

ISO FLANGES AND FITTINGS

ISO Flanges and fittings

Features

Quick, easy, and repeatable vacuum sealing
Flanges and fittings in NW63, 80, 100 160, 200, 250, 320, 400, 500 and 600 ISO sizes

Bake able to 150 °C (up to 200 °C for limited use)
Tabulated flanges suitable for welding to stainless steel tube

Adaptors allow connection to KF or CF
304 stainless steel.

Vacuum rated to 1×10^{-8} m.bar
Wide range of elbows, tees, crosses and flexible connectors available.

Claw clamp and bolted flange styles, Leak tight to 1×10^{-10} m.bar.l.s-1

ISO Flanges - Bolted or Clamped

There are two different types of ISO flange. Bolted flanges have a set of bolt holes to allow flanges to be joined together. Fixed and rotatable bolted styles are available. Claw clamp flanges use detachable claw clamps to hold the two mating flanges together. The use of the claw clamps means that components can be joined together in any relative orientation.

Tabulated ISO Flanges

Manufactured from stainless steel, these flanges are suitable for welding to stainless steel tubes or bellows for the manufacture of special pumping lines or fittings. Tabulated flanges are only available with the claw clamp sealing arrangement.

ISO Components

The ISO flange system follows the same sealing principles of the smaller KF flange range. The flanges are sealed by an o-ring that is held in a carrier which locates in a counter bore in both flanges. There are two basic flange forms, clamped and bolted. Fixed and rotatable bolted flanges are available. The claw clamp system allows mating flanges to be joined in any orientation.

Cantering Trapped O-rings

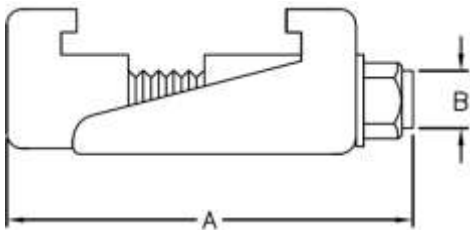
Used to make the actual vacuum seal, the Viton® or Nitrile O-ring is held in place on a stainless steel carrier that stops the O-ring distorting when the seal is made. The design of the carrier means that it is impossible to over tighten the O-ring. The use of Viton® means that the seal is bake able to + 150 °C.

ISO Flange Claw Clamps

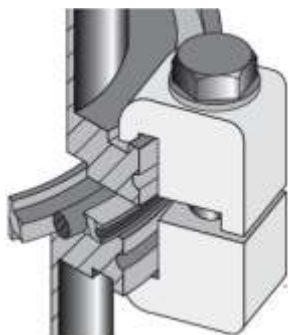
These are used to make the seal. Double claw clamps are used to join two clamp style flanges together. Single claw clamps allow clamp style flanges to be bolted to mating components such as gate valves or chamber ports.



ISO Steel Double Claw Clamps, Stainless Steel

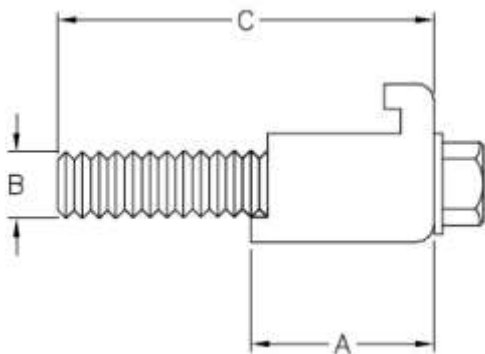


Double claw clamp, for use with ISO flanges of sizes ISO63 to ISO630. Material is stainless steel.



	A	B	Number /Flange	Order Code
NW63	60	M10	4	FVT063301DCC
NW80	60	M10	4	FVT080302DCC
NW100	60	M10	4	FVT100303DCC
NW160	60	M10	4	FVT160304DCC
NW200	60	M10	4	FVT200305DCC
NW250	60	M10	6	FVT250306DCC
NW320	75	M12	8	FVT320307DCC
NW400	75	M12	8	FVT400308DCC
NW500	75	M12	12	FVT500309DCC
NW630	85	M12	12	FVT630310DCC

All dimensions in mm
*S-Stainless steel, A-Aluminium

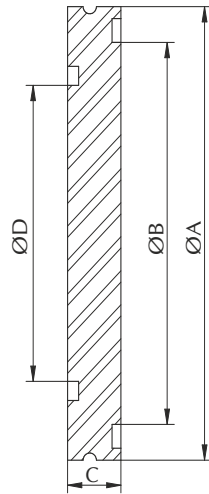


Single claw wall clamp, for use with ISO flanges of sizes ISO63 to ISO630. Material is stainless steel.

