19.41	7.60	26.97	6	M4
CF-BL-212R	CF2.12" (DN2 5)	53.80	27.94	11.90	41.28	4	6.73
CF-BL-212RT	CF2.12" (DN2 5)	53.80	27.94	11.90	41.28	4	1/4-28
CF-BL-212RM	CF2.12" (DN2 5)	53.80	27.94	11.90	41.28	4	M6
CF-BL-275R	CF2.75" (DN4 0)	69.30	48.31	12.70	58.72	6	6.73
CF-BL-275RT	CF2.75" (DN4 0)	69.30	48.31	12.70	58.72	6	1/4-28
CF-BL-275RM	CF2.75" (DN4 0)	69.30	48.31	12.70	58.72	6	M6
CF-BL-338R	CF3.38" (DN5 0)	85.30	54.50	17.40	72.39	8	8.43
CF-BL-338RT	CF3.38" (DN5 0)	85.30	54.50	17.40	72.39	8	5/16-24
CF-BL-338RM	CF3.38" (DN5 0)	85.30	54.50	17.40	72.39	8	M8
CF-BL-450R	CF4.50" (DN6 3)	113.50	72.39	19.10	92.15	8	8.43
CF-BL-450RT	CF4.50" (DN6 3)	113.50	72.39	19.10	92.15	8	5/16-24
CF-BL-450RM	CF4.50" (DN6 3)	113.50	72.39	19.10	92.15	8	M8
CF-BL-462R	CF4.62" (DN8 0)	117.00	79.71	20.60	102.36	10	8.43
CF-BL-462RT	CF4.62" (DN8 0)	117.00	79.71	20.60	102.36	10	5/16-24
CF-BL-462RM	CF4.62" (DN8 0)	117.00	79.71	20.60	102.36	10	M8
CF-BL-600R	CF6.00" (DN1 00)	151.60	106.17	21.30	130.25	16	8.43
CF-BL-600RT	CF6.00" (DN1 00)	151.60	106.17	21.30	130.25	16	5/16-24
CF-BL-600RM	CF6.00" (DN1 00)	151.60	106.17	21.30	130.25	16	M8
CF-BL-675R	CF6.75" (DN1 30)	170.69	129.50	21.30	151.61	18	8.43
CF-BL-675RT	CF6.75" (DN1 30)	170.69	129.50	21.30	151.61	18	5/16-24
CF-BL-675RM	CF6.75" (DN1 30)	170.69	129.50	21.30	151.61	18	M8
CF-BL-800R	CF8.00" (DN1 60)	202.44	155.70	23.90	181.05	20	8.43
CF-BL-800RT	CF8.00" (DN1 60)	202.44	155.70	23.90	181.05	20	5/16-24
CF-BL-800RM	CF8.00" (DN1 60)	202.44	155.70	23.90	181.05	20	M8
CF-BL-1000R	CF10.00" (DN2 00)	253.24	208.28	24.60	231.85	24	8.43
CF-BL-1000RT	CF10.00" (DN2 00)	253.24	208.28	24.60	231.85	24	5/16-24
CF-BL-1000RM	CF10.00" (DN2 00)	253.24	208.28	24.60	231.85	24	M8
CF-BL-1200R	CF12.00" (DN2 50)	304.04	256.03	25.90	283.97	32	8.43
CF-BL-1200RT	CF12.00" (DN2 50)	304.04	256.03	25.90	283.97	32	5/16-24
CF-BL-1200RM	CF12.00" (DN2 50)	304.04	256.03	25.90	283.97	32	M8
CF-BL-1325R	CF13.25" (DN2 70)	335.79	276.30	28.45	306.32	30	10.49
CF-BL-1325RT	CF13.25" (DN2 70)	335.79	276.30	28.45	306.32	30	3/8-24
CF-BL-1325RM	CF13.25" (DN2 70)	335.79	276.30	28.45	306.32	30	M10
CF-BL-1400R	CF14.00" (DN3 00)	354.84	305.82	28.45	325.37	30	10.49
CF-BL-1400RT	CF14.00" (DN3 00)	354.84	305.82	28.45	325.37	30	3/8-24
CF-BL-1400RM	CF14.00" (DN3 00)	354.84	305.82	28.45	325.37	30	M10
CF-BL-1650R	CF16.50" (DN3 50)	418.34	359.61	28.45	388.87	36	10.49
CF-BL-1650RT	CF16.50" (DN3 50)	418.34	359.61	28.45	388.87	36	3/8-24
CF-BL-1650RM	CF16.50" (Dn350)	418.34	359.61	28.45	388.87	36	M10

*Note: SS 316LN Material Available on Request.

