

# Product Catalog

Vacuum Components  
Vacuum Chambers

ISO-KF

ISO-K/ISO-F

CF SYSTEMS

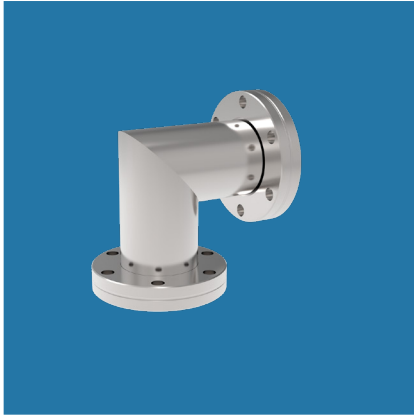
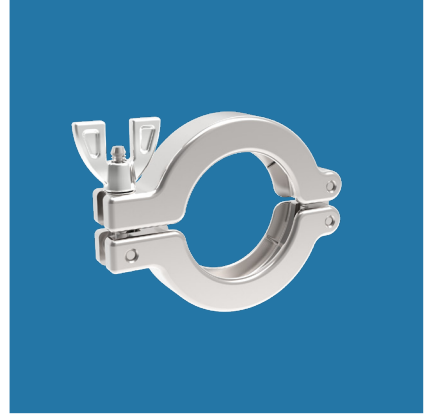
# PRODUCT CATALOG

Our Systems

ISO-KF

ISO-K / ISO-F

CF (ConFlat®)



Our customers are our business partners. By working with them to create value and mutual benefits, we aim to become a leader in the vacuum and fitting components sector. We are looking forward to starting our partnership through this Anadolu Vacuum product catalog.

# Table of Contents

---

**Company Profile**

|             |   |
|-------------|---|
| Who We Are  | 4 |
| What We Do  | 5 |
| Our Systems | 6 |

**ISO-KF**

|                                                 |    |
|-------------------------------------------------|----|
| Major Dimensions of ISO-KF Components Materials | 9  |
| ISO-KF Components & Connection Types            | 15 |

**ISO-KF System Products**

|                 |    |
|-----------------|----|
| ISO-KF Flanges  | 16 |
| ISO-KF Seals    | 25 |
| ISO-KF Clamps   | 48 |
| ISO-KF Fittings | 56 |
| ISO-KF Adapters | 71 |
| ISO-KF Hoses    | 86 |

**ISO-K/ISO-F System Products**

|                        |     |
|------------------------|-----|
| ISO-K / ISO-F Flanges  | 97  |
| ISO-K / ISO-F Seals    | 110 |
| ISO-K / ISO-F Clamps   | 123 |
| ISO-K / ISO-F Fittings | 128 |
| ISO-K / ISO-F Adapters | 139 |
| ISO-K / ISO-F Hoses    | 146 |

**CF System Products**

|                     |     |
|---------------------|-----|
| CF Flanges          | 155 |
| CF Viewport Flanges | 185 |
| CF Seals            | 187 |
| CF Fittings         | 190 |
| CF Adapters         | 199 |
| CF Hoses            | 204 |

**Vacuum Chambers**

|                            |     |
|----------------------------|-----|
| Customized Vacuum Chambers | 209 |
| High Vacuum Chambers       | 212 |
| Medium Vacuum Chambers     | 216 |
| Modular Vacuum Chambers    | 218 |

**Product List**

|     |
|-----|
| 223 |
|-----|

# WHO WE ARE

## OUR STORY

*Anadolu Vacuum continues to grow with its 70 employees, 1600 m<sup>2</sup> work space, CNC lathe, CNC milling machines and up-to-date technologies, international collaborations and strong references.*



Anadolu Vacuum products are created with 50 years of craftsmanship, experience in the trade, machining experience, family tradition and artisanship. This special collection of products has been developed and tested since 2009.

Anadolu Vacuum meets customer needs with modern production techniques, quality and product improvement practices. By meeting engineering and quality material needs, and customer requests in an economical way that is also in conformity with international quality standards, we aim to provide our valuable customers with solutions in the vacuum and semiconductor industries. The products you will see in these pages have been developed after extensive researches on internationally sold products, with the aim of providing good customer service/customer support with cost effective, highly durable, easy to use quality material solutions.

In additions to its products, Anadolu Vacuum is also a practical, fast and reliable solution partner that meets its customers expectations by finding solutions tailored to its customers specific requests, by being able to work on an order-based manner and by answering its customers needs and requests as quickly as possible.



# WHAT WE DO

## OUR PRODUCTS

We are excited to introduce you to Anadolu Vacuum, a company that constantly improves itself through customer surveys, international collaborations, ever-improving production experience, high quality production lines, highly trained professionals and impeccable customer service principles. We design products for vacuum and semiconductor industry. Anadolu Vacuum products are special selection of 304 or 316 Stainless Steel and Aluminium EN AW 6082 vacuum and fitting components flanges, seals, O-rings and clamps. Our vacuum and fitting components can be customized for your specific needs. We also manufacture customized products, vacuum chambers and vacuum brazings.



## Get maximum efficiency!

*We guarantee you that you will get maximum efficiency when original Anadolu Vacuum products are used with the correct assembly.*

# OUR SYSTEMS

## OUR PRODUCT SYSTEMS

### ISO-KF

The Small flange or KF standard (DIN 28403, ISO 2861) is the standard connection for vacuum pipes up to the nominal diameter of DN50 used in low and high vacuum. KF flanges utilize an Aluminium clamp with a single wing nut allowing frequent assembly and disassembly without the need for any tools. Trapped centering rings and NW clamps or clamp chains are offered for special applications.

### ISO-K/ISO-F

ISO KF vacuum systems employ components with metric interface dimensions which have been defined by the International Standards Organisation (ISO 1609). This ensures a high degree of compatibility between components obtained from different sources.

The bolt type flanges are assembled by using a set of bolts to fix the position of the mating flanges, whereas the claw clamp flanges use double claw clamps to hold two flanges together. In addition, the use of the claw clamps means that mating flanges can be connected together in any orientation. A wide range of adaptors for connection to CF or KF flanges can be found in the adaptor section.

### CF

The generation of ultra high vacuum (UHV) makes great demands on the material and connections. Therefore the CF standard was created in the UHV technology (ISO 3669). CF components compress a copper gasket between two stainless steel flanges to create a vacuum tight seal in ultra high vacuum. The CF flange system is more commonly used within the vacuum industry and as such has a much larger standard product offering. For transition from UHV to HV, Anadolu Vacuum also offers a complete range of adaptors for CF flange to KF or ISO flange. Please refer to the adaptor section.



# FUTURE OF VACUUM COMPONENTS



**ISO-KF**



**ISO-K/ISO-F**



**CF**

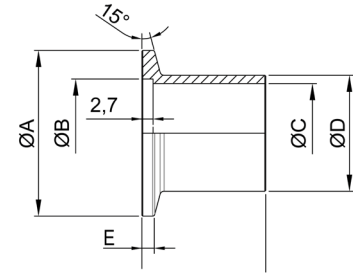
# ISO-KF SYSTEM

ISO-KF vacuum components are directly compatible with all ISO-KF, NW or QF vacuum flange hardware connections.

The standard sizes offered are NW10, NW16, NW20, NW25, NW32, NW40 and NW50.

*Most components are offered in stainless steel. However, for adapters vacuum grade aluminium alloys are sometimes preferred. The standard KF vacuum component is generally used to connect vacuum instruments and can be found on vacuum coating systems, electron microscopes, vacuum ovens, vacuum pumps, vacuum equipment, vacuum gauges etc.*

## Major Dimensions of ISO-KF Components



| Size (DN)                        | KF10 | KF16 | KF20 | KF25 | KF32 | KF40 | KF50 |
|----------------------------------|------|------|------|------|------|------|------|
| Outside Dimension A (mm)         | 30   | 30   | 40   | 40   | 55   | 55   | 75   |
| Outside Dimension A (inch)       | 1.18 | 1.18 | 1.57 | 1.57 | 2.17 | 2.17 | 2.95 |
| Centering ring nose B (mm)       | 12.2 | 17.2 | 22.2 | 26.2 | 34.2 | 41.2 | 52.2 |
| Typical inside dimension C (mm)  | 10   | 16   | 20   | 24   | 34   | 40.5 | 50   |
| Typical outside dimension D (mm) | 14   | 20   | 25   | 28   | 38   | 44.5 | 57   |
| Dimension E (mm)                 | 3    | 3    | 3    | 3    | 3    | 3    | 3    |

### Please consider the following in planning and designing your vacuum system:

-The pressures indicated below in connection with the product descriptions are absolute pressures, at an ambient pressure of 1000 mbar.