	A	B	C	Number /Flange	Order Code
NW63	22.5	M8	35	4	FVT063321DCC*
NW80	22.5	M8	35	6	FVT063321DCC*
NW100	22.5	M8	35	8	FVT063321DCC*
NW160	23	M10	35	8	FVT160324DCC*
NW200	23	M10	35	10	FVT160324DCC*
NW250	23	M10	35	12	FVT160324DCC*
NW320	36.5	M12	50	12	FVT320327DCC*
NW400	36.5	M12	50	16	FVT320327DCC*
NW500	36.5	M12	50	16	FVT320327DCC*
NW630	41.5	M12	50	20	FVT320327DCC*

All dimensions in mm
*S-Stainless steel, A-Aluminium

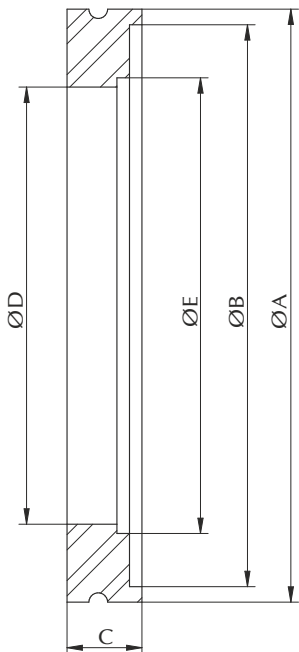
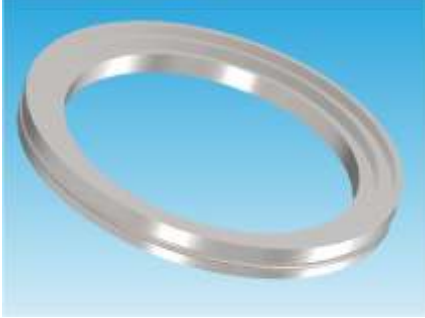
ISO BLANK CLAW CLAMP FLANGE



	A	B	C	D	Order Code
NW63	95	90	12	70	FVT063501BCF*
NW80	110	105	12	83	FVT080502BCF*
NW100	130	125	12	102	FVT100503BCF*
NW160	180	175	12	153	FVT160504BCF*
NW200	240	235	12	213	FVT200505BCF*
NW250	290	285	12	261	FVT250506BCF*
NW320	370	365	17	318	FVT320507BCF*
NW400	450	445	17	400	FVT400508BCF*
NW500	550	545	17	501	FVT500509BCF*
NW630	690	685	22	630	FVT630510BCF*

All dimensions in mm
*S-SS304, L-SS304L

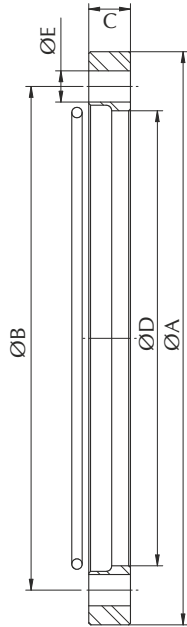
ISO BORED CLAW CLAMP FLANGE



	A	B	C	D	E	Order Code
NW63	95	90	12	70	76	FVT063511BOF*
NW80	110	105	12	83	89	FVT080512BOF*
NW100	130	125	12	102	108	FVT100513BOF*
NW160	180	175	12	153	159	FVT160514BOF*
NW200	240	235	12	213	219	FVT200515BOF*
NW250	290	285	12	261	267	FVT250516BOF*
NW320	370	365	17	318	324	FVT320517BOF*
NW400	450	445	17	400	406	FVT400518BOF*
NW500	550	545	17	501	508	FVT500519BOF*
NW630	690	685	22	630	660	FVT630520BOF*