CF Flanges



CF BORED FLANGES

*Material: SS 304L

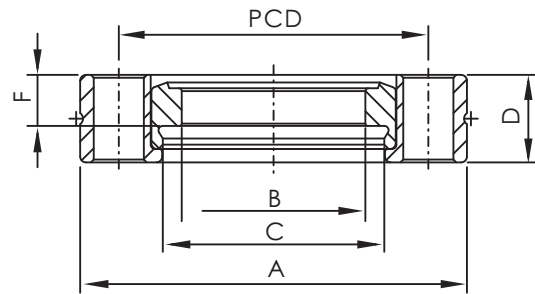
* Tapped and Through Holes

Part Number	Size	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	PCD (mm)	Bolt Holes	Diameter (mm) / Thread Type
CF-BF-133x038	CF1.33"(DN16)	33.70	9.65	-	7.60	-	26.97	6	4.37
CF-BF-133x038T	CF1.33"(DN16)	33.70	9.65	-	7.60	-	26.97	6	8-32
CF-BF-133x038M	CF1.33"(DN16)	33.70	9.65	-	7.60	-	26.97	6	M4
CF-BF-133x050	CF1.33"(DN16)	33.70	12.83	-	7.60	-	26.97	6	4.37
CF-BF-133x050T	CF1.33"(DN16)	33.70	12.83	-	7.60	-	26.97	6	8-32
CF-BF-133x050M	CF1.33"(DN16)	33.70	12.83	-	7.60	-	26.97	6	M4
CF-BF-133x075	CF1.33"(DN16)	33.70	19.30	16.00	7.60	4.45	26.97	6	4.37
CF-BF-133x075T	CF1.33"(DN16)	33.70	19.30	16.00	7.60	4.45	26.97	6	8-32
CF-BF-133x075M	CF1.33"(DN16)	33.70	19.30	16.00	7.60	4.45	26.97	6	M4
CF-BF-212x100	CF2.12"(DN25)	53.80	25.65	23.90	11.90	4.32	41.28	4	6.73
CF-BF-212x100T	CF2.12"(DN25)	53.80	25.65	23.90	11.90	4.32	41.28	4	1/4-28
CF-BF-212x100M	CF2.12"(DN25)	53.80	25.65	23.90	11.90	4.32	41.28	4	M6
CF-BF-275x075	CF2.75"(DN40)	69.30	19.30	16.00	12.70	5.31	58.72	6	6.73
CF-BF-275x075T	CF2.75"(DN40)	69.30	19.30	16.00	12.70	5.31	58.72	6	1/4-28
CF-BF-275x075M	CF2.75"(DN40)	69.30	19.30	16.00	12.70	5.31	58.72	6	M6
CF-BF-275x100	CF2.75"(DN40)	69.30	25.65	22.10	12.70	5.31	58.72	6	6.73
CF-BF-275x100T	CF2.75"(DN40)	69.30	25.65	22.10	12.70	5.31	58.72	6	1/4-28
CF-BF-275x100M	CF2.75"(DN40)	69.30	25.65	22.10	12.70	5.31	58.72	6	M6
CF-BF-275x150	CF2.75"(DN40)	69.30	38.35	36.60	12.70	5.31	58.72	6	6.73
CF-BF-275x150T	CF2.75"(DN40)	69.30	38.35	36.60	12.70	5.31	58.72	6	1/4-28
CF-BF-275x150M	CF2.75"(DN40)	69.30	38.35	36.60	12.70	5.31	58.72	6	M6
CF-BF-275x175	CF2.75"(DN40)	69.30	44.70	41.20	12.70	5.31	58.72	6	6.73
CF-BF-275x175T	CF2.75"(DN40)	69.30	44.70	41.20	12.70	5.31	58.72	6	1/4-28
CF-BF-275x175M	CF2.75"(DN40)	69.30	44.70	41.20	12.70	5.31	58.72	6	M6
CF-BF-338x200	CF3.38"(DN50)	85.30	51.05	49.30	17.40	5.72	72.39	8	8.43
CF-BF-338x200T	CF3.38"(DN50)	85.30	51.05	49.30	17.40	5.72	72.39	8	5/16-24
CF-BF-338x200M	CF3.38"(DN50)	85.30	51.05	49.30	17.40	5.72	72.39	8	M8
CF-BF-450x250	CF4.50"(DN63)	113.50	63.75	62.00	17.40	9.53	92.15	8	8.43
CF-BF-450x250T	CF4.50"(DN63)	113.50	63.75	62.00	17.40	9.53	92.15	8	5/16-24
CF-BF-450x250M	CF4.50"(DN63)	113.50	63.75	62.00	17.40	9.53	92.15	8	M8
CF-BF-462x300	CF4.62"(DN80)	117.00	76.45	74.70	20.60	9.60	102.36	10	8.43
CF-BF-462x300T	CF4.62"(DN80)	117.00	76.45	74.70	20.60	9.60	102.36	10	5/16-24
CF-BF-462x300M	CF4.62"(DN80)	117.00	76.45	74.70	20.60	9.60	102.36	10	M8
CF-BF-600x400	CF6.00"(DN100)	151.60	101.85	99.60	19.80	11.10	130.25	16	8.43
CF-BF-600x400T	CF6.00"(DN100)	151.60	101.85	99.60	19.80	11.10	130.25	16	5/16-24
CF-BF-600x400M	CF6.00"(DN100)	151.60	101.85	99.60	19.80	11.10	130.25	16	M8
CF-BF-675x500	CF6.75"(DN130)	170.69	127.25	123.83	21.34	11.68	151.61	18	8.43
CF-BF-675x500T	CF6.75"(DN130)	170.69	127.25	123.83	21.34	11.68	151.61	18	5/16-24
CF-BF-675x500M	CF6.75"(DN130)	170.69	127.25	123.83	21.34	11.68	151.61	18	M8
CF-BF-800x600	CF8.00"(DN160)	202.44	152.91	150.40	22.35	12.70	181.05	20	8.43
CF-BF-800x600T	CF8.00"(DN160)	202.44	152.91	150.40	22.35	12.70	181.05	20	5/16-24
CF-BF-800x600M	CF8.00"(DN160)	202.44	152.91	150.40	22.35	12.70	181.05	20	M8
CF-BF-1000x800	CF10.00"(DN200)	253.24	203.71	200.40	24.64	12.70	231.85	24	8.43
CF-BF-1000x800T	CF10.00"(DN200)	253.24	203.71	200.40	24.64	12.70	231.85	24	5/16-24
CF-BF-1000x800M	CF10.00"(DN200)	253.24	203.71	200.40	24.64	12.70	231.85	24	M8
CF-BF-1200x1000	CF12.00"(DN250)	304.04	254.51	250.95	25.90	12.70	283.97	32	8.43
CF-BF-1200x1000T	CF12.00"(DN250)	304.04	254.51	250.95	25.90	12.70	283.97	32	5/16-24
CF-BF-1200x1000M	CF12.00"(DN250)	304.04	254.51	250.95	25.90	12.70	283.97	32	M8
CF-BF-1325x1000	CF13.25"(DN270)	335.79	254.51	250.95	28.45	12.70	306.32	30	10.49
CF-BF-1325x1000T	CF13.25"(DN270)	335.79	254.51	250.95	28.45	12.70	306.32	30	3/8-24
CF-BF-1325x1000M	CF13.25"(DN270)	335.79	254.51	250.95	28.45	12.70	306.32	30	M10
CF-BF-1400x1200	CF14.00"(DN300)	354.84	305.31	301.75	28.45	12.70	325.37	30	10.49
CF-BF-1400x1200T	CF14.00"(DN300)	354.84	305.31	301.75	28.45	12.70	325.37	30	3/8-24
CF-BF-1400x1200M	CF14.00"(DN300)	354.84	305.31	301.75	28.45	12.70	325.37	30	M10
CF-BF-1650x1400	CF16.50"(DN350)	418.34	356.11	352.00	28.45	12.70	388.87	36	10.49
CF-BF-1650x1400T	CF16.50"(DN350)	418.34	356.11	352.00	28.45	12.70	388.87	36	3/8-24
CF-BF-1650x1400M	CF16.50"(DN350)	418.34	356.11	352.00	28.45	12.70	388.87	36	M10

*Note: SS 316LN Material Available on Request.

