

CF & WIRE SEAL FLANGES



CF (ConFlat®) and wire seal flanges are part of the same family of ultrahigh vacuum components that compress a copper gasket between two stainless steel flanges to create a vacuum tight seal. The CF flange system is more commonly used within the vacuum industry and as such has a much larger standard product offering. Wire seal flanges are desirable for those applications that require flanges larger than those available with the CF flange system. LewVac's CF flanges are manufactured to industry standards and are interchangeable with all other ConFlat® style flanges and fittings. Wire seal flanges have no standard dimension specifications. Vacuum component manufacturers endeavour to create interchangeable flanges, however, it is our opinion that the only way to ensure compatibility is to purchase a mating set of flanges from one manufacturer. All flanges offered by LewVac are manufactured on state-of-the-art CNC (computer numerical control) lathes to ensure consistency with dimensional tolerances, and extremely fine surface finishes. Water soluble, non sulphur based coolants are used during the manufacturing process. The flanges are cleaned in an ultrasonic de-ionized water based cleaning system and vacuum packaged free from visible particulates and oils, ready for immediate use in any vacuum application.

Specifications

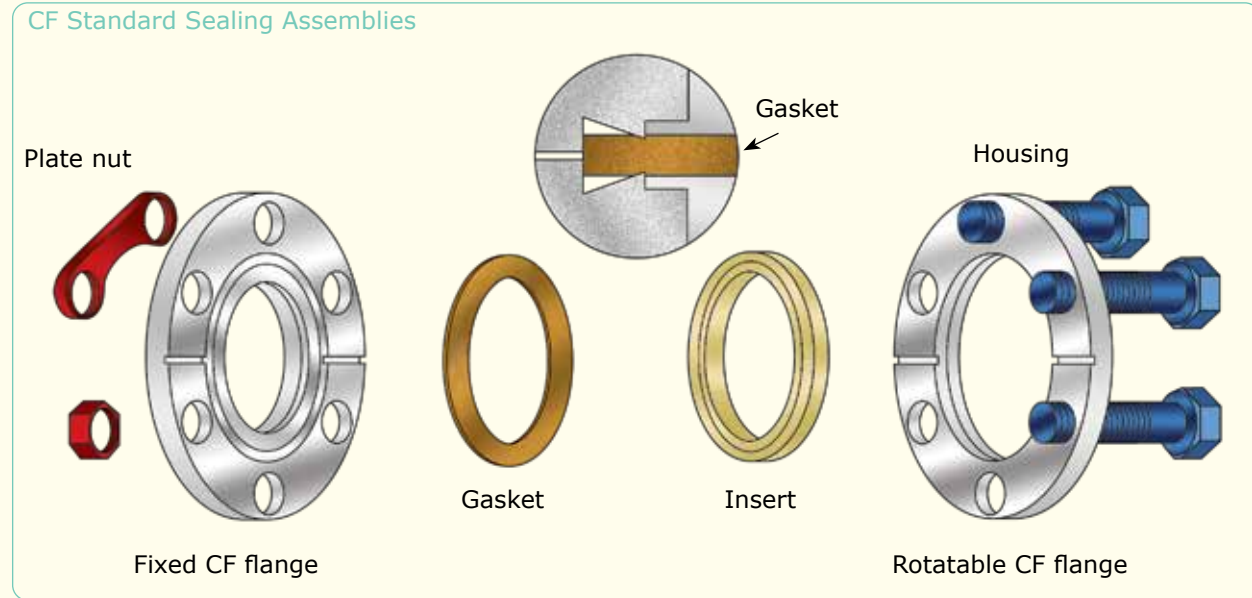
- Vacuum rated to 1×10^{-13} Torr.
- Leak rating $< 1 \times 10^{-9}$ std. cc/s helium.
- Temperature range: -200°C to 450°C .
- Standard Materials:
Flanges and fittings: 304L stainless steel
seals: OF copper for ultrahigh vacuum (UHV) or Viton® for high vacuum (HV).
- Standard sizes: CF flanges outer diameter: 34mm (1.33") to 419mm (16 1/2") (for tubing diameter 6.3mm (1/4") up to 355mm (14")).
Wire seal flanges outer diameter: 314mm (12 3/8") up to 689mm (27 1/8") (for tubing diameter 254mm (10") up to 607mm (24")).

Features

- Reusable flanges.
- All-metal seals.
- Sexless flanges - CF flange system.
- Rotatable flanges for easier bolt hole alignment - CF flange system.
- Tapped or clearance bolt holes available.
- Adapters to other flange systems available.
- Available in metric and U.S. (imperial) sizes.
- Interchangeable with other ConFlat® style flanges and wire seal flanges made to industry standards (ISO 3669).

All dimensions are nominal in millimetres unless otherwise specified

CF & Wire Seal Flanges



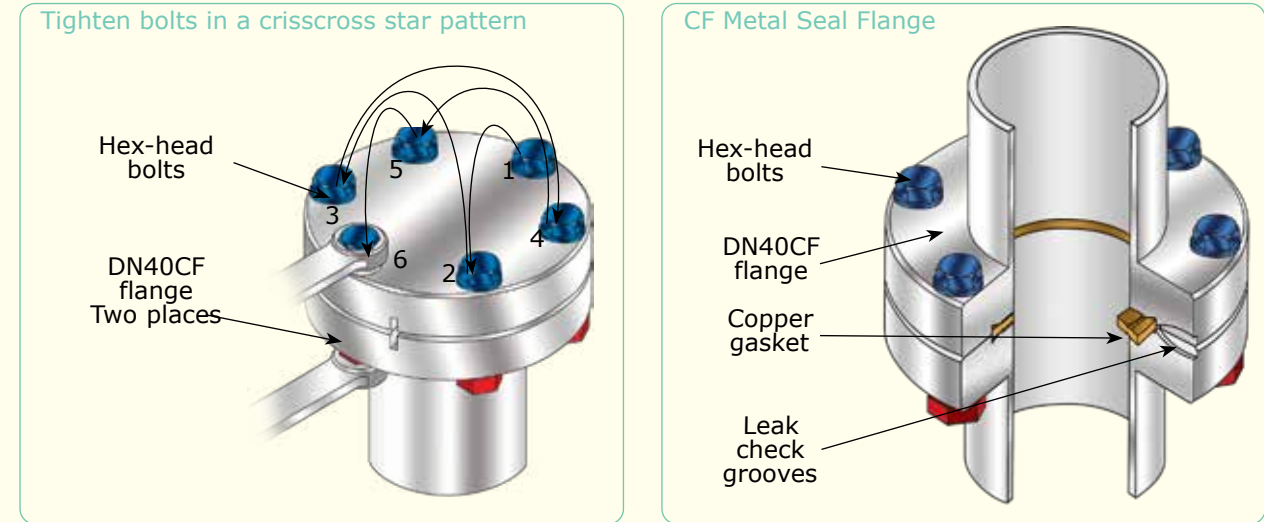
The CF flange system provides a complete range of flanges to mount with tubing sized 6.35mm (1/4") up to 355mm (14") diameter. The CF seal assembly consists of 3 types of sub-components, two flanges, a sealing gasket and a fastener to compress the seal between the two flanges.

CF Flanges are available in two general styles: fixed and rotatable. Fixed flanges have a set bolt hole orientation while rotatable flanges have a two piece design allowing for bolt hole rotation to ease bolt alignment when mating the two flanges. The two pieces of the rotatable CF flange are called the insert (in which the knife-edge is machined) and the housing (in which the bolt holes are machined). When installing these components the housing is placed behind the insert on the tubing prior to welding the insert to the tubing. Both fixed and rotatable flanges are available with clearance and tapped bolt holes. Clearance bolt holes allow for unrestricted passage of a bolt through the flanges. The bolt is then tightened with a nut on one side of the flange assembly. Tapped bolt holes are threaded to receive and tighten the bolt directly and do not utilize a nut. This is an excellent space saving option and is particularly useful when fastening a flange to a chamber wall or gate valve.

CF gaskets are made of either OF grade copper or Viton® elastomer. Copper gaskets are by far the most commonly used with the CF flange system and when compressed between the flange knife-edges provide a vacuum tight seal capable of achieving ultrahigh vacuum pressures and temperatures as high as 450°C. LewVac does not recommend using a CF copper gasket for more than one seal. Viton® gaskets are reusable and can be used many times to make new vacuum tight seals.

CF fasteners are bolts, nuts and washers made of high tensile strength stainless steel. Bolts are offered with standard hex-head or 12-point head and silver plated. LewVac recommends either high temperature anti-seize lubricant or silver plated bolts for applications with high temperature to prevent galling of the bolt and nut or threaded bolt hole. Nuts are offered with standard or plate nut design. Plate nuts are the most convenient way of fastening CF flanges. Plate nuts allow adjacent bolts to be tightened into one nut and eliminate the need for a second spanner to hold the nut while tightening. This is particularly useful when access to the installation is limited.

All dimensions are nominal in millimetres unless otherwise specified



LewVac offers a complete line of flanges, fittings, valves, traps and accessories with CF connections that can be used to create a complete vacuum system or pumping line.

A sealing pair of CF flanges each contains an identical flange face with a knife-edge machined into the surface. A copper sealing gasket is placed into the gasket capture groove of one of the two flanges. The flanges compress the gasket as the fastening bolts are tightened. This pressure forces the knife-edges of the two flanges into the gasket, creating an annular groove. The gasket material cold flows under this pressure and fills microscopic surface imperfections on the sealing knife-edges creating a vacuum tight seal capable of withstanding temperature extremes from -200°C up to 450°C and pressures as low as 1x10⁻¹³ Torr.

Assembly Instructions

Always wear gloves (lint free) when touching or handling any part of a vacuum component that will come into contact with the vacuum atmosphere.

- Check both flanges for cleanliness and that sealing surfaces have no dents or scratches.
- Apply anti-seize lubricant to the threaded portion of your bolts. If you have purchased silver plated bolts then the anti-seize lubricant is unnecessary. LewVac recommends either anti-seize lubricant or silver plated bolts for almost all CF assemblies, especially for those assemblies that will be subjected to high temperatures or have tapped bolt holes. Bolt galling in a tapped flange can ruin the machined thread pattern in the bolt hole and render the entire flange unusable.
- Place a sealing gasket against the knife-edge of a non-rotatable flange.
- Align the bolt holes and leak check groove of the opposing flange.
- Insert the bolts, add the washer to the nut side of the assembly and hand tighten. After hand tightening all the bolts in the assembly, use a spanner on both the bolt head and the nut. Tighten by turning the nuts in small increments (1/2 turn or less) using an alternating pattern, choosing a bolt across the flange from the last. Continue the incremental tightening of the nuts in the pattern until the desired torque pressures have been achieved. This tightening procedure ensures even gasket compression and a reliable seal.

All dimensions are nominal in millimetres unless otherwise specified

CF & Wire Seal Flanges

Special Purpose CF Flanges

Double Sided CF Flanges



These flanges are manufactured with the same size CF flange profile on both sides. They are installed between two flanges also of the same size.

Zero Length Adapter CF Flanges



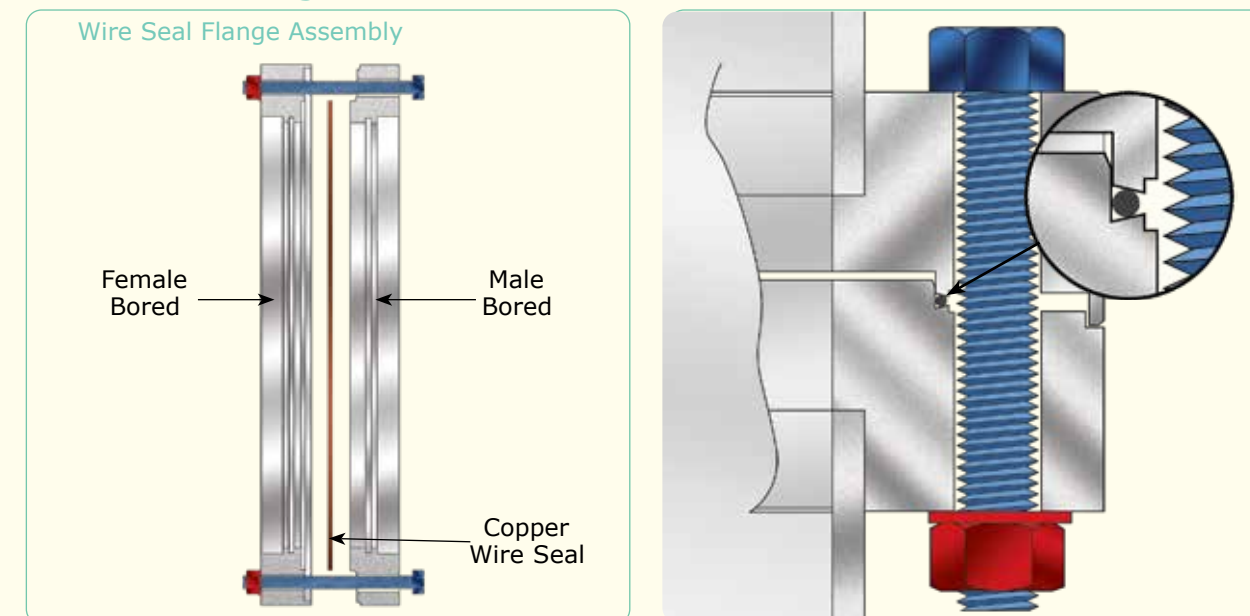
These flanges are manufactured with different size CF flange on either side of the flange. They allow direct assembly of two different sizes of CF flanges with minimal impact on the length added to your system to accomplish the transition. Zero-length reducers are approximately the width of one standard flange.

Adapter CF Flanges



These flanges are manufactured in a variety of useful designs. Adapt from a single or double sided CF to an up-to-air valve or one or more side ports. These flanges are ideal for adding vacuum accessories to your system such as measurement devices, shutters and valves.

Wire Seal Flanges



The wire seal flange system provides a complete range of flanges to mount with tubing sized 10" (254mm) up to 24" (609.6mm) outer diameter. The wire seal assembly consists of four sub-components: two flanges, a sealing gasket and a fastener to compress the seal between the two flanges.

Wire seal flanges are available as male or female. Female flanges accept the sealing gasket while the male flange has a protruding circular ridge that fits into the gasket groove on the receiving female flange. Upon compression the gasket material cold flows under this pressure and fills microscopic surface imperfections on the sealing surfaces creating a vacuum tight seal capable of withstanding temperature extremes from -200°C up to 450°C and pressures as low as 1×10^{-13} Torr. There are no standard rotatable wire seal flanges, so great care must be taken to specify bolt hole orientation on chambers and fittings that are assembled with these flanges.

Wire seal gaskets are made of either OF grade copper wire or Viton[®] elastomer. Copper gaskets are by far the most commonly used with the wire seal flange system and when compressed between the flanges provide a vacuum tight seal capable of achieving ultrahigh vacuum pressures and temperatures as high as 450°C . LewVac does not recommend using a wire seal copper gasket for more than one seal. Viton[®] gaskets are capable of high vacuum pressures and temperatures as high as 150°C (200°C intermittent use). Viton[®] gaskets are reusable and can be used many times to make new vacuum tight seals.

Wire seal fasteners are hex-head bolts, nuts and washers made of high tensile strength stainless steel.

Wire seal assembly follows the same guidelines as the CF flange system.

Wire seal flanges are ideal for those applications that require large diameter ports and extremely low ultimate vacuum pressure. Common examples are bell jar systems, vacuum furnaces, deposition systems and environmental chambers.

CF & Wire Seal Fasteners



These metal sealed flange systems both use bolt kits to fasten together your flanges and create a seal. The different styles of bolt kits detailed on these pages offer advantages for different applications and are described in detail below.

CF Clearance Flange Fasteners



These bolt kits fasten two flanges together that both have clearance bolt holes. The bolts slide easily through smooth bored bolt holes and are fastened with a nut and washer on the far side of the flange assembly. Bolt sets are supplied as standard with plain stainless steel bolts and hex nuts. Bolt sets are available with two options: 1) Silver plated bolts – silver plating replaces the need for anti-seize lubricant to prevent galling between the nut and bolt after being subjected to high temperatures. 2) Plate Nuts - plate nuts allow adjacent bolts to be tightened into one nut and eliminate the need for a second spanner to hold the nut while tightening. This is particularly useful when access to the installation is limited or there is limited clearance for the flange in an area of your vacuum system.

CF Tapped Flange Fasteners



These bolt kits fasten a flange to another flange that has tapped bolt holes. Tapped bolt holes are threaded to receive and tighten the bolt directly and do not utilise a nut. This is an excellent space saving option and is particularly useful when fastening a flange to a chamber wall or gate valve. We offer the option of silver plated bolts. Silver-plating replaces the need for anti-seize lubricant to prevent galling between the bolt and flange after being subjected to high temperatures.

CF Double Sided Flange Fasteners



These bolt kits are the same as the standard hex-head bolt, nut and washer kits listed for CF clearance flanges listed above, with one difference: The bolts are longer to accommodate the thickness of the three CF flanges that are fastened with a double sided CF flange assembly.

All dimensions are nominal in millimetres unless otherwise specified

Wire Seal Flange Fasteners



These bolt kits fasten a male wire seal flange to a female flange. Each bolt kit contains the appropriate number of hex-head bolts, nuts and washers for one assembly.

Fastener Accessories



LewVac offers two accessories for CF and wire seal fasteners. 1) Anti-seize thread lubricant prevents galling on bolts that are not silver plated. LewVac recommend either anti-seize lubricant or silver plated bolts for almost all CF assemblies. Especially for those assemblies that will be subjected to high temperatures or have tapped bolt holes. Bolt galling in a tapped flange can ruin the machined thread pattern in the bolt hole and render the entire flange unusable. 2) Spanners or hex "Allen" keys.

All dimensions are nominal in millimetres unless otherwise specified

CF Flange Fasteners



Specifications:

Material

Bolts St.St. or silver plated St.St.
 Nut & washer St.St.

Features:

- For use with clearance hole CF flanges.
- Silver plating prevents galling of bolt and nut after exposure to high temperatures.
- Each bolt is supplied with two washers and one nut.

CF Clearance Bolt Hole Flange Fasteners With Nuts



Bolt Type	Use With Flange Size	Bolts Per Pack	Part Code	Price £	Price €
Cap head	DN16CF	25	M4-20	£6	€7
Hex head	DN25CF	25	M6-35	£8	€10
Hex head	DN40CF	25	M6-35	£8	€10
Hex Head	DN40CF	20	M6-40	£8	€10
Hex head	DN50CF	25	M8-50	£16	€19
Hex head	DN63CF	25	M8-50	£16	€19
Hex head	DN75CF	25	M8-50	£16	€19
Hex head	DN100CF	25	M8-50	£16	€19
Hex head	DN125CF	25	M8-60	£20	€23
Hex head	DN160CF	25	M8-60	£20	€23
Hex head	DN200CF	25	M8-60	£20	€23
Hex head	DN250CF	32	M8-60-32	£24	€28
Hex head	DN275CF	40	M10-70-40	POA	POA
Hex head	DN300CF	40	M10-70-40	POA	POA
Hex head	DN350CF	40	M10-70-40	POA	POA
Hex head	DN400CF	40	M10-70-40	POA	POA

CF Clearance Bolt Hole Flange Fasteners With Nuts - Silver Plated



Bolt Type	Use With Flange Size	Bolts Per Pack	Part Code	Price £	Price €
Cap head	DN16CF	25	M4-20-AG	£26	€30
Hex head	DN40CF	25	M6-35-AG	£28	€33
Hex Head	DN40CF	25	M6-40-AG	POA	POA
Hex head	DN63CF	25	M8-50-AG	£41	€48
Hex head	DN100CF	25	M8-50-AG	£41	€48
Hex head	DN160CF	25	M8-60-AG	£43	€50
Hex head	DN200CF	25	M8-60-AG	£43	€50
Hex head	DN250CF	32	M8-60-32-AG	£53	€61

All dimensions are nominal in millimetres unless otherwise specified



Specifications:

Material

Bolts St.St. or silver plated St.St.
 Plate nut & washer St.St.

Features:

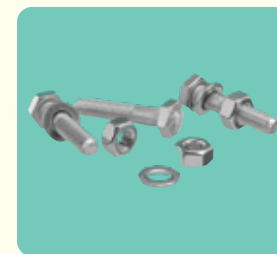
- For use with clearance hole CF flanges.
- Each pair of bolts is supplied with one washer and one plate nut.

CF Clearance Bolt Hole Flange Fasteners With Plate Nuts



Bolt Type	Use With Flange Size	Bolts Per Pack	Part Code	Price £	Price €
Cap head	DN16CF	24	PLNUT16SET	£17	€20
Hex head	DN40CF	24	PLNUT40SET	£21	€25
Hex head	DN63CF	24	PLNUT63SET	£30	€35
Hex head	DN100CF	24	PLNUT100SET	£45	€52
Hex head	DN160CF	24	PLNUT160SET	£48	€56
Hex Head	DN200CF	24	PLNUT200SET	£49	€57

CF Double Sided Flange Fasteners With Nuts



Bolt Type	Use With Flange Size	Bolts Per Pack	Part Code	Price £	Price €
Cap head	DN16CF	25	M4-30	£6	€7
Hex head	DN40CF	25	M6-55	£9	€11
Hex head	DN63CF	25	M8-65	£22	€26
Hex head	DN100CF	25	M8-70	£25	€29
Hex head	DN160CF	25	M8-80	£28	€33
Hex head	DN200CF	25	M8-90	£35	€41

All dimensions are nominal in millimetres unless otherwise specified

CF & Wire Seal Fasteners



Specifications:

Material

Bolts St.St. or silver plated St.St.
 Washer St.St.

Features:

- For use with tapped CF flanges.
- Silver plating prevents galling of bolt and nut after exposure to high temperatures.
- Each bolt is supplied with one washer.

CF Tapped Bolt Hole Flange Fasteners



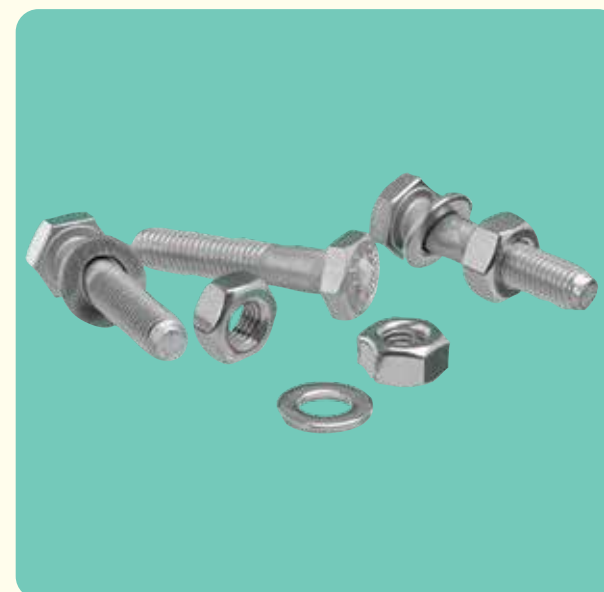
Bolt Type	Use With Flange Size	Bolts Per Pack	Part Code	Price £	Price €
Cap head	DN16CF	25	M4-14	£4	€5
Cap head	DN16CF	25	M4-16	£4	€5
Hex head	DN25CF	25	M6-20	£6	
Hex head	DN40CF	25	M6-20	£6	€7
Hex head	DN40CF	25	M6-25	£6	€7
Hex head	DN50CF	25	M8-25	£9	€11
Hex Head	DN63CF	25	M8-25	£9	€11
Hex Head	DN63CF	25	M8-25	£9	€11
Hex head	DN63CF	25	M8-30	£10	€12
Hex head	DN75CF	25	M8-35	£10	€12
Hex head	DN100CF	25	M8-35	£10	€12
Hex head	DN125CF	25	M8-35	£10	€12
Hex head	DN160CF	25	M8-35	£10	€12
Hex head	DN200CF	25	M8-50T	£15	€18
Hex head	DN250CF	32	M8-50-32	£17	€20
Hex head	DN275CF	40	M10-60-40	POA	POA
Hex head	DN300CF	40	M10-60-40	POA	POA
Hex head	DN350CF	40	M10-60-40	POA	POA
Hex head	DN400CF	40	M10-60-40	POA	POA

CF Tapped Bolt Hole Flange Fasteners - Silver Plated



Bolt Type	Use With Flange Size	Bolts Per Pack	Part Code	Price £	Price €
Cap Head	DN16CF	25	M4-14-AG	£24	€28
Cap head	DN16CF	25	M4-16-AG	£24	€28
Hex head	DN40CF	25	M6-20-AG	£26	€30
Hex head	DN40CF	25	M6-25-AG	£26	€30
Hex Head	DN63CF	25	M8-25-AG	£29	€34
Hex head	DN63CF	25	M8-30-AG	£30	€35
Hex head	DN100	25	M8-35-AG	£30	€35
Hex head	DN160CF	25	M8-35-AG	£30	€35
Hex Head	DN200CF	25	M8-50T-AG	POA	POA
Hex head	DN250CF	32	M8-50-32-AG	£46	€53

All dimensions are nominal in millimetres unless otherwise specified



Specifications:

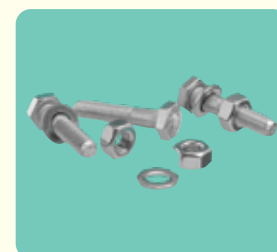
Material

Bolts St.St.
 Nut & washer St.St.