-The minimum achievable ultimate pressure in the entire system will depend upon numerous factors, especially upon the pump system, the desorption rates of the interior surfaces and the pump-down time. The minimum pressures indicated in connection with the product descriptions are based upon experience, showing what can be achieved in a well designed vacuum system. They could be higher or lower in individual cases. If elastomer seals are being employed, it will be necessary to take their gas permeability (permeation) into consideration. It will be a function of the material, temperature and type of gas in question. You will find typical ultimate pressures for elastomers in the chapter entitled "Materials."

-The highest and lowest permissible temperatures in the entire system will be governed by the lowest high temperature and highest low temperature of the components involved.

-The flange connections and components have been developed in order to achieve vacuum-tight connections. They can only assume mechanical loads to a limited extent. In designing a vacuum system, it will therefore be necessary to review whether it will be necessary for static or dynamic loads to be assumed by additional elements, e.g. holders.

## Component Elements Properties

| Material number (AISI No.) | Material abbreviation | Cr(%)     | Ni(%)     | Mo (%)   | C (%)     | Si (%) | Mn (%) | P (%) | S (%)     | Other additives / Comments                                |
|----------------------------|-----------------------|-----------|-----------|----------|-----------|--------|--------|-------|-----------|-----------------------------------------------------------|
| 1.4301 (304)               | X5CrNi 18 10          | 15-20     | 8-19      | *        | 0.1       | 1      | 2      | 0.05  | 0.015     | * MO permissible                                          |
| 1.4303 (305)               | X4CrNi 18 12          | 15-20     | 8-19      | *        | 0.1       | 1      | 2      | 0.05  | 0.015     | * MO permissible                                          |
| 1.4305 (303)               | X8CrNiS 18 9          | 16-19     | 5-10      | max. 0.7 | 0.12      | 1      | 6.5    | 0.2   | 0.15-0.35 | Cu. sulphur can be substituted with selenium              |
| 1.4306 (304L)              | X2CrNi 19 11          | 18-20     | 10-12     | -        | 0.03      | 1      | 2      | 0.045 | 0.015     |                                                           |
| 1.4307 (304L)              | X2CrNi 18 9           | 17.5-19.5 | 8-10.5    | -        | 0.03      | 1      | 2      | 0.045 | 0.015     |                                                           |
| 1.4310 (301)               | X10CrNi 18 10         | 16-18     | 6-9.5     | max. 0.8 | 0.05-0.15 | 2      | 2      | 0.045 | 0.015     |                                                           |
| 1.4401 (316)               | X5CrNiMo 17-12-2      | 16-18.5   | 10-15     | 2-3      | 0.08      | 1      | 2      | 0.045 | 0.03      |                                                           |
| 1.4404 (316L)              | X2CrNiMo 17-13-2      | 16-18.5   | 10-13     | 2-2.5    | 0.03      | 1      | 2      | 0.045 | 0.015     |                                                           |
| 1.4429 (316LN)             | X2CrNiMo 17-13-3      | 16.5-18.5 | 11-14     | 2.5-3    | 0.03      | 1      | 2      | 0.045 | 0.015     |                                                           |
| 1.4435 (316L)              | X2CrNiMo 18-14-3      | 17-19     | 12.5-15   | 2.5-3    | 0.03      | 1      | 2      | 0.045 | 0.015     |                                                           |
| 1.4541 (321)               | X6CrNiTi 18-10        | 17-19     | 9-12      | -        | 0.08      | 1      | 2      | 0.045 | 0.015     | Mo permissible. must contain Ti or Nb or Ta for stability |
| 1.4571 (316Ti)             | X6CrNiMoTi 17 12 2    | 16.5-18   | 10.5-13.5 | 2-2.5    | 0.08      | 1      | 2      | 0.045 | 0.015     |                                                           |

## Table of High-Grade Steels Properties

| Material number (AISI No.) | 0.2% yield point at 20 °C in N/mm2 | 0.2% yield point at 300 °C in N/mm2 | Tensile strength in N/mm2 | Coefficient of linear expansion in $10^{-6} K^{-1}$ bet. 20 °C and 300 °C | Max. operation temperature of air | Structure                                   | Magnetability |
|----------------------------|------------------------------------|-------------------------------------|---------------------------|---------------------------------------------------------------------------|-----------------------------------|---------------------------------------------|---------------|
| 1.4301 (304)               | 210-250                            | 110                                 | 520-720                   | 17                                                                        | 300                               | Austenitic steel with small ferrite content | possible      |
| 1.4306 (304L)              | 220-250                            | 100                                 | 520-670                   | 17                                                                        | 350                               | Austenitic steel with small ferrite content | possible      |
| 1.431                      | 220-240                            | 100                                 | 520-670                   | 17                                                                        | 350                               | Austenitic steel with small ferrite content | possible      |
| 1.4401 (316)               | 220-250                            | 128                                 | 530-680                   | 17                                                                        | 300                               | Austenitic steel with small ferrite content | less possible |
| 1.4404 (316L)              | 220-260                            | 118                                 | 530-680                   | 17                                                                        | 400                               | Austenitic steel with small ferrite content | less possible |
| 1.4429 (316LN)             | 280-310                            | 155                                 | 580-770                   | 17                                                                        | 400                               | Austenitic steel                            | not possible  |
| 1.4435 (316L)              | 220-260                            | 118                                 | 540-700                   | 17                                                                        | 400                               | Austenitic steel                            | not possible  |
| 1.4541 (321)               | 200-250                            | 135                                 | 520-710                   | 17                                                                        | 400                               | Austenitic steel with small ferrite content | possible      |
| 1.4571 (316Ti)             | 220-260                            | 145                                 | 540-690                   | 18                                                                        | 400                               | Austenitic steel with small ferrite content | possible      |



## Properties of Elastomer Materials

| Designation | Base Elastomer                                 | Customary Trade Name | Temperature Range [°C] | Properties <sup>*1</sup> <sup>*2</sup>                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------|------------------------------------------------|----------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FKM, FPM    | Fluoro rubber                                  | Viton®               | -15 to 200             | <ul style="list-style-type: none"> <li>&gt; Extremely resistant to petroleum-based oils, aliphatic and aromatic hydrocarbons as well as chlorinated hydrocarbons, concentrated and diluted acids and weak bases</li> <li>&gt; Outstanding temperature resistance</li> <li>&gt; High mechanical values</li> <li>&gt; Superb aging resistance</li> <li>&gt; Typically achievable ultimate pressure: 10<sup>-7</sup> mbar</li> </ul> |
| NBR         | Acrylonitrile butadiene rubber, nitrile rubber | Perbunan®            | -25 to 120             | <ul style="list-style-type: none"> <li>&gt; Resistant to petroleum-based oils, hydraulic oils, lubricants, gasoline as well as other aliphatic hydrocarbons, diluted acids and bases</li> <li>&gt; High wear resistance and stability</li> <li>&gt; Very good helium-tightness</li> <li>&gt; Typically achievable ultimate pressure: 10<sup>-6</sup> mbar</li> </ul>                                                              |
| EPDM        | Ethylene propylene rubber                      | Dutral®              | -50 to 130             | <ul style="list-style-type: none"> <li>&gt; High resistance to hot water and steam</li> <li>&gt; Very good resistance to aging and ozone</li> <li>&gt; Good temperature stability</li> <li>&gt; Very good resistance to oxidizing agents</li> <li>&gt; No resistance to aliphatic and aromatic hydrocarbons and petroleum products</li> <li>&gt; Typically achievable ultimate pressure: 10<sup>-6</sup> mbar</li> </ul>          |
| VMQ         | Silicon rubber                                 | Silopren®<br>Silikon | -55 to 200             | <ul style="list-style-type: none"> <li>&gt; Superb temperature resistance, however not in the case of hot water or steam</li> <li>&gt; Typically achievable ultimate pressure: 10<sup>-5</sup> mbar</li> </ul>                                                                                                                                                                                                                    |
| CR          | Chloroprene Rubber                             | Neopren®             | -40°C up to +100°C     | <ul style="list-style-type: none"> <li>&gt; Low friction and low 'stick-slip' effect</li> <li>&gt; Far better elasticity than solid PTFE</li> <li>&gt; Common within pharmaceutical and processing industries</li> </ul>                                                                                                                                                                                                          |

*\*1 Information relating to resistance should be used only as a guideline, as it is provided solely for the purpose of general information. Although this information is intended to simplify selection of the elastomer, it can by no means be deemed to represent a warranty, as it cannot readily be applied to real-world operating conditions. Service life might have to be determined on the basis of trial and error.*

*\*2 The indicated ultimate pressures are based upon experience showing what can be achieved in a well designed vacuum system. They could be higher or lower in individual cases.*

# Materials

## Metallic Seals

Metallic seals require high contact pressures. They are plastically deformed when assembled and can therefore be used only once. Their hardness has to be lower than that of the flanges, thus allowing them to adapt to the microstructure and produce a metallic ultra high vacuum-tight connection.