CF

CF Flanges



CF BORED FLANGES, ROTATABLE

*Material: SS 304L

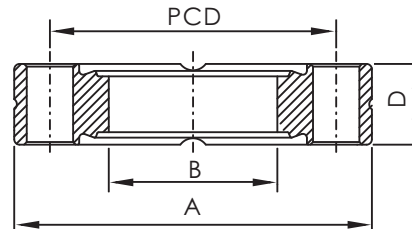
*Tapped and Through Holes

CF

Part Number	Size	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	PCD (mm)	Bolt Holes	Diameter (mm) / Thread Type
CF-BF-133x050R	CF1.33"(DN16)	33.70	12.83	12.83	7.60	-	26.97	6	4.37
CF-BF-133x050RT	CF1.33"(DN16)	33.70	12.83	12.83	7.60	-	26.97	6	8-32
CF-BF-133x050RM	CF1.33"(DN16)	33.70	12.83	12.83	7.60	-	26.97	6	M4
CF-BF-133x075R	CF1.33"(DN16)	33.70	16.00	19.30	7.60	4.44	26.97	6	4.37
CF-BF-133x075RT	CF1.33"(DN16)	33.70	16.00	19.30	7.60	4.44	26.97	6	8-32
CF-BF-133x075RM	CF1.33"(DN16)	33.70	16.00	19.30	7.60	4.44	26.97	6	M4
CF-BF-212x100R	CF2.12"(DN25)	53.80	23.90	25.91	11.90	4.32	41.28	4	6.73
CF-BF-212x100RT	CF2.12"(DN25)	53.80	23.90	25.91	11.90	4.32	41.28	4	1/4-28
CF-BF-212x100RM	CF2.12"(DN25)	53.80	23.90	25.91	11.90	4.32	41.28	4	M6
CF-BF-275x075R	CF2.75"(DN40)	69.30	16.00	19.30	12.70	5.31	58.72	6	6.73
CF-BF-275x075RT	CF2.75"(DN40)	69.30	16.00	19.30	12.70	5.31	58.72	6	1/4-28
CF-BF-275x075RM	CF2.75"(DN40)	69.30	16.00	19.30	12.70	5.31	58.72	6	M6
CF-BF-275x150R	CF2.75"(DN40)	69.30	36.60	38.61	12.70	5.31	58.72	6	6.73
CF-BF-275x150RT	CF2.75"(DN40)	69.30	36.60	38.61	12.70	5.31	58.72	6	1/4-28
CF-BF-275x150RM	CF2.75"(DN40)	69.30	36.60	38.61	12.70	5.31	58.72	6	M6
CF-BF-338x200R	CF3.38"(DN50)	85.30	49.30	51.31	17.40	5.71	72.39	8	8.43
CF-BF-338x200RT	CF3.38"(DN50)	85.30	49.30	51.31	17.40	5.71	72.39	8	5/16-24
CF-BF-338x200RM	CF3.38"(DN50)	85.30	49.30	51.31	17.40	5.71	72.39	8	M8
CF-BF-450x250R	CF4.50"(DN63)	113.50	62.00	64.01	19.10	9.52	92.15	8	8.43
CF-BF-450x250RT	CF4.50"(DN63)	113.50	62.00	64.01	19.10	9.52	92.15	8	5/16-24
CF-BF-450x250RM	CF4.50"(DN63)	113.50	62.00	64.01	19.10	9.52	92.15	8	M8
CF-BF-462x300R	CF4.62"(DN80)	117.00	74.70	76.71	20.60	9.52	102.36	10	8.43
CF-BF-462x300RT	CF4.62"(DN80)	117.00	74.70	76.71	20.60	9.52	102.36	10	5/16-24
CF-BF-462x300RM	CF4.62"(DN80)	117.00	74.70	76.71	20.60	9.52	102.36	10	M8
CF-BF-600x400R	CF6.00"(DN100)	151.60	99.60	102.11	21.30	11.10	130.25	16	8.43
CF-BF-600x400RT	CF6.00"(DN100)	151.60	99.60	102.11	21.30	11.10	130.25	16	5/16-24
CF-BF-600x400RM	CF6.00"(DN100)	151.60	99.60	102.11	21.30	11.10	130.25	16	M8
CF-BF-675x500R	CF6.75"(DN130)	170.69	125.00	127.51	21.30	11.68	151.61	18	8.43
CF-BF-675x500RT	CF6.75"(DN130)	170.69	125.00	127.51	21.30	11.68	151.61	18	5/16-24
CF-BF-675x500RM	CF6.75"(DN130)	170.69	125.00	127.51	21.30	11.68	151.61	18	M8
CF-BF-800x600R	CF8.00"(DN160)	202.44	150.40	152.91	23.90	12.70	181.05	20	8.43
CF-BF-800x600RT	CF8.00"(DN160)	202.44	150.40	152.91	23.90	12.70	181.05	20	5/16-24
CF-BF-800x600RM	CF8.00"(DN160)	202.44	150.40	152.91	23.90	12.70	181.05	20	M8
CF-BF-1000x800R	CF10.00"(DN200)	253.24	200.40	203.71	24.60	12.70	231.85	24	8.43
CF-BF-1000x800RT	CF10.00"(DN200)	253.24	200.40	203.71	24.60	12.70	231.85	24	5/16-24
CF-BF-1000x800RM	CF10.00"(DN200)	253.24	200.40	203.71	24.60	12.70	231.85	24	M8
CF-BF-1200x1000R	CF12.00"(DN250)	304.04	250.95	254.51	25.90	12.70	283.97	32	8.43
CF-BF-1200x1000RT	CF12.00"(DN250)	304.04	250.95	254.51	25.90	12.70	283.97	32	5/16-24
CF-BF-1200x1000RM	CF12.00"(DN250)	304.04	250.95	254.51	25.90	12.70	283.97	32	M8
CF-BF-1325x1000R	CF13.25"(DN270)	335.79	250.95	254.51	28.45	12.70	306.32	30	10.49
CF-BF-1325x1000RT	CF13.25"(DN270)	335.79	250.95	254.51	28.45	12.70	306.32	30	3/8-24
CF-BF-1325x1000RM	CF13.25"(DN270)	335.79	250.95	254.51	28.45	12.70	306.32	30	M10
CF-BF-1400x1200R	CF14.00"(DN300)	354.84	301.75	305.31	28.45	12.70	325.37	30	10.49
CF-BF-1400x1200RT	CF14.00"(DN300)	354.84	301.75	305.31	28.45	12.70	325.37	30	3/8-24
CF-BF-1400x1200RM	CF14.00"(DN300)	354.84	301.75	305.31	28.45	12.70	325.37	30	M10
CF-BF-1650x1400R	CF16.50"(DN350)	418.34	352.55	356.11	28.45	12.70	388.87	36	10.49
CF-BF-1650x1400RT	CF16.50"(DN350)	418.34	352.55	356.11	28.45	12.70	388.87	36	3/8-24
CF-BF-1650x1400RM	CF16.50"(DN350)	418.34	352.55	356.11	28.45	12.70	388.87	36	M10

*Note: SS 316LN Material Available on Request.