Features:

- For use with clearance hole wire seal flanges.
- Each bolt is supplied with two washers and one nut.

Wire Seal Flange Fasteners With Nuts



Bolt Type	Use With Flange Size	Bolts Per Pack	Part Code	Price £	Price €
Hex head	12-3/8"	24	M8-70-24	POA	POA
Hex head	14-5/8"	32	M8-70-32	POA	POA
Hex head	17-1/4"	36	M12-80-36	POA	POA
Hex head	19-9/16"	36	M12-80-36	POA	POA
Hex head	22-1/8"	36	M14-100-36	POA	POA
Hex head	27-1/8"	40	M14-100-40	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

CF Flange Fasteners

CF Plate Nuts



Specifications:

Material

Plate nut

St.St.

Features:

- For use with clearance hole CF flanges.
- Self centring over adjacent bolt holes.
- Only one spanner required for installation.



Use With Flange Size	Plate Nuts Per Pack	Part Code	Price £	Price €
DN16CF	12	PLNUT16	£15	€18
DN40CF	12	PLNUT40	£15	€18
DN63CF	12	PLNUT63	£25	€29
DN100CF	12	PLNUT100	£30	€35
DN160CF	12	PLNUT160	£38	€44
DN200CF	12	PLNUT200	£39	€45

CF Accessories



Description	Part Code	Price £	Price €
Thread lubricating grease 454g tub with brush	A-8009	£38	€44
DN16CF Plastic flange cap	FL-CP16CF	£1	€2
DN40CF Plastic flange cap	FL-CP40CF	£1	€2
DN63CF Plastic flange cap	FL-CP63CF	£1	€2
DN100CF Plastic flange cap	FL-CP100CF	£1	€2
DN160CF Plastic flange cap	FL-CP160CF	£1	€2
DN200CF Plastic flange cap	FL-CP200CF	£4	€5
DN250CF Plastic flange cap	FL-CP250CF	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

CF Copper Gaskets



The basic seal for the CF flange system is an oxygen free grade (OF) copper gasket that is compressed between the knife-edges of two CF flanges to create a seal capable of achieving ultrahigh vacuum pressures. Copper gaskets have a temperature range of -200°C up to 450°C . These gaskets are precisely punched, de-burred, chemically treated and packaged to eliminate and prevent surface imperfections. CF copper gaskets provide one reliable seal per use. Use a new copper gasket each time you install a CF sealing assembly.

CF Viton® Gaskets



This alternative seal for the CF flange system is a vacuum grade fluorocarbon elastomer gasket that is compressed between the knife-edges of two CF flanges to create a seal capable of achieving high vacuum pressure. Viton® gaskets have a temperature range of -20°C up to 150°C (200°C intermittent use). These gaskets are precisely manufactured, de-burred, cleaned and packaged to eliminate and prevent shedding or rips. CF Viton® gaskets may be re-used many times for re-installation of CF sealing assemblies.

Wire Seal Copper Gaskets



The basic seal for the wire seal flange system is an oxygen free grade (OF) copper wire gasket that is compressed between the male and female wire seal flanges to create a seal capable of achieving ultrahigh vacuum pressures. Copper gaskets have a temperature range of -200°C up to 450°C . These gaskets are manufactured from a 2mm diameter OF copper wire chemically treated and packaged to eliminate and prevent surface imperfections. Wire seal copper gaskets provide one reliable seal per use. Use a new copper gasket each time you install a wire seal sealing assembly.

Wire Seal Viton® Gaskets



This alternative seal for the wire seal flange system is a vacuum grade fluorocarbon elastomer gasket that is compressed between the male and female wire seal flanges to create a seal capable of achieving high vacuum pressure. Viton® gaskets have a temperature range of -20°C up to 150°C (200°C intermittent use). These gaskets are precisely lathe cut, de-burred, cleaned and packaged to eliminate and prevent shedding or rips. Wire seal Viton® gaskets may be re-used many times for re-installation of wire seal sealing assemblies.

All dimensions are nominal in millimetres unless otherwise specified

CF & Wire Seal Flange Gaskets

**Specifications:**

Material OF copper, Viton® or nickel

Features:

- For use with CF and wire seal flanges.
- Solid gaskets (without bore) available to order.
- Nickel gaskets also available.
- There are two sizes of gasket for DN250CF flanges: 272.87mm OD, our standard, and 270.1mm OD (VG flanges). Please contact sales office for further details.

CF Copper Gaskets

Use With Flange Size	Gaskets Per Pack	Part Code	Price £	Price €
DN16CF	10	CG16	£7	€9
DN25CF	10	CG25	£6	€7
DN40CF	10	CG40	£9	€11
DN40CF	10	CG40-39	£10	€12
DN40CF	10	CG40-39.2	£11	€13
DN50CF	10	CG50	£9	€11
DN63CF	10	CG63	£17	€20
DN63CF	10	CG63-82.5/72	£19	€22
DN75CF	10	CG75	£19	€22
DN100CF	10	CG100	£24	€28
DN125CF	10	CG125	£25	€29
DN160CF	10	CG160	£34	€40
DN200CF	10	CG200	£47	€55
DN250CF	1	CG250-273-1	£20	€23
DN250CF	1	CG250-270-1	POA	POA
DN275CF	1	CG275	£20	€23
DN300CF	1	CG300	£45	€52
DN350CF	1	CG350	£24	€28
DN400CF	1	CG400	POA	POA
14" OD	1	CG-US14	£21	€25

CF Copper Gaskets - Annealed

Use With Flange Size	Gaskets Per Pack	Part Code	Price £	Price €
DN16CF	5	CG16A	£6	€7
DN25CF	5	CG25A	£7	€9
DN40CF	5	CG40A	£11	€13
DN40CF	5	CG40-39A	£11	€13
DN40CF	5	CG40-39.2A	£13	€15
DN50CF	5	CG50A	£12	€14
DN63CF	5	CG63A	£16	€19
DN63CF	5	CG63-82.5/72A	£17	€20
DN75CF	5	CG75A	£18	€21
DN100CF	5	CG100A	£22	€26
DN125CF	5	CG125A	£25	€29
DN160CF	5	CG160A	£27	€32
DN200CF	5	CG200A	£36	€42
DN250CF	1	CG250-273-1A	£38	€44
DN250CF	1	CG250-270-1A	POA	POA
DN275CF	1	CG275A	£31	€36
DN300CF	1	CG300A	POA	POA
DN350CF	1	CG350A	£31	€36
DN400CF	1	CG400A	POA	POA
14" OD	1	CG-US14A	£21	€?

CF Copper Gaskets - Silver Plated

Use With Flange Size	Gaskets Per Pack	Part Code	Price £	Price €
DN16CF	10	CG16AG	£8	€10
DN25CF	5	CG25AG	£8	€10
DN40CF	10	CG40AG	£16	€19
DN40CF	10	CG40-39AG	£17	€20
DN40CF	10	CG40-39.2AG	£17	€20
DN50CF	5	CG50AG	£16	€19
DN63CF	10	CG63AG	£31	€36
DN63CF	10	CG63-82.5/72AG	£33	€38
DN75CF	5	CG75AG	£33	€38
DN100CF	10	CG100AG	£44	€51
DN125CF	5	CG125AG	£21	€25
DN160CF	10	CG160AG	£61	€71
DN200CF	10	CG200AG	£75	€87
DN250CF	1	CG250-273-1AG	£24	€28
DN250CF	1	CG250-270-1AG	POA	POA
DN275CF	1	CG275AG	£33	€38
DN300CF	1	CG300AG	POA	POA
DN350CF	1	CG350AG	POA	POA
DN400CF	1	CG400AG	POA	POA
14" OD	1	CG-US14AG	£21	€25

Gold plated gaskets also available, please call sales office for details

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

CF & Wire Seal Flange Gaskets

**Specifications:**

Material OF copper, Viton® or nickel

Features:

- For use with CF and wire seal flanges.
- Solid gaskets (without bore) available to order.
- Nickel gaskets also available.
- There are two sizes of gasket for DN250CF flanges: 272.87mm OD, our standard, and 270.1mm OD (VG flanges). Please contact sales office for further details.

CF Copper Gaskets - Annealed & Silver Plated

Use With Flange Size	Gaskets Per Pack	Part Code	Price £	Price €
DN16CF	5	CG16AGA	£9	€11
DN25CF	5	CG25AGA	£9	€11
DN40CF	5	CG40AGA	£14	€17
DN40CF	5	CG40-39AGA	£14	€17
DN40CF	5	CG40-39.2AGA	£21	€25
DN50CF	5	CG50AGA	£25	€29
DN63CF	5	CG63AGA	£20	€23
DN63CF	5	CG63-82.5/72AGA	£24	€28
DN75CF	5	CG75AGA	£37	€43
DN100CF	5	CG100AGA	£26	€30
DN125CF	5	CG125AGA	£36	€42
DN160CF	5	CG160AGA	£47	€55
DN200CF	5	CG200AGA	£52	€60
DN250CF	1	CG250-273-1AGA	£35	€41
DN250CF	1	CG250-270-1AGA	POA	POA
DN275CF	1	CG275AGA	POA	POA
DN300CF	1	CG300AGA	POA	POA
DN350CF	1	CG350AGA	POA	POA
DN400CF	1	CG400AGA	POA	POA
14" OD	1	CG-US14AGA	£36	€42

CF Copper Gaskets - Special Purpose

Description	Part Code	Price £	Price €
DN16CF Copper gasket solid 21.25mm OD 2mm thk 10/pk	CG16-SD	£14	€17
DN25CF Copper gasket solid 32.8mm OD 2mm thk 10/pk	CG25SD	POA	POA
DN40CF Copper gasket solid 48.15mm OD 2mm thk10/pk	CG40-SD	£18	€21
DN50CF Copper gasket solid 61.69mm OD 2mm thk 10/pk	CG50SD	POA	POA
DN63CF Copper gasket solid 82.4mm OD 2mm thk1/pk	CG63-SD	£9	€11
DN75CF Copper gasket solid 91.4mm OD 2mm thk 10/pk	CG75SD	POA	POA
DN100CF Copper gasket solid 120.5mm OD 2mm thk 1/pk	CG100-SD	POA	POA
DN125CF Copper gasket solid 141.4mm OD 2mm thk 10/pk	CG125SD	POA	POA
DN160CF Copper gasket solid 171.1mm OD 2mm thk 1/pk	CG160-SD	POA	POA
DN200CF Copper gasket solid 222.0mm OD 2mm thk 1/pk	CG200-SD	POA	POA
DN250CF Copper gasket solid 272.87mm OD 2mm thk 1/pk	CG250-SD	POA	POA
DN275CF Copper gasket solid 294.36mm OD 2mm thk 10/pk	CG275SD	POA	POA
DN300CF Copper gasket solid 307.6mm OD 2mm thk 10/pk	CG300SD	POA	POA
DN350CF Copper gasket solid 356.5mm OD 2mm thk 10/pk	CG350SD	POA	POA
DN400CF Copper gasket solid 423.9mm OD 2mm thk 10/pk	CG400SD	POA	POA
DN40CF Annealed angular alignment copper gasket 48.15mm OD 36.86mm ID 3.65mm thk 1/pk	CG40-3.65THK	£20	€23
DN40CF Annealed angular alignment copper gasket 48.15mm OD 39.2mm ID 3.65mm thk 1/pk	CG40-39.2-3.65THK	POA	POA
DN63CF Annealed angular alignment copper gasket 82.4mm OD 63.45mm ID 3.65mm thk 1/pk	CG63-3.65THK	POA	POA
DN100CF Annealed angular alignment copper gasket 120.5mm OD 101.7mm ID 3.65mm thk 1/pk	CG100-3.65THK	POA	POA

CF Nickel 200/201 Annealed Gaskets

Use With Flange Size	Gaskets Per Pack	Part Code	Price £	Price €
DN16CF	1	NG16	POA	POA
DN25CF	1	NG25	POA	POA
DN40CF	1	NG40	POA	POA
DN50CF	1	NG50	POA	POA
DN63CF	1	NG63	POA	POA
DN75CF	1	NG75	POA	POA
DN100CF	1	NG100	POA	POA
DN125CF	1	NG125	POA	POA
DN160CF	1	NG160	POA	POA
DN200CF	1	NG200	POA	POA
DN250CF	1	NG250	POA	POA
DN275CF	1	NG275	POA	POA
DN300CF	1	NG300	POA	POA
DN350CF	1	NG350	POA	POA
DN400CF	1	NG400	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

CF & Wire Seal Flange Gaskets

**Specifications:**

Material OF copper, Viton® or nickel

Features:

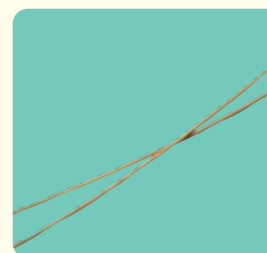
- For use with CF and wire seal flanges.
- Solid gaskets (without bore) available to order.
- Nickel gaskets also available.
- There are two sizes of gasket for DN250CF flanges: 272.87mm OD, our standard, and 270.1mm OD (VG flanges). Please contact sales office for further details.

CF Viton® Gaskets

Use With Flange Size	Gaskets Per Pack	Part Code	Price £	Price €
DN16CF	5	VG16	£18	€21
DN25CF	1	VG25	£31	€36
DN40CF	5	VG40	£21	€25
DN50CF	1	VG50	£15	€18
DN63CF	1	VG63	£19	€22
DN75CF	1	VG75	£19	€22
DN100CF	1	VG100	£21	€25
DN125CF	1	VG125	£19	€22
DN160CF	1	VG160	£49	€57
DN200CF	1	VG200	£39	€45
DN250CF	1	VG250	POA	POA
DN275CF	1	VG275	POA	POA
DN300CF	1	VG300	POA	POA
DN350CF	1	VG350	POA	POA
DN400CF	1	VG400	POA	POA
14" OD	1	VG-US14	POA	POA

CF Wide Style Viton® Gaskets

Use With Flange Size	Gaskets Per Pack	Part Code	Price £	Price €
DN16CF	2	VGW16	£17	€20
DN40CF	2	VGW40	£24	€28
DN63CF	2	VGW63	£40	€46
DN100CF	2	VGW100	£44	€51
DN160CF	2	VGW160	£64	€74
DN200CF	2	VGW200	£95	€110

Wire Seal Copper Gaskets

Use With Flange Size	Gaskets Per Pack	Part Code	Price £	Price €
12-3/8"	1	FL-WF1200CG	POA	POA
14-5/8"	1	FL-WF1400CG	POA	POA
17-1/4"	1	FL-WF1700CG	POA	POA
19-9/16"	1	FL-WF1900CG	POA	POA
22-1/8"	1	FL-WF2200CG	POA	POA
27-1/8"	1	FL-WF2700CG	POA	POA

Wire Seal Viton® Gaskets

Use With Flange Size	Gaskets Per Pack	Part Code	Price £	Price €
12-3/8"	1	FL-WF1200VG	POA	POA
14-5/8"	1	FL-WF1400VG	POA	POA
17-1/4"	1	FL-WF1700VG	POA	POA
19-9/16"	1	FL-WF1900VG	POA	POA
22-1/8"	1	FL-WF2200VG	POA	POA
27-1/8"	1	FL-WF2700VG	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

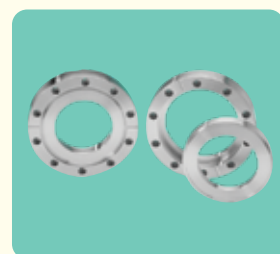
CF & Wire Seal Flanges



Features:

- Reusable flanges.
- 304L stainless steel as standard.
- 316L & 316LN stainless steel also available.
- All metal seals.
- Sexless flanges - CF system.
- Rotatable flanges for simplified bolt hole alignment - CF system.
- Tapped or clearance bolt holes.
- Adapters to other flange systems available.
- Compatible with metric and imperial (US) sizes.
- Industry standard sizes, compatible with other ConFlat® style flanges (with DN250CF there are exceptions, please call sales office for details)

CF Weld Flanges



These flanges are manufactured with a weld prep and tubing bore for immediate installation on your system with no additional alteration. LewVac offers CF weld flanges in two designs: fixed and rotatable. Fixed flanges have a set bolt hole orientation while rotatable flanges have a two piece design allowing for bolt hole rotation to ease bolt alignment when mating the two flanges. Fixed and rotatable flanges have two bolt hole options; clearance or tapped bolt holes. Clearance bolt holes allow for unrestricted passage of a bolt through the flanges. The bolt is then tightened with a nut on the back side of the flange assembly. Tapped bolt holes are threaded to receive and tighten the bolt directly and do not require a nut. Standard CF weld flanges are manufactured from 304L stainless steel, with 316L or 316LN stainless steel available on request.

Specifications:

Material

Flanges & fittings 304L or 316L / 316LN St.St.[†]

Temperature Range

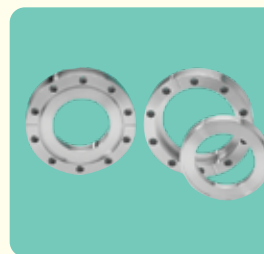
Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

* - Increased upper limit for intermittent use

† - 316LN fittings have 316LN flanges and 316L tubes

CF Blank Flanges



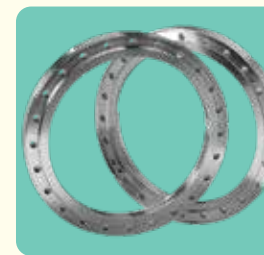
These flanges are manufactured with no weld prep and no tubing bore. Blank flanges are commonly used to close unused ports or they are altered by customers with their own custom machining capability for a special use. LewVac offers CF blank flanges in two designs; fixed and rotatable. Fixed flanges have a set bolt hole orientation while rotatable flanges have a two piece design allowing for bolt hole rotation to ease bolt alignment when mating the two flanges. Fixed and rotatable flanges have two bolt hole options; clearance or tapped bolt holes. Clearance bolt holes allow for unrestricted passage of a bolt through the flanges. The bolt is then tightened with a nut on the back side of the flange assembly. Tapped bolt holes are threaded to receive and tighten the bolt directly and do not require a nut. Standard CF blank flanges are manufactured from either 304L stainless steel, with 316L or 316LN stainless steel available on request.

CF Special Purpose Flanges



These flanges can serve a variety of useful functions in your vacuum system, such as adapting directly from a larger CF flange to a smaller CF flange, or adding side ports on which various accessories can be mounted, such as: pressure gauges, shutters or up to air valves.

Wire Seal Weld Flanges



These flanges are manufactured with a weld prep and tubing bore for immediate installation on your system with no additional alteration. Wire seal flanges are available in two general designs: male and female. Female flanges accept the sealing gasket while the male flange has a protruding circular ridge that fits into the gasket groove on the receiving female flange. Standard wire seal bored flanges are manufactured from 304L stainless steel. Other materials are available on request.

Wire Seal Blank Flanges



These flanges are manufactured with no weld prep and no tubing bore. Blank flanges are commonly used to close unused ports or they are altered by customers with their own custom machining capability for a special use. Wire seal flanges are available in two general designs: male and female. Female flanges accept the sealing gasket while the male flange has a protruding circular ridge that fits into the gasket groove on the receiving female flange. Standard wire seal blank flanges are manufactured from 304L stainless steel. Other materials are available on request.

DN16CF 34mm (1-1/3") OD Mini Flanges



Specifications:

Material

Flanges 304L St.St.
316L & 316LN also available

Gaskets OF copper, Viton® or nickel

Temperature Range

Using copper gaskets -200°C to 450°C
Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 6
Size M4
Torque 9Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

PLEASE NOTE - Flanges are also available in 316L & 316LN stainless steel. Alternative bore sizes also available. Please contact our sales office for further details.

Features:

- 304L stainless steel as standard.
- 316L & 316LN stainless steel available on request.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Industry standard sizes, compatible with other ConFlat® style flanges.
- US flange sizes also available.

Fig. 1.

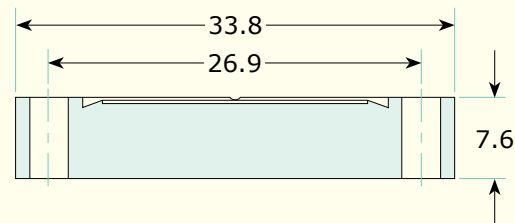


Fig. 2.

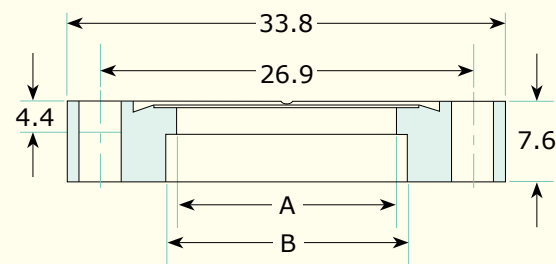


Fig. 3.

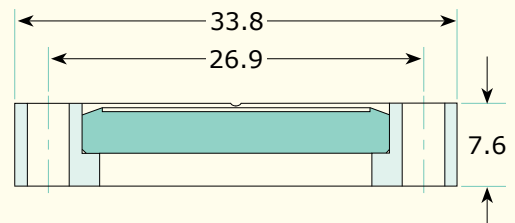
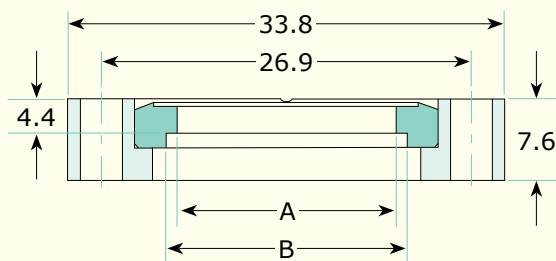


Fig. 4.



DN16CF Fixed Flanges 304L



Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-16CF	£7	€9
19.0	Clearance	2	16.0	19.1	FL-16CF-19	£7	€9
19.0	Clearance	5	16.0	-	FL-16CF-19W	£16	€19
Blank	Tapped	1	-	-	FL-16CFT	£11	€13
19.0	Tapped	2	16.0	19.1	FL-16CFT-19	£13	€15
19.0	Tapped	5	16.0	-	FL-16CFT-19W	£17	€20

DN16CF Rotatable Flanges 304L



Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-16CFR	£9	€11
19.0	Clearance	4	16.0	19.1	FL-16CFR-19	£8	€10
19.0	Clearance	6	16.0	-	FL-16CFR-19W	£23	€27
Blank	Tapped	3	-	-	FL-16CFRT	£15	€18
19.0	Tapped	4	16.0	19.1	FL-16CFRT-19	£16	€19
19.0	Tapped	6	16.0	-	FL-16CFRT-19W	£22	€26

DN16CF Flange Hardware & Accessories



Description	Part Code	Price £	Price €
DN16CF Copper gaskets 21.25mm OD 16.0mm ID 2mm thk 10/pk	CG16	£7	€9
DN16CF Copper gaskets solid 21.25mm OD 2mm thk 10/pk	CG16-SD	£14	€17
DN16CF Viton® gaskets 5/pk	VG16	£18	€21
DN16CF wide style Viton® gaskets 2/pk	VGW16	£17	€20
DN16CF Annealed copper gaskets 21.25mm OD 16.0mm ID 2mm thk 5/pk	CG16A	£6	€7
DN16CF Ag plated copper gaskets 21.25mm OD 16.0mm ID 2mm thk 10/pk	CG16AG	£8	€10
DN16CF Ag plated annealed copper gaskets 21.25mm OD 16.0mm ID 2mm thk 5/pk	CG16AGA	£9	€11
DN16CF Nickel gasket 21.25mm OD 16.0mm ID 2mm thk 1/pk	NG16	£15	€18
Socket head screw M4 X 14mm long - for blind tapped flanges 25/pk	M4-14	£4	€5
Socket head screw M4 X 16mm long - for tapped flanges 25/pk	M4-16	£4	€5
Socket head screw M4 X 20mm long 25/pk inc nuts	M4-20	£6	€7
Socket head screw M4 X 30mm long - for double sided flanges 25/pk inc nuts	M4-30	£6	€7
Plate nuts to suit DN16CF flange 12/pk	PLNUT16	£15	€18
Plate nuts / bolts / washers to suit DN16CF flange 12/24/24/pk	PLNUT16SET	£17	€20
Thread lubricating grease 454g tub with brush	A-8009	£38	€44
DN16CF plastic flange cap	FL-CP16CF	£1	€2

Silver plated bolts are available, please call sales office for details.

Fig. 5.

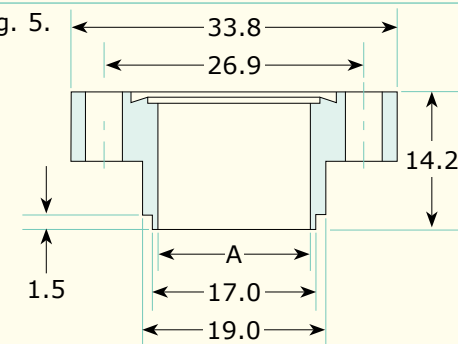
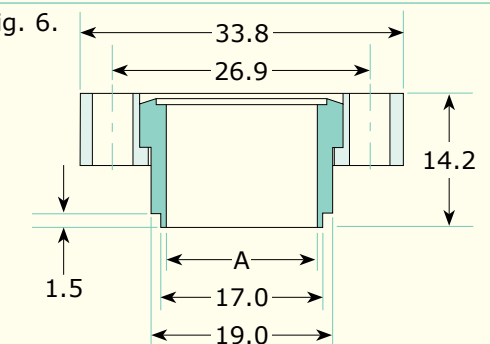


Fig. 6.