### Aluminium

Aluminium seals with Aluminium edged seal rings are employed for ISO-KF and ISO-K flanges. What are used are soft-annealable Aluminium-silicon alloys that require a contact pressure of around  $100 \text{ N/mm}^2$ . The differing thermal expansion will limit the maximum permissible working temperature in connection with the combination of Aluminium seal and stainless steel flanges to around  $150^\circ\text{C}$ . Following exposure to excess temperatures, the sealing effect will often deteriorate after cool-down.

## Copper

Copper has around the same thermal expansion as austenitic stainless steel. Copper seals are used as gaskets (CF flanges) or wire seals (COF flanges). The copper must be of low-oxygen design, i.e. OF (Oxygen Free) or OFHC (Oxygen Free High Conductivity) must be employed. The presence of oxygen will lead to what is called "hydrogen disease"; i.e. when heat treated, the hydrogen will react with oxygen and the water that is thus produced will burst the structure.

Copper seals require a contact pressure of at least  $200 \text{ N/mm}^2$ . Their maximum permissible working temperature in air is  $200^\circ\text{C}$ ; silver coating increases this to a maximum of  $450^\circ\text{C}$ . Soft-annealed copper seals require less contact pressure. They should be used in connection with viewports, in particular, in order to keep assembly related stresses as low as possible.

# Materials

## Description of individual high-grade steel types

### 1.4301 (304):

Suitable for vacuum applications. Austenitic stainless steel. Very high cold formability. Easily weldable. High corrosion resistance.

### 1.4305 (303):

Lower corrosion resistance than 1.4301. Easy to machine. Not weldable.

### 1.4306 1.4307 (304L):

Suitable for vacuum applications. Low-carbon variant of 1.4301 with similar properties. Easily weldable.

### 1.4401 (316):

Suitable for vacuum applications. Very high cold formability. Easily weldable. Due to molybdenum additive, more resistant than 1.4301 to non-oxidising acids and chlorine substance.

### 1.4404 (316L):

Suitable for vacuum applications. Significantly less carbon than 1.4401 but with similar properties. Easily weldable.

### 1.4429 (304LN):

Suitable for vacuum applications. Higher strength than 1.4435.

### 1.4435 (316LMo):

Suitable for vacuum applications. Similar properties to 1.4404. The increased content of molybdenum makes 1.4435 more resistant to non-oxidising acids.

### 1.4541 (321):

Suitable for vacuum applications. Similar properties to 1.4301 but not polishable. Titan-stabilised, which makes it highly weldable in all dimensions without being susceptible to intergranular corrosion.

### 1.4571 (316Ti):

Suitable for vacuum applications. Similar properties to 1.4401. Titan-stabilised, which makes it highly weldable in all dimensions without being susceptible to intergranular corrosion.

### 1.4429 (316LN-ESR):

Suitable for vacuum applications. Very high homogeneity including purity combined with a high hardness level. Very low magnetic permeability. Other properties correspond to 1.4429.

## Sealing materials

Elastomer seals are permeable to gas and also emit gases. The gas permeability, or permeation, depends on the material, the type of gas and ambient conditions – mainly the temperature. After an adequate evacuation time, the outward gas stream decreases considerably, which means that a relatively constant permeation gas stream materialises.

### Storage conditions of elastomer seals:

To ensure that their properties are retained as long as possible, we recommend the following ambient conditions during storage:

- an area with little temperature variation
- an area where the temperature is between 10-25 °C
- O-rings should be stored in lightproof boxes

### Metal seals made of aluminium:

High purity, which in turn allows to be used in combination with Aluminium as well as stainless steel flanges. Temperature range: -196 °C to 150 °C. One time use only.

## ISO-KF Components & Connection Types

KF components are used in low, medium and high vacuum systems. KF flanges are a sexless design, made from stainless steel or Aluminium. The seal is a elastomeric O-ring placed in a centering ring (inner centered), which aligns the flanges and holds the O-ring in position. These components are manufactured at Anadolu Vacuum in accordance with DIN 28403 and ISO 2861 in sizes NW10 to NW50 and are compatible with components from other well-known brands. The name KF (for Klein Flansche) was acknowledged by ISO, DIN, and Pneurop standards organizations. It is also called QF, NW and occasionally DN.

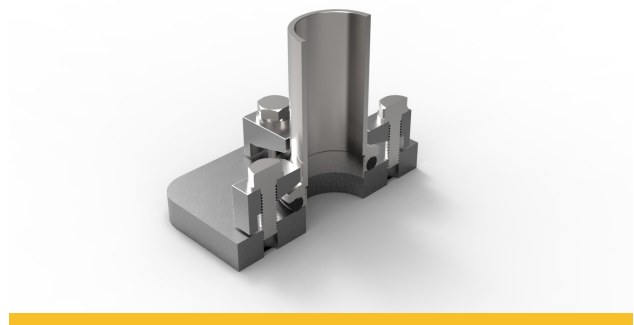
Each flange has a chamfered back-surface and is compatible by a circumferential clamp tightened by wing-nut, thumbscrew, bolt, or over-center lever (Fig. 1). All welded parts have been leak-tested using helium and are leak-proof up to  $10^{-9}$  mbar/s. The KF connection include on two symmetric flanges with a centering ring (inner centered), with O-ring seal and a clamping ring (Fig. 1). The essential contact pressure for the seal is composed via the conical fixing surfaces at the KF flange and clamping ring. Besides collar half shells can be used rather than a clamping ring. For the montage of KF components on base plates, claws are used (Fig. 2).

KF components are appropriate for a pressure of 2.5 bar (1.5 bar abundant pressure) and pressure of up to  $10^{-9}$  mbar. At a max. pressure of up to 4 bar (3 bar abundant pressure), an outer ring in together with a clamping ring must be set upped.

Please consider the product information given on the product pages.



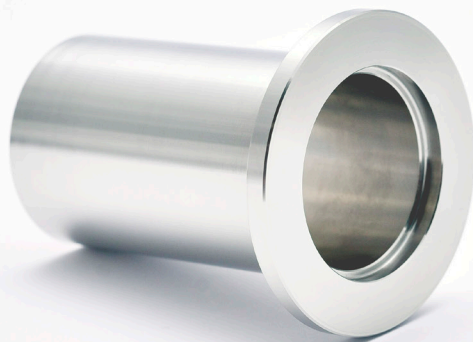
(Fig. 1)



(Fig. 2)

# ISO-KF Flanges

This part consists of ISO-KF Flanges.  
Check out this section for products NW10-NW50

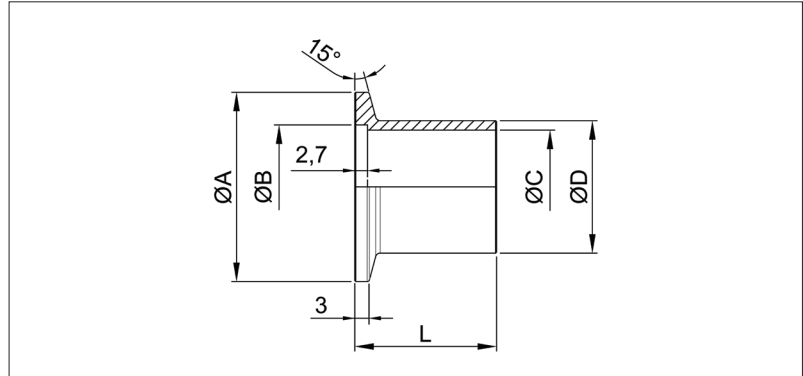


## ISO-KF Short Half Flange



- Pressure range:  $1 \cdot 10^{-8}$  mbar to 1.5 bar (elastomer seal)
- $1 \cdot 10^{-9}$  mbar to 1.5 bar 304 & 316L (metal seal)
- Custom lengths available upon request