CF Flanges



CF DOUBLE FACE FLANGES

*Material: SS 304L

*Through Holes

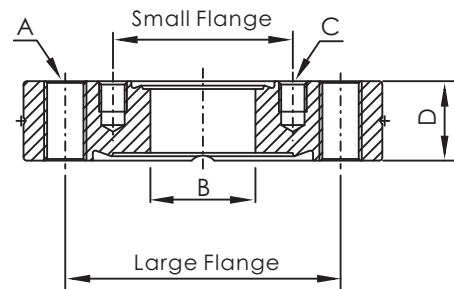
Part Number	Flange Size	A (mm)	B (mm)	D (mm)	PCD (mm)	Bolt Holes	Diameter (mm) / Thread Type
CF-DF-133	CF1.33" (DN16)	33.70	-	7.60	26.97	6	4.37
CF-DF-133x075	CF1.33" (DN16)	33.70	15.88	7.60	26.97	6	4.37
CF-DF-212	CF2.12" (DN25)	53.80	-	11.90	41.28	4	6.73
CF-DF-212x100	CF2.12" (DN25)	53.80	25.65	11.90	41.28	4	6.73
CF-DF-275	CF2.75" (DN40)	69.30	-	12.70	58.72	6	6.73
CF-DF-275x150	CF2.75" (DN40)	69.30	38.35	12.70	58.72	6	6.73
CF-DF-338	CF3.38" (DN50)	85.30	-	16.00	72.39	8	8.43
CF-DF-338x200	CF3.38" (DN50)	85.30	51.05	16.00	72.39	8	8.43
CF-DF-450	CF4.50" (DN63)	113.50	-	17.40	92.15	8	8.43
CF-DF-450x250	CF4.50" (DN63)	113.50	63.75	17.40	92.15	8	8.43
CF-DF-462	CF4.62" (DN80)	117.00	-	19.10	102.36	10	8.43
CF-DF-462x300	CF4.62" (DN80)	117.00	79.71	19.10	102.36	10	8.43
CF-DF-600	CF6.00" (DN100)	151.60	-	19.80	130.25	16	8.43
CF-DF-600x400	CF6.00" (DN100)	151.60	101.85	19.80	130.25	16	8.43
CF-DF-675	CF6.75" (DN130)	170.69	-	21.34	151.61	18	8.43
CF-DF-675x500	CF6.75" (DN130)	170.69	127.25	21.34	151.61	18	8.43
CF-DF-800	CF8.00" (DN160)	202.44	-	22.35	181.05	20	8.43
CF-DF-800x600	CF8.00" (DN160)	202.44	152.65	22.35	181.05	20	8.43
CF-DF-1000	CF10.00" (DN200)	253.24	-	24.60	231.85	24	8.43
CF-DF-1000x800	CF10.00" (DN200)	253.24	203.45	24.60	231.85	24	8.43
CF-DF-1325	CF13.25" (DN270)	335.79	-	28.45	306.32	30	10.49
CF-DF-1325x1000	CF13.25" (Dn270)	335.79	254.50	28.45	306.32	30	10.49

*Note: SS 316LN Material available on Request.

CF Flanges

CF ZERO LENGTH REDUCERS- INCH THREAD

*Material: SS 304L



The last digit of part number means optional thread types shown as follows.

T: Both Small Flange and Large Flange are Inch Tapped holes.

Z: Small Flange(Inch tapped holes)+Large Flange(Thru holes)

CF

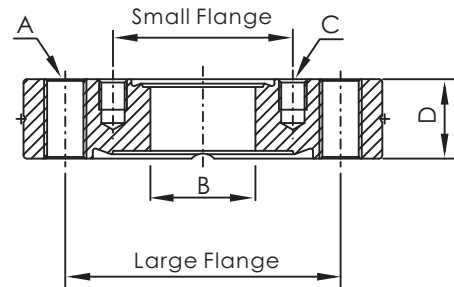
Part Number	Large Flange	Small Flange	A	B (mm)	C	D (mm)
CF-ZL-212x133T	CF2.12"	CF1.33"	1/4-28	15.75	8-32	11.90
CF-ZL-212x133Z	CF2.12"	CF1.33"	6.73	15.75	8-32	11.90
CF-ZL-275x133Z	CF2.75"	CF1.33"	6.73	15.75	8-32	12.70
CF-ZL-275x212T	CF2.75"	CF2.12"	1/4-28	25.40	1/4-28	12.70
CF-ZL-275x212Z	CF2.75"	CF2.12"	6.73	25.40	1/4-28	12.70
CF-ZL-338x133Z	CF3.38"	CF1.33"	8.43	15.75	8-32	16.00
CF-ZL-338x212T	CF3.38"	CF2.12"	5/16-24	25.40	1/4-28	16.00
CF-ZL-338x212Z	CF3.38"	CF2.12"	8.43	25.40	1/4-28	16.00
CF-ZL-338x275T	CF3.38"	CF2.75"	5/16-24	38.10	1/4-28	16.00
CF-ZL-338x275Z	CF3.38"	CF2.75"	8.43	38.10	1/4-28	16.00
CF-ZL-450x133Z	CF4.50"	CF1.33"	8.43	15.75	8-32	17.40
CF-ZL-450x212Z	CF4.50"	CF2.12"	8.43	25.40	1/4-28	17.40
CF-ZL-450x275Z	CF4.50"	CF2.75"	8.43	38.10	1/4-28	17.40
CF-ZL-450x338T	CF4.50"	CF3.38"	5/16-24	50.80	5/16-24	17.40
CF-ZL-450x338Z	CF4.50"	CF3.38"	8.43	50.80	5/16-24	17.40
CF-ZL-462x133Z	CF4.62"	CF1.33"	8.43	15.75	8-32	19.10
CF-ZL-462x212Z	CF4.62"	CF2.12"	8.43	25.40	1/4-28	19.10
CF-ZL-462x275Z	CF4.62"	CF2.75"	8.43	38.10	1/4-28	19.10
CF-ZL-462x338Z	CF4.62"	CF3.38"	8.43	50.80	5/16-24	19.10
CF-ZL-600x133Z	CF6.00"	CF1.33"	8.43	15.75	8-32	19.80
CF-ZL-600x212Z	CF6.00"	CF2.12"	8.43	25.40	1/4-28	19.80
CF-ZL-600x275Z	CF6.00"	CF2.75"	8.43	38.10	1/4-28	19.80
CF-ZL-600x338Z	CF6.00"	CF3.38"	8.43	50.80	5/16-24	19.80
CF-ZL-600x450Z	CF6.00"	CF4.50"	8.43	63.50	5/16-24	19.80
CF-ZL-600x462Z	CF6.00"	CF4.62"	8.43	76.20	5/16-24	19.80
CF-ZL-675x275Z	CF6.75"	CF2.75"	8.43	38.10	1/4-28	21.34
CF-ZL-675x450Z	CF6.75"	CF4.50"	8.43	63.50	5/16-24	21.34
CF-ZL-800x133Z	CF8.00"	CF1.33"	8.43	15.75	8-32	22.35
CF-ZL-800x275Z	CF8.00"	CF2.75"	8.43	38.10	1/4-28	22.35
CF-ZL-800x450Z	CF8.00"	CF4.50"	8.43	63.50	5/16-24	22.35
CF-ZL-800x600Z	CF8.00"	CF6.00"	8.43	101.60	5/16-24	22.35
CF-ZL-1000x133Z	CF10.00"	CF1.33"	8.43	15.75	8-32	24.60
CF-ZL-1000x275Z	CF10.00"	CF2.75"	8.43	38.10	1/4-28	24.60
CF-ZL-1000x450Z	CF10.00"	CF4.50"	8.43	63.50	5/16-24	24.60
CF-ZL-1000x600Z	CF10.00"	CF6.00"	8.43	101.60	5/16-24	24.60
CF-ZL-1000x800Z	CF10.00"	CF8.00"	8.43	152.40	5/16-24	24.60
CF-ZL-1325x133Z	CF13.25"	CF1.33"	10.49	15.75	8-32	28.45
CF-ZL-1325x275Z	CF13.25"	CF2.75"	10.49	38.10	1/4-28	28.45
CF-ZL-1325x450Z	CF13.25"	CF4.50"	10.49	63.50	5/16-24	28.45
CF-ZL-1325x600Z	CF13.25"	CF6.00"	10.49	101.60	5/16-24	28.45
CF-ZL-1325x800Z	CF13.25"	CF8.00"	10.49	152.40	5/16-24	28.45
CF-ZL-1325x1000Z	CF13.25"	CF10.00"	10.49	203.20	5/16-24	28.45

