

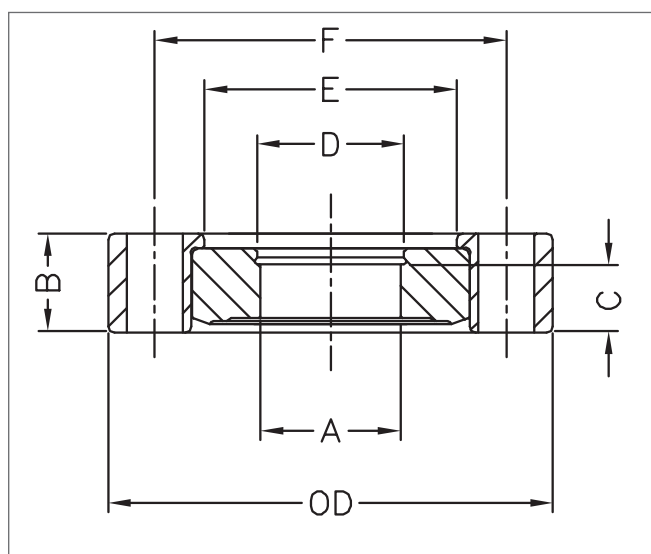


Rotatable Bored CF Flanges

Rotatable bored Conflat Flat (CF) flanges are welded onto chamber tubulations or vacuum components. Smaller sizes of flange can accept a number of different standard tube sizes. The rotatable CF flange consists of two parts, the inner knife edge detail and the outer bolt hole retaining ring which rotates around the inner part, this allows the boltholes to align to mating flanges in any orientation.



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Product Overview

- Made to international flange standards. Ensuring compatibility with existing flange dimensions
- Two materials available from stock, 304L and 316LN ESR (316LN ESR Tri forge on request)
- Controlled material hardness for Longer life
- High temperature range. Suitable for use from liquid nitrogen temperatures to 450°C. 316LN to 1050°C vacuum bake
- Wide pressure range 1 bar to 10⁻¹² mbar.
- Low outgassing rates <1⁻¹³ mbar.l.s⁻¹.cm⁻²
- Controlled alloy, controlled detection of inclusion and additives
- Very low magnetic permeability, $\mu=1.005$ for 316LN ESR material
- Also suitable for use in high magnetic field applications
- Harder material (added N₂) prolongs lifetime of knife edge and allows H₂ degassing
- Low carbon content reduces possibility of corrosion and chromium migration at welds
- Capable of vacuum firing for removal of H₂
- Full material traceability available



Rotatable Bored CF Flanges

304L Rotatable Bored CF Flanges (CFRL Series)

DN Number	OD mm	Mounting holes	Clear Bore A mm	Flange Thickness B mm	Land Thickness C mm	Tube Counter Bore D mm	Rotatable Tube Bore E mm	Bolt Hole PCD F mm	Bolt Hole Diameter (or thread) mm	No. Of Bolt Holes	Tube Size to Fit Flange Bore mm	Previous VG Code	Order Code
DN16	34	Clear	6.4	7.6	N/A	6.4	19.3	27	4.3	6	6.35	ZFCR97	CFR34-6
DN16	34	Tapped	6.4	7.6	N/A	6.4	19.3	27	(M6)	6	6.35	-	CFR34T-6
DN40	70	Clear	40	13	4.8	41.3	41.9	58.7	6.8	6	41.27	ZFCR41	CFR70-41
DN40	70	Tapped	40	13	4.8	41.3	41.9	58.7	(M6)	6	41.27	ZFCR41	CFR70T-41
DN63	114	Clear	68	17.5	8	70	71	92.1	8.4	8	69.8	ZFCR70	CFR114-70
DN63	114	Tapped	68	17.5	8	70	71	92.1	(M8)	8	69.8	ZFCR70	CFR114T-70
DN100	152	Clear	99.4	20	9.5	101.9	104.9	130.2	8.4	16	101.6	ZFCR10	CFR152-102
DN100	152	Tapped	99.4	20	9.5	101.9	104	130.2	(M8)	16	101.6	ZFCR10	CFR152T-102
DN160	203	Clear		22	9.5	152.6	155.7	181	8.4	20	152.4	ZFCR15	CFR203-153
DN160	203	Tapped		22	9.5	152.6	155.7	181	(M8)	20	152.4	ZFCR15	CFR203T-153
DN200	254	Clear		24.5	9.5	203.5	206.4	231.8	8.4	24	203.2	ZFCR20	CFR254-206
DN200	254	Tapped		24.5	9.5	203.5	206.4	231.8	(M8)	24	203.2	-	CFR254T-206

All dimensions are in mm unless otherwise stated

316LN (2D Forged) Rotatable Bored CF Flanges (CFRL Series)

DN Number	OD mm	Mounting holes	Clear Bore A mm	Flange Thickness B mm	Land Thickness C mm	Tube Counter Bore D mm	Rotatable Tube Bore E mm	Bolt Hole PCD F mm	Bolt Hole Diameter (or thread) mm	No. Of Bolt Holes	Tube Size to Fit Flange Bore mm	Order Code 316LN
DN16	34	Clear	6.4	7.6	N/A	6.4	19.3	27	4.3	6	6.35	CFR34-6-LN
DN16	34	Tapped	6.4	7.6	N/A	6.4	19.3	27	(M6)	6	6.35	CFR34T-6-LN
DN40	70	Clear	40	13	4.8	41.3	41.9	58.7	6.8	6	41.27	CFR70-41-LN
DN40	70	Tapped	40	13	4.8	41.3	41.9	58.7	(M6)	6	41.27	CFR70T-41-LN
DN63	114	Clear	68	17.5	8	70	71	92.1	8.4	8	69.8	CFR114-70-LN
DN63	114	Tapped	68	17.5	8	70	71	92.1	(M8)	8	69.8	CFR114T-70-LN
DN100	152	Clear	99.4	20	9.5	101.9	104.9	130.2	8.4	16	101.6	CFR152-102-LN
DN100	152	Tapped	99.4	20	9.5	101.9	104	130.2	(M8)	16	101.6	CFR152T-102-LN
DN160	203	Clear	149.7	22	9.5	152.6	155.7	181	8.4	20	152.4	CFR203-153-LN
DN160	203	Tapped	149.7	22	9.5	152.6	155.7	181	(M8)	20	152.4	CFR203T-153-LN
DN200	254	Clear	200.4	24.5	9.5	203.5	206.4	231.8	8.4	24	203.2	CFR254-206-LN
DN200	254	Tapped	200.4	24.5	9.5	203.5	206.4	231.8	(M8)	24	203.2	CFR254T-206-LN

All dimensions are in mm unless otherwise stated