### Dimensions



### Aluminium EN AW-6082/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No           |
|-----------|---------------------|--------|--------|--------|--------|--------|--------------------|
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 10     | VC1FLA1AL010-14-10 |
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 20     | VC1FLA1AL010-14-20 |
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 30     | VC1FLA1AL010-14-30 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 10     | VC1FLA1AL016-20-10 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 20     | VC1FLA1AL016-20-20 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 30     | VC1FLA1AL016-20-30 |
| 20        | 25X2                | 40     | 22.2   | 21     | 25     | 10     | VC1FLA1AL020-25-10 |
| 20        | 25X2                | 40     | 22.2   | 21     | 25     | 20     | VC1FLA1AL020-25-20 |
| 20        | 25X2                | 40     | 22.2   | 21     | 25     | 30     | VC1FLA1AL020-25-30 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 10     | VC1FLA1AL025-28-10 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 20     | VC1FLA1AL025-28-20 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 30     | VC1FLA1AL025-28-30 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 10     | VC1FLA1AL032-38-10 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 20     | VC1FLA1AL032-38-20 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 30     | VC1FLA1AL032-38-30 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 10     | VC1FLA1AL040-44-10 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 20     | VC1FLA1AL040-44-20 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 30     | VC1FLA1AL040-44-30 |
| 50        | 57X3.2              | 75     | 52.2   | 50.6   | 57     | 10     | VC1FLA1AL050-57-10 |
| 50        | 57X3.2              | 75     | 52.2   | 50.6   | 57     | 20     | VC1FLA1AL050-57-20 |
| 50        | 57X3.2              | 75     | 52.2   | 50.6   | 57     | 30     | VC1FLA1AL050-57-30 |

**Stainless Steel 304/1.4301**

- Temperature range: -196 to 300 °C

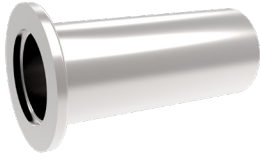
| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No           |
|-----------|---------------------|--------|--------|--------|--------|--------|--------------------|
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 10     | VC1FLA1SS010-14-10 |
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 20     | VC1FLA1SS010-14-20 |
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 30     | VC1FLA1SS010-14-30 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 10     | VC1FLA1SS016-20-10 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 20     | VC1FLA1SS016-20-20 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 30     | VC1FLA1SS016-20-30 |
| 20        | 25X2                | 40     | 22.2   | 21     | 25     | 10     | VC1FLA1SS020-25-10 |
| 20        | 25X2                | 40     | 22.2   | 21     | 25     | 20     | VC1FLA1SS020-25-20 |
| 20        | 25X2                | 40     | 22.2   | 21     | 25     | 30     | VC1FLA1SS020-25-30 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 10     | VC1FLA1SS025-28-10 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 20     | VC1FLA1SS025-28-20 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 30     | VC1FLA1SS025-28-30 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 10     | VC1FLA1SS032-38-10 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 20     | VC1FLA1SS032-38-20 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 30     | VC1FLA1SS032-38-30 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 10     | VC1FLA1SS040-44-10 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 20     | VC1FLA1SS040-44-20 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 30     | VC1FLA1SS040-44-30 |
| 50        | 57X3.2              | 75     | 52.2   | 50.6   | 57     | 10     | VC1FLA1SS050-57-10 |
| 50        | 57X3.2              | 75     | 52.2   | 50.6   | 57     | 20     | VC1FLA1SS050-57-20 |
| 50        | 57X3.2              | 75     | 52.2   | 50.6   | 57     | 30     | VC1FLA1SS050-57-30 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

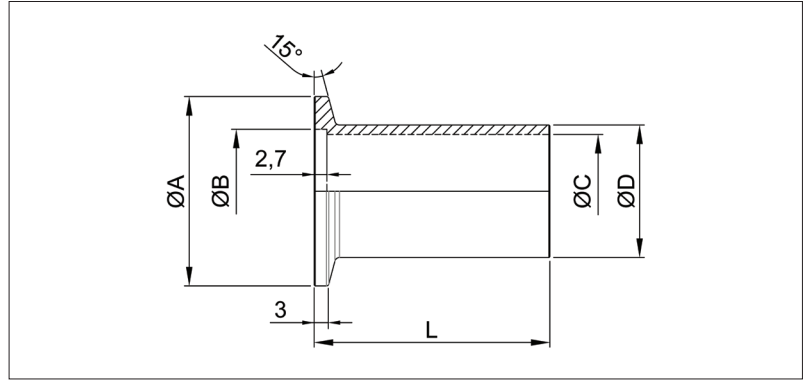
| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No           |
|-----------|---------------------|--------|--------|--------|--------|--------|--------------------|
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 10     | VC1FLA2SS010-14-10 |
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 20     | VC1FLA2SS010-14-20 |
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 30     | VC1FLA2SS010-14-30 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 10     | VC1FLA2SS016-20-10 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 20     | VC1FLA2SS016-20-20 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 30     | VC1FLA2SS016-20-30 |
| 20        | 25X2                | 40     | 22.2   | 21     | 25     | 10     | VC1FLA2SS020-25-10 |
| 20        | 25X2                | 40     | 22.2   | 21     | 25     | 20     | VC1FLA2SS020-25-20 |
| 20        | 25X2                | 40     | 22.2   | 21     | 25     | 30     | VC1FLA2SS020-25-30 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 10     | VC1FLA2SS025-28-10 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 20     | VC1FLA2SS025-28-20 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 30     | VC1FLA2SS025-28-30 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 10     | VC1FLA2SS032-38-10 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 20     | VC1FLA2SS032-38-20 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 30     | VC1FLA2SS032-38-30 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 10     | VC1FLA2SS040-44-10 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 20     | VC1FLA2SS040-44-20 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 30     | VC1FLA2SS040-44-30 |
| 50        | 57X3.2              | 75     | 52.2   | 50.6   | 57     | 10     | VC1FLA2SS050-57-10 |
| 50        | 57X3.2              | 75     | 52.2   | 50.6   | 57     | 20     | VC1FLA2SS050-57-20 |
| 50        | 57X3.2              | 75     | 52.2   | 50.6   | 57     | 30     | VC1FLA2SS050-57-30 |

## ISO-KF Long Half Flange



- Pressure range:  $1 \cdot 10^{-8}$  mbar to 1.5 bar (elastomer seal)
- $1 \cdot 10^{-9}$  mbar to 1.5 bar 304 & 316L (metal seal)
- Custom lengths available upon request

### Dimensions



### Aluminium EN AW-6082/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No           |
|-----------|---------------------|--------|--------|--------|--------|--------|--------------------|
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 40     | VC1FLB1AL010-14-40 |
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 50     | VC1FLB1AL010-14-50 |
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 60     | VC1FLB1AL010-14-60 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 40     | VC1FLB1AL016-20-40 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 50     | VC1FLB1AL016-20-50 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 60     | VC1FLB1AL016-20-60 |
| 20        | 25X2                | 40     | 22.2   | 20     | 25     | 40     | VC1FLB1AL020-25-40 |
| 20        | 25X2                | 40     | 22.2   | 20     | 25     | 50     | VC1FLB1AL020-25-50 |
| 20        | 25X2                | 40     | 22.2   | 20     | 25     | 60     | VC1FLB1AL020-25-60 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 40     | VC1FLB1AL025-28-40 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 50     | VC1FLB1AL025-28-50 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 60     | VC1FLB1AL025-28-60 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 40     | VC1FLB1AL032-38-40 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 50     | VC1FLB1AL032-38-50 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 60     | VC1FLB1AL032-38-60 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 40     | VC1FLB1AL040-44-40 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 50     | VC1FLB1AL040-44-50 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 60     | VC1FLB1AL040-44-60 |
| 50        | 57X3.2              | 75     | 52.2   | 50     | 57     | 40     | VC1FLB1AL050-57-40 |
| 50        | 57X3.2              | 75     | 52.2   | 50     | 57     | 50     | VC1FLB1AL050-57-50 |
| 50        | 57X3.2              | 75     | 52.2   | 50     | 57     | 60     | VC1FLB1AL050-57-60 |