All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

DN25CF 54mm (2 1/8") OD Flanges

**Specifications:****Material**

Flanges 304L St.St.
Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C
Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 4
Size M6
Torque 16Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Compatible with other ConFlat® style flanges.

Fig. 1.

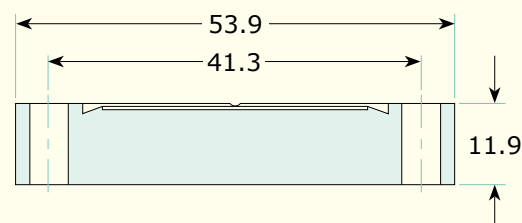


Fig. 2.

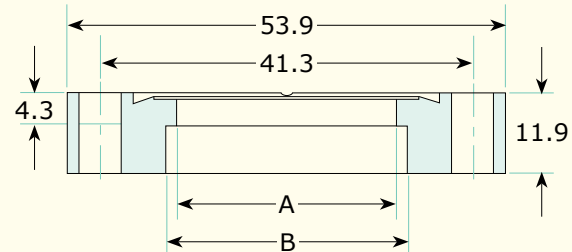


Fig. 3.

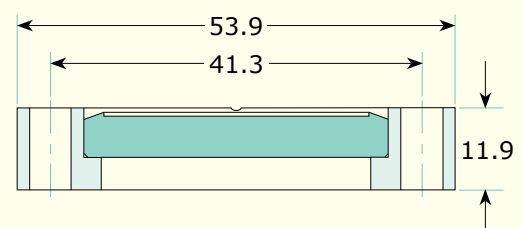
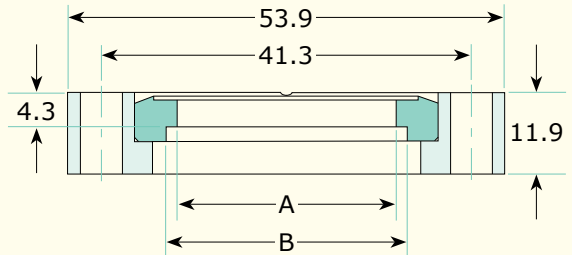
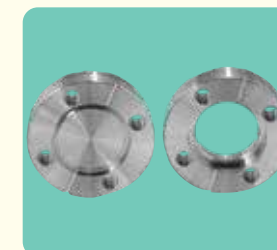


Fig. 4.



All dimensions are nominal in millimetres unless otherwise specified

DN25CF Fixed Flanges 304L

Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-25CF	£18	€21
6.35	Clearance	2	6.5	-	FL-25CF-6	£31	€36
12.7	Clearance	2	12.8	-	FL-25CF-13	£18	€21
19.1	Clearance	2	15.9	19.3	FL-25CF-19	£17	€20
25.4	Clearance	2	22.2	25.7	FL-25CF-25	£18	€21
Blank	Tapped	1	-	-	FL-25CFT	POA	POA
6.35	Tapped	2	6.5	-	FL-25CFT-6	POA	POA
12.7	Tapped	2	12.8	-	FL-25CFT-13	POA	POA
19.1	Tapped	2	15.9	19.3	FL-25CFT-19	POA	POA
25.4	Tapped	2	22.2	25.7	FL-25CFT-25	POA	POA

DN25CF Rotatable Flanges 304L

Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-25CFR	£29	€34
6.35	Clearance	4	6.5	-	FL-25CFR-6	£24	€28
12.7	Clearance	4	12.8	-	FL-25CFR-13	£24	€28
19.1	Clearance	4	15.9	19.3	FL-25CFR-19	POA	POA
25.4	Clearance	4	22.2	25.7	FL-25CFR-25	£19	€22
Blank	Tapped	3	-	-	FL-25CFRT	POA	POA
6.35	Tapped	4	6.5	-	FL-25CFRT-6	POA	POA
12.7	Tapped	4	12.8	-	FL-25CFRT-13	POA	POA
19.1	Tapped	4	15.9	19.3	FL-25CFRT-19	POA	POA
25.4	Tapped	4	22.2	25.7	FL-25CFRT-25	POA	POA

DN25CF Flange Hardware & Accessories

Description	Part Code	Price £	Price €
DN25CF copper gaskets 32.8mm OD 25.6mm ID 2mm thk 10/pk	CG25	£6	€7
DN25CF Annealed copper gaskets 32.8mm OD 25.6mm ID 2mm thk 5/PK	CG25A	£7	€9
DN25CF Ag plated copper gaskets 32.8mm OD 25.6mm ID 2mm thk 5/PK	CG25AG	£8	€10
Cu Ag plated annealed copper gaskets 32.8mm OD 25.6mm ID 2mm thk 5/PK	CG25AGA	£9	€11
DN25CF viton® gaskets 1//PK	VG-25	£31	€36
Hex head bolts M6 X 25mm long - for tapped flanges 25/PK (inc. washers)	M6-25	£6	€7
Hex head bolts M6 X 35mm long 25/PK (inc. nuts & washers)	M6-35	£8	€10
Hex head bolts M6 X 40mm long 25/PK (inc. nuts & washers)	M6-40	£8	€10
Hex head bolts M6 X 55mm long - for double sided flanges 25/PK (inc. nuts & washers)	M6-55	£9	€11
Thread lubricating grease 454g tub with brush	A-8009	£38	€44

All dimensions are nominal in millimetres unless otherwise specified

DN40CF 70mm (2-3/4") OD Flanges



Features:

- 304L stainless steel as standard.
- 316L & 316LN stainless steel available on request.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Industry standard sizes, compatible with other ConFlat® style flanges.
- US flange sizes also available.

Fig. 1.

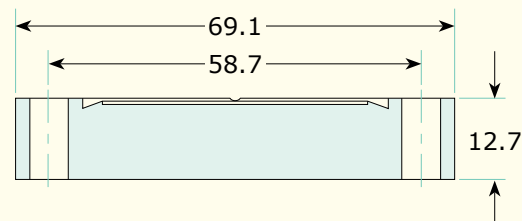
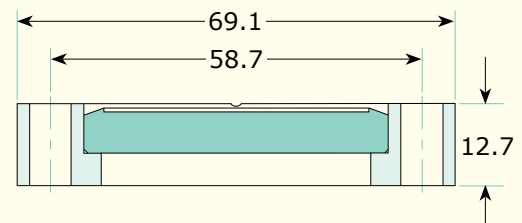


Fig. 3.



Specifications:

Material

Flanges 304L St.St.
316L & 316LN also available

Gaskets OF copper, Viton® or nickel

Temperature Range

Using copper gaskets -200°C to 450°C
Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 6
Size M6
Torque 16Nm

Vacuum Range To below 1×10^{-13} Torr

* - Increased upper limit for intermittent use

PLEASE NOTE - Flanges are also available in 316L & 316LN stainless steel. Alternative bore sizes also available. Please contact our sales office for further details.

Fig. 2.

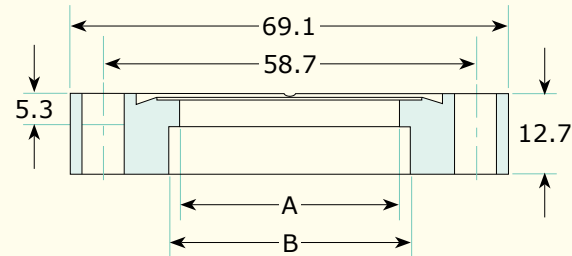
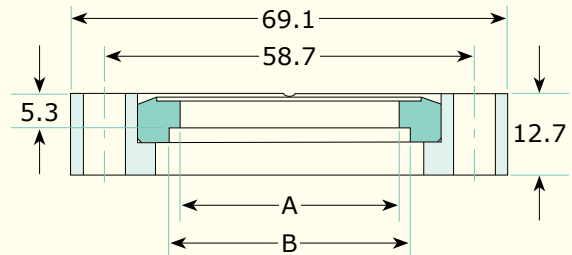
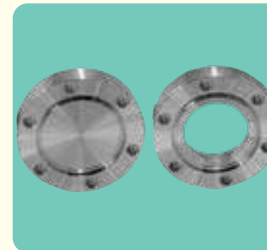


Fig. 4.

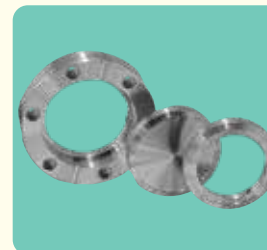


DN40CF Fixed Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-40CF	£8	€10
38.1	Clearance	2	36.6	38.2	FL-40CF-38	£12	€14
41.3*	Clearance	2	39.6	41.5	FL-40CF-41	£8	€10
44.5*	Clearance	2	41.0	44.6	FL-40CF-45	£8	€10
Blank	Tapped	1	-	-	FL-40CFT	£16	€19
38.1	Tapped	2	36.6	38.2	FL-40CFT-38	£14	€17
41.3*	Tapped	2	39.6	41.5	FL-40CFT-41	POA	POA
44.5*	Tapped	2	41.0	44.6	FL-40CFT-45	£19	€22

DN40CF Rotatable Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-40CFR	£16	€19
38.1	Clearance	4	36.6	38.2	FL-40CFR-38	£16	€19
41.3*	Clearance	4	39.6	41.5	FL-40CFR-41	£27	€32
44.5*	Clearance	4	41.0	44.6	FL-40CFR-45	POA	POA
Blank	Tapped	3	-	-	FL-40CFRT	POA	POA
38.1	Tapped	4	36.6	38.2	FL-40CFRT-38	£22	€26
41.3*	Tapped	4	39.6	41.5	FL-40CFRT-41	POA	POA
44.5*	Tapped	4	41.0	44.6	FL-40CFRT-45	POA	POA

DN40CF Flange Hardware & Accessories



Silver plated bolts are available, please call sales office for details.

* - The use of CG40-39 gaskets is recommended for larger bore tubes / flanges.

Description	Part Code	Price £	Price €
DN40CF Copper gaskets 48.15mm OD 36.86mm ID 2mm thk 10/pk	CG40	£9	€11
DN40CF Copper gaskets 48.15mm OD 38.7mm ID 2mm thk 10/pk	CG40-39	£10	€12
DN40CF Copper gaskets 48.15mm OD 39.2mm ID 2mm thk 10/pk	CG40-39.2	£11	€13
DN40CF Annealed angular alignment copper gasket 48.15mm OD 36.86mm ID 3.65mm thk 1/pk	CG40-3.65THK	£20	€23
DN40CF Copper gaskets solid 48.15mm OD 2mm thk 10/pk	CG40-SD	£18	€21
DN40CF Viton® gaskets 5/pk	VG40	£21	€25
DN40CF wide style Viton® Gasket 2/pk	VGW40	£24	€28
DN40CF annealed Cu gaskets 36.8mm ID 5/pk	CG40A	£11	€13
DN40CF annealed Cu gaskets 38.8mm ID 5/pk	CG40-39A	£11	€13
DN40CF annealed Cu gaskets 39.2mm ID 5/pk	CG40-39.2A	£13	€15
DN40CF Ag plated Cu gaskets 36.8mm ID 10/pk	CG40AG	£16	€19
DN40CF Ag plated Cu gaskets 38.8mm ID 10/pk	CG40-39AG	£17	€20
DN40CF Ag plated Cu gaskets 39.2mm ID 10/pk	CG40-39.2AG	£17	€20
DN40CF Ag plated annealed Cu gasketsS 5/pk	CG40AGA	£14	€17
DN40CF Ag plated annealed Cu gaskets 38.8mm ID 5/pk	CG40-39AGA	£14	€17
DN40CF Ag plated annealed Cu gasketsS 39.2mm ID 5/pk	CG40-39.2AGA	£21	€25
DN40CF Nickel gasket 48.15mm OD 36.86mm ID 2mm thk 1/Pk	NG40	£20	€23
Hex head bolts M6 X 20mm long for blind tapped flanges 25/pk	M6-20	£6	€7
Hex head bolts M6 X 25mm long - for tapped flanges 25/pk	M6-25	£6	€7
Hex head bolts M6 X 35mm long 25/pk inc nuts	M6-35	£8	€10
Hex head bolts M6 X 55mm long - for double sided flanges 25/pk inc nuts	M6-55	£9	€11
Plate nuts to suit DN40CF flange 12/pk	PLNUT40	£15	€18
Plate nuts / bolts / washers to suit DN40CF flange 12/24/24/pk	PLNUT40SET	£21	€25
Thread lubricating grease 454g tub with brush	A-8009	£38	€44
DN40CF plastic flange cap	FL-CP40CF	£1	€2

Silver plated bolts are available, please call sales office for details.

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

DN50CF 86mm (3³/₈" OD) Flanges**Specifications:****Material**

Flanges	304L St.St.
Gaskets	OF copper or Viton®

Temperature Range

Using copper gaskets	-200°C to 450°C
Using Viton® gaskets	-20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts	8
Size	M8
Torque	20Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Compatible with other ConFlat® style flanges.

Fig. 1.

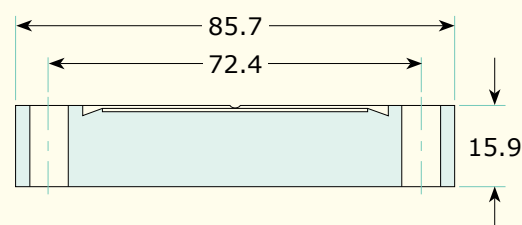


Fig. 2.

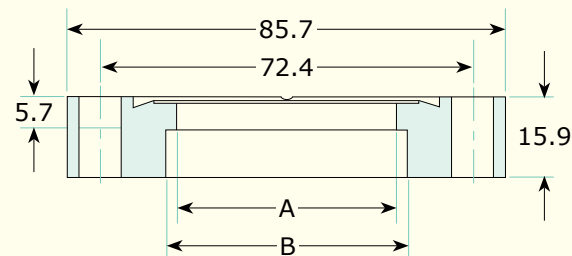


Fig. 3.

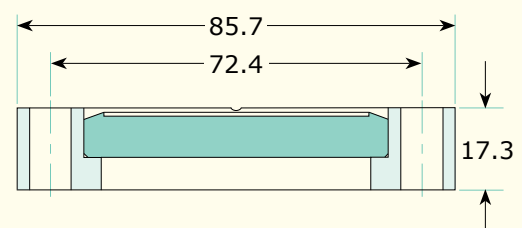
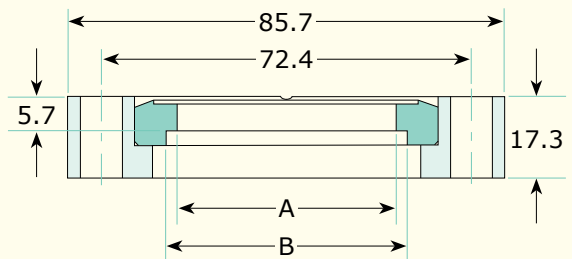


Fig. 4.

**DN50CF Fixed Flanges 304L**

Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-50CF	£45	€52
38.1mm	Clearance	2	34.9	38.4	FL-50CF-38	£44	€51
50.8mm	Clearance	2	47.6	51.1	FL-50CF-51	£44	€51
Blank	Tapped	1	-	-	FL-50CFT	POA	POA
38.1mm	Tapped	2	34.9	38.4	FL-50CFT-38	POA	POA
50.8mm	Tapped	2	47.6	51.1	FL-50CFT-51	POA	POA

DN50CF Rotatable Flanges 304L

Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-50CFR	£48	€56
38.1mm	Clearance	4	34.9	38.4	FL-50CFR-38	£48	€56
50.8mm	Clearance	4	47.6	51.1	FL-50CFR-51	£48	€56
Blank	Tapped	3	-	-	FL-50CFRT	POA	POA
38.1mm	Tapped	4	34.9	38.4	FL-50CFRT-38	POA	POA
50.8mm	Tapped	4	47.6	51.1	FL-50CFRT-51	POA	POA

DN50CF Flange Hardware & Accessories

Description	Part Code	Price £	Price €
DN50CF copper gaskets 61.6mm OD 50.9mm ID 2mm thk 10/PK	CG50	£9	€11
DN50CF annealed copper gaskets 61.6mm OD 50.9mm ID 2mm thk 5/PK	CG50A	£12	€14
DN50CF Ag plated copper gaskets 61.6mm OD 50.9mm ID 2mm thk 5/PK	CG50AG	£16	€19
DN50CF Ag plated annealed copper gaskets 61.6mm OD 50.9mm ID 2mm thk 5/PK	CG50AGA	£25	€29
DN50CF Viton® gasket 1/pk	VG50	£16	€19
Hex head bolt M8 X 25mm long - for tapped flanges 25/PK (inc. washers)	M8-25	£9	€11
Hex head bolt M8 X 30mm long - for tapped flanges 25/PK (inc. washers)	M8-30	£10	€12
Hex head bolt M8 X 50mm long 25/PK (inc. nuts & washers)	M8-50	£15	€18
Hex head bolt M8 X 65mm long - for double sided flanges 25/PK (inc. nuts & washers)	M8-65	£22	€26
Thread lubricating grease 454g tub with brush	A-8009	£38	€44

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

DN63CF 114mm (4-1/2") OD Flanges



Specifications:

Material

Flanges 304L St.St.
316L & 316LN also available

Gaskets OF copper, Viton® or nickel

Temperature Range

Using copper gaskets -200°C to 450°C
Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 8
Size M8
Torque 20Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use
PLEASE NOTE - Flanges are also available in 316L & 316LN stainless steel. Alternative bore sizes also available. Please contact our sales office for further details.

Features:

- 304L stainless steel as standard.
- 316L & 316LN stainless steel available on request.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Industry standard sizes, compatible with other ConFlat® style flanges.
- US flange sizes also available.

Fig. 1.

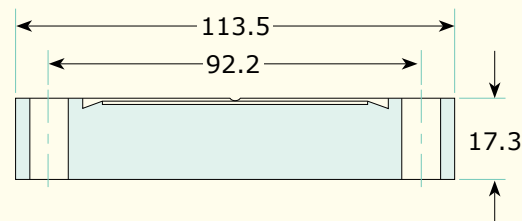


Fig. 2.

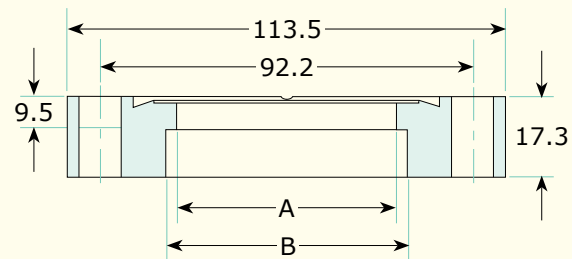


Fig. 3.

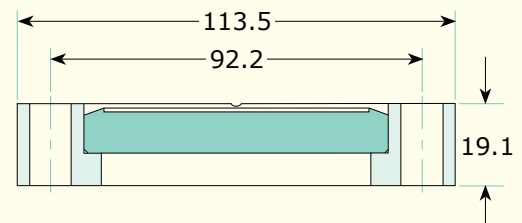
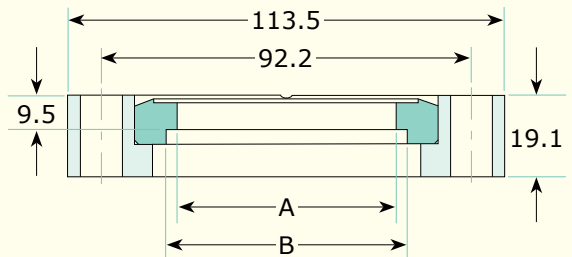
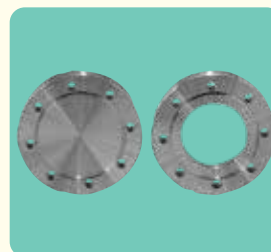


Fig. 4.



All dimensions are nominal in millimetres unless otherwise specified

DN63CF Fixed Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-63CF	£30	€35
63.5	Clearance	2	61.8	63.5	FL-63CF-64	£32	€37
70.0	Clearance	2	66.7	70.2	FL-63CF-70	POA	POA
Blank	Tapped	1	-	-	FL-63CFT	£47	€55
63.5	Tapped	2	61.8	63.5	FL-63CFT-64	£48	€56
70.0	Tapped	2	66.7	70.2	FL-63CFT-70	POA	POA0

DN63CF Rotatable Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-63CFR	£42	€49
63.5	Clearance	4	61.8	63.5	FL-63CFR-64	£40	€46
70.0	Clearance	4	66.7	70.2	FL-63CFR-70	POA	POA
Blank	Tapped	3	-	-	FL-63CFRT	£57	€66
63.5	Tapped	4	61.8	63.5	FL-63CFRT-64	£58	€67
70.0	Tapped	4	66.7	70.2	FL-63CFRT-70	£56	€65

DN63CF Flange Hardware & Accessories



Description	Part Code	Price £	Price €
DN63CF Copper gaskets 82.4mm OD 63.45mm ID 2mm thk 10/pk	CG63	£17	€20
DN63CF Copper gaskets 82.4mm OD 72.0mm ID 2mm thk 10/pk	CG63-82.5/72	£19	€22
DN63CF Annealed angular alignment copper gasket 82.4mm OD 63.45mm ID 3.65mm 2mm thk1/pk	CG63-3.65THK	POA	POA
DN63CF Copper gasket solid 82.4mm OD 2mm thk1/pk	CG63-SD	£9	€11
DN63CF Viton® gasket 1/pk	VG63	£20	€23
DN63CF wide style Viton® Gaskets 2/pk	VGW63	£40	€46
DN63CF Annealed copper gaskets 82.4mm OD 63.45mm ID 2mm thk 5/pk	CG63A	£16	€19
DN63CF Annealed copper gaskets 82.5mm OD / 72mm ID 2mm thk 5/pk	CG63-82.5/72A	£17	€20
DN63CF Ag plated copper gaskets 82.4mm OD 63.45mm ID 2mm thk 10/pk	CG63AG	£31	€36
DN63CF Ag plated copper gaskets 82.4mm OD 72.0mm ID 2mm thk 10/pk	CG63-82.5/72AG	£33	€38
DN63CF Ag plated annealed copper gaskets 82.4mm OD 63.45mm ID 2mm THK 5/PK	CG63AGA	£20	€23
DN63CF Ag plated annealed Cu gaskets 82.5mm OD / 72mm ID 5/pk	CG63-82.5/72AGA	£24	€28
DN63CF Nickel gasket 82.4mm OD 63.45mm ID 2mm thk 1/pk	NG63	£35	€41
Hex head bolts M8 X 30mm long - for tapped flanges 25/pk	M8-30	£10	€12
Hex head bolts M8 X 50mm long 25/pk inc nuts	M8-50	£15	€18
Hex head bolts M8 X 65mm long - for double sided flanges 25/pk inc nuts	M8-65	£22	€26
Plate nuts to suit DN63CF flange 12/pk	PLNUT63	£25	€29
Plate nuts / bolts / washers to suit DN63CF flange 12/24/24/pk	PLNUT63SET	£29	€34
Thread lubricating grease 454g tub with brush	A-8009	£38	€44
DN63CF plastic flange cap	FL-CP63CF	£1	€2

Silver plated bolts are available, please call sales office for details.

All dimensions are nominal in millimetres unless otherwise specified

DN75CF 117mm (4⁵/₈" OD Flanges



Specifications:

Material

Flanges 304L St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 10

Size M8

Torque 20Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Compatible with other ConFlat® style flanges.

Fig. 1.

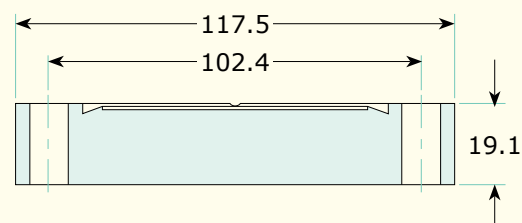


Fig. 2.

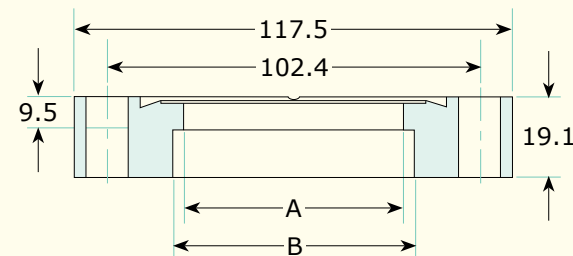


Fig. 3.