All dimensions in mm
*S-SS304, L-SS304L

ISO ROTATABLE FLANGE



	A	B	C	ØExN	Order Code
NW63	130	110	12	9x4	FVT063530RBF*
NW80	145	125	12	9x8	FVT080531RBF*
NW100	165	145	12	9x8	FVT100532RBF*
NW160	225	200	12	11x8	FVT160533RBF*
NW200	285	260	12	11x12	FVT200534RBF*
NW250	335	310	12	11x12	FVT250535RBF*
NW320	425	395	17	14x12	FVT320536RBF*
NW400	510	480	17	14x16	FVT400537RBF*
NW500	610	580	17	14x16	FVT500538RBF*
NW630	750	720	22	14x20	FVT630539RBF*

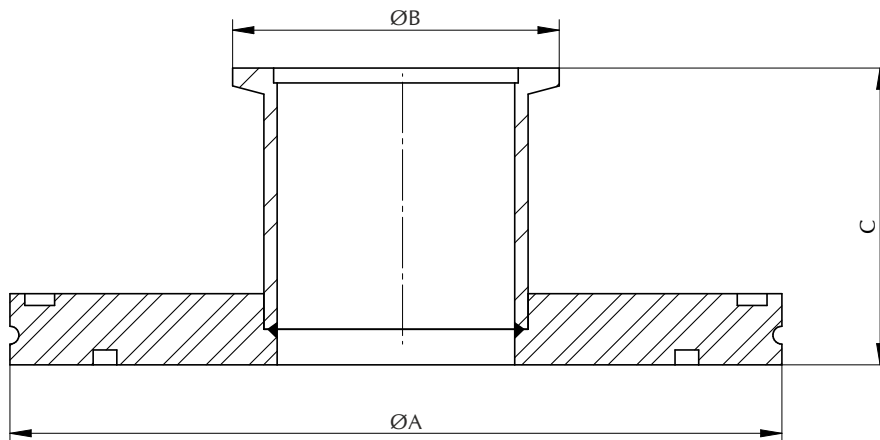
All dimensions in mm
*SS304/SS304L

ISO K TO KF ADAPTOR NIPPLES

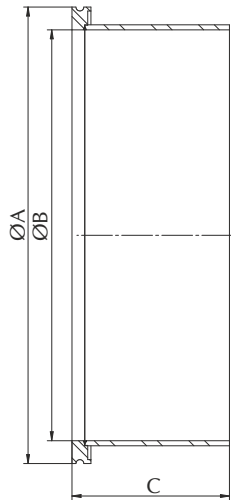


	A	B	C	Order Code
NW63/KF25	95	40	50	FVT06325AN*
NW63/KF40	95	55	50	FVT06340AN*
NW63/KF50	95	75	75	FVT06350AN*
NW80/KF40	110	55	50	FVT08040AN*
NW80/KF50	110	75	75	FVT08050AN*
NW100/KF40	130	55	50	FVT10040AN*
NW100/KF50	130	75	75	FVT10050AN*

All dimensions in mm
*SS304/SS304L



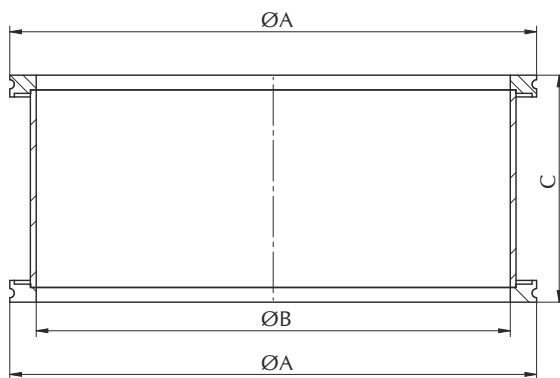
ISO K CLAW CLAMP HALF NIPPLE



	A	B	C	Order Code
NW63	95	70	100	FVT063540CHN*
NW80	110	83	100	FVT080541CHN*
NW100	130	102	100	FVT100542CHN*
NW160	180	153	100	FVT160543CHN*
NW200	240	213	100	FVT200544CHN*
NW250	290	261	100	FVT250545CHN*
NW320	370	318	100	FVT320546CHN*
NW400	450	400	100	FVT400547CHN*
NW500	550	501	100	FVT500548CHN*
NW630	690	630	100	FVT630549CHN*