**Stainless Steel 304/1.4301**

- Temperature range: -196 to 300 °C

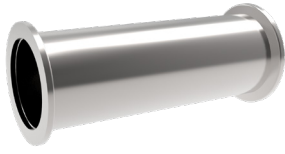
| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No           |
|-----------|---------------------|--------|--------|--------|--------|--------|--------------------|
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 40     | VC1FLB1SS010-14-40 |
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 50     | VC1FLB1SS010-14-50 |
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 60     | VC1FLB1SS010-14-60 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 40     | VC1FLB1SS016-20-40 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 50     | VC1FLB1SS016-20-50 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 60     | VC1FLB1SS016-20-60 |
| 20        | 25X2                | 40     | 22.2   | 20     | 25     | 40     | VC1FLB1SS020-25-40 |
| 20        | 25X2                | 40     | 22.2   | 20     | 25     | 50     | VC1FLB1SS020-25-50 |
| 20        | 25X2                | 40     | 22.2   | 20     | 25     | 60     | VC1FLB1SS020-25-60 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 40     | VC1FLB1SS025-28-40 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 50     | VC1FLB1SS025-28-50 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 60     | VC1FLB1SS025-28-60 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 40     | VC1FLB1SS032-38-40 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 50     | VC1FLB1SS032-38-50 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 60     | VC1FLB1SS032-38-60 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 40     | VC1FLB1SS040-44-40 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 50     | VC1FLB1SS040-44-50 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 60     | VC1FLB1SS040-44-60 |
| 50        | 57X3.2              | 75     | 52.2   | 50     | 57     | 40     | VC1FLB1SS050-57-40 |
| 50        | 57X3.2              | 75     | 52.2   | 50     | 57     | 50     | VC1FLB1SS050-57-50 |
| 50        | 57X3.2              | 75     | 52.2   | 50     | 57     | 60     | VC1FLB1SS050-57-60 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

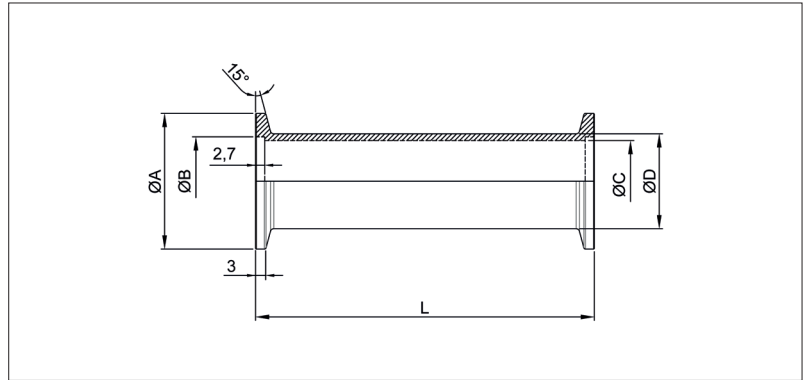
| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No           |
|-----------|---------------------|--------|--------|--------|--------|--------|--------------------|
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 40     | VC1FLB2SS010-14-40 |
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 50     | VC1FLB2SS010-14-50 |
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | 60     | VC1FLB2SS010-14-60 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 40     | VC1FLB2SS016-20-40 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 50     | VC1FLB2SS016-20-50 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | 60     | VC1FLB2SS016-20-60 |
| 20        | 25X2                | 40     | 22.2   | 20     | 25     | 40     | VC1FLB2SS020-25-40 |
| 20        | 25X2                | 40     | 22.2   | 20     | 25     | 50     | VC1FLB2SS020-25-50 |
| 20        | 25X2                | 40     | 22.2   | 20     | 25     | 60     | VC1FLB2SS020-25-60 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 40     | VC1FLB2SS025-28-40 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 50     | VC1FLB2SS025-28-50 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | 60     | VC1FLB2SS025-28-60 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 40     | VC1FLB2SS032-38-40 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 50     | VC1FLB2SS032-38-50 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | 60     | VC1FLB2SS032-38-60 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 40     | VC1FLB2SS040-44-40 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 50     | VC1FLB2SS040-44-50 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | 60     | VC1FLB2SS040-44-60 |
| 50        | 57X3.2              | 75     | 52.2   | 50     | 57     | 40     | VC1FLB2SS050-57-40 |
| 50        | 57X3.2              | 75     | 52.2   | 50     | 57     | 50     | VC1FLB2SS050-57-50 |
| 50        | 57X3.2              | 75     | 52.2   | 50     | 57     | 60     | VC1FLB2SS050-57-60 |

## ISO-KF Full Flange



- Pressure range:  $1 \cdot 10^{-8}$  mbar to 1.5 bar (elastomer seal)
- $1 \cdot 10^{-9}$  mbar to 1.5 bar 304 & 316L (metal seal)
- Custom lengths available upon request

### Dimensions



### Aluminium EN AW-6082/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No         |
|-----------|--------|--------|--------|--------|--------|------------------|
| 10        | 30     | 12.2   | 10     | 14     | 60     | VC1FLC1AL010-60  |
| 16        | 30     | 17.2   | 16     | 20     | 80     | VC1FLC1AL016-80  |
| 20        | 40     | 22.2   | 20     | 25     | 100    | VC1FLC1AL020-100 |
| 25        | 40     | 26.2   | 24     | 28     | 100    | VC1FLC1AL025-100 |
| 32        | 55     | 34.2   | 34     | 38     | 130    | VC1FLC1AL032-130 |
| 40        | 55     | 41.2   | 40.5   | 44.5   | 130    | VC1FLC1AL040-130 |
| 50        | 75     | 52.2   | 50.6   | 57     | 140    | VC1FLC1AL050-140 |

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No         |
|-----------|--------|--------|--------|--------|--------|------------------|
| 10        | 30     | 12.2   | 10     | 14     | 60     | VC1FLC1SS010-60  |
| 16        | 30     | 17.2   | 16     | 20     | 80     | VC1FLC1SS016-80  |
| 20        | 40     | 22.2   | 20     | 25     | 100    | VC1FLC1SS020-100 |
| 25        | 40     | 26.2   | 24     | 28     | 100    | VC1FLC1SS025-100 |
| 32        | 55     | 34.2   | 34     | 38     | 130    | VC1FLC1SS032-130 |
| 40        | 55     | 41.2   | 40.5   | 44.5   | 130    | VC1FLC1SS040-130 |
| 50        | 75     | 52.2   | 50.6   | 57     | 140    | VC1FLC1SS050-140 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

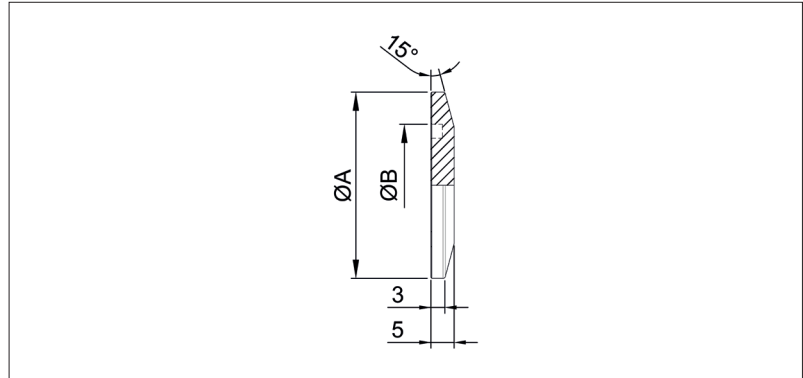
| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No         |
|-----------|--------|--------|--------|--------|--------|------------------|
| 10        | 30     | 12.2   | 10     | 14     | 60     | VC1FLC2SS010-60  |
| 16        | 30     | 17.2   | 16     | 20     | 80     | VC1FLC2SS016-80  |
| 20        | 40     | 22.2   | 20     | 25     | 100    | VC1FLC2SS020-100 |
| 25        | 40     | 26.2   | 24     | 28     | 100    | VC1FLC2SS025-100 |
| 32        | 55     | 34.2   | 34     | 38     | 130    | VC1FLC2SS032-130 |
| 40        | 55     | 41.2   | 40.5   | 44.5   | 130    | VC1FLC2SS040-130 |
| 50        | 75     | 52.2   | 50.6   | 57     | 140    | VC1FLC2SS050-140 |

## ISO-KF Blanking Flange



- Pressure range:  $1 \cdot 10^{-8}$  mbar to 1.5 bar (elastomer seal)
- $1 \cdot 10^{-9}$  mbar to 1.5 bar 304 & 316L (metal seal)