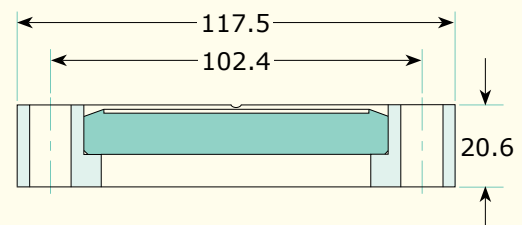
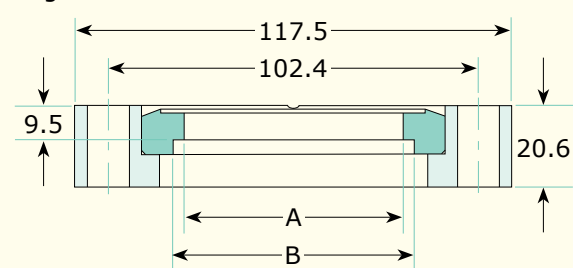
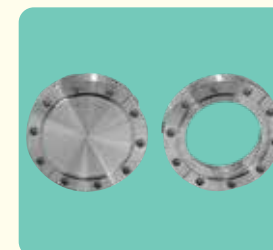


Fig. 4.



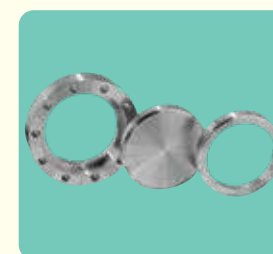
All dimensions are nominal in millimetres unless otherwise specified

DN75CF Fixed Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-75CF	£71	€82
63.5mm	Clearance	2	60.3	63.8	FL-75CF-64	£79	€91
76.2mm	Clearance	2	73.0	76.5	FL-75CF-76	£71	€82
Blank	Tapped	1	-	-	FL-75CFT	POA	POA
63.5mm	Tapped	2	60.3	63.8	FL-75CFT-64	POA	POA
76.2mm	Tapped	2	73.0	76.5	FL-75CFT-76	POA	POA

DN75CF Rotatable Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-75CFR	£116	€134
63.5mm	Clearance	4	60.3	63.8	FL-75CFR-64	£108	€125
76.2mm	Clearance	4	73.0	76.5	FL-75CFR-76	£80	€92
Blank	Tapped	3	-	-	FL-75CFRT	POA	POA
63.5mm	Tapped	4	60.3	63.8	FL-75CFRT-64	POA	POA
76.2mm	Tapped	4	73.0	76.5	FL-75CFRT-76	POA	POA

DN75CF Flange Hardware & Accessories



Description	Part Code	Price £	Price €
DN75CF Copper gaskets 91.4mm OD 76.4mm ID 2mm thk 10/PK	CG75	£19	€22
DN75CF annealed copper gaskets 91.4mm OD 76.4mm ID 2mm thk 5/PK	CG75A	£18	€21
DN75CF Ag plated copper gaskets 91.4mm OD 76.4mm ID 2mm thk 5/PK	CG75AG	£33	€38
DN75CF Ag plated annealed copper gaskets 76.4mm OD 50.9mm ID 2mm thk 5/PK	CG75AGA	£37	€43
DN75CF Viton® gasket1/pk	VG75	£20	€23
Hex head bolts M8 X 30mm long - for tapped flanges 25/pk	M8-30	£10	€12
Hex head bolts M8 X 50mm long 25/pk inc nuts	M8-50	£15	€18
Hex head bolts M8 X 65mm long - for double sided flanges 25/pk inc nuts	M8-65	£22	€26
Thread lubricating grease 454g tub with brush	A-8009	£38	€44

All dimensions are nominal in millimetres unless otherwise specified

DN100CF 152mm (6") OD Flanges



Specifications:

Material

Flanges 304L St.St.
316L & 316LN also available

Gaskets OF copper, Viton® or nickel

Temperature Range

Using copper gaskets -200°C to 450°C
Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 16
Size M8
Torque 20Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

PLEASE NOTE - Flanges are also available in 316L & 316LN stainless steel. Alternative bore sizes also available. Please contact our sales office for further details.

Features:

- 304L stainless steel as standard.
- 316L & 316LN stainless steel available on request.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Industry standard sizes, compatible with other ConFlat® style flanges.
- US flange sizes also available.

Fig. 1.

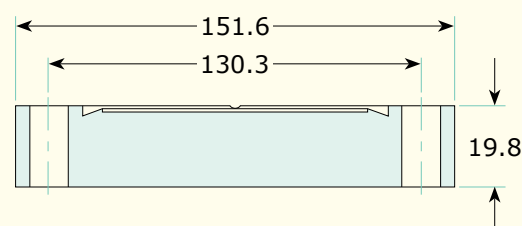


Fig. 2.

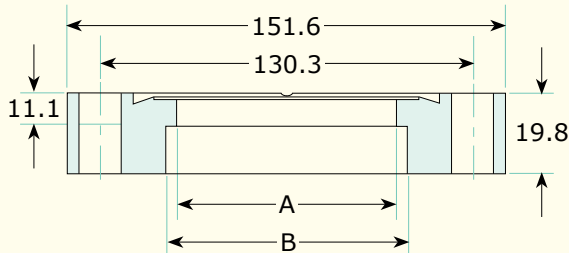


Fig. 3.

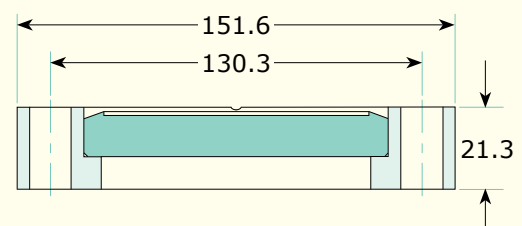
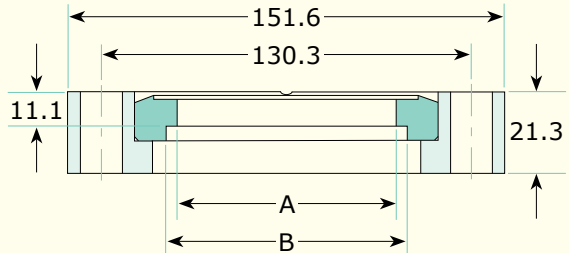
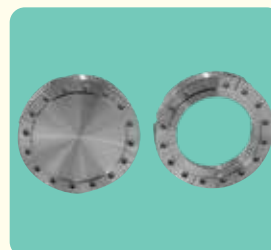


Fig. 4.



All dimensions are nominal in millimetres unless otherwise specified

DN100CF Fixed Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-100CF	£42	€49
101.6	Clearance	2	96.8	101.9	FL-100CF-102	£53	€61
104.0	Clearance	2	101.6	104.5	FL-100CF-104	£60	€69
Blank	Tapped	1	-	-	FL-100CFT	£65	€75
101.6	Tapped	2	96.8	101.9	FL-100CFT-102	£70	€81
104.0	Tapped	2	101.6	104.5	FL-100CFT-104	£70	€81

DN100CF Rotatable Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-100CFR	£60	€69
101.6	Clearance	4	96.8	101.9	FL-100CFR-102	£77	€89
104.0	Clearance	4	101.6	104.5	FL-100CFR-104	POA	POA
Blank	Tapped	3	-	-	FL-100CFRT	POA	POA
101.6	Tapped	4	96.8	101.9	FL-100CFRT-102	POA	POA
104.0	Tapped	4	101.6	104.5	FL-100CFRT-104	POA	POA

DN100CF Flange Hardware & Accessories



Description	Part Code	Price £	Price €
DN100CF Copper gaskets 120.5mm OD 101.7mm ID 2mm thk 10/pk	CG100	£24	€28
DN100CF Annealed angular alignment copper gasket 120.5mm OD 101.7mm ID 3.65mm thk 1/pk	CG100-3.65THK	POA	POA
DN100CF Copper gasket solid 120.5mm OD 2mm thk 1/pk	CG100-SD	POA	POA
DN100CF Viton® gasket 1/pk	VG100	£21	€25
DN100CF wide style Viton® gaskets 2/pk	VGW100	£44	€51
DN100CF Annealed copper gaskets 120.5mm OD 101.7mm ID 2mm thk 5/pk	CG100A	£22	€26
DN100CF Ag plated copper gaskets 120.5mm OD 101.7mm ID 2mm thk 10/pk	CG100AG	£44	€51
DN100CF Ag plated annealed copper gaskets 120.5mm OD 101.7mm ID 2mm thk 5/pk	CG100AGA	£26	€30
DN100CF Nickel gasket 120.5mm OD 101.7mm ID 2mm thk 1/pk	NG100	POA	POA
Hex head bolts M8 X 35mm long - for tapped flanges 25/pk	M8-35	£10	€12
Hex head bolts M8 X 50mm long 25/pk inc nuts	M8-50	£15	€18
Hex head bolts M8 X 70mm long - for double sided flanges 25/pk inc nuts	M8-70	£25	€29
Plate nuts to suit DN100CF flange 12/pk	PLNUT100	£30	€35
Plate nuts / bolts / washers to suit DN100CF flange 12/24/24/pk	PLNUT100SET	£44	€51
Thread lubricating grease 454g tub with brush	A-8009	£38	€44
DN100CF plastic flange cap	FL-CP100CF	£1	€2

Silver plated bolts are available, please call sales office for details.

All dimensions are nominal in millimetres unless otherwise specified

DN125CF 172mm (6¾") OD Flanges



Specifications:

Material

Flanges 304L St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 18

Size M8

Torque 20Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Compatible with other ConFlat® style flanges.

Fig. 1.

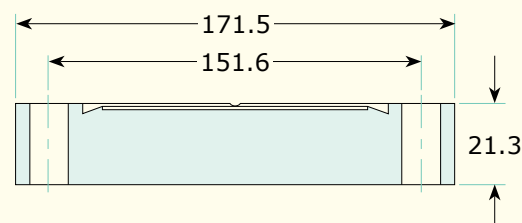


Fig. 2.

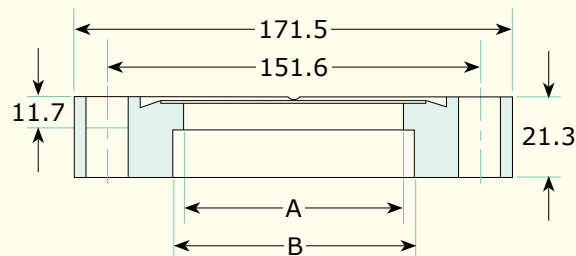


Fig. 3.

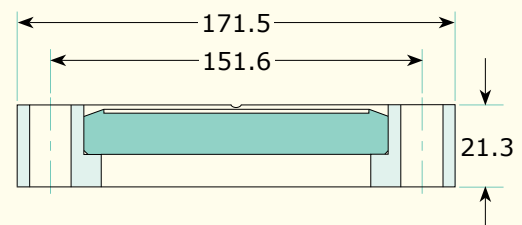
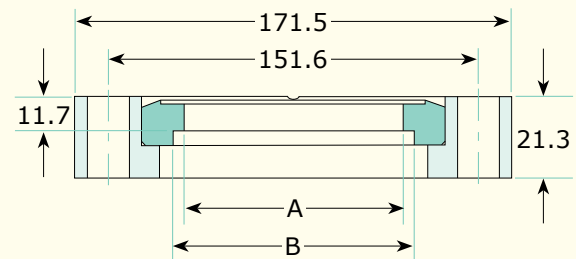


Fig. 4.



All dimensions are nominal in millimetres unless otherwise specified

DN125CF Fixed Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-125CF	£96	€111
101.6mm	Clearance	2	98.4	101.9	FL-125CF-102	POA	POA
127.0mm	Clearance	2	123.8	127.3	FL-125CF-127	POA	POA
Blank	Tapped	1	-	-	FL-125CFT	POA	POA
101.6mm	Tapped	2	98.4	101.9	FL-125CFT-102	POA	POA
127.0mm	Tapped	2	123.8	127.3	FL-125CFT-127	POA	POA

DN125CF Rotatable Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-125CFR	POA	POA
101.6mm	Clearance	4	98.4	101.9	FL-125CFR-102	POA	POA
127.0mm	Clearance	4	123.8	127.3	FL-125CFR-127	POA	POA
Blank	Tapped	3	-	-	FL-125CFRT	POA	POA
101.6mm	Tapped	4	98.4	101.9	FL-125CFRT-102	POA	POA
127.0mm	Tapped	4	123.8	127.3	FL-125CFRT-127	POA	POA

DN125CF Flange Hardware & Accessories



Description	Part Code	Price £	Price €
DN125CF copper gaskets 141.4mm OD 127.2mm ID 2mm thk 10/PK	CG125	£25	€29
DN125CF annealed copper gaskets 141.4mm OD 127.2mm ID 2mm thk 5/PK	CG125A	£25	€29
DN125CF Ag plated copper gaskets 141.4mm OD 127.2mm ID 2mm thkK 5/PK	CG125AG	£21	€25
DN125CF Ag plated annealed copper gaskets 141.4mm OD 127.2mm ID 2mm thk 5/PK	CG125AGA	£36	€42
DN125CF Viton® gasket 1/PK	VG125	£19	€22
Hex head bolts M8 X 35mm long - for tapped flanges 25/pk	M8-35	£10	€12
Hex head bolts M8 X 50mm long 25/pk inc nuts	M8-50	£15	€18
Hex head bolts M8 X 70mm long - for double sided flanges 25/pk inc nuts	M8-70	£25	€29
Thread lubricating grease 454g tub with brush	A-8009	£38	€44

All dimensions are nominal in millimetres unless otherwise specified

DN160CF 203mm (8") OD Flanges



Features:

- 304L stainless steel as standard.
- 316L & 316LN stainless steel available on request.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Industry standard sizes, compatible with other ConFlat® style flanges.
- US flange sizes also available.

Specifications:

Material

Flanges 304L St.St.
316L & 316LN also available

Gaskets OF copper, Viton® or nickel

Temperature Range

Using copper gaskets -200°C to 450°C
Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 20
Size M8
Torque 20Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

PLEASE NOTE - Flanges are also available in 316L & 316LN stainless steel. Alternative bore sizes also available. Please contact our sales office for further details.

Fig. 1.

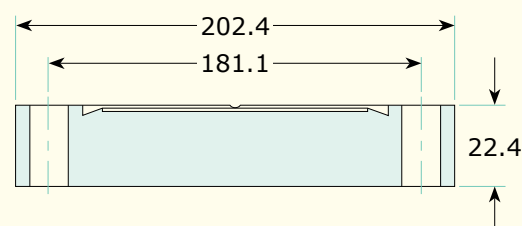


Fig. 2.

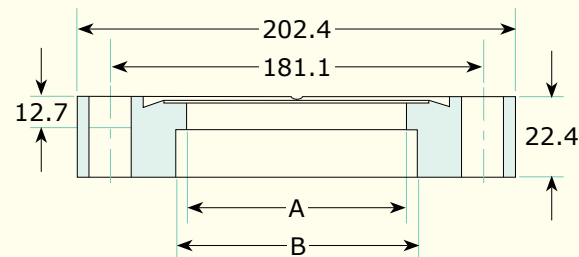


Fig. 3.

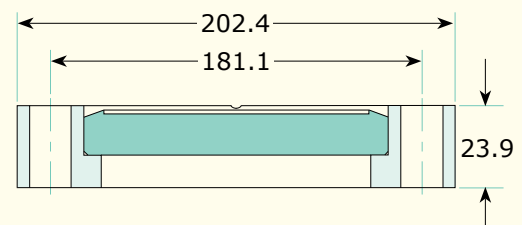
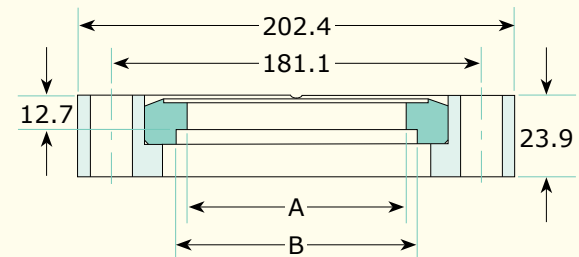
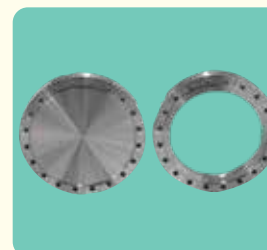


Fig. 4.



All dimensions are nominal in millimetres unless otherwise specified

DN160CF Fixed Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-160CF	£64	€74
152.4	Clearance	2	150.2	152.9	FL-160CF-152	£64	€74
Blank	Tapped	1	-	-	FL-160CFT	£136	€157
152.4	Tapped	2	150.2	152.9	FL-160CFT-152	£99	€114

DN160CF Rotatable Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-160CFR	POA	POA
152.4	Clearance	4	150.2	152.9	FL-160CFR-152	£116	€134
Blank	Tapped	3	-	-	FL-160CFRT	POA	POA
152.4	Tapped	4	150.2	152.9	FL-160CFRT-152	POA	POA

DN160CF Flange Hardware & Accessories

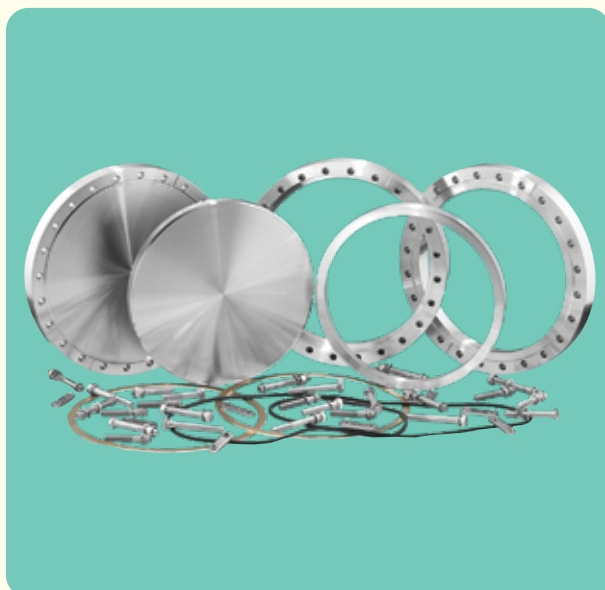


Description	Part Code	Price £	Price €
DN160CF Copper gaskets 171.1mm OD 152.5mm ID 2mm thk 10/pk	CG160	£34	€40
DN160CF Copper gasket solid 171.1mm OD 2mm thk 1/pk	CG160-SD	POA	POA
DN160CF Viton® gasket 1/pk	VG160	£51	€59
DN160CF wide style Viton® gaskets 2/pk	VGW160	£64	€74
DN160CF Annealed copper gaskets 171.1mm OD 152.5mm ID 2mm thk 5/pk	CG160A	£27	€32
DN160CF Ag plated copper gaskets 171.1mm OD 152.5mm ID 2mm thk 10/pk	CG160AG	£61	€71
DN160CF Ag plated annealed copper gaskets 171.1mm OD 152.5mm ID 2mm thk 5/pk	CG160AGA	£47	€55
DN160CF Nickel gasket 171.1mm OD 152.5mm ID 2mm thk 1/pk	NG160	POA	POA
Hex head bolts M8 X 35mm long - for tapped flanges 25/pk	M8-35	£10	€12
Hex head bolts M8 X 60mm long 25/pk inc nuts	M8-60	£20	€23
Hex head bolts M8 X 80mm long - for double sided flanges 25/pk inc nuts	M8-80	£28	€33
Plate nuts to suit DN160CF flange 12/pk	PLNUT160	£38	€44
Plate nuts / bolts / washers to suit DN160CF flange 12/24/24/pk	PLNUT160SET	£48	€56
Thread lubricating grease 454g tub with brush	A-8009	£38	€44
DN160CF plastic flange cap	FL-CP160CF	£1	€2

Silver plated bolts are available, please call sales office for details.

All dimensions are nominal in millimetres unless otherwise specified

DN200CF 254mm (10") OD Flanges



Specifications:

Material

Flanges 304L St.St.
316L & 316LN also available

Gaskets OF copper, Viton® or nickel

Temperature Range

Using copper gaskets -200°C to 450°C
Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 24
Size M8
Torque 20Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

PLEASE NOTE - Flanges are also available in 316L & 316LN stainless steel. Alternative bore sizes also available. Please contact our sales office for further details.

Features:

- 304L stainless steel as standard.
- 316L & 316LN stainless steel available on request.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Industry standard sizes, compatible with other ConFlat® style flanges.
- US flange sizes also available.

Fig. 1.

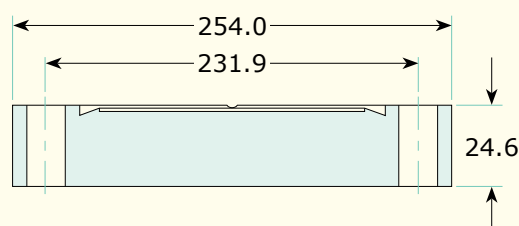


Fig. 2.

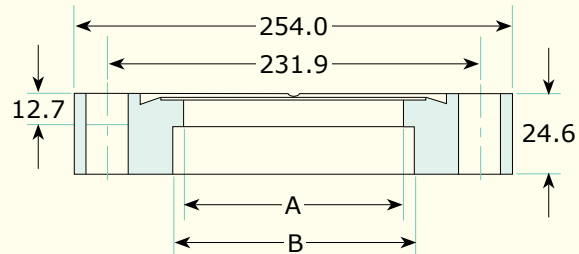


Fig. 3.

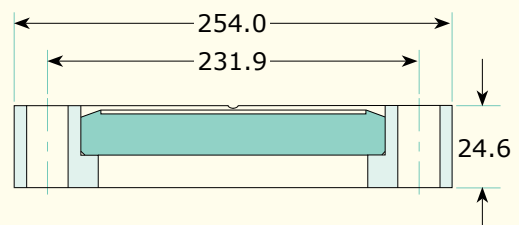
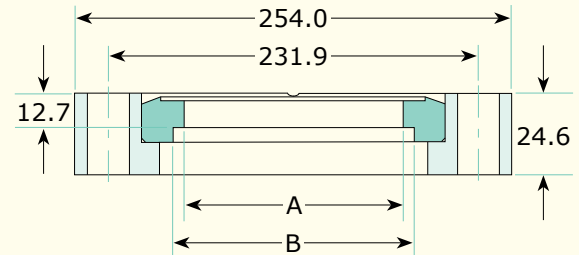


Fig. 4.



All dimensions are nominal in millimetres unless otherwise specified

DN200CF Fixed Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-200CF	£130	€150
203.2	Clearance	2	200.4	203.7	FL-200CF-203	£139	€160
Blank	Tapped	1	-	-	FL-200CFT	POA	POA
203.2	Tapped	2	200.4	203.7	FL-200CFT-203	POA	POA

DN200CF Rotatable Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-200CFR	POA	POA
203.2	Clearance	4	200.4	203.7	FL-200CFR-203	POA	POA
Blank	Tapped	3	-	-	FL-200CFRT	POA	POA
203.2	Tapped	4	200.4	203.7	FL-200CFRT-203	POA	POA

DN200CF Flange Hardware & Accessories



Description	Part Code	Price £	Price €
DN200CF Copper gaskets 222.0mm OD 203.25mm ID 2mm thk 10/pk	CG200	£47	€55
DN200CF Viton® gasket 1/pk	VG200	£39	€45
DN200CF wide style Viton® gaskets 2/pk	VGW200	£95	€110
DN200CF Annealed copper gaskets 222.0mm OD 203.25mm ID 2mm thk 5/pk	CG200A	£36	€42
DN200CF Ag plated copper gaskets 222.0mm OD 203.25mm ID 2mm thk 10/pk	CG200AG	£75	€87
DN200CF Ag plated annealed copper gaskets 222.0mm OD 203.25mm ID 2mm thk 5/pk	CG200AGA	£52	€60
DN200CF Nickel gasket 222.0mm OD 203.25mm ID 2mm thk 1/pk	NG200	POA	POA
Hex head bolts M8 X 50mm long - for tapped flanges 25/pk	M8-50	£12	€14
Hex head bolts M8 X 60mm long 25/pk inc nuts	M8-60	£20	€23
Hex head bolts M8 X 90mm long - for double sided flanges 25/pk inc nuts	M8-90	£35	€41
Plate nuts to suit DN200CF flange 12/PK	PLNUT200	£39	€45
Plate nuts / bolts / washers to suit DN200CF flange 12/24/24/PK	PLNUT200SET	£49	€57
Thread lubricating grease 454g tub with brush	A-8009	£38	€44
DN200CF plastic flange cap	FL-CP200CF	£4	€5

Silver plated bolts are available, please call sales office for details.

All dimensions are nominal in millimetres unless otherwise specified

DN250CF 304mm (12") OD Flanges



Specifications:

Material

Flanges 304L St.St.
316L & 316LN also available

Gaskets OF copper, Viton® or nickel

Temperature Range

Using copper gaskets -200°C to 450°C
Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 32
Size M8
Torque 20Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

PLEASE NOTE - Flanges are also available in 316L & 316LN stainless steel. Alternative bore sizes also available. Please contact our sales office for further details.

Features:

- 304L stainless steel as standard.
- 316L & 316LN stainless steel available on request.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Compatible with other ConFlat® style flanges.**
- US flange sizes also available.

Fig. 1.

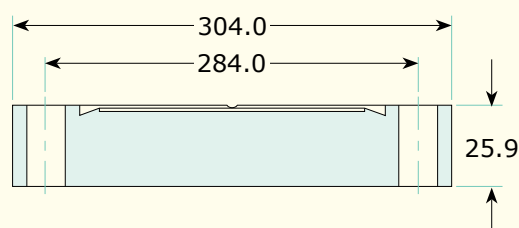


Fig. 2.