*Note: SS 316LN Material Available on Request.

CF Flanges

CF ZERO LENGTH REDUCERS- METRIC THREAD

*Material: SS 304L



The last digit of part number means optional thread types shown as follows.

M: Both Small Flange and Large Flange are Metric Tapped holes.

Y: Small Flange(Metric tapped holes)+Large Flange(Thru holes)

Part Number	Large Flange	Small Flange	A	B (mm)	C	D (mm)
CF-ZL-212x133M	CF2.12"	CF1.33"	M6	15.75	M4	11.90
CF-ZL-212x133Y	CF2.12"	CF1.33"	6.73	15.75	M4	11.90
CF-ZL-275x133Y	CF2.75"	CF1.33"	6.73	15.75	M4	12.70
CF-ZL-275x212M	CF2.75"	CF2.12"	M6	25.40	M6	12.70
CF-ZL-275x212Y	CF2.75"	CF2.12"	6.73	25.40	M6	12.70
CF-ZL-338x133Y	CF3.38"	CF1.33"	8.43	15.75	M4	16.00
CF-ZL-338x212M	CF3.38"	CF2.12"	M8	25.40	M6	16.00
CF-ZL-338x212Y	CF3.38"	CF2.12"	8.43	25.40	M6	16.00
CF-ZL-338x275M	CF3.38"	CF2.75"	M8	38.10	M6	16.00
CF-ZL-338x275Y	CF3.38"	CF2.75"	8.43	38.10	M6	16.00
CF-ZL-450x133Y	CF4.50"	CF1.33"	8.43	15.75	M4	17.40
CF-ZL-450x212Y	CF4.50"	CF2.12"	8.43	25.40	M6	17.40
CF-ZL-450x275Y	CF4.50"	CF2.75"	8.43	38.10	M6	17.40
CF-ZL-450x338M	CF4.50"	CF3.38"	M8	50.80	M8	17.40
CF-ZL-450x338Y	CF4.50"	CF3.38"	8.43	50.80	M8	17.40
CF-ZL-462x133Y	CF4.62"	CF1.33"	8.43	15.75	M4	19.10
CF-ZL-462x212Y	CF4.62"	CF2.12"	8.43	25.40	M6	19.10
CF-ZL-462x275Y	CF4.62"	CF2.75"	8.43	38.10	M6	19.10
CF-ZL-462x338Y	CF4.62"	CF3.38"	8.43	50.80	M8	19.10
CF-ZL-600x133Y	CF6.00"	CF1.33"	8.43	15.75	M4	19.80
CF-ZL-600x212Y	CF6.00"	CF2.12"	8.43	25.40	M6	19.80
CF-ZL-600x275Y	CF6.00"	CF2.75"	8.43	38.10	M6	19.80
CF-ZL-600x338Y	CF6.00"	CF3.38"	8.43	50.80	M8	19.80
CF-ZL-600x450Y	CF6.00"	CF4.50"	8.43	63.50	M8	19.80
CF-ZL-600x462Y	CF6.00"	CF4.62"	8.43	76.20	M8	19.80
CF-ZL-675x275Y	CF6.75"	CF2.75"	8.43	38.10	M6	21.34
CF-ZL-675x450Y	CF6.75"	CF4.50"	8.43	63.50	M8	21.34
CF-ZL-800x133Y	CF8.00"	CF1.33"	8.43	15.75	M4	22.35
CF-ZL-800x275Y	CF8.00"	CF2.75"	8.43	38.10	M6	22.35
CF-ZL-800x450Y	CF8.00"	CF4.50"	8.43	63.50	M8	22.35
CF-ZL-800x600Y	CF8.00"	CF6.00"	8.43	101.60	M8	22.35
CF-ZL-1000x133Y	CF10.00"	CF1.33"	8.43	15.75	M4	24.60
CF-ZL-1000x275Y	CF10.00"	CF2.75"	8.43	38.10	M6	24.60
CF-ZL-1000x450Y	CF10.00"	CF4.50"	8.43	63.50	M8	24.60
CF-ZL-1000x600Y	CF10.00"	CF6.00"	8.43	101.60	M8	24.60
CF-ZL-1000x800Y	CF10.00"	CF8.00"	8.43	152.40	M8	24.60
CF-ZL-1325x133Y	CF13.25"	CF1.33"	10.49	15.75	M4	28.45
CF-ZL-1325x275Y	CF13.25"	CF2.75"	10.49	38.10	M6	28.45
CF-ZL-1325x450Y	CF13.25"	CF4.50"	10.49	63.50	M8	28.45
CF-ZL-1325x600Y	CF13.25"	CF6.00"	10.49	101.60	M8	28.45
CF-ZL-1325x800Y	CF13.25"	CF8.00"	10.49	152.40	M8	28.45
CF-ZL-1325x1000Y	CF13.25"	CF10.00"	10.49	203.20	M8	28.45

*Note: SS 316LN Material Available on Request.