### Dimensions



### Aluminium EN AW-6082/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | Order No     |
|-----------|--------|--------|--------------|
| 10        | 30     | 12.2   | VC1FLD1AL010 |
| 16        | 30     | 17.2   | VC1FLD1AL016 |
| 20        | 40     | 22.2   | VC1FLD1AL020 |
| 25        | 40     | 26.2   | VC1FLD1AL025 |
| 32        | 55     | 34.2   | VC1FLD1AL032 |
| 40        | 55     | 41.2   | VC1FLD1AL040 |
| 50        | 75     | 52.2   | VC1FLD1AL050 |

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | Order No     |
|-----------|--------|--------|--------------|
| 10        | 30     | 12.2   | VC1FLD1SS010 |
| 16        | 30     | 17.2   | VC1FLD1SS016 |
| 20        | 40     | 22.2   | VC1FLD1SS020 |
| 25        | 40     | 26.2   | VC1FLD1SS025 |
| 32        | 55     | 34.2   | VC1FLD1SS032 |
| 40        | 55     | 41.2   | VC1FLD1SS040 |
| 50        | 75     | 52.2   | VC1FLD1SS050 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

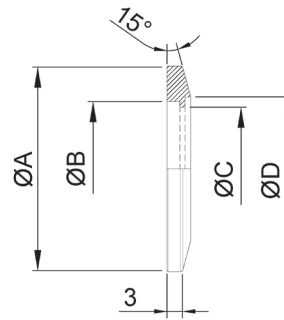
| Size (DN) | A (mm) | B (mm) | Order No     |
|-----------|--------|--------|--------------|
| 10        | 30     | 12.2   | VC1FLD2SS010 |
| 16        | 30     | 17.2   | VC1FLD2SS016 |
| 20        | 40     | 22.2   | VC1FLD2SS020 |
| 25        | 40     | 26.2   | VC1FLD2SS025 |
| 32        | 55     | 34.2   | VC1FLD2SS032 |
| 40        | 55     | 41.2   | VC1FLD2SS040 |
| 50        | 75     | 52.2   | VC1FLD2SS050 |

## ISO-KF Weld Ring Flange



- Pressure range:  $1 \cdot 10^{-8}$  mbar to 1.5 bar (elastomer seal)
- $1 \cdot 10^{-9}$  mbar to 1.5 bar 304 & 316L (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | Order No          |
|-----------|---------------------|--------|--------|--------|--------|-------------------|
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | VC1FLE1SS010-14-2 |
| 10        | 13X1.5              | 30     | 12.2   | 10     | 13     | VC1FLE1SS010-13-1 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | VC1FLE1SS016-20-2 |
| 16        | 19x1.5              | 30     | 17.2   | 16     | 19     | VC1FLE1SS016-19-1 |
| 20        | 25X2                | 40     | 22.2   | 21     | 25     | VC1FLE1SS020-25-2 |
| 20        | 23x1.5              | 40     | 22.2   | 20     | 23     | VC1FLE1SS020-23-1 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | VC1FLE1SS025-28-2 |
| 25        | 29x1.5              | 40     | 26.2   | 26     | 29     | VC1FLE1SS025-29-1 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | VC1FLE1SS032-38-2 |
| 32        | 35x1.5              | 55     | 34.2   | 32     | 35     | VC1FLE1SS032-35-1 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | VC1FLE1SS040-44-2 |
| 40        | 41x1.5              | 55     | 41.2   | 38     | 41     | VC1FLE1SS040-41-1 |
| 50        | 57X3.2              | 75     | 52.2   | 50.6   | 57     | VC1FLE1SS050-57-3 |
| 50        | 53x1.5              | 75     | 52.2   | 50     | 53     | VC1FLE1SS050-53-1 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

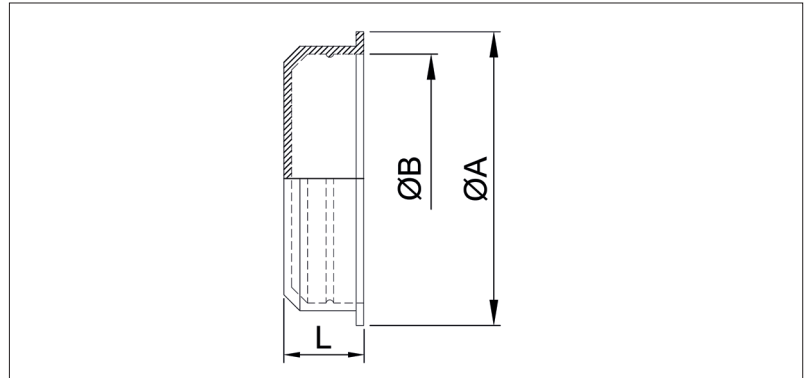
| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | Order No          |
|-----------|---------------------|--------|--------|--------|--------|-------------------|
| 10        | 14X2                | 30     | 12.2   | 10     | 14     | VC1FLE2SS010-14-2 |
| 10        | 13X1.5              | 30     | 12.2   | 10     | 13     | VC1FLE2SS010-13-1 |
| 16        | 20X2                | 30     | 17.2   | 16     | 20     | VC1FLE2SS016-20-2 |
| 16        | 19x1.5              | 30     | 17.2   | 16     | 19     | VC1FLE2SS016-19-1 |
| 20        | 25X2                | 40     | 22.2   | 21     | 25     | VC1FLE2SS020-25-2 |
| 20        | 23x1.5              | 40     | 22.2   | 20     | 23     | VC1FLE2SS020-23-1 |
| 25        | 28X2                | 40     | 26.2   | 24     | 28     | VC1FLE2SS025-28-2 |
| 25        | 29x1.5              | 40     | 26.2   | 26     | 29     | VC1FLE2SS025-29-1 |
| 32        | 38X2                | 55     | 34.2   | 34     | 38     | VC1FLE2SS032-38-2 |
| 32        | 35x1.5              | 55     | 34.2   | 32     | 35     | VC1FLE2SS032-35-1 |
| 40        | 44.5X2              | 55     | 41.2   | 40.5   | 44.5   | VC1FLE2SS040-44-2 |
| 40        | 41x1.5              | 55     | 41.2   | 38     | 41     | VC1FLE2SS040-41-1 |
| 50        | 57X3.2              | 75     | 52.2   | 50.6   | 57     | VC1FLE2SS050-57-3 |
| 50        | 53x1.5              | 75     | 52.2   | 50     | 53     | VC1FLE2SS050-53-1 |

## ISO-KF Flange Caps (Plastics)

- Material: Plastic
- Polyethylene (PE)



### Dimensions

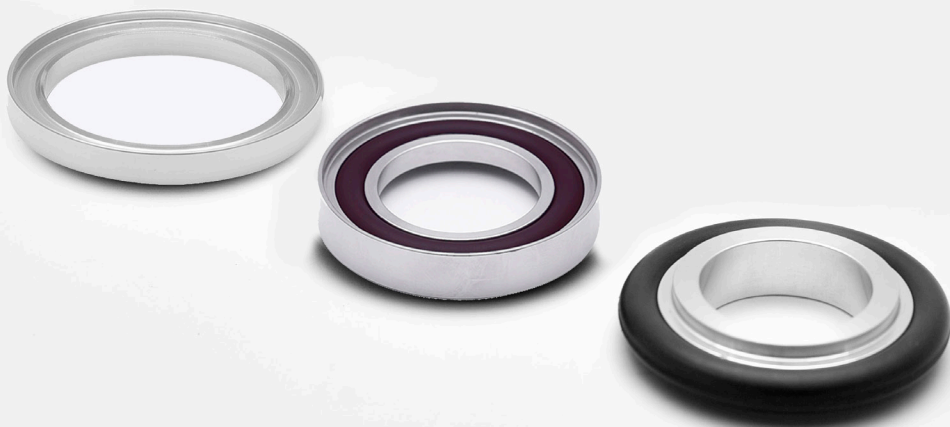


### Plastic

| Size (DN) | A (mm) | B (mm) | L (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10/16     | 30     | 37     | 11.5   | VC1FLF2PL016 |
| 20/25     | 40     | 47     | 11.5   | VC1FLF2PL025 |
| 32/40     | 55     | 62     | 11.5   | VC1FLF2PL040 |
| 50        | 75     | 82     | 11.5   | VC1FLF2PL050 |

# ISO-KF Seals

This part consists of ISO-KF Seals.  
Check out this section for products NW10-NW50