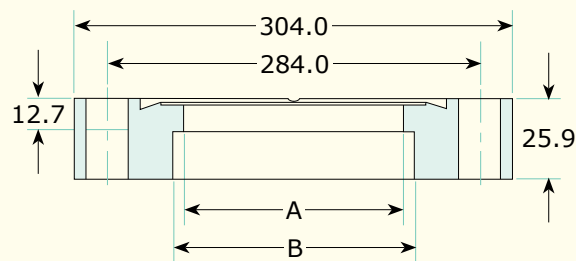


Fig. 3.

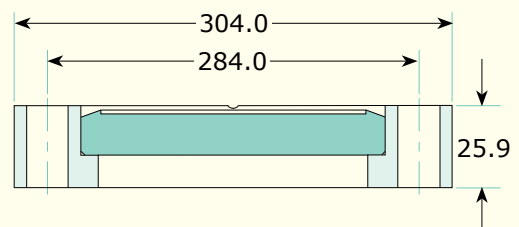
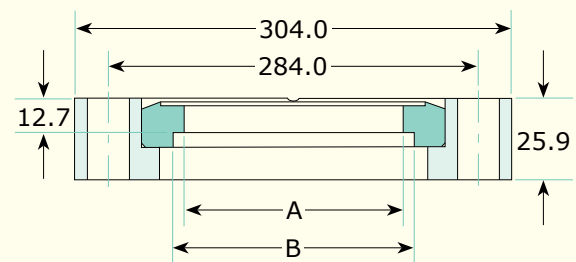


Fig. 4.

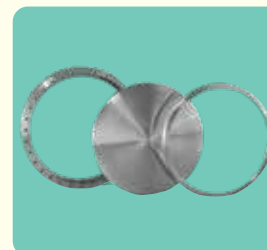


DN250CF Fixed Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-250CF	£238	€274
254.0	Clearance	2	250.9	254.5	FL-250CF-254	£259	€298
Blank	Tapped	1	-	-	FL-250CFT	POA	POA
254.0	Tapped	2	250.9	254.5	FL-250CFT-254	POA	POA

DN250CF Rotatable Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-250CFR	POA	POA
254.0	Clearance	4	250.9	254.5	FL-250CFR-254	POA	POA
Blank	Tapped	3	-	-	FL-250CFRT	POA	POA
254.0	Tapped	4	250.9	254.5	FL-250CFRT-254	POA	POA

DN250CF Flange Hardware & Accessories



Description	Part Code	Price £	Price €
DN250CF Copper gasket 272.87mm OD 254.2mm ID 2mm thk 1/pk **	CG250-273-1	£20	€23
DN250CF Annealed copper gasket 272.87mm OD 254.2mm ID 2mm thk 1/pk **	CG250-273-1A	£38	€44
DN250CF Ag plated copper gasket 272.87mm OD 254.2mm ID 2mm thk 1/pk **	CG250-273-1AG	£24	€28
DN250CF Ag plated annealed copper gasket 272.87mm OD 254.2mm ID 2mm thk 1/pk **	CG250-273-1AGA	£35	€41
DN250CF Copper gasket (to fit VG flanges) 270.1mm OD 254.0mm ID 2mm thk 1/pk **	CG250-270-1	POA	POA
DN250CF Annealed copper gasket (to fit VG flanges) 270.1mm OD 254.0mm ID 2mm thk 1/pk **	CG250-270-1A	POA	POA
DN250CF Ag plated copper gasket (to fit VG flanges) 270.1mm OD 254.0mm ID 2mm thk 1/pk**	CG250-270-1AG	POA	POA
DN250CF Ag plated annealed copper gasket (to fit VG flanges) 270.1mm OD 254.0mm ID 2mm thk 1/pk**	CG250-270-1AGA	POA	POA
DN250CF Copper gasket solid 272.87mm OD 2mm thk 1/pk	CG250-SD	POA	POA
DN250CF Viton® gasket 1/pk	VG250	POA	POA
Hex head bolts M8 X 50mm long - for tapped flanges 32/pk	M8-50-32	£15	€18
Hex head bolts M8 X 60mm long 32/pk inc nuts	M8-60-32	£24	€28
Thread lubricating grease 454g tub with brush	A-8009	£38	€44
DN250CF plastic flange cap	FL-CP250CF	POA	POA

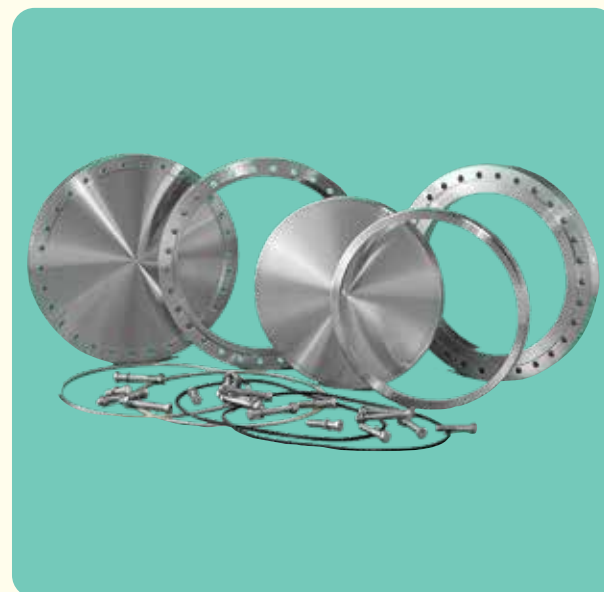
Silver plated bolts are available, please call sales office for details.

** **PLEASE NOTE:** - For DN250CF flanges there are two popular sizes in use. LewVac flanges are compatible with most other manufacturers flanges with the exception of VG manufactured flanges. LewVac flanges are manufactured in accordance with ISO3669 and require gaskets with an OD of 272.87mm, our part code CG250-273-1. Please do not hesitate to contact our sales office for further guidance.

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

DN275 337mm (13¼") OD Flanges

**Specifications:****Material**

Flanges	304L St.St.
Gaskets	OF copper Viton®

Temperature Range

Using copper gaskets	-200°C to 450°C
Using Viton® gaskets	-20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts	30
Size	M10
Torque	35Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Compatible with other ConFlat® style flanges.

Fig. 1.

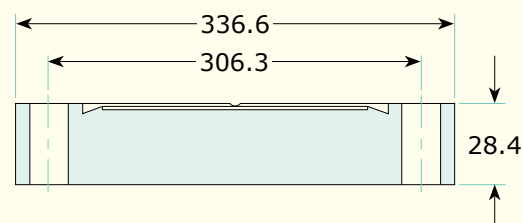


Fig. 2.

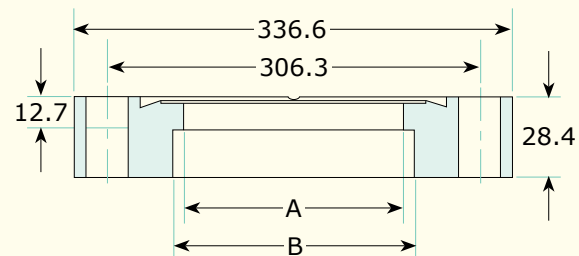


Fig. 3.

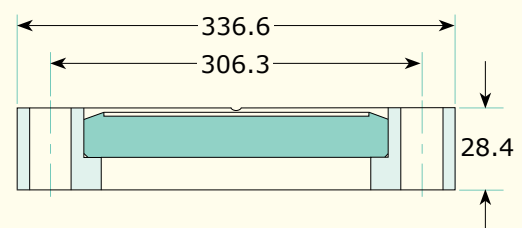
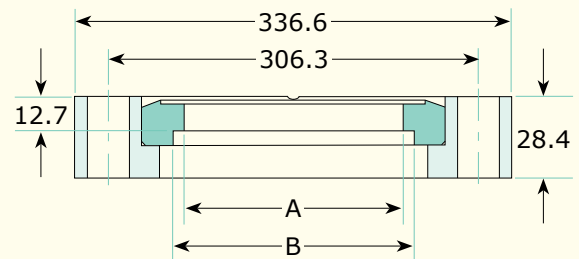


Fig. 4.



All dimensions are nominal in millimetres unless otherwise specified

DN275CF Fixed Flanges 304L

Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-275CF	POA	POA
254.0mm	Clearance	2	247.7	254.5	FL-275CF-254	POA	POA
273.1mm	Clearance	2	266.7	273.4	FL-275CF-273	POA	POA
Blank	Tapped	1	-	-	FL-275CFT	POA	POA
254.0mm	Tapped	2	247.7	254.5	FL-275CFT-254	POA	POA
273.1mm	Tapped	2	266.7	273.4	FL-275CFT-273	POA	POA

DN275CF Rotatable Flanges 304L

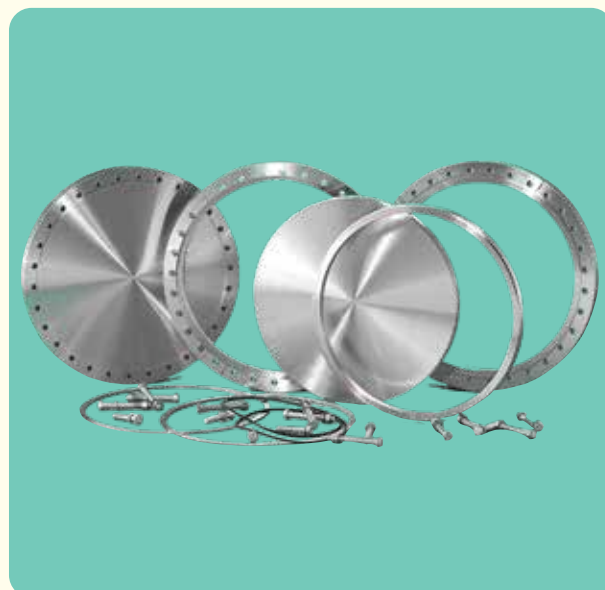
Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-275CFR	POA	POA
254.0mm	Clearance	4	247.7	254.5	FL-275CFR-254	POA	POA
273.1mm	Clearance	4	266.7	273.4	FL-275CFR-273	POA	POA
Blank	Tapped	3	-	-	FL-275CFRT	POA	POA
254.0mm	Tapped	4	247.7	254.5	FL-275CFRT-254	POA	POA
273.1mm	Tapped	4	266.7	273.4	FL-275CFRT-273	POA	POA

DN275CF Flange Hardware & Accessories

Description	Part Code	Price £	Price €
DN275CF copper gaskets 294.36mm OD 274.125mm ID 2mm thk 1/PK	CG275	£20	€23
DN275CF annealed copper gaskets 294.36mm OD 274.125mm ID 2mm thk 1/PK	CG275A	£31	€36
DN275CF Ag plated copper gaskets 294.36mm OD 274.125mm ID 2mm thk 1/PK	CG275AG	£33	€38
DN275CF Ag plated annealed copper gaskets 294.36mm OD 274.125mm ID 2mm thk 1/PK	CG275AGA	POA	POA
DN275CF Viton® gasket 1/PK	VG275	POA	POA
Hex head bolt set M10 x 70mm long 40/PK (inc. nuts & washers)	M10-70-40	POA	POA
Hex head bolt set M10 X 60mm long - for tapped flanges 40/PK (inc. washers)	M10-60-40	POA	POA
Thread lubricating grease 454g tub with brush	A-8009	£38	€44

All dimensions are nominal in millimetres unless otherwise specified

DN300CF 368mm (14½") OD Flanges



Specifications:

Material

Flanges 304L St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 32

Size M10

Torque 35Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Compatible with other ConFlat® style flanges.

Fig. 1.

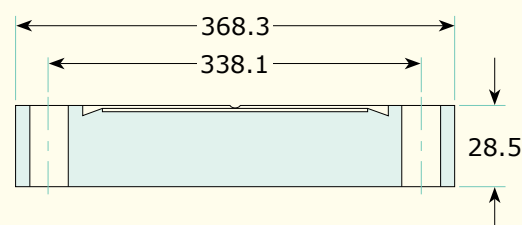


Fig. 2.

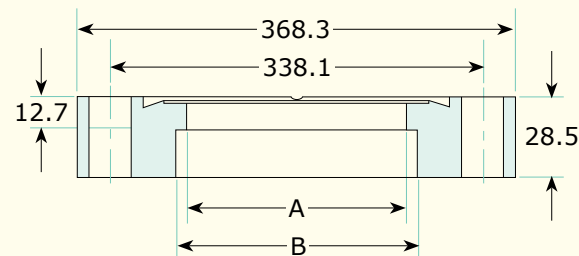


Fig. 3.

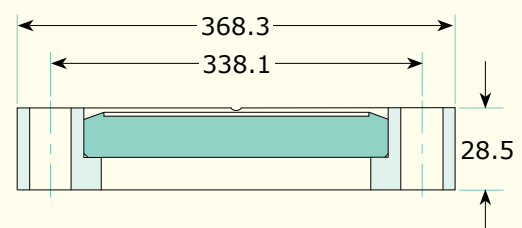
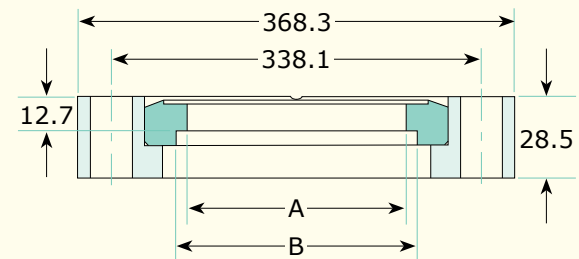


Fig. 4.



All dimensions are nominal in millimetres unless otherwise specified

DN300CF Fixed Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-300CF	POA	POA
304.8mm	Clearance	2	298.5	305.5	FL-300CF-305	POA	POA
Blank	Tapped	1	-	-	FL-300CFT	POA	POA
304.8mm	Tapped	2	298.5	305.5	FL-300CFT-305	POA	POA

DN300CF Rotatable Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-300CFR	POA	POA
304.8mm	Clearance	4	298.5	305.5	FL-300CFR	POA	POA
Blank	Tapped	3	-	-	FL-300CFRT	POA	POA
304.8mm	Tapped	4	298.5	305.5	FL-300CFRT-305	POA	POA

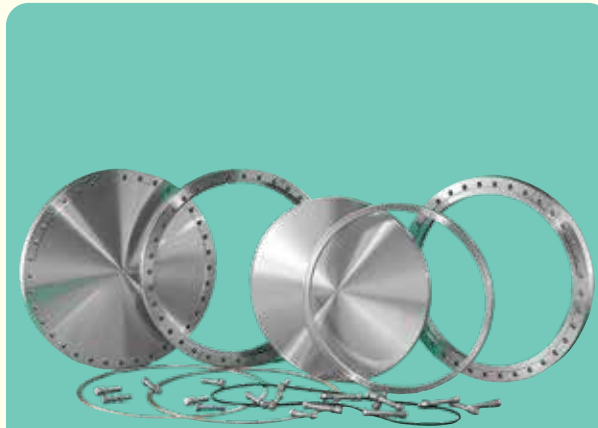
DN300CF Flange Hardware & Accessories



Description	Part Code	Price £	Price €
DN300CF copper gasket 368mm OD 307.6mm ID 2mm thk 1/PK	CG300	£45	€52
DN300CF annealed copper gasket 368mm OD 307.6mm ID 2mm THK 1/pk	CG300A	POA	POA
DN300CF Ag plated copper gasket 368mm OD 307.6mm ID 2mm thk 1/pk	CG300AG	POA	POA
DN300CF Ag plated annealed copper gasket 368mm OD 307.6mm ID 2mm thk 1/pk	CG300AGA	POA	POA
DN300CF Viton® gasket 1/PK	VG300	POA	POA
Hex head bolt set M10 x 70mm long 40/PK (inc. nuts & washers)	M10-70-40	POA	POA
Hex head bolt set M10 X 60mm long - for tapped flanges 40/PK (inc. washers)	M10-60-40	POA	POA
Thread lubricating grease 454g tub with brush	A-8009	£38	€44

All dimensions are nominal in millimetres unless otherwise specified

DN350CF 419 (16½") OD Flanges



Features:

- 304L stainless steel as standard.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Compatible with other ConFlat® style flanges.

Fig. 1.

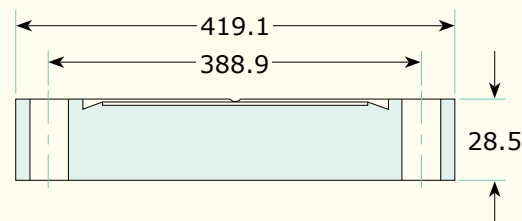
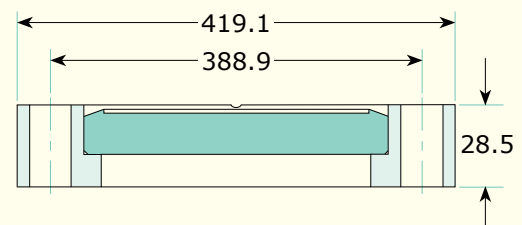


Fig. 3.



Specifications:

Material

Flanges 304L St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 36

Size M10

Torque 35Nm

Vacuum Range To below 1×10^{-13} Torr

* - Increased upper limit for intermittent use

Fig. 2.

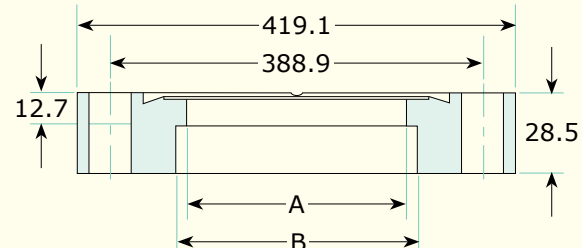
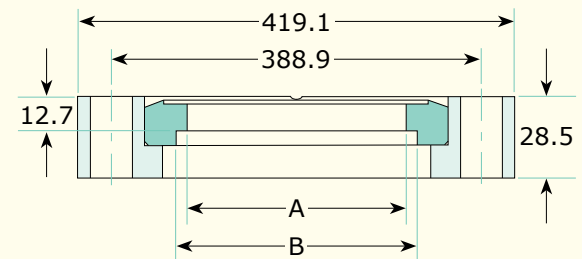


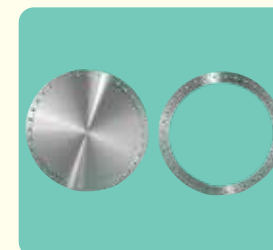
Fig. 4.



All dimensions are nominal in millimetres unless otherwise specified

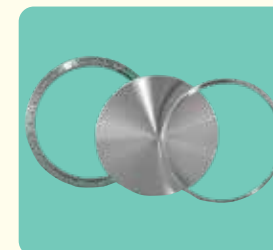
Email : sales@lewvac.co.uk - Tel : +44 (0)1444 233372 - Fax : +44 (0)1444 233392 - Website : www.lewvac.co.uk

DN350CF Fixed Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-350CF	POA	POA
355.6mm	Clearance	2	349.3	356.1	FL-350CF-356	POA	POA
Blank	Tapped	1	-	-	FL-350CFT	POA	POA
355.6mm	Tapped	2	349.3	356.1	FL-350CFT-356	POA	POA

DN350CF Rotatable Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-350CFR	POA	POA
355.6mm	Clearance	4	349.3	356.1	FL-350CFR-356	POA	POA
Blank	Tapped	3	-	-	FL-350CFRT	POA	POA
355.6mm	Tapped	4	349.3	356.1	FL-350CFRT-356	POA	POA

DN350CF Flange Hardware & Accessories

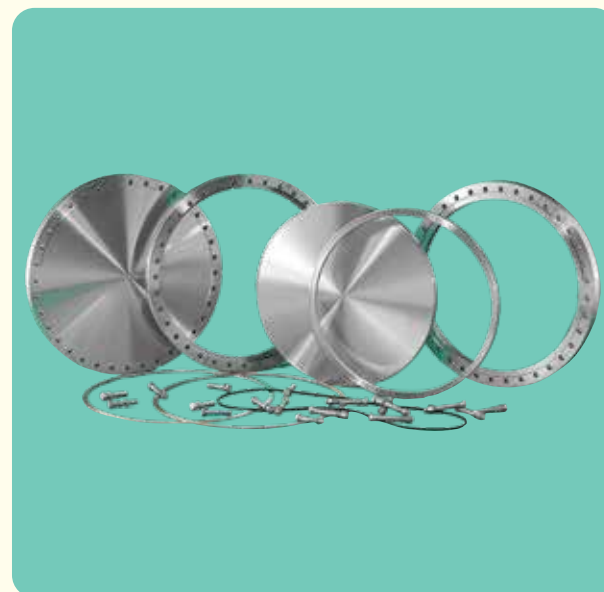


Description	Part Code	Price £	Price €
DN350CF copper gasket 356.5mm OD 376.7mm ID 2mm thk 1/PK	CG350	£24	€28
DN350CF annealed copper gasket 356.5mm OD 376.7mm ID 2mm thk 1/PK	CG350A	£31	€36
DN350CF Ag plated copper gasket 356.5mm OD 376.7mm ID 2mm thk 1/PK	CG350AG	£31	€36
DN350CF Ag plated annealed copper gasket 356.5mm OD 376.7mm ID 2mm thk 1/PK	CG350AGA	£43	€50
DN350CF Viton® gasket 1/PK	VG350	POA	POA
Hex head bolt set M10 x 70mm long 40/PK (inc. nuts & washers)	M10-70-40	POA	POA
Hex head bolt set M10 X 60mm long - for tapped flanges 40/PK (inc. washers)	M10-60-40	POA	POA
Thread lubricating grease 454g tub with brush	A-8009	£38	€44

All dimensions are nominal in millimetres unless otherwise specified

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DN400CF 469.9mm (18.5") OD Flanges

**Specifications:****Material**

Flanges	304L St.St.
Gaskets	OF copper or Viton®

Temperature Range

Using copper gaskets	-200°C to 450°C
Using Viton® gaskets	-20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts	40
Size	M10
Torque	35Nm

Vacuum Range To below 1×10^{-13} Torr

* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Compatible with other ConFlat® style flanges.

Fig. 1.

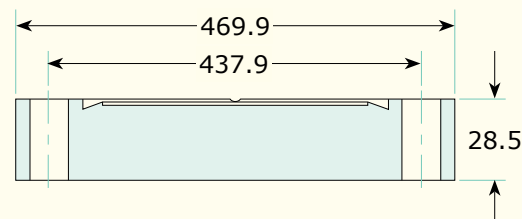


Fig. 2.

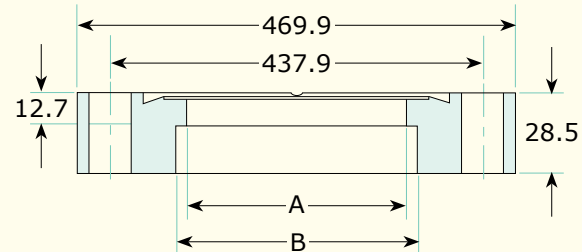


Fig. 3.

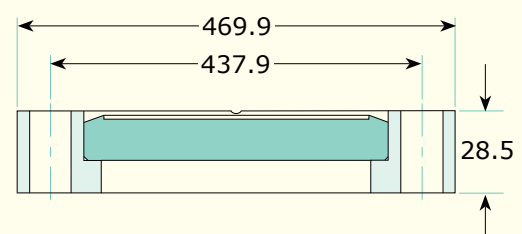
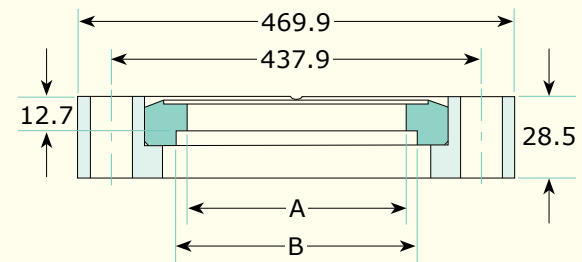
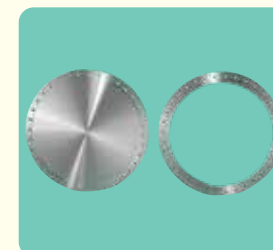


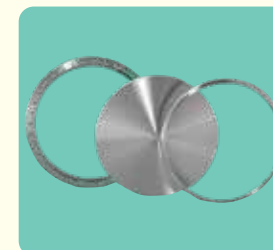
Fig. 4.



All dimensions are nominal in millimetres unless otherwise specified

DN400CF Fixed Flanges 304L

Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-400CF	POA	POA
406mm	Clearance	2	401.0	406.5	FL-400CF-406	POA	POA
Blank	Tapped	1	-	-	FL-400CFT	POA	POA
406mm	Tapped	2	401.0	406.5	FL-400CFT-406	POA	POA

DN400CF Rotatable Flanges 304L

Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-400CFR	POA	POA
406mm	Clearance	4	401.0	406.5	FL-400CFR-406	POA	POA
Blank	Tapped	3	-	-	FL-400CFRT	POA	POA
406mm	Tapped	4	401.0	406.5	FL-400CFRT-406	POA	POA

DN400CF Flange Hardware & Accessories

Description	Part Code	Price £	Price €
DN400CF copper gasket 423.9mm OD 405mm ID 2mm thk 1/PK	CG400	POA	POA
DN400CF annealed copper gasket 423.9mm OD 405mm ID 2mm thk 1/PK	CG400A	POA	POA
DN400CF Ag plated copper gasket 423.9mm OD 405.4mm ID 2mm thk 1/PK	CG400AG	POA	POA
DN400CF Ag plated annealed copper gasket 23.9mm OD 405.4mm ID 2mm thk 1/PK	CG400AGA	POA	POA
Hex head bolt set M10 x 70mm long 40/PK (inc. nuts & washers)	M10-70-40	POA	POA
Hex head bolt set M10 X 60mm long - for tapped flanges 40/PK (inc. washers)	M10-60-40	POA	POA
Thread lubricating grease 454g tub with brush	A-8009	£38	€44

All dimensions are nominal in millimetres unless otherwise specified

DN300CF* 356mm (14") OD Flanges



Specifications:

Material

Flanges 304L St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Bolt Fastening

Number of bolts 30

Size M10

Torque 35Nm

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- Metal or Viton® seals.
- Tapped or clearance bolt holes.
- Compatible with other ConFlat® style flanges.