CF

CF Flittings

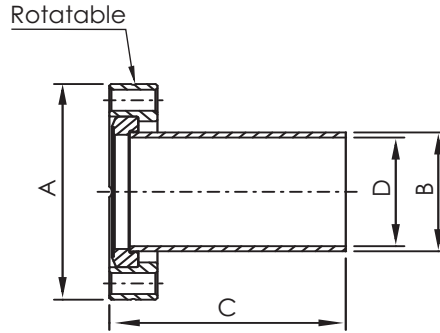


Figure 1

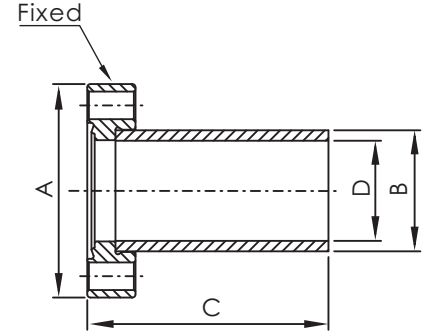


Figure 2

CF FLANGE HALF NIPPLES

*Material: SS 304L

*Tube Finish: Bead Blast

CF

Part Number	Size	Figure	A	B	C	D
CF-HN-133	CF1.33"(DN16)	2	1.33"	19.05	38.10	15.75
CF-HN-133R	CF1.33"(DN16)	1	1.33"	19.05	38.10	15.75
CF-HN-212	CF2.12"(DN25)	2	2.12"	25.40	52.07	22.10
CF-HN-275	CF2.75"(DN40)	2	2.75"	38.10	62.48	34.80
CF-HN-275R	CF2.75"(DN40)	1	2.75"	38.10	62.70	34.80
CF-HN-338	CF3.38"(DN50)	2	3.38"	50.80	81.79	47.50
CF-HN-450	CF4.50"(DN63)	2	4.50"	63.50	85.85	60.20
CF-HN-450R	CF4.50"(DN63)	1	4.50"	63.50	104.80	60.20
CF-HN-462	CF4.62"(DN80)	2	4.62"	76.20	89.66	72.90
CF-HN-600	CF6.00"(DN100)	2	6.00"	101.60	109.73	97.40
CF-HN-600R	CF6.00"(DN100)	1	6.00"	101.60	134.90	97.40
CF-HN-675	CF6.75"(DN130)	2	6.75"	127.00	109.70	122.80
CF-HN-800	CF8.00"(DN160)	2	8.00"	152.40	139.70	148.20
CF-HN-800R	CF8.00"(DN160)	1	8.00"	152.40	166.70	148.20
CF-HN-1000	CF10.00"(DN200)	2	10.00"	203.20	203.20	197.20
CF-HN-1000R	CF10.00"(DN200)	1	10.00"	203.20	203.20	199.00

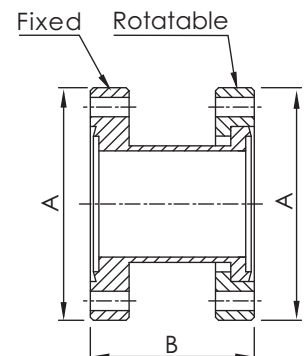
CF FLANGE FULL NIPPLES

*Material: SS 304L

*Tube Finish: Bead Blast



Part Number	Flange Size	A	B
CF-FN-133	CF1.33"(DN16)	1.33"	76.20
CF-FN-212	CF2.12"(DN25)	2.12"	104.14
CF-FN-275	CF2.75"(DN40)	2.75"	124.97
CF-FN-338	CF3.38"(DN50)	3.38"	163.58
CF-FN-450	CF4.50"(DN63)	4.50"	171.70
CF-FN-462	CF4.62"(DN80)	4.62"	179.32
CF-FN-600	CF6.00"(DN100)	6.00"	219.46
CF-FN-675	CF6.75"(DN130)	6.75"	214.90
CF-FN-800	CF8.00"(DN160)	8.00"	200.00
CF-FN-1000	CF10.00"(DN200)	10.00"	406.40



*Note: SS 316LN (SS 316L Tube+ SS 316LN Flange) Material Available on Request.

*Note: Polished and Electro- Polished Tube Finishes Available on Request.

CF Flittings

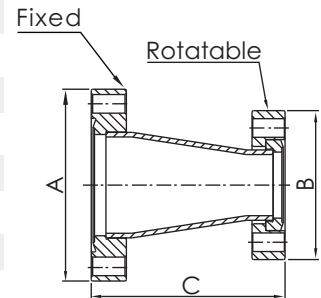


CF CONICAL REDUCING NIPPLES

*Material: SS 304L

*Tube Finish: Bead Blast

Part Number	Flange Size	A	B	C
CF-CRN-212x133	CF2.12"(DN25)/CF1.33"(DN16)	2.12"	1.33"	51.90
CF-CRN-275x133	CF2.75"(DN40)/CF1.33"(DN16)	2.75"	1.33"	78.30
CF-CRN-275x212	CF2.75"(DN40)/CF2.12"(DN25)	2.75"	2.12"	69.90
CF-CRN-338x212	CF3.38"(DN50)/CF2.12"(DN25)	3.38"	2.12"	70.30
CF-CRN-338x275	CF3.38"(DN50)/CF2.75"(DN40)	3.38"	2.75"	71.30
CF-CRN-450x275	CF4.50"(DN63)/CF2.75"(DN40)	4.50"	2.75"	75.20
CF-CRN-450x338	CF4.50"(DN63)/CF3.38"(DN50)	4.50"	3.38"	75.60
CF-CRN-462x275	CF4.62"(DN80)/CF2.75"(DN40)	4.62"	2.75"	104.50
CF-CRN-462x338	CF4.62"(DN80)/CF3.38"(DN50)	4.62"	3.38"	104.90
CF-CRN-462x450	CF4.62"(DN80)/CF4.50"(DN63)	4.62"	4.50"	108.70
CF-CRN-600x338	CF6.00"(DN100)/CF3.38"(DN50)	6.00"	3.38"	108.90
CF-CRN-600x450	CF6.00"(DN100)/CF4.50"(DN63)	6.00"	4.50"	112.70
CF-CRN-600x462	CF6.00"(DN100)/CF4.62"(DN80)	6.00"	4.62"	110.30



CF

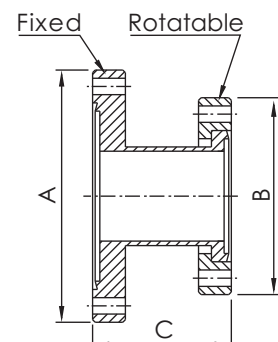


CF STRAIGHT REDUCING NIPPLES

*Material: SS 304L

*Tube Finish: Bead Blast

Part Number	Flange Size	A	B	C
CF-SRN-275x133	CF2.75"(DN40)/CF1.33"(DN16)	2.75"	1.33"	45.00
CF-SRN-450x133	CF4.50"(DN63)/CF1.33"(DN16)	4.50"	1.33"	70.00
CF-SRN-450x275	CF4.50"(DN63)/CF2.75"(DN40)	4.50"	2.75"	75.00
CF-SRN-600x275	CF6.00"(DN100)/CF2.75"(DN40)	6.00"	2.75"	127.00
CF-SRN-600x450	CF6.00"(DN100)/CF4.50"(DN63)	6.00"	4.50"	95.00
CF-SRN-800x275	CF8.00"(DN160)/CF2.75"(DN40)	8.00"	2.75"	127.00
CF-SRN-800x450	CF8.00"(DN160)/CF4.50"(DN63)	8.00"	4.50"	127.00
CF-SRN-800x600	CF8.00"(DN160)/CF6.00"(DN100)	8.00"	6.00"	127.00
CF-SRN-1000x275	CF10.00"(DN200)/CF2.75"(DN40)	10.00"	2.75"	127.00
CF-SRN-1000x450	CF10.00"(DN200)/CF4.50"(DN63)	10.00"	4.50"	127.00
CF-SRN-1000x600	CF10.00"(DN200)/CF6.00"(DN100)	10.00"	6.00"	127.00
CF-SRN-1000x800	CF10.00"(DN200)/CF8.00"(DN160)	10.00"	8.00"	127.00



*Note: SS 316LN (SS 316L Tube+ SS 316LN Flange) Material Available on Request.