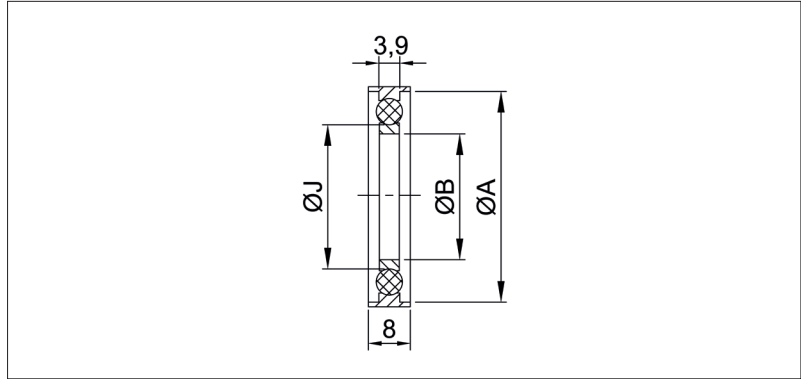


## ISO-KF Seal Outer Centered



- Various types of O-ring seals are available.
- Inner ring material: Stainless steel
- Consider O-ring temperature ranges (See Properties of Elastomer Materials Table on Page 12)

### Dimensions



### Aluminium EN AW-6082/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 10/16     | 30     | 16     | 18     | FKM          | VC1SLA1SS016-FKM  |
| 10/16     | 30     | 16     | 18     | CR           | VC1SLA1AL016-CR   |
| 10/16     | 30     | 16     | 18     | NBR          | VC1SLA1AL016-NBR  |
| 10/16     | 30     | 16     | 18     | EPDM         | VC1SLA1AL016-EPDM |
| 10/16     | 40     | 24     | 28     | VMQ(SILICON) | VC1SLA1AL016-VMQ  |
| 20/25     | 40     | 24     | 28     | FKM          | VC1SLA1AL025-FKM  |
| 20/25     | 40     | 24     | 28     | CR           | VC1SLA1AL025-CR   |
| 20/25     | 40     | 24     | 28     | NBR          | VC1SLA1AL025-NBR  |
| 20/25     | 40     | 24     | 28     | EPDM         | VC1SLA1AL025-EPDM |
| 20/25     | 40     | 24     | 28     | VMQ(SILICON) | VC1SLA1AL025-VMQ  |
| 32/40     | 55     | 40     | 42     | FKM          | VC1SLA1AL040-FKM  |
| 32/40     | 55     | 40     | 42     | CR           | VC1SLA1AL040-CR   |
| 32/40     | 55     | 40     | 42     | NBR          | VC1SLA1AL040-NBR  |
| 32/40     | 55     | 40     | 42     | EPDM         | VC1SLA1AL040-EPDM |
| 32/40     | 55     | 40     | 42     | VMQ(SILICON) | VC1SLA1AL040-VMQ  |
| 50        | 75     | 50     | 55     | FKM          | VC1SLA1AL050-FKM  |
| 50        | 75     | 50     | 55     | CR           | VC1SLA1AL050-CR   |
| 50        | 75     | 50     | 55     | NBR          | VC1SLA1AL050-NBR  |
| 50        | 75     | 50     | 55     | EPDM         | VC1SLA1AL050-EPDM |
| 50        | 75     | 50     | 55     | VMQ(SILICON) | VC1SLA1AL050-VMQ  |

### PTFE (inner and centering ring)

- Temperature Range: -15 to 150 C°

| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring | Order No.        |
|-----------|--------|--------|--------|--------|------------------|
| 10/16     | 30     | 16     | 18     | FKM    | VC1SLA1PL016-FKM |
| 20/25     | 40     | 24     | 28     | FKM    | VC1SLA1PL025-FKM |
| 32/40     | 55     | 40     | 42     | FKM    | VC1SLA1PL040-FKM |
| 50        | 75     | 50     | 55     | FKM    | VC1SLA1PL050-FKM |

**Stainless Steel 304/1.4301**

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 10/16     | 30     | 16     | 18     | FKM          | VC1SLA1SS016-FKM  |
| 10/16     | 30     | 16     | 18     | CR           | VC1SLA1SS016-CR   |
| 10/16     | 30     | 16     | 18     | NBR          | VC1SLA1SS016-NBR  |
| 10/16     | 30     | 16     | 18     | EPDM         | VC1SLA1SS016-EPDM |
| 10/16     | 40     | 24     | 28     | VMQ(SILICON) | VC1SLA1SS016-VMQ  |
| 20/25     | 40     | 24     | 28     | FKM          | VC1SLA1SS025-FKM  |
| 20/25     | 40     | 24     | 28     | CR           | VC1SLA1SS025-CR   |
| 20/25     | 40     | 24     | 28     | NBR          | VC1SLA1SS025-NBR  |
| 20/25     | 40     | 24     | 28     | EPDM         | VC1SLA1SS025-EPDM |
| 20/25     | 40     | 24     | 28     | VMQ(SILICON) | VC1SLA1SS025-VMQ  |
| 32/40     | 55     | 40     | 42     | FKM          | VC1SLA1SS040-FKM  |
| 32/40     | 55     | 40     | 42     | CR           | VC1SLA1SS040-CR   |
| 32/40     | 55     | 40     | 42     | NBR          | VC1SLA1SS040-NBR  |
| 32/40     | 55     | 40     | 42     | EPDM         | VC1SLA1SS040-EPDM |
| 32/40     | 55     | 40     | 42     | VMQ(SILICON) | VC1SLA1SS040-VMQ  |
| 50        | 75     | 50     | 55     | FKM          | VC1SLA1SS050-FKM  |
| 50        | 75     | 50     | 55     | CR           | VC1SLA1SS050-CR   |
| 50        | 75     | 50     | 55     | NBR          | VC1SLA1SS050-NBR  |
| 50        | 75     | 50     | 55     | EPDM         | VC1SLA1SS050-EPDM |
| 50        | 75     | 50     | 55     | VMQ(SILICON) | VC1SLA1SS050-VMQ  |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 10/16     | 30     | 16     | 18     | FKM          | VC1SLA2SS016-FKM  |
| 10/16     | 30     | 16     | 18     | CR           | VC1SLA2SS016-CR   |
| 10/16     | 30     | 16     | 18     | NBR          | VC1SLA2SS016-NBR  |
| 10/16     | 30     | 16     | 18     | EPDM         | VC1SLA2SS016-EPDM |
| 10/16     | 40     | 24     | 28     | VMQ(SILICON) | VC1SLA2SS016-VMQ  |
| 20/25     | 40     | 24     | 28     | FKM          | VC1SLA2SS025-FKM  |
| 20/25     | 40     | 24     | 28     | CR           | VC1SLA2SS025-CR   |
| 20/25     | 40     | 24     | 28     | NBR          | VC1SLA2SS025-NBR  |
| 20/25     | 40     | 24     | 28     | EPDM         | VC1SLA2SS025-EPDM |
| 20/25     | 40     | 24     | 28     | VMQ(SILICON) | VC1SLA2SS025-VMQ  |
| 32/40     | 55     | 40     | 42     | FKM          | VC1SLA2SS040-FKM  |
| 32/40     | 55     | 40     | 42     | CR           | VC1SLA2SS040-CR   |
| 32/40     | 55     | 40     | 42     | NBR          | VC1SLA2SS040-NBR  |
| 32/40     | 55     | 40     | 42     | EPDM         | VC1SLA2SS040-EPDM |
| 32/40     | 55     | 40     | 42     | VMQ(SILICON) | VC1SLA2SS040-VMQ  |
| 50        | 75     | 50     | 55     | FKM          | VC1SLA2SS050-FKM  |
| 50        | 75     | 50     | 55     | CR           | VC1SLA2SS050-CR   |
| 50        | 75     | 50     | 55     | NBR          | VC1SLA2SS050-NBR  |
| 50        | 75     | 50     | 55     | EPDM         | VC1SLA2SS050-EPDM |
| 50        | 75     | 50     | 55     | VMQ(SILICON) | VC1SLA2SS050-VMQ  |

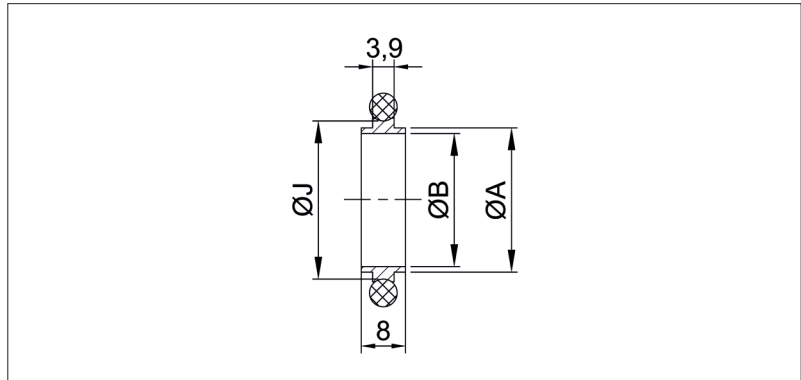


## ISO-KF Seal Inner Centered



- Various types of O-ring seals are available.
- Consider O-ring temperature ranges (See Properties of Elastomer Materials Table on Page 12)