Fig. 1.

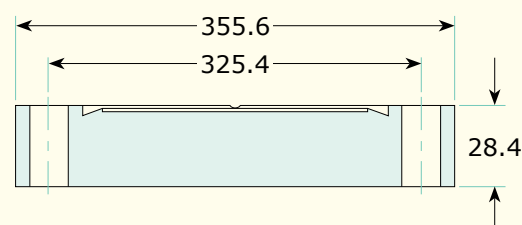


Fig. 2.

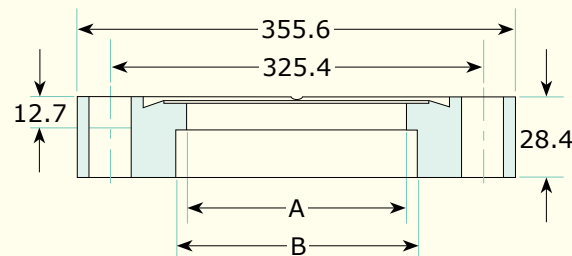


Fig. 3.

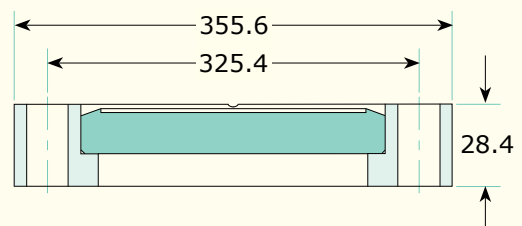
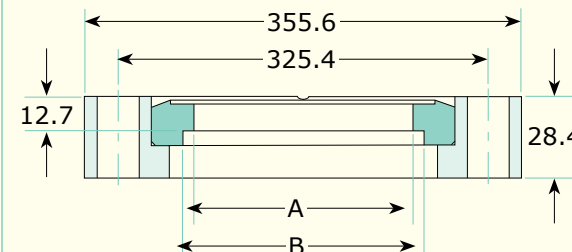


Fig. 4.



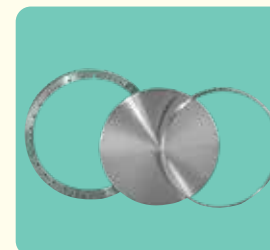
All dimensions are nominal in millimetres unless otherwise specified

DN300CF** Fixed Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	1	-	-	FL-1400CF	POA	POA
12" (304.8mm)	Clearance	2	298.5	305.3	FL-1400-1200CF	POA	POA
Blank	Tapped	1	-	-	FL-1400CFT	POA	POA
12" (304.8mm)	Tapped	2	298.5	305.3	FL-1400-1200CFT	POA	POA

DN300CF** Rotatable Flanges 304L



Use With Tube OD	Bolt Hole	Fig.	A	B	Part Code	Price £	Price €
Blank	Clearance	3	-	-	FL-1400CFR	POA	POA
12" (304.8mm)	Clearance	4	298.5	305.3	FL-1400-1200CFR	POA	POA
Blank	Tapped	3	-	-	FL-1400CFRT	POA	POA
12" (304.8mm)	Tapped	4	298.5	305.3	FL-1400-1200CFRT	POA	POA

DN300CF** Flange Hardware & Accessories



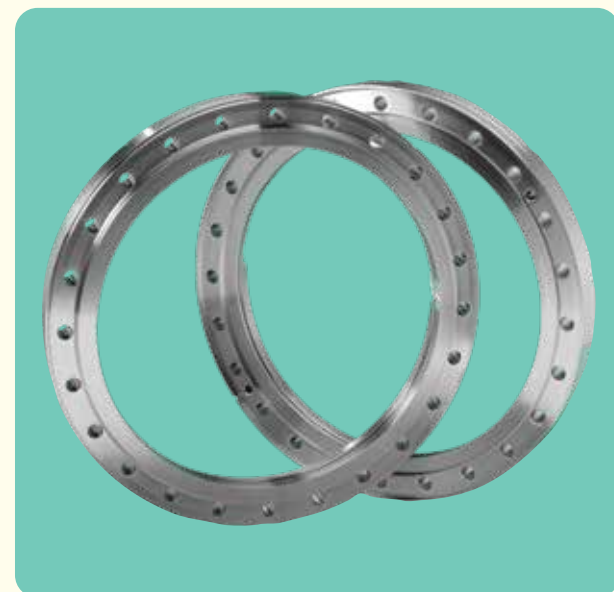
Description	Part Code	Price £	Price €
Cu gasket to suit 14" OD CF flange 1/pk	CG-US14	£21	€25
Cu annealed gasket to suit 14" OD CF flange 1/pk	CG-US14A	£33	€38
Cu Ag plated gasket to suit 14" OD CF flange 1/pk	CG-US14AG	£25	€29
Cu Ag plated annealed gasket to suit 14" OD CF flange 5/PK	CG-US14AGA	£36	€42
Viton® gasket to suit 14" OD CF flange 1/pk	VG-US14	POA	POA
Thread lubricating grease 454g tub with brush	A-8009	£38	€44

Imperial size bolts etc are available, please call our sales office for details.

** PLEASE NOTE: - No ISO standard exists for DN300CF flanges with an OD of 14" (356mm). If in doubt, please contact our sales office.

All dimensions are nominal in millimetres unless otherwise specified

Wire Seal Flanges



Specifications:

Material

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

Please see page 3:17 for wire seal gaskets

Features:

- 304L stainless steel as standard.
- Dished versions available to reduce weight and cost.
- Metal or Viton® seals.

Fig. 1.

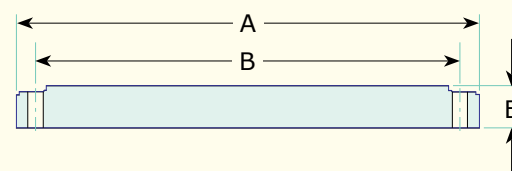


Fig. 2.

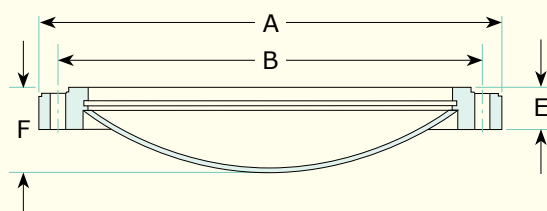


Fig. 3.

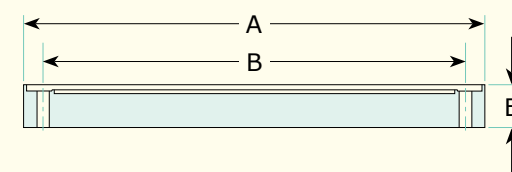


Fig. 4.

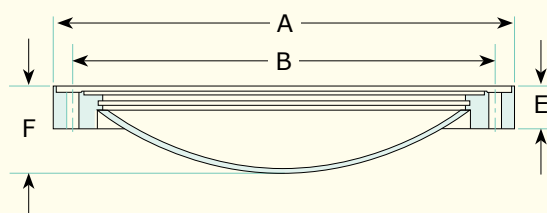


Fig. 5.

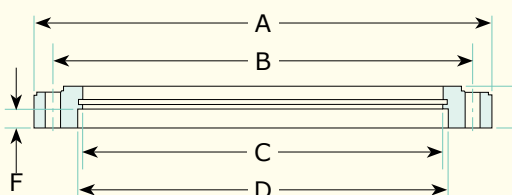
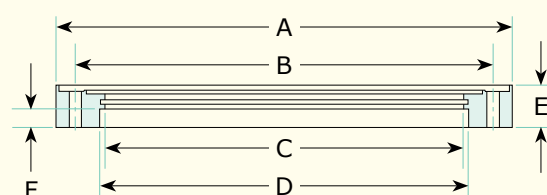


Fig. 6.



All dimensions are nominal in millimetres unless otherwise specified

Wire Seal Flanges Male Blank



Nominal Flange OD	Bolt Holes	Fig.	A	B	E	F	Part Code	Price £	Price €
12-3/8"	24	1	314.3	288.1	28.6	-	FL-WF1200-000-M	POA	POA
12-3/8"	24	2	314.3	288.1	28.6	59.2	FL-WF1200-000-M-D	POA	POA
14-5/8"	32	1	371.5	345.3	28.6	-	FL-WF1400-000-M	POA	POA
14-5/8"	32	2	371.5	345.3	28.6	59.2	FL-WF1400-000-M-D	POA	POA
17-1/4"	36	1	438.2	399.2	28.6	-	FL-WF1700-000-M	POA	POA
17-1/4"	36	2	438.2	399.2	28.6	66.0	FL-WF1700-000-M-D	POA	POA
19-9/16"	36	1	496.9	454.0	33.3	-	FL-WF1900-000-M	POA	POA
19-9/16"	36	2	496.9	454.0	33.3	77.2	FL-WF1900-000-M-D	POA	POA
22-1/8"	36	1	562.0	512.7	38.1	-	FL-WF2200-000-M	POA	POA
22-1/8"	36	2	562.0	512.7	38.1	88.9	FL-WF2200-000-M-D	POA	POA
27-1/8"	40	1	689.0	656.4	44.5	-	FL-WF2700-000-M	POA	POA
27-1/8"	40	2	689.0	656.4	44.5	112.5	FL-WF2700-000-M-D	POA	POA

Wire Seal Flanges Female Blank



Nominal Flange OD	Bolt Holes	Fig.	A	B	E	F	Part Code	Price £	Price €
12-3/8"	24	3	314.3	288.1	28.6	-	FL-WF1200-000-F	POA	POA
12-3/8"	24	4	314.3	288.1	28.6	59.2	FL-WF1200-000-F-D	POA	POA
14-5/8"	32	3	371.5	345.3	28.6	-	FL-WF1400-000-F	POA	POA
14-5/8"	32	4	371.5	345.3	28.6	59.2	FL-WF1400-000-F-D	POA	POA
17-1/4"	36	3	438.2	399.2	28.6	-	FL-WF1700-000-F	POA	POA
17-1/4"	36	4	438.2	399.2	28.6	66.0	FL-WF1700-000-F-D	POA	POA
19-9/16"	36	3	496.9	454.0	33.3	-	FL-WF1900-000-F	POA	POA
19-9/16"	36	4	496.9	454.0	33.3	77.2	FL-WF1900-000-F-D	POA	POA
22-1/8"	36	3	562.0	512.7	38.1	-	FL-WF2200-000-F	POA	POA
22-1/8"	36	4	562.0	512.7	38.1	88.9	FL-WF2200-000-F-D	POA	POA
27-1/8"	40	3	689.0	656.4	44.5	-	FL-WF2700-000-F	POA	POA
27-1/8"	40	4	689.0	656.4	44.5	112.5	FL-WF2700-000-F-D	POA	POA

Wire Seal Flanges Male Bored



Nominal Flange OD	Bolt Holes	Fig.	A	B	C	D	E	F	Part Code	Price £	Price €
12-3/8"	24	5	314.3	288.1	247.7	254.0	28.6	12.7	FL-WF1200-1000-M	POA	POA
14-5/8"	32	5	371.5	345.3	298.5	304.8	28.6	12.7	FL-WF1400-1200-M	POA	POA
17-1/4"	36	5	438.2	399.2	349.3	355.6	28.6	12.7	FL-WF1700-1400-M	POA	POA
19-9/16"	36	5	496.9	454.0	400.1	406.4	33.3	12.7	FL-WF1900-1600-M	POA	POA
22-1/8"	36	5	562.0	512.7	450.9	457.2	38.1	12.7	FL-WF2200-1800-M	POA	POA
27-1/8"	40	5	689.0	656.4	603.3	609.6	44.5	16.0	FL-WF2700-2400-M	POA	POA

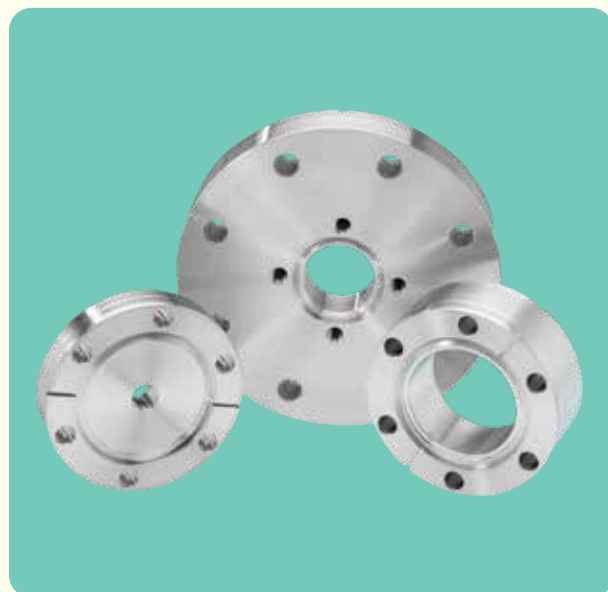
Wire Seal Flanges Female Bored



Nominal Flange OD	Bolt Holes	Fig.	A	B	C	D	E	F	Part Code	Price £	Price €
12-3/8"	24	6	314.3	288.1	247.7	254.0	28.6	12.7	FL-WF1200-1000-F	POA	POA
14-5/8"	32	6	371.5	345.3	298.5	304.8	28.6	12.7	FL-WF1400-1200-F	POA	POA
17-1/4"	36	6	438.2	399.2	349.3	355.6	28.6	12.7	FL-WF1700-1400-F	POA	POA
19-9/16"	36	6	496.9	454.0	400.1	406.4	33.3	12.7	FL-WF1900-1600-F	POA	POA
22-1/8"	36	6	562.0	512.7	450.9	457.2	38.1	12.7	FL-WF2200-1800-F	POA	POA
27-1/8"	40	6	689.0	656.4	603.3	609.6	44.5	16.0	FL-WF2700-2400-F	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

Special Purpose CF Flanges

**Specifications:****Material**

Flanges & fittings 304L St.St.

Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

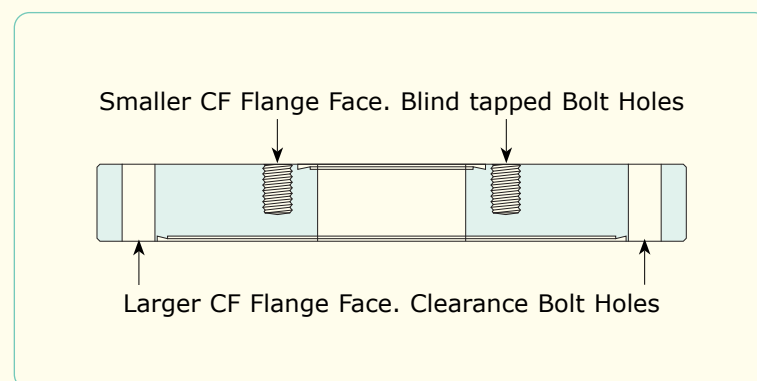
* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- 316LN stainless steel also available.
- Metal or Viton® seals.
- Sexless flanges - CF system.
- Tapped or clearance bolt holes.
- Industry standard sizes, compatible with other ConFlat® style flanges (Except DN250CF).

Zero Length CF Adapter Flanges

These flanges are manufactured with different size CF flange on either side of the flange. They allow direct assembly of two different sizes of CF flanges with minimal impact on the length added to your system to accomplish the transition. Zero-length reducers are the length of 1 standard flange.

**Double Sided CF Flanges**

These flanges are manufactured with the same size CF flange on both sides. They are installed between two flanges also of the same size. This is a convenient and efficient way to add a spacer, or customize with a radial port to add a variety of vacuum accessories to your system, such as measurement devices, shutters and valves. Double sided CF flanges have special hardware to accommodate the width of three CF flanges for this seal assembly.

Adaptive CF Flanges

These flanges are manufactured in a variety of useful designs. Adapt from a single or double sided CF to 1 or 2 female NPT side ports, or a double sided CF with a CF133 machined side port. These flanges are ideal for adding vacuum accessories to your system such as measurement devices, shutters and valves.

Zero Length CF Adapter Flanges



Specifications:

Material

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

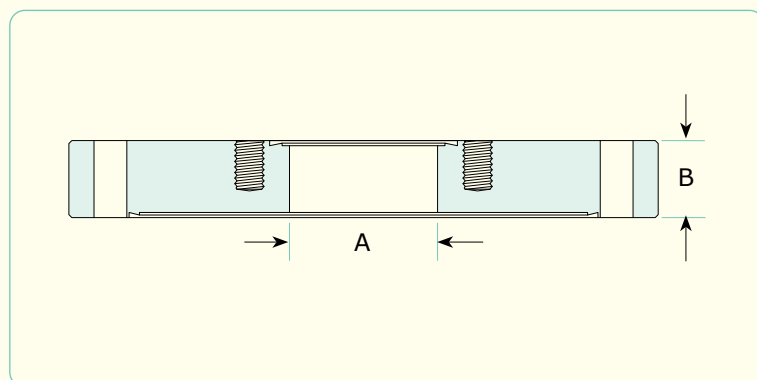
Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1 x 10⁻¹³ Torr

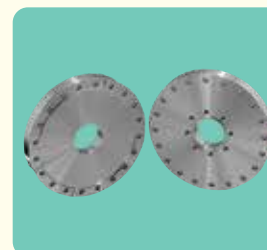
* - Increased upper limit for intermittant use

Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Metal or Viton® seals.
- Different size CF flange on each side.
- Minimal impact on space requirement.
- Metric threads as standard, imperial threads available on request.



Zero Length Adapters



Large Flange	Small Flange	A	B	Part Code	Price £	Price €
DN40CF	DN16CF	15.7	12.7	FL-Z40-16	£35	€41
DN63CF	DN16CF	15.7	17.3	FL-Z63-16	£55	€64
DN63CF	DN40CF	38.1	17.3	FL-Z63-40	£63	€73
DN100CF	DN16CF	15.7	19.8	FL-Z100-16	£74	€86
DN100CF	DN40CF	38.1	19.8	FL-Z100-40	£75	€87
DN100CF	DN63CF	63.5	19.8	FL-Z100-63	£85	€98
DN160CF	DN16CF	15.7	22.4	FL-Z160-16	£143	€165
DN160CF	DN40CF	38.1	22.4	FL-Z160-40	£107	€124
DN160CF	DN63CF	63.5	22.4	FL-Z160-63	£117	€135
DN160CF	DN100CF	101.6	22.4	FL-Z160-100	£125	€144
DN200CF	DN40CF	38.1	24.6	FL-Z200-40	£165	€190
DN200CF	DN63CF	63.5	24.6	FL-Z200-63	£174	€201
DN200CF	DN100CF	101.6	24.6	FL-Z200-100	£179	€206
DN200CF	DN160CF	152.4	24.6	FL-Z200-160	£184	€212
DN250CF	DN40CF	38.1	25.9	FL-Z250-40	£312	€359
DN250CF	DN63CF	63.5	25.9	FL-Z250-63	£345	€397
DN250CF	DN100CF	101.6	25.9	FL-Z250-100	£355	€409
DN250CF	DN160CF	152.4	25.9	FL-Z250-160	£365	€420
DN250CF	DN200CF	203.2	25.9	FL-Z250-200	£375	€432

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

Double Sided CF Flanges



Specifications:

Material

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

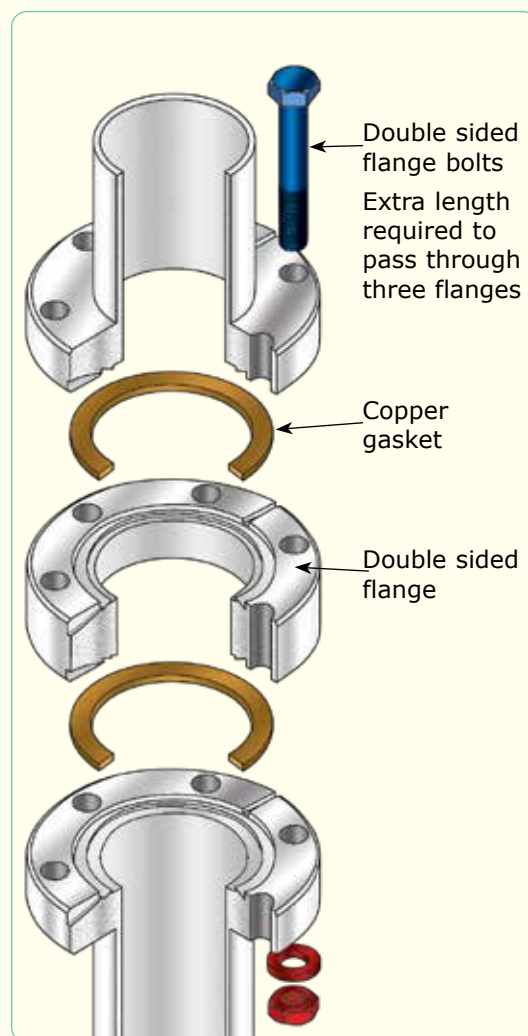
Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

Features:

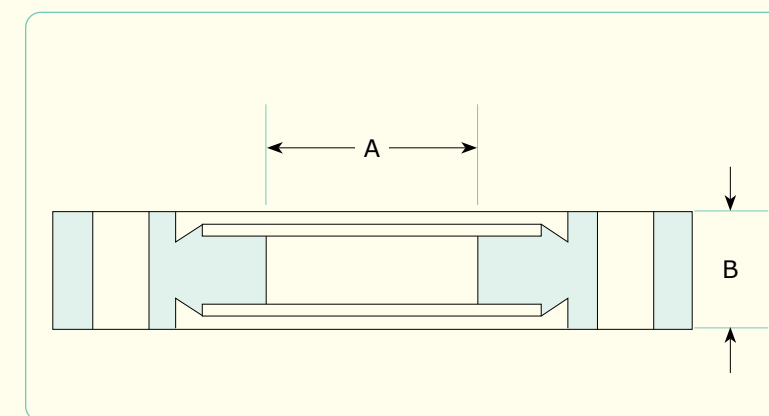
- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Metal or Viton® seals.
- Same size CF flange on each side.
- Minimal impact on space requirement.
- US flange sizes also available.



Double Sided Flanges



Flange	A	B	Part Code	Price £	Price €
DN16CF	-	7.6	FL-DS16B	£19	€22
DN16CF	-	12.7	FL-DS16B-12.7	£34	€40
DN16CF	6.5	7.6	FL-DS16-7	£32	€37
DN16CF	9.7	7.6	FL-DS16-10	£25	€29
DN16CF	12.8	7.6	FL-DS16-13	£32	€37
DN16CF	16	7.6	FL-DS16-16	£31	€36
DN16CF	16	12.7	FL-DS16-16-12.7	£34	€40
DN40CF	-	12.7	FL-DS40B	£30	€35
DN40CF	-	19.1	FL-DS40B-19.1	£79	€91
DN40CF	-	25.4	FL-DS40B-25.4	£90	€104
DN40CF	6.5	12.7	FL-DS40-7	£56	€65
DN40CF	12.8	12.7	FL-DS40-12.8	£56	€65
DN40CF	19.3	12.7	FL-DS40-19	£56	€65
DN40CF	25.7	12.7	FL-DS40-26	£56	€65
DN40CF	32	12.7	FL-DS40-32	£56	€65
DN40CF	38.4	12.7	FL-DS40-38	£30	€35
DN40CF	38.4	19.1	FL-DS40-38-19.1	POA	POA
DN40CF	38.4	25.4	FL-DS40-38-25.4	POA	POA
DN63CF	-	17.3	FL-DS63B	£59	€68
DN63CF	38.4	17.3	FL-DS63-38	POA	POA
DN63CF	51.1	17.3	FL-DS63-51	POA	POA
DN63CF	63.8	17.3	FL-DS63-64	£59	€68
DN63CF	69.8	17.3	FL-DS63-70	POA	POA
DN100CF	-	19.8	FL-DS100B	£103	€119
DN100CF	101.9	19.8	FL-DS100-102	£85	€98
DN160CF	-	22.1	FL-DS160B	POA	POA
DN160CF	152.9	22.1	FL-DS160-153	£155	€179
DN200CF	-	24.6	FL-DS200B	£244	€281
DN200CF	203.7	24.6	FL-DS200-204	£252	€290
DN250CF	-	25.9	FL-DS250B	£345	€397
DN250CF	255.0	25.9	FL-DS250-255	£345	€397



All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

Special Purpose CF Flanges



Specifications:

Material

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Metal or Viton® seals.
- Ideal for adding vacuum accessories.
- Minimal impact on space requirement.

Fig. 1.