All dimensions in mm
*SS304/SS304L

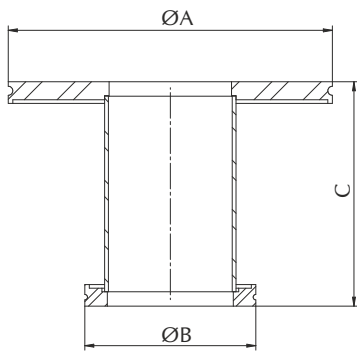
ISO K CLAW CLAMP FULL NIPPLE



	A	B	C	Order Code
NW63	95	70	125	FVT063550FN*
NW80	110	83	125	FVT080551FN*
NW100	130	102	125	FVT100552FN*
NW160	180	153	125	FVT160553FN*
NW200	240	213	125	FVT200554FN*
NW250	290	261	125	FVT250555FN*
NW320	370	318	200	FVT320556FN*
NW400	450	400	200	FVT400557FN*
NW500	550	501	200	FVT500558FN*
NW630	690	630	200	FVT630559FN*

All dimensions in mm
*SS304/SS304L

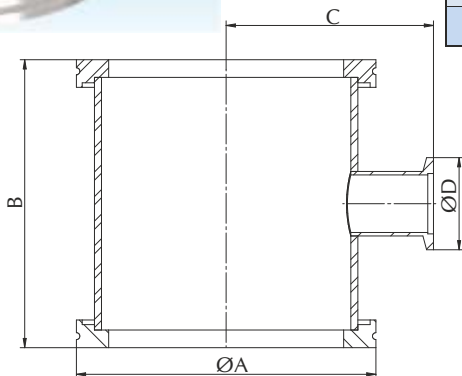
ISO K CLAW CLAMP REDUCER NIPPLE



	A	B	C	Order Code
NW100/63	130	95	125	FVT10063RA*
NW100/80	130	110	125	FVT10080RA*
NW160/63	180	95	125	FVT16063RA*
NW160/80	180	110	125	FVT16080RA*
NW160/100	180	130	125	FVT160100RA*
NW200/100	240	130	125	FVT200100RA*
NW200/160	240	180	150	FVT200160RA*
NW250/160	290	180	150	FVT250160RA*
NW250/200	290	240	150	FVT250200RA*

All dimensions in mm
*SS304/SS304L

ISO K TO KF REDUCING TEE



	A	B	C	D	Order Code
NW63/16	95	125	63	30	FVT6316560RT*
NW63/25	95	125	70	40	FVT6325561RT*
NW63/40	95	125	70	55	FVT6340562RT*
NW63/50	95	125	80	75	FVT6350563RT*
NW100/25	130	125	80	40	FVT10025564RT*
NW100/40	130	125	80	55	FVT10040565RT*
NW100/50	130	125	100	75	FVT10040566RT*
NW160/25	180	125	110	40	FVT16025567RT*
NW160/40	180	125	110	55	FVT16040568RT*
NW160/50	180	125	130	75	FVT16050569RT*

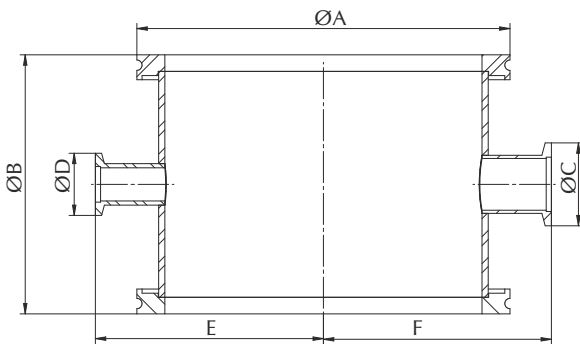
All dimensions in mm
*SS304/SS304L

ISO K TO KF REDUCING CROSS



	A	B	C	D	E	F	Order Code
NW63/16/25	95	125	40	40	60	70	FVT631625RC*
NW63/25/40	95	125	55	40	70	70	FVT632540RC*
NW63/25/50	95	125	40	75	70	80	FVT632550RC*
NW100/16/25	130	125	40	30	80	90	FVT1001625RC*
NW100/25/40	130	125	55	40	90	90	FVT1002540RC*
NW100/25/50	130	125	75	40	90	100	FVT1002550RC*
NW160/16/25	180	125	40	30	110	110	FVT1601625RC*
NW160/25/40	180	125	55	40	110	110	FVT1602540RC*
NW160/25/50	180	125	75	40	120	130	FVT1602550RC*