*Note: Polished and Electro- Polished Tube Finishes Available on Request.

CF Fittings

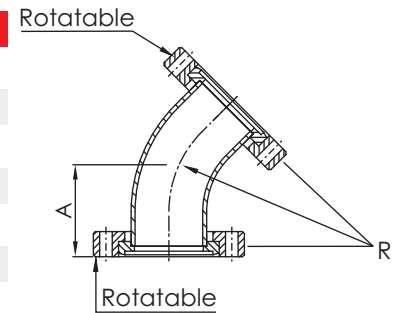
CF 45° ELBOWS

*Material: SS 304L

*Tube Finish: Bead Blast



Part Number	Flange Size	A	R
CF-45EL-133	CF1.33"(DN16)	23.80	25.40
CF-45EL-212	CF2.12"(DN25)	28.90	38.10
CF-45EL-275	CF2.75"(DN40)	44.20	57.20
CF-45EL-338	CF3.38"(DN50)	52.50	76.20
CF-45EL-450	CF4.50"(DN63)	85.60	95.30
CF-45EL-462	CF4.62"(DN80)	100.60	114.30
CF-45EL-600	CF6.00"(DN100)	132.50	152.40



CF

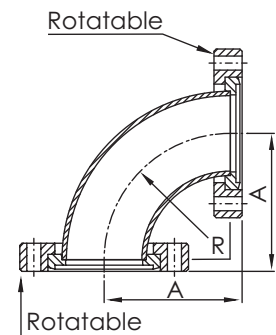
CF 90° ELBOWS

*Material: SS 304L

*Tube Finish: Bead Blast



Part Number	Flange Size	A	R
CF-90EL-133	CF1.33"(DN16)	38.10	28.60
CF-90EL-212	CF2.12"(DN25)	42.40	38.10
CF-90EL-275	CF2.75"(DN40)	62.50	57.15
CF-90EL-338	CF3.38"(DN50)	81.80	76.20
CF-90EL-450	CF4.50"(DN63)	104.60	95.25
CF-90EL-462	CF4.62"(DN80)	121.40	114.30
CF-90EL-600	CF6.00"(DN100)	163.60	152.40



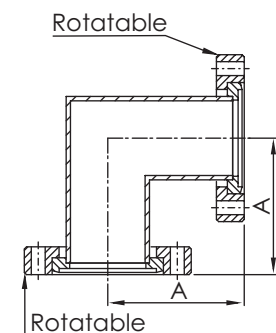
CF 90° MITERED ELBOWS

*Material: SS 304L

*Tube Finish: Bead Blast



Part Number	Flange Size	A
CF-90MEL-133	CF1.33"(DN16)	38.10
CF-90MEL-212	CF2.12"(DN25)	52.00
CF-90MEL-275	CF2.75"(DN40)	62.50
CF-90MEL-338	CF3.38"(DN50)	81.80
CF-90MEL-450	CF4.50"(DN63)	85.90
CF-90MEL-462	CF4.62"(DN80)	89.70
CF-90MEL-600	CF6.00"(DN100)	109.70



*Note: SS 316LN (SS 316L Tube+ SS 316LN Flange) Material Available on Request.

*Note: Polished and Electro- Polished Tube Finishes Available on Request.

CF Fittings

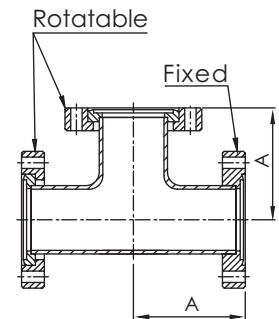
CF EQUAL TEES

*Material: SS 304L

*Tube Finish: Bead Blast



Part Number	Flange Size	A
CF-ET-133	CF1.33"(DN16)	38.10
CF-ET-212	CF2.12"(DN25)	52.05
CF-ET-275	CF2.75"(DN40)	62.50
CF-ET-338	CF3.38"(DN50)	81.80
CF-ET-450	CF4.50"(DN63)	85.85
CF-ET-450-1	CF4.50"(DN63)	104.65
CF-ET-462	CF4.62"(DN80)	89.70
CF-ET-600	CF6.00"(DN100)	109.70
CF-ET-600-1	CF6.00"(DN100)	134.88



CF

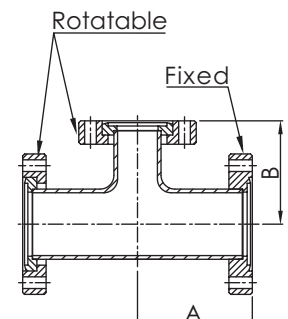
CF REDUCING TEES

*Material: SS 304L

*Tube Finish: Bead Blast



Part Number	Flange Size	A	B
CF-RT-275x133	CF2.75"(DN40)/CF1.33"(DN16)	62.50	47.50
CF-RT-275x212	CF2.75"(DN40)/CF2.12"(DN25)	62.50	58.20
CF-RT-338x133	CF3.38"(DN50)/CF1.33"(DN16)	81.80	54.10
CF-RT-338x275	CF3.38"(DN50)/CF2.75"(DN40)	81.80	68.80
CF-RT-450x275	CF4.50"(DN63)/CF2.75"(DN40)	85.90	75.20
CF-RT-450x338	CF4.50"(DN63)/CF3.38"(DN50)	85.90	88.40
CF-RT-462x338	CF4.62"(DN80)/CF3.38"(DN50)	89.70	94.70
CF-RT-462x450	CF4.62"(DN80)/CF4.50"(DN63)	89.70	92.20
CF-RT-600x275	CF6.00"(DN100)/CF2.75"(DN40)	109.70	94.20
CF-RT-600x338	CF6.00"(DN100)/CF3.38"(DN50)	109.70	107.40
CF-RT-600x450	CF6.00"(DN100)/CF4.50"(DN63)	109.70	104.90
CF-RT-600x462	CF6.00"(DN100)/CF4.62"(DN80)	109.70	102.40



*Note: SS 316LN (SS 316L Tube+ SS 316LN Flange) Material Available on Request.