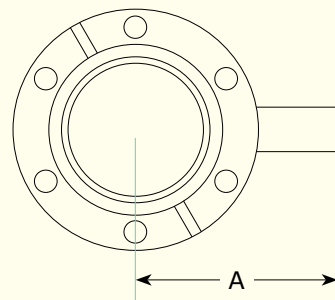
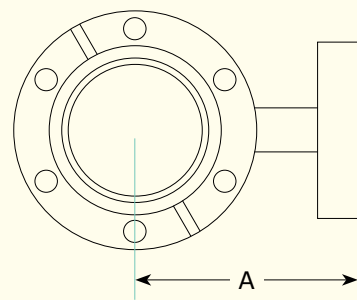


Fig. 2.



Special Purpose Flanges



Description	Fig.	Part Code	Price £	Price €
DN40CF 12.7mm thick double sided flange bored to 38.4mm with 6.35mm side tube A = 60mm	1	FL-DS40-SP	POA	POA
DN40CF 12.7mm double sided flange bored to 38.4mm with 2 X 6.35mm side tubes A = 60mm	-	FL-DS40-2SP	POA	POA
DN40CF 19.1mm thick double sided flange bored to 38.4mm with DN16CF side port (12.7mm OD tube), A = 54mm	2	FL-DS40-SP16CF	£129	€149
DN40CF 12.7mm thick double sided flange bored to 38.4mm with 2 X DN16CF side port (6.35mm OD tube), A = 54mm	-	FL-DS40-2SP16CF	£175	€202
DN63CF 17.3mm thick double sided flange bored to 63.8mm with DN16CF side port, A = 80mm (12.7mm OD tube)	2	FL-DS63-SP16CF	£171	€197
DN100CF 19.8mm thick double sided flange bored to 101.9mm with DN16CF side port, A = 110mm (12.7mm OD tube)	2	FL-DS100-SP16CF	£221	€255

Double sided flanges with side mounted up-to-air valves are available, please see catalogue section 5.8.

CF Fittings

**Specifications:****Material**

Flanges & fittings	304L St.St.
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Temperature Range

Using copper gaskets	-200°C to 450°C
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Using Viton® gaskets	-20°C to 150°C (200°C*)
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Vacuum Range	To below 1×10^{-13} Torr
---------------------	-----------------------------------

* - Increased upper limit for intermittent use

Features:

- Reusable flanges.
- 304L Stainless steel as standard.
- 316LN stainless steel also available.
- All metal seals.
- Sexless flanges - CF system.
- Rotatable flanges for simplified bolt hole alignment - CF system.
- Tapped or clearance bolt holes.
- Adapters to other flange systems available.
- Compatible with metric and imperial (US) sizes.
- Industry standard sizes, compatible with other ConFlat® style flanges (Except DN250CF - contact sales office for further details)

Half Nipples (Tubulated Flanges)

These fittings are manufactured with a flange on one end and bare tubing on the other. Half nipples are often welded onto a custom vacuum system or instrument by a customer with in-house welding capabilities, however, these fittings can also be used with quick connect compression fittings to make a vacuum tight connection without welding. LewVac supplies standard half nipples in 304L stainless steel, other materials are available on request.

Full Nipples (Straight Connectors)

These fittings are manufactured with a flange on each end of a straight section of tubing. Nipples are used to create a weld free straight connection within a vacuum system. Nipples are also used as straight adapters between different tubing sizes or flange types. These fittings are available in all CF sizes and flange types. LewVac supplies standard nipples in 304L stainless steel, other materials are available on request.

All dimensions are nominal in millimetres unless otherwise specified

Elbows

These fittings are manufactured with a flange on each end of a curved section of tubing. Elbows accommodate turns or alignment considerations for vacuum system design. Elbows are offered in 4 designs: 45° radius elbow, 90° radius elbow, 90° mitred elbow and 90° mitred high conductance elbow, to accommodate a wide variety of system configurations. LewVac supplies standard elbows in 304L stainless steel, other materials are available on request.

Tees

These fittings are manufactured with a flange on each end of a "T" shaped section of tubing. Tees accommodate junctions or alignment considerations for vacuum system design. Tees are also used as junction adapters between different tubing sizes or flange types. LewVac supplies standard tees in 304L stainless steel, other materials are available on request.

Crosses

These fittings are manufactured with a flange on each end of an "X" shaped section of tubing. Crosses accommodate junctions or alignment considerations for vacuum system design. Crosses are also used as junction adapters between different tubing sizes or flange types. LewVac supplies standard crosses in 304L stainless steel, other materials are available on request.

5-Way Crosses, 6-Way Crosses & Cubes

These fittings are manufactured with a flange on each end of a 5 or 6 sided tubing junction. These crosses accommodate complex junctions or alignment considerations for vacuum system design. Larger sizes are sometimes used as the starting point of a simple vacuum chamber design. LewVac supplies standard 5 and 6-way crosses and cubes in 304L stainless steel, other materials are available on request.

Quick Access Doors

Quick access doors are fittings manufactured with a base flange on which is mounted either a blank or viewport fitted hinged flange. These doors allow quick access to load locks or other parts of the vacuum system. LewVac supplies quick access doors in 304L stainless steel. Viewport fitted quick access doors have either 7056 borosilicate glass or quartz windows. Please contact sales office with your specific requirements.

Cluster Flanges

Cluster flanges are fittings manufactured with a base flange on which can be mounted a number of machined, flush mounted or tubulated ports. These allow for the addition of several accessories or feedthroughs onto a single chamber port. LewVac supplies cluster flanges in 304L stainless steel, other materials are available on request. Please contact sales office with your specific requirements.

All dimensions are nominal in millimetres unless otherwise specified

CF Half Nipples (Tubulated Flanges)

**Specifications:****Material**

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

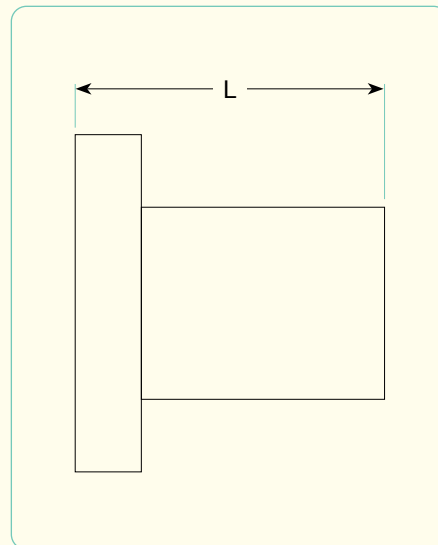
Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1×10^{-13} Torr

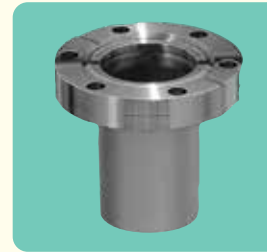
* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Fixed or rotatable flanges.
- Clearance or tapped bolt holes.
- Metal or Viton® seals.
- Custom lengths available upon request.

**CF Half Nipple - Fixed Flange - Clearance Bolt Holes**

Flange	Tube OD	L	Part Code	Price £	Price €
DN16CF	19.0	38.1	FL-HN16CF	£19	€22
DN40CF	38.1	62.5	FL-HN40CF	£24	€28
DN63CF	63.5	85.9	FL-HN63CF	£60	€69
DN100CF	101.6	109.7	FL-HN100CF	£120	€138
DN160CF	152.4	139.7	FL-HN160CF	£195	€225
DN200CF	203.2	203.2	FL-HN200CF	£310	€357

CF Half Nipple - Fixed Flange - Tapped Bolt Holes

Flange	Tube OD	L	Part Code	Price £	Price €
DN16CF	19.0	38.1	FL-HN16CFT	POA	POA
DN40CF	38.1	62.5	FL-HN40CFT	POA	POA
DN63CF	63.5	85.9	FL-HN63CFT	POA	POA
DN100CF	101.6	109.7	FL-HN100CFT	POA	POA
DN160CF	152.4	139.7	FL-HN160CFT	POA	POA
DN200CF	203.2	203.2	FL-HN200CFT	POA	POA

CF Half Nipple - Rotatable Flange - Clearance Bolt Holes

Flange	Tube OD	L	Part Code	Price £	Price €
DN16CF	19.0	38.1	FL-HN16CFR	£25	€29
DN40CF	38.1	62.7	FL-HN40CFR	£30	€35
DN63CF	63.5	104.8	FL-HN63CFR	£80	€92
DN100CF	101.6	109.7	FL-HN100CFR	£153	€176
DN160CF	152.4	139.7	FL-HN160CFR	£251	€289
DN200CF	203.2	203.2	FL-HN200CFR	£285	€328

CF Half Nipple - Rotatable Flange - Tapped Bolt Holes

Flange	Tube OD	L	Part Code	Price £	Price €
DN16CF	19.0	38.1	FL-HN16CFRT	POA	POA
DN40CF	38.1	62.5	FL-HN40CFRT	POA	POA
DN63CF	63.5	85.9	FL-HN63CFRT	POA	POA
DN100CF	101.6	109.7	FL-HN100CFRT	POA	POA
DN160CF	152.4	139.7	FL-HN160CFRT	POA	POA
DN200CF	203.2	203.2	FL-HN200CFRT	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

CF Full Nipples (Straight Connectors)

**Specifications:****Material**

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1×10^{-13} Torr

* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Clearance bolt holes.
- One fixed, one rotatable flange.
- Metal or Viton® seals.
- Custom lengths and tube sizes available upon request.

Fig. 1.

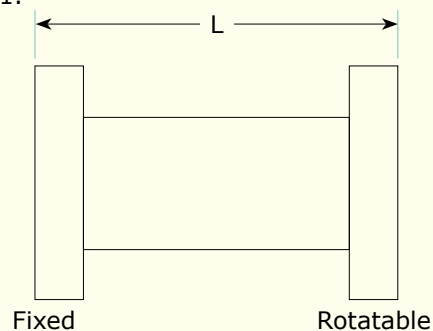


Fig. 2.

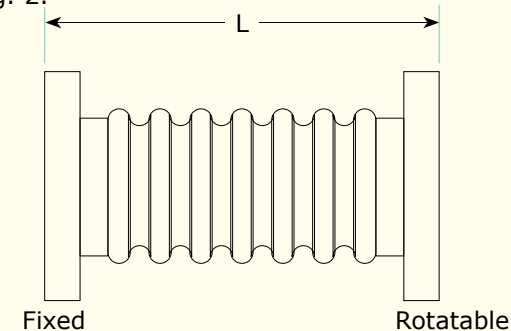
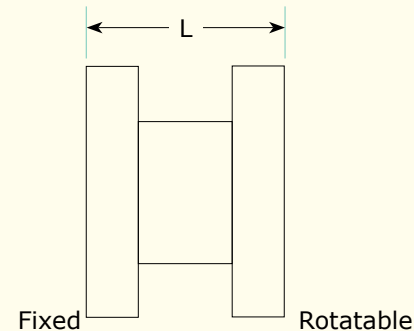


Fig. 3.

**CF Full Nipple**

Flange	Fig.	Tube OD	L	Part Code	Price £	Price €
DN16CF	1	19.1	76.2	FL-SC16CF	£32	€37
DN40CF	1	38.1	125.2	FL-SC40CF	£50	€58
DN63CF	1	63.5	171.7	FL-SSC63CF	£118	€136
DN63CF	1	63.5	209.6	FL-SC63CF	£145	€167
DN100CF	1	101.6	219.5	FL-SSC100CF	£200	€230
DN100CF	1	101.6	269.8	FL-SC100CF	£230	€265
DN160CF	1	152.4	200.0	FL-SSC160CF	£399	€459
DN160CF	1	152.4	333.3	FL-SC160CF	£365	€420
DN200CF	1	203.2	406.4	FL-SC200CF	POA	POA

CF Flexible Nipple

Flange	Fig.	Hose ID	L	Part Code	Price £	Price €
DN16CF	2	16.0	101.6	FL-H102-16CF	£169	€195
DN40CF	2	38.1	101.6	FL-H102-40CF	POA	POA
DN63CF	2	65.0	152.4	FL-H152-63CF	£314	€362
DN100CF	2	100.0	215.9	FL-H216-100CF	£396	€456
DN160CF	2	150.0	215.9	FL-H216-160CF	£592	€681

CF Tapped Flange Adapter

Flange	Fig.	Bore	L	Part Code	Price £	Price €
DN16CF	3	16	44.5	FL-TFA-16	£93	€107
DN40CF	3	38	58.5	FL-TFA-40	£108	€125
DN63CF	3	66	67.2	FL-TFA-63	£215	€248
DN100CF	3	102	76.5	FL-TFA-100	£239	€275

The tapped flange adapter is a straight connector with one fixed and one rotatable flange, both with clearance bolt holes and a minimum length to allow the mating of two tapped flanges. The adapter is supplied complete with studs, nuts and washers. Studs are inserted into each tapped flange before placing the adapter between the flanges.

CF Reducing Nipples (Reducing Connectors)

**Specifications:****Material**

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1×10^{-13} Torr

* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Clearance bolt holes.
- One fixed, one rotatable flange.
- Metal or Viton® seals.
- Custom lengths, tube sizes and flange combinations available upon request.

Fig. 1.

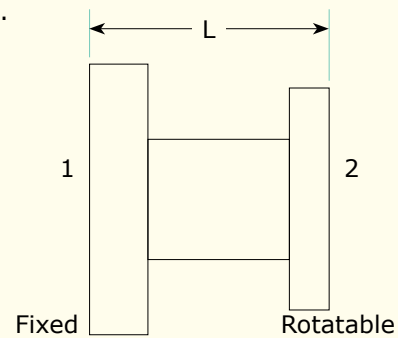
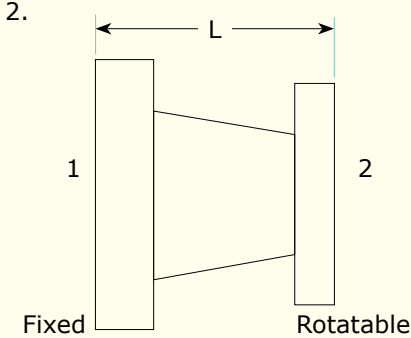


Fig. 2.

**CF Straight Reducing Nipple**

Flange 1	Flange 2	Fig.	Tube OD	L	Part Code	Price £	Price €
DN40CF	DN16CF	1	19.1	45.0	FL-SR40CF-16CF	£39	€45
DN40CF	DN16CF	1	19.1	63.5	FL-SR40CF-16CF-A	£75	€87
DN63CF	DN16CF	1	19.1	70.0	FL-SR63CF-16CF	£83	€96
DN63CF	DN40CF	1	38.1	75.0	FL-SR63CF-40CF	£105	€121
DN100CF	DN40CF	1	38.1	127.0	FL-SR100CF-40CF-A	£134	€155
DN100CF	DN63CF	1	63.5	127.0	FL-SR100CF-63CF-A	£220	€253
DN160CF	DN40CF	1	38.1	127.0	FL-SR160CF-40CF-A	£226	€260
DN160CF	DN63CF	1	63.5	127.0	FL-SR160CF-63CF-A	£231	€266
DN160CF	DN100CF	1	101.6	127.0	FL-SR160CF-100CF-A	£270	€311
DN200CF	DN40CF	1	38.1	127.0	FL-SR200CF-40CF-A	£275	€317
DN200CF	DN63CF	1	63.5	127.0	FL-SR200CF-63CF-A	£303	€349
DN200CF	DN100CF	1	101.6	127.0	FL-SR200CF-100CF-A	£392	€451
DN200CF	DN160CF	1	154.0	127.0	FL-SR200CF-160CF-A	£463	€533
DN250CF	DN63CF	1	63.5	160.0	FL-SR250CF-63CF	POA	POA
DN250CF	DN100CF	1	101.6	160.0	FL-SR250CF-100CF	POA	POA
DN250CF	DN160CF	1	152.4	160.0	FL-SR250CF-160CF	POA	POA
DN250CF	DN200CF	1	254.0	160.0	FL-SR250CF-200CF	POA	POA

CF Conical Reducing Nipple

Flange 1	Flange 2	Fig.	L	Part Code	Price £	Price €
DN40CF	DN16CF	2	78.3	FL-CR40CF-16CF	£85	€98
DN63CF	DN40CF	2	75.2	FL-CR63CF-40CF	£110	€127
DN100CF	DN63CF	2	112.7	FL-CR100CF-63CF	£179	€206

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

CF Elbows



Specifications:

Material

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

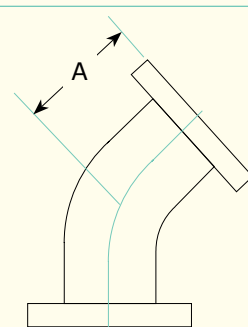
Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

Features:

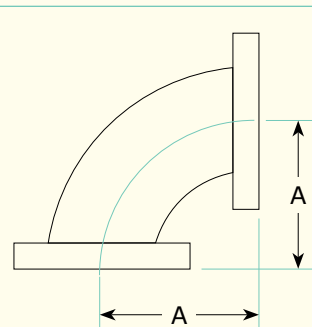
- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Clearance bolt holes.
- Both flanges rotatable.
- Metal or Viton® seals.
- Custom lengths available upon request.

Fig. 1.



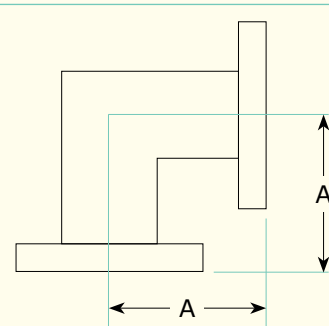
Both flanges rotatable

Fig. 2.



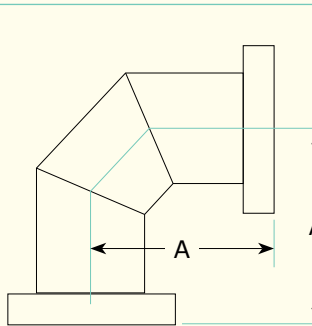
Both flanges rotatable

Fig. 3.



Both flanges rotatable

Fig. 4.



Both flanges rotatable

CF 45° Elbow



Flange	Fig.	Tube OD	A	Part Code	Price £	Price €
DN16CF	1	19.1	23.8	FL-RE45-16CF	£65	€75
DN40CF	1	38.1	44.2	FL-RE45-40CF	£78	€90
DN63CF	1	63.5	85.6	FL-RE45-63CF	£163	€188
DN100CF	1	101.6	132.5	FL-RE45-100CF	£249	€287

CF 90° Elbow



Flange	Fig.	Tube OD	A	Part Code	Price £	Price €
DN16CF	2	19.1	38.1	FL-RE16CF	£49	€57
DN40CF	2	38.1	62.5	FL-RE40CF	£65	€75
DN63CF	2	63.5	104.6	FL-RE63CF	£179	€206
DN100CF	2	101.6	163.6	FL-RE100CF	£228	€263
DN160CF	2	152.4	241.3	FL-RE160CF	£445	€512

CF 90° Elbow - Mitred



Flange	Fig.	Tube OD	A	Part Code	Price £	Price €
DN16CF	3	19.1	38.1	FL-ME16CF	£49	€57
DN40CF	3	38.1	62.5	FL-ME40CF	£61	€71
DN63CF	3	63.5	85.9	FL-ME63CF	£210	€242
DN100CF	3	101.6	109.7	FL-ME100CF	£320	€368
DN160CF	3	152.4	139.7	FL-ME160CF	POA	POA
DN200CF	3	203.2	190.5	FL-ME200CF	POA	POA

CF 90° Elbow - Mitred - High Conductance



Flange	Fig.	Tube OD	A	Part Code	Price £	Price €
DN160CF	4	152.4	241.3	FL-MEHC-160CF	POA	POA
DN200CF	4	203.2	317.5	FL-MEHC-200CF	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

CF Tees



Specifications:

Material

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

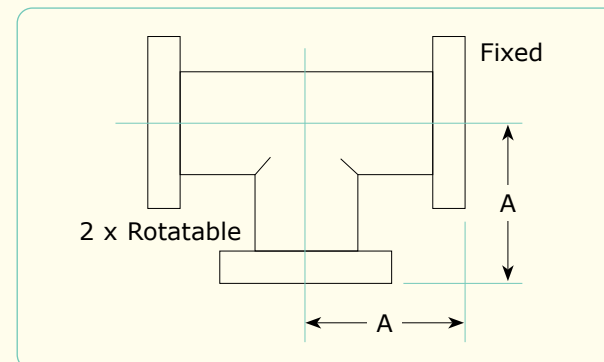
Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1×10^{-13} Torr

* - Increased upper limit for intermittent use



Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Clearance bolt holes.
- Two rotatable flanges.
- Pulled ports for optimum vacuum performance.
- Metal or Viton® seals.
- Custom lengths available upon request.

CF Tee



Flange	Tube OD	A	Part Code	Price £	Price €
DN16CF	19.1	38.1	FL-T16CF	£41	€48
DN40CF	38.1	62.5	FL-T40CF	£80	€92
DN40CF	38.1	66.5	FL-T40CF-L	£153	€176
DN63CF	63.5	85.9	FL-T63CF	£210	€242
DN63CF	63.5	104.6	FL-T63CF-L	£212	€244
DN100CF	101.6	109.7	FL-T100CF	£299	€344
DN100CF	101.6	134.9	FL-T100CF-L	£340	€391
DN160CF	152.4	139.7	FL-T160CF	POA	POA
DN160CF	152.4	166.6	FL-T160CF-L	POA	POA
DN200CF	203.2	190.5	FL-T200CF	POA	POA

CF Reducing Tees



Specifications:

Material

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

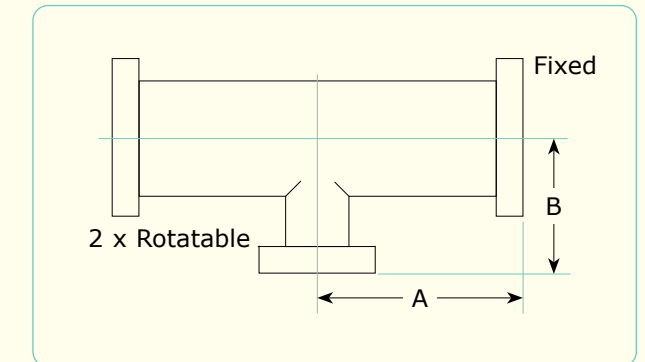
Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1×10^{-13} Torr

* - Increased upper limit for intermittent use



Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Clearance bolt holes.
- Two rotatable flanges.
- Pulled ports for optimum vacuum performance.
- Metal or Viton® seals.
- Custom lengths available upon request.

CF Reducing Tee



Flange 1 & 2	Tube OD	Flange 3	Tube OD	A	B	Part Code	Price £	Price €
DN40CF	38.1	DN16CF	19.1	62.5	47.5	FL-RT40-16CF	£78	€90
DN63CF	63.5	DN40CF	38.1	85.9	75.2	FL-RT63-40CF	£175	€202
DN100CF	101.6	DN40CF	38.1	109.7	94.2	FL-RT100-40CF	£325	€374
DN100CF	101.6	DN63CF	63.5	109.7	104.9	FL-RT100-63CF	£374	€431
DN160CF	152.4	DN40CF	38.1	139.7	119.6	FL-RT160-40CF	£442	€509
DN160CF	152.4	DN63CF	63.5	139.7	130.3	FL-RT160-63CF	POA	POA
DN160CF	152.4	DN100CF	101.6	139.7	135.1	FL-RT160-100CF	POA	POA
DN200CF	203.2	DN160CF	152.4	190.5	165.1	FL-RT200-160CF	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

4-Way CF Crosses



Specifications:

Material

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

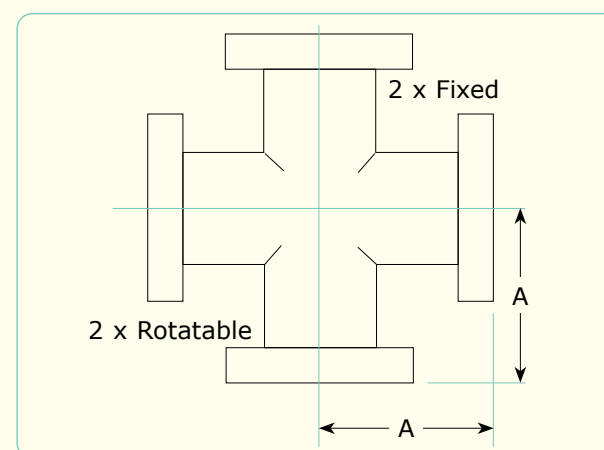
Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use



Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Clearance bolt holes.
- Two rotatable flanges.
- Pulled ports for optimum vacuum performance.
- Metal or Viton® seals.
- Custom lengths available upon request.