All dimensions in mm
*SS304/SS304L

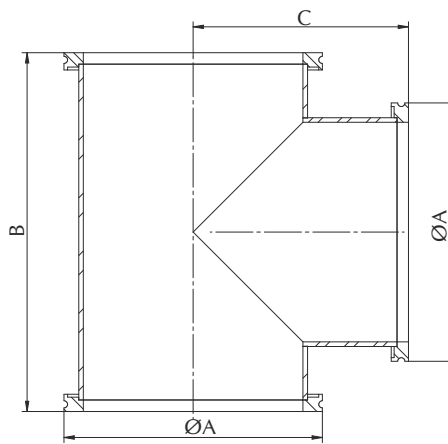


ISO K EQUAL TEE

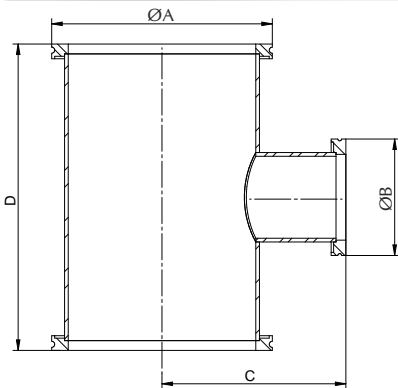


	A	B	C	Order Code
NW63	95	175	100	FVT063063ET*
NW100	130	225	125	FVT100100ET*
NW160	180	250	150	FVT160160ET*
NW200	240	350	200	FVT200200ET*
NW250	290	400	250	FVT250250ET*

All dimensions in mm
*SS304/SS304L



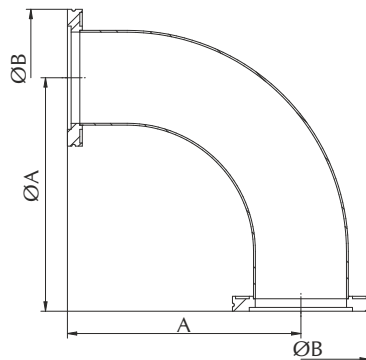
ISO K REDUCED TEE



	A	B	C	D	Order Code
NW80/63	110	95	100	175	FVT080631UT*
NW100/63	130	95	100	225	FVT100632UT*
NW100/80	130	110	100	225	FVT100803UT*
NW160/63	180	95	150	250	FVT160634UT*
NW160/80	180	110	150	250	FVT160805UT*
NW160/100	180	130	150	250	FVT1601006UT*
NW200/63	240	95	200	350	FVT200637UT*
NW200/80	240	110	190	350	FVT200808UT*
NW200/100	240	130	190	350	FVT2001009UT*
NW250/63	290	95	220	400	FVT2506310UT*
NW250/100	290	110	245	400	FVT25010011UT*
NW250/160	290	180	250	400	FVT25016012UT*

All dimensions in mm
*SS304/SS304L

ISO K 90 ° L-BEND



	A	B	Order Code
NW63	162	95	FVT063570 EB*
NW80	188	110	FVT080571 EB*
NW100	183	130	FVT100572 EB*
NW160	281	180	FVT160573 EB*
NW200	383	240	FVT200574 EB*
NW250	414	290	FVT250575 EB*

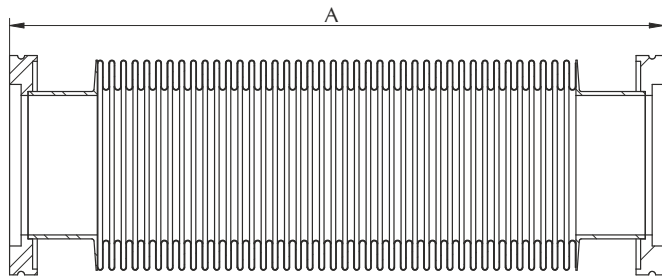
All dimensions in mm
*SS304/SS304L

ISO K BELLOWS



	A	Order Code
NW63	1/2/3	FVT063580BL*
NW80	1/2/3	FVT080581BL*
NW100	1/2/3	FVT100582BL*
NW160	1/2/3	FVT160583BL*

All dimensions in mm
 *SS304/SS304L
 *1-250 LONG
 *2-500 LONG
 *3-1000 LONG





Flyvacuum Technologies Pvt. Ltd.

No.338, 9th Cross, 4th Phase

Peenya, Bangalore 560 058, Karnataka, INDIA

Tel.: +91 80 4852 1441

email: marketing@flyvacuum.com

www.flyvacuum.com