*Note: Polished and Electro- Polished Tube Finishes Available on Request.

CF Fittings

CF

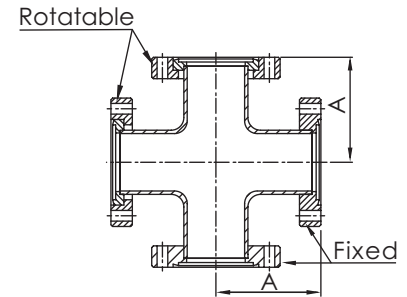


CF 4-WAY CROSSES

*Material: SS 304L

*Tube Finish: Bead Blast

Part Number	Flange Size	A
CF-4C-133	CF1.33"(DN16)	38.10
CF-4C-212	CF2.12"(DN25)	52.00
CF-4C-275	CF2.75"(DN40)	62.50
CF-4C-338	CF3.38"(DN50)	81.80
CF-4C-450	CF4.50"(DN63)	85.90
CF-4C-462	CF4.62"(DN80)	89.70
CF-4C-600	CF6.00"(DN100)	109.70

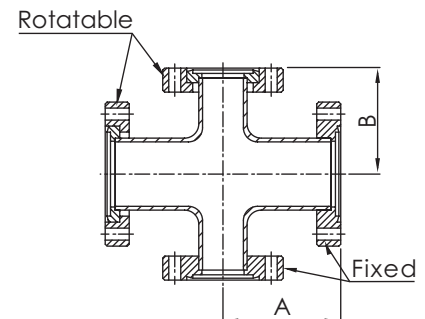


CF 4-WAY REDUCING CROSSES

*Material: SS 304L

*Tube Finish: Bead Blast

Part Number	Flange Size	A	B
CF-4RC-275x133	CF2.75"(DN40)/CF1.33"(DN16)	62.50	47.50
CF-4RC-275x212	CF2.75"(DN40)/CF2.12"(DN25)	62.50	58.20
CF-4RC-338x133	CF3.38"(DN50)/CF1.33"(DN16)	81.80	54.10
CF-4RC-338x275	CF3.38"(DN50)/CF2.75"(DN40)	81.80	68.80
CF-4RC-450x275	CF4.50"(DN63)/CF2.75"(DN40)	85.90	75.20
CF-4RC-450x338	CF4.50"(DN63)/CF3.38"(DN50)	85.90	88.40
CF-4RC-462x338	CF4.62"(DN80)/CF3.38"(DN50)	89.70	94.70
CF-4RC-462x450	CF4.62"(DN80)/CF4.50"(DN63)	89.70	92.20
CF-4RC-600x275	CF6.00"(DN100)/CF2.75"(DN40)	109.70	94.20
CF-4RC-600x338	CF6.00"(DN100)/CF3.38"(DN50)	109.70	107.40
CF-4RC-600x450	CF6.00"(DN100)/CF4.50"(DN63)	109.70	104.90
CF-4RC-600x462	CF6.00"(DN100)/CF4.62"(DN80)	109.70	104.90



*Note: SS 316LN (SS 316L Tube+ SS 316LN Flange) Material Available on Request.

*Note: Polished and Electro- Polished Tube Finishes Available on Request.

CF Fittings

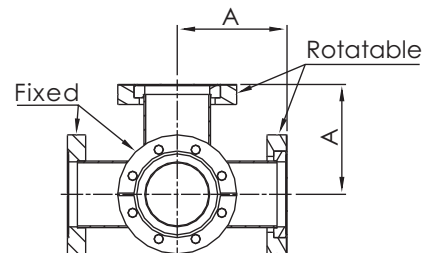
CF 5-WAY CROSSES

*Material: SS 304L

*Tube Finish: Bead Blast



Part Number	Flange Size	A
CF-5C-133	CF1.33"(DN16)	38.10
CF-5C-212	CF2.12"(DN25)	52.00
CF-5C-275	CF2.75"(DN40)	62.50
CF-5C-338	CF3.38"(DN50)	81.80
CF-5C-450	CF4.50"(DN63)	85.90
CF-5C-462	CF4.62"(DN80)	92.20
CF-5C-600	CF6.00"(DN100)	134.90



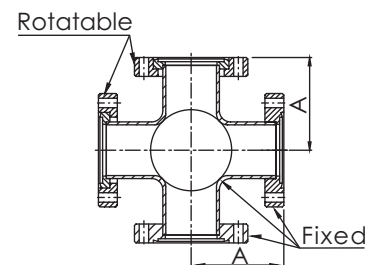
CF 6-WAY CROSSES

*Material: SS 304L

*Tube Finish: Bead Blast



Part Number	Flange Size	A
CF-6C-133	CF1.33"(DN16)	38.10
CF-6C-212	CF2.12"(DN25)	52.07
CF-6C-275	CF2.75"(DN40)	62.48
CF-6C-338	CF3.38"(DN50)	81.79
CF-6C-450	CF4.50"(DN63)	85.85
CF-6C-462	CF4.62"(DN80)	92.20
CF-6C-600	CF6.00"(DN100)	134.90

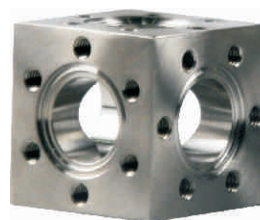


*Note: SS 316LN (SS 316L Tube+ SS 316LN Flange) Material Available on Request.

*Note: Polished and Electro- Polished Tube Finishes Available on Request.

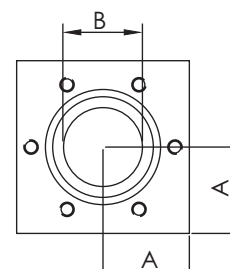
CF 6-WAY CUBES

*Material: SS 304L



Part Number	Flange Size	A	B	Diameter (mm) / Thread Type
CF-6CU-133T	CF1.33"(DN16)	17.00	15.75	8-32
CF-6CU-133M	CF1.33"(DN16)	17.00	15.75	M4
CF-6CU-275T	CF2.75"(DN40)	35.05	38.10	1/4-28
CF-6CU-275M	CF2.75"(DN40)	35.05	38.10	M6
CF-6CU-338T	CF3.38"(DN50)	42.50	50.80	5/16-24
CF-6CU-338M	CF3.38"(DN50)	42.50	50.80	M8
CF-6CU-450T	CF4.50"(DN63)	56.75	63.50	5/16-24
CF-6CU-450M	CF4.50"(DN63)	56.75	63.50	M8
CF-6CU-600T	CF6.00"(DN100)	75.80	101.60	5/16-24
CF-6CU-600M	CF6.00"(DN100)	75.80	101.60	M8

*Note: SS 316LN Material Available on Request.



CF