4-Way CF Cross



Flange	Tube OD	A	Part Code	Price £	Price €
DN16CF	19.1	38.1	FL-4X16CF	£85	€98
DN40CF	38.1	62.5	FL-4X40CF	£125	€144
DN63CF	63.5	85.9	FL-4X63CF	£300	€345
DN63CF	63.5	104.8	FL-4X63CF-L	£300	€345
DN100CF	101.6	109.7	FL-4X100CF	£494	€569
DN100CF	101.6	134.9	FL-4X100CF-L	£500	€575
DN160CF	152.4	139.7	FL-4X160CF	£1063	€1223
DN160CF	152.4	166.6	FL-4X160CF-L	POA	POA
DN200CF	203.2	190.5	FL-4X200CF	POA	POA

4-Way Reducing CF Crosses



Specifications:

Material

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

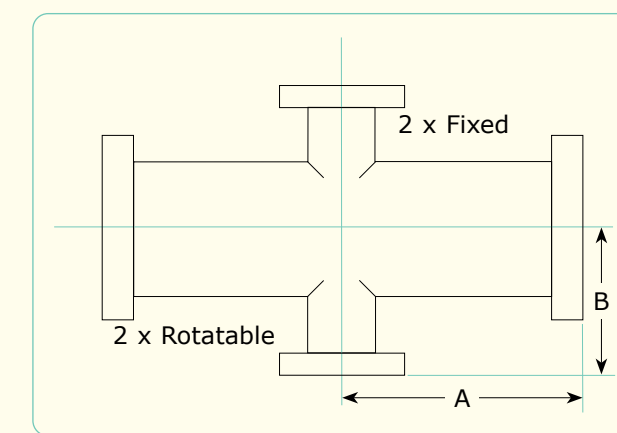
Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use



Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Clearance bolt holes.
- Two rotatable flanges.
- Pulled ports for optimum vacuum performance.
- Metal or Viton® seals.
- Custom lengths available upon request.

4-Way Reducing CF Crosses



Flange 1 & 2	Tube OD	Flange 3 & 4	Tube OD	A	B	Part Code	Price £	Price €
DN40CF	38.1	DN16CF	19.1	62.5	47.5	FL-RX40-16CF	£130	€150
DN63CF	63.5	DN40CF	38.1	85.9	75.2	FL-RX63-40CF	£270	€311
DN100CF	101.6	DN40CF	38.1	109.7	94.2	FL-RX100-40CF	£390	€449
DN100CF	101.6	DN63CF	63.5	109.7	104.9	FL-RX100-63CF	£439	€505
DN160CF	152.4	DN40CF	38.1	139.7	119.6	FL-RX160-40CF	£751	€864
DN160CF	152.4	DN63CF	63.5	139.7	130.3	FL-RX160-63CF	£800	€920
DN160CF	152.4	DN100CF	101.6	139.7	135.1	FL-RX160-100CF	£890	€1024
DN200CF	203.2	DN160CF	152.4	190.5	165.1	FL-RX200-160CF	£1205	€1386

All dimensions are nominal in millimetres unless otherwise specified

All dimensions are nominal in millimetres unless otherwise specified

5-Way CF Crosses



Specifications:

Material

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

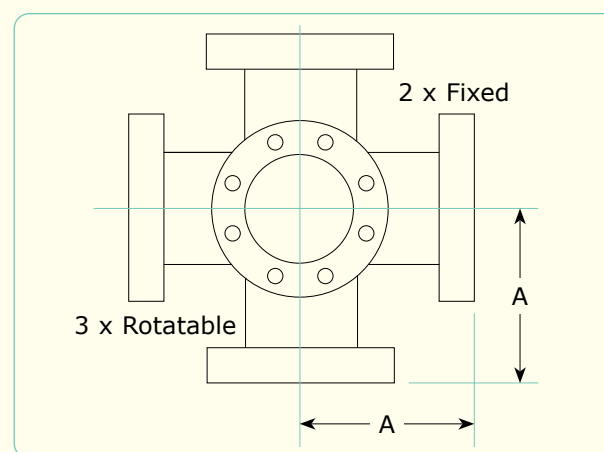
Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use



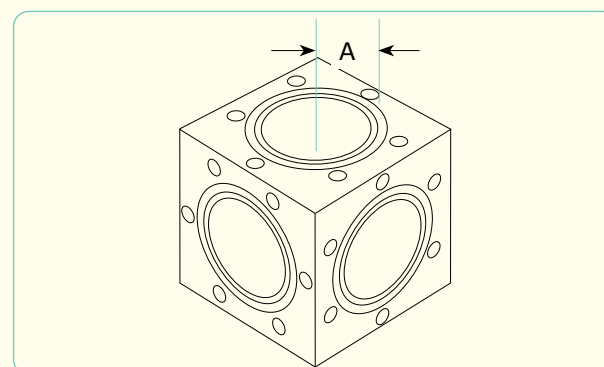
Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Clearance bolt holes.
- Three rotatable flanges.
- Pulled ports for optimum vacuum performance.
- Metal or Viton® seals.
- Custom lengths available upon request.

CF 5-Way Cross



Flange	Tube OD	A	Part Code	Price £	Price €
DN16CF	19.1	38.1	FL-5X16CF	£156	€180
DN40CF	38.1	62.5	FL-5X40CF	£189	€218
DN63CF	63.5	85.9	FL-5X63CF	£349	€402
DN63CF	63.5	104.6	FL-5X63CF-L	£365	€420
DN100CF	101.6	109.7	FL-5X100CF	£605	€696
DN160CF	152.4	139.7	FL-5X160CF	POA	POA
DN200CF	203.2	190.5	FL-5X200CF	POA	POA



All dimensions are nominal in millimetres unless otherwise specified

6-Way Crosses & Cubes



Specifications:

Material

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

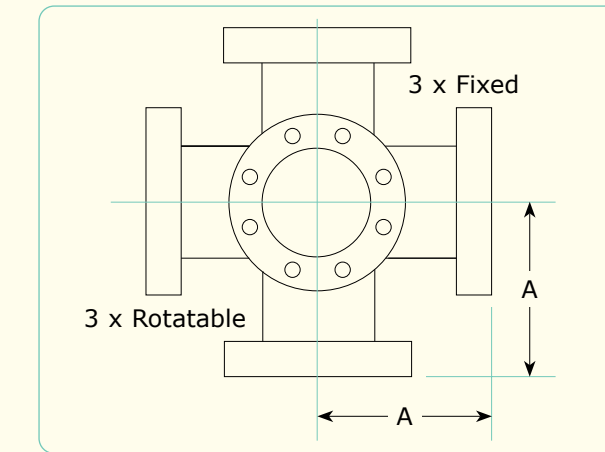
Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use



Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Clearance bolt holes.
- Three rotatable flanges.
- Pulled ports for optimum vacuum performance.
- Metal or Viton® seals.
- Custom lengths available upon request.

CF 6-Way Cross



Flange	Tube OD	A	Part Code	Price £	Price €
DN16CF	19.1	38.1	FL-6X16CF	£175	€202
DN40CF	38.1	62.5	FL-6X40CF	£251	€289
DN63CF	63.5	85.9	FL-6X63CF	£425	€489
DN100CF	101.6	109.7	FL-6X100CF	£828	€953
DN160CF	152.4	139.7	FL-6X160CF	POA	POA
DN200CF	203.2	190.5	FL-6X200CF	POA	POA

CF 6-Way Cubes

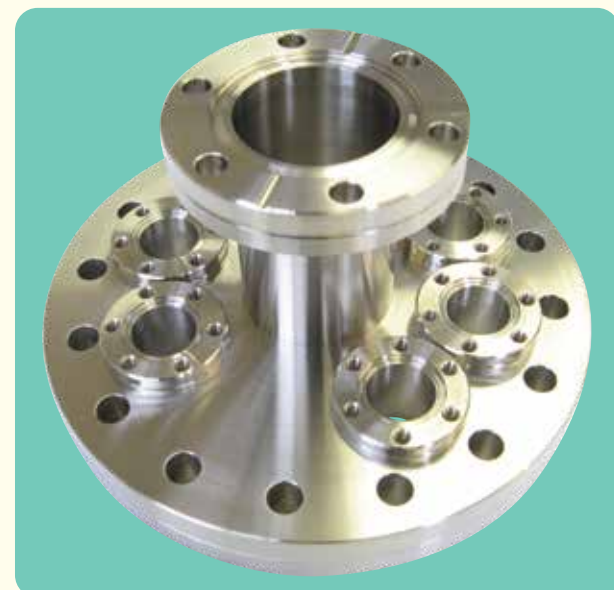


Flange	A	Part Code	Price £	Price €
DN16CF	17.0	FL-CUBE16CF	£149	€172
DN40CF	35.1	FL-CUBE40CF	£369	€425
DN63CF	56.8	FL-CUBE63CF	£1015	€1168
DN100CF	75.7	FL-CUBE100CF	£2430	€2795
DN160CF	101.1	FL-CUBE160CF	£5222	€6006
DN200CF	127.0	FL-CUBE200CF	POA	POA

Please Note : To maximise component mounting options, some cubes may have bolt holes on adjacent faces that clash, requiring the use of shortened mounting bolts. For details of bolt hole patterns please contact our sales office.

All dimensions are nominal in millimetres unless otherwise specified

Multiport & Cluster Flanges.



Specifications:

Material

Flanges 304L St.St. or 316LN St.St.

Gaskets OF copper or Viton®

Temperature Range

Using copper gaskets -200°C to 450°C

Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1 x 10⁻¹³ Torr

* - Increased upper limit for intermittent use

Please note: Blind tapped holes require shorter bolts due to decreased flange thickness, use M4-14

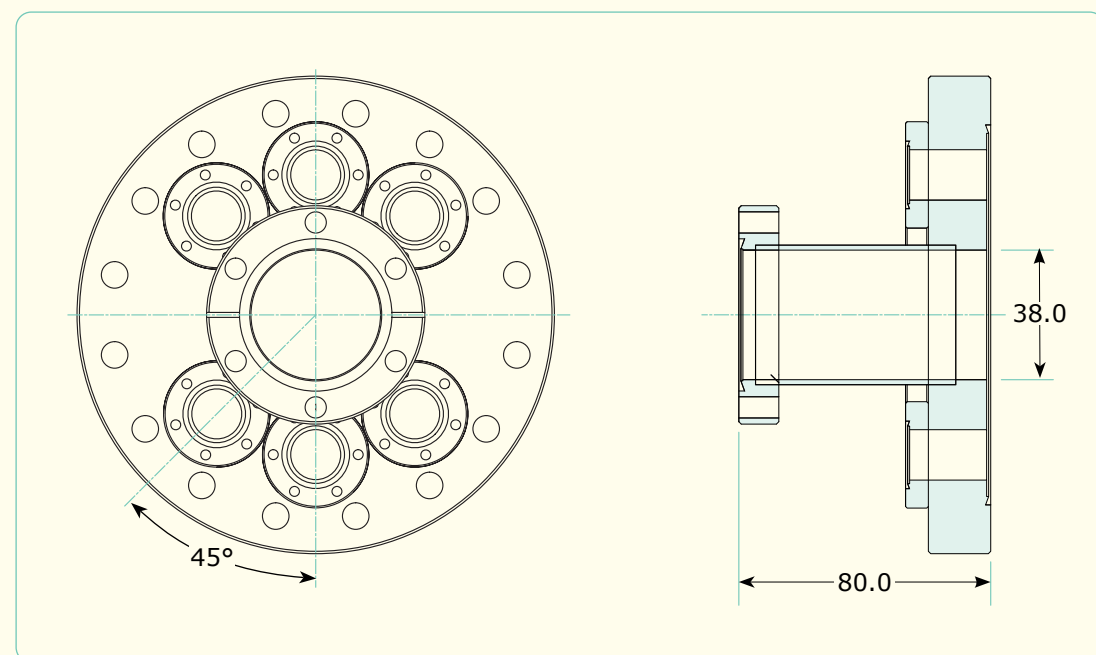
Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Metal or Viton® seals.
- Custom configurations available upon request.

Multiport Flanges



Description	Part Code	Price £	Price €
DN100CF to DN40CF reducer with 6X DN16CFT	FL-100-40-6X16	£555	€639
DN160CF to DN40CF reducer with 6X DN16CFT	FL-160-40-6X16	£577	€664
DN100CF to DN40CF reducer with 6X ANGLED DN16CF	FL-100-40-6X16A	£639	€735
DN160CF to DN40CF reducer with 6X ANGLED DN16CF	FL-160-40-6X16A	£693	€797



All dimensions are nominal in millimetres unless otherwise specified

Multiport & Cluster Flanges.

Mini Multiport Flanges



Description	Part Code	Price £	Price €
Multiport adapter DN40CF top & bottom, 4 DN16CF @ 90° spacing	M-MPA-40CF	POA	POA
Multiport adapter DN40CF top & bottom, 4 DN16CF (2 @ 135°) spacing	M-MPA-135-40CF	POA	POA
Multiport adapter DN40CF top & bottom, 5 DN16CF @ 72° spacing	M-MPA5-40CF	POA	POA
Multiport adapter DN40CF top & bottom, 6 DN16CF @ 60° spacing	M-MPA6-40CF	POA	POA

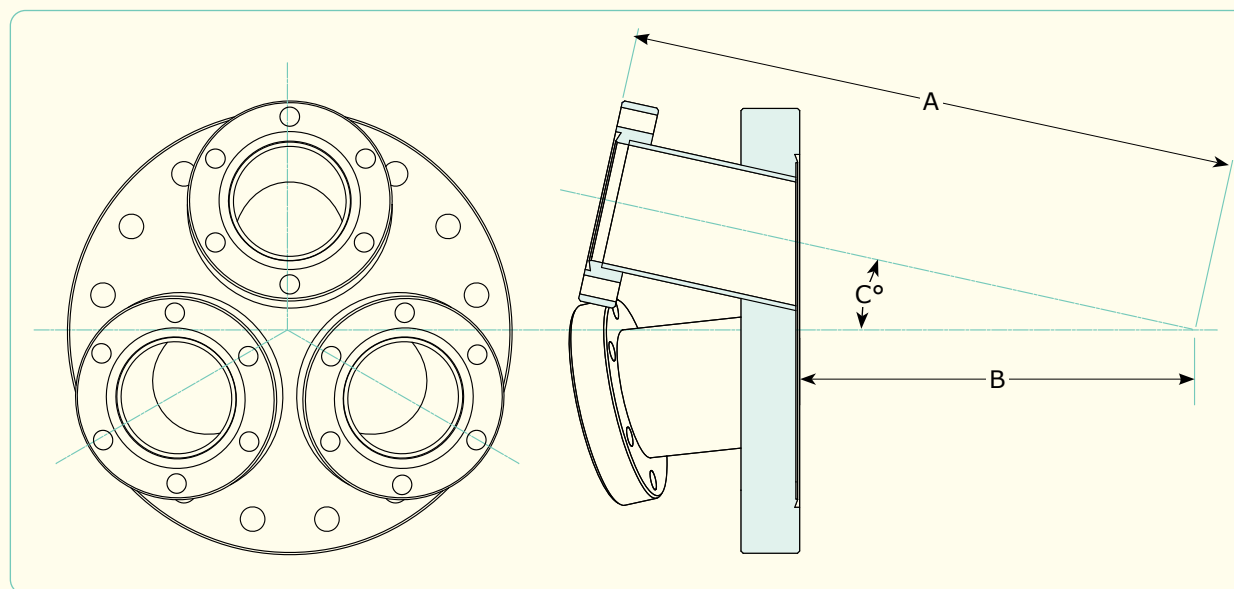
See Section 8 Page 67 for further details of this product.

Cluster Flanges



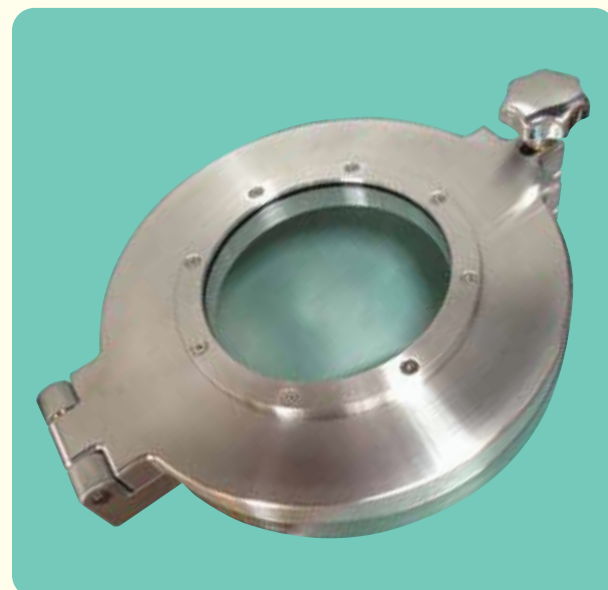
No of ports	A	B	C	Part Code	Price £	Price €
3	n/a	n/a	0°	FL-CL63/3X16CF	£219	€252
2	n/a	n/a	0°	FL-CL100/2X40CF	£262	€302
3	205.0	109.9	12.5°	FL-CL100/3X40CF	£435	€501
3	215.0	139.7	13°	FL-CL160/3X40CF	£423	€487
4	235.0	139.7	13°	FL-CL160/4X40CF	£553	€636
4	285.0	190.5	13°	FL-CL200/4X40CF	POA	POA

Alternative configurations available, please contact sales office for details.



All dimensions are nominal in millimetres unless otherwise specified

Quick Access Doors - With Aluminium Door

**Specifications:****Material**

Body	304L St.St.
Door	Aluminium
Fastening knob	Aluminium
Window	7056 borosilicate glass or Fused Silica
Seals	Viton®

Temperature Range

Using copper gaskets (200°C*)	-20°C to 150°C
Using Viton® gaskets (200°C*)	-20°C to 150°C

Vacuum Range To below 1×10^{-8} Torr

* - Increased upper limit for intermittent use

Features:

- 304L stainless steel as standard.
- 316LN stainless steel available on request.
- Recessed bolt mount holes.

Fig. 1.

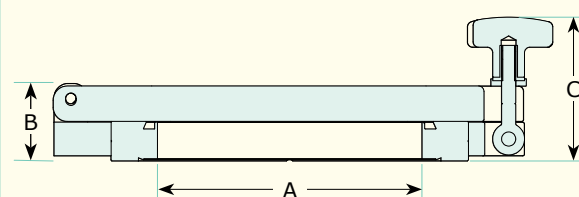
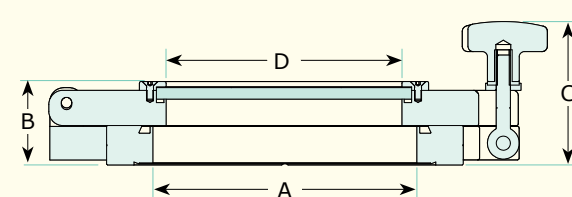


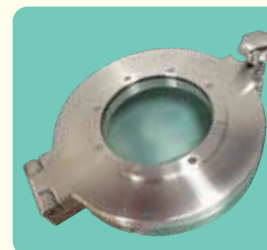
Fig. 2.



All dimensions are nominal in millimetres unless otherwise specified

Quick Access Doors - Blank

Flange	Fig.	A	B	C	Part Code	Price £	Price €
DN40CF	1	38	24.8	45.9	FL-QAD-40CF	POA	POA
DN63CF	1	67	39.1	69.0	FL-QAD-63CF	POA	POA
DN100CF	1	95	41.4	73.6	FL-QAD-100CF	POA	POA
DN160CF	1	150	43.8	81.4	FL-QAD-160CF	POA	POA
DN200CF	1	203	46.1	80.6	FL-QAD-200CF	POA	POA

Quick Access Doors - 7056 Glass Window

Flange	Fig.	A	B	C	D, View	Part Code	Price £	Price €
DN40CF	2	38	27.8	45.9	38.0	FL-QADV-40CF	POA	POA
DN63CF	2	67	40.6	69.0	60.7	FL-QADV-63CF	POA	POA
DN100CF	2	95	44.9	73.6	82.0	FL-QADV-100CF	POA	POA
DN160CF	2	150	47.3	81.4	134.0	FL-QADV-160CF	POA	POA
DN200CF	2	203	49.6	80.6	203.0	FL-QADV-200CF	POA	POA

Quick Access Doors - Fused Silica Window

Flange	Fig.	A	B	C	D, View	Part Code	Price £	Price €
DN40CF	2	38	27.8	45.9	38.0	FL-QADVQ-40CF	POA	POA
DN63CF	2	67	40.6	69.0	60.7	FL-QADVQ-63CF	POA	POA
DN100CF	2	95	44.9	73.6	82.0	FL-QADVQ-100CF	POA	POA
DN160CF	2	150	47.3	81.4	134.0	FL-QADVQ-160CF	POA	POA
DN200CF	2	203	49.6	80.6	203.0	FL-QADVQ-200CF	POA	POA

All dimensions are nominal in millimetres unless otherwise specified

Quick Access Doors - With Stainless Steel Door

**Features:**

- 304 stainless steel as standard.
- Recessed bolt mount holes.

Specifications:**Material**

Body	304 St.St.
Door	304 St.St.
Window	7056 borosilicate glass
Seals	Viton®

Temperature Range

Using copper gaskets -20°C to 150°C (200°C*)

Using Viton® gaskets -20°C to 150°C (200°C*)

Vacuum Range To below 1×10^{-8} Torr

* - Increased upper limit for intermittent use

LewVac in association with Accu-Glass Products is pleased to introduce an improved range of vacuum Quick Access Doors on DN40CF, DN63CF & DN100CF Conflat® compatible flange mount sizes. They're available as blank or zero-length glass viewport doors. Viewport fitted doors are constructed with Corning® 7056 borosilicate glass and Kovar® (nickel-iron) low expansion metal sleeves, which are TIG welded to the door's frame.

These access doors employ a unique, adjustable dual-axis hinge mechanism that exerts even pressure on the door's elastomer seal, for fast reliable closures and pump-down cycles. Although standard doors have a 195° swing-angle, an optional door-stop kit will reduce swing-angle to 120° maximum, a helpful feature in tight laboratory settings. All doors are supplied with a Viton® elastomer gasket that is suitable for high vacuum service. Access door closure is accomplished with a simple over-center latching mechanism that's quick and easy to use, which can be fitted with a security cotter pin (included) to prevent accidental unlatching when system is not under vacuum. These access doors can be mounted to both clearance or threaded CF mating system flanges.

Larger or smaller custom access door sizes, as well as blind threaded mounting hole doors (for reverse bolting arrangements) are available on request.

Quick Access Doors - Blank

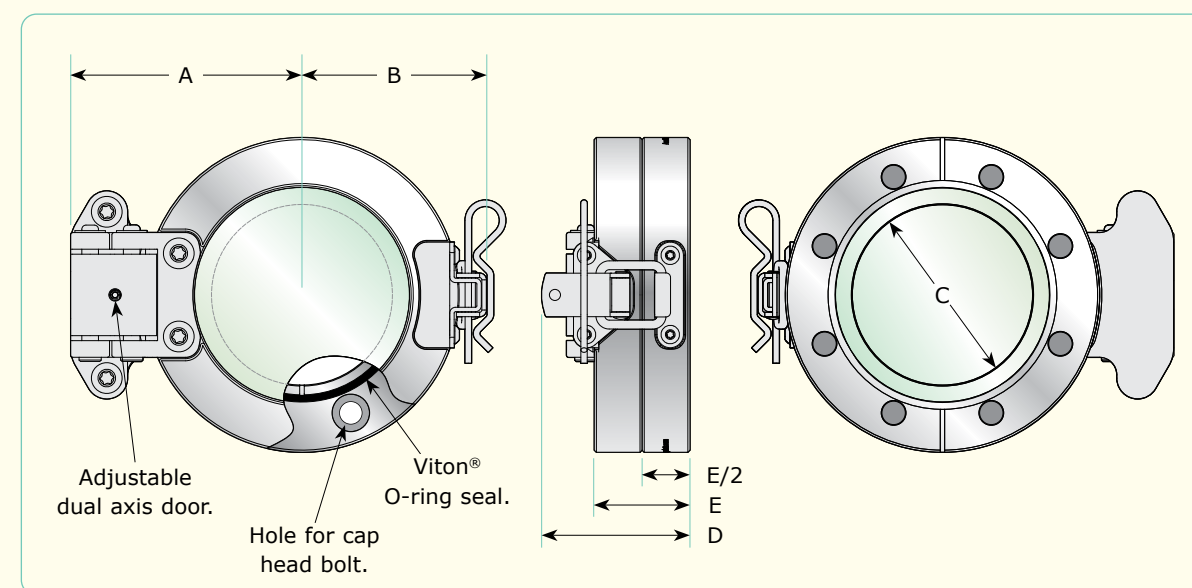
Flange	A	B	C	D	E	Part Code	Price £	Price €
DN40CF	61.5	47.8	38.1	44.5	25.4	FL-QAD-40CFS	£610	€702
DN63CF	83.5	66.5	63.8	53.5	34.5	FL-QAD-63CFS	£635	€731
DN100CF	103.8	86.1	102.6	55.3	39.6	FL-QAD-100CFS	£737	€848

Quick Access Doors - 7056 Glass Window

Flange	A	B	C View	D	E	Part Code	Price £	Price €
DN63CF	83.5	66.5	60.7	53.5	34.5	FL-QADV-63CFS	£729	€839
DN100CF	103.8	86.1	60.7	55.3	39.6	FL-QADV100CFS	£968	€1114

Accessories

Description	Part Code	Price £	Price €
120° door stop kit for FL-QAD(V)-63CFS & FL-QAD(V)-100CFS doors	FL-QAD-120DS	£9	€11
Door seal for FL-QAD(V)-40CFS	FL-QAD-SEAL40	£4	€5
Door seal for FL-QAD(V)-63CFS	FL-QAD-SEAL63	£4	€5
Door seal for FL-QAD(V)-100CFS	FL-QAD-SEAL100	£5	€6



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