### Dimensions



### Aluminium EN AW-6082/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 10        | 12     | 10     | 15     | FKM          | VC1SLB1AL010-FKM  |
| 10        | 12     | 10     | 15     | CR           | VC1SLB1AL010-CR   |
| 10        | 12     | 10     | 15     | NBR          | VC1SLB1AL010-NBR  |
| 10        | 12     | 10     | 15     | EPDM         | VC1SLB1AL010-EPDM |
| 10        | 12     | 10     | 15     | VMQ(SILICON) | VC1SLB1AL010-VMQ  |
| 16        | 17     | 16     | 18     | FKM          | VC1SLB1AL016-FKM  |
| 16        | 17     | 16     | 18     | CR           | VC1SLB1AL016-CR   |
| 16        | 17     | 16     | 18     | NBR          | VC1SLB1AL016-NBR  |
| 16        | 17     | 16     | 18     | EPDM         | VC1SLB1AL016-EPDM |
| 16        | 17     | 16     | 18     | VMQ(SILICON) | VC1SLB1AL016-VMQ  |
| 20        | 22     | 20     | 24     | FKM          | VC1SLB1AL020-FKM  |
| 20        | 22     | 20     | 25     | CR           | VC1SLB1AL020-CR   |
| 20        | 22     | 20     | 25     | NBR          | VC1SLB1AL020-NBR  |
| 20        | 22     | 20     | 25     | EPDM         | VC1SLB1AL020-EPDM |
| 20        | 22     | 20     | 25     | VMQ(SILICON) | VC1SLB1AL020-VMQ  |
| 25        | 26     | 24     | 28     | FKM          | VC1SLB1AL025-FKM  |
| 25        | 26     | 24     | 28     | CR           | VC1SLB1AL025-CR   |
| 25        | 26     | 24     | 28     | NBR          | VC1SLB1AL025-NBR  |
| 25        | 26     | 24     | 28     | EPDM         | VC1SLB1AL025-EPDM |
| 25        | 26     | 24     | 28     | VMQ(SILICON) | VC1SLB1AL025-VMQ  |
| 32        | 34     | 32     | 35     | FKM          | VC1SLB1AL032-FKM  |

| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 32        | 34     | 32     | 35     | CR           | VC1SLB1AL032-CR   |
| 32        | 34     | 32     | 35     | NBR          | VC1SLB1AL032-NBR  |
| 32        | 34     | 32     | 35     | EPDM         | VC1SLB1AL032-EPDM |
| 32        | 34     | 32     | 35     | VMQ(SILICON) | VC1SLB1AL032-VMQ  |
| 40        | 41     | 40     | 42     | FKM          | VC1SLB1AL040-FKM  |
| 40        | 41     | 40     | 42     | CR           | VC1SLB1AL040-CR   |
| 40        | 41     | 40     | 42     | NBR          | VC1SLB1AL040-NBR  |
| 40        | 41     | 40     | 42     | EPDM         | VC1SLB1AL040-EPDM |
| 40        | 41     | 40     | 42     | VMQ(SILICON) | VC1SLB1AL040-VMQ  |
| 50        | 52     | 50     | 55     | FKM          | VC1SLB1AL050-FKM  |
| 50        | 52     | 50     | 55     | CR           | VC1SLB1AL050-CR   |
| 50        | 52     | 50     | 55     | NBR          | VC1SLB1AL050-NBR  |
| 50        | 52     | 50     | 55     | EPDM         | VC1SLB1AL050-EPDM |
| 50        | 52     | 50     | 55     | VMQ(SILICON) | VC1SLB1AL050-VMQ  |

**PTFE** (inner and centering ring)

- Temperature Range: -15 to 150 C°

| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring | Order No         |
|-----------|--------|--------|--------|--------|------------------|
| 10        | 12     | 10     | 15     | FKM    | VC1SLB1PL010-FKM |
| 16        | 17     | 16     | 18     | FKM    | VC1SLB1PL016-FKM |
| 20        | 22     | 20     | 24     | FKM    | VC1SLB1PL020-FKM |
| 25        | 26     | 24     | 28     | FKM    | VC1SLB1PL025-FKM |
| 32        | 34     | 32     | 35     | FKM    | VC1SLB1PL032-FKM |
| 40        | 41     | 40     | 42     | FKM    | VC1SLB1PL040-FKM |
| 50        | 52     | 50     | 55     | FKM    | VC1SLB1PL050-FKM |

**Stainless Steel 304/1.4301**

- Temperature range: -196 to 300 °C

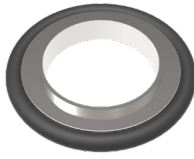
| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 10        | 12     | 10     | 15     | FKM          | VC1SLB1SS010-FKM  |
| 10        | 12     | 10     | 15     | CR           | VC1SLB1SS010-CR   |
| 10        | 12     | 10     | 15     | NBR          | VC1SLB1SS010-NBR  |
| 10        | 12     | 10     | 15     | EPDM         | VC1SLB1SS010-EPDM |
| 10        | 12     | 10     | 15     | VMQ(SILICON) | VC1SLB1SS010-VMQ  |
| 16        | 17     | 16     | 18     | FKM          | VC1SLB1SS016-FKM  |
| 16        | 17     | 16     | 18     | CR           | VC1SLB1SS016-CR   |
| 16        | 17     | 16     | 18     | NBR          | VC1SLB1SS016-NBR  |
| 16        | 17     | 16     | 18     | EPDM         | VC1SLB1SS016-EPDM |
| 16        | 17     | 16     | 18     | VMQ(SILICON) | VC1SLB1SS016-VMQ  |
| 20        | 22     | 20     | 24     | FKM          | VC1SLB1SS020-FKM  |
| 20        | 22     | 20     | 25     | CR           | VC1SLB1SS020-CR   |
| 20        | 22     | 20     | 25     | NBR          | VC1SLB1SS020-NBR  |
| 20        | 22     | 20     | 25     | EPDM         | VC1SLB1SS020-EPDM |
| 20        | 22     | 20     | 25     | VMQ(SILICON) | VC1SLB1SS020-VMQ  |
| 25        | 26     | 24     | 28     | FKM          | VC1SLB1SS025-FKM  |
| 25        | 26     | 24     | 28     | CR           | VC1SLB1SS025-CR   |
| 25        | 26     | 24     | 28     | NBR          | VC1SLB1SS025-NBR  |
| 25        | 26     | 24     | 28     | EPDM         | VC1SLB1SS025-EPDM |
| 25        | 26     | 24     | 28     | VMQ(SILICON) | VC1SLB1SS025-VMQ  |
| 32        | 34     | 32     | 35     | FKM          | VC1SLB1SS032-FKM  |
| 32        | 34     | 32     | 35     | CR           | VC1SLB1SS032-CR   |
| 32        | 34     | 32     | 35     | NBR          | VC1SLB1SS032-NBR  |
| 32        | 34     | 32     | 35     | EPDM         | VC1SLB1SS032-EPDM |
| 32        | 34     | 32     | 35     | VMQ(SILICON) | VC1SLB1SS032-VMQ  |
| 40        | 41     | 40     | 42     | FKM          | VC1SLB1SS040-FKM  |
| 40        | 41     | 40     | 42     | CR           | VC1SLB1SS040-CR   |
| 40        | 41     | 40     | 42     | NBR          | VC1SLB1SS040-NBR  |
| 40        | 41     | 40     | 42     | EPDM         | VC1SLB1SS040-EPDM |
| 40        | 41     | 40     | 42     | VMQ(SILICON) | VC1SLB1SS040-VMQ  |
| 50        | 52     | 50     | 55     | FKM          | VC1SLB1SS050-FKM  |
| 50        | 52     | 50     | 55     | CR           | VC1SLB1SS050-CR   |
| 50        | 52     | 50     | 55     | NBR          | VC1SLB1SS050-NBR  |
| 50        | 52     | 50     | 55     | EPDM         | VC1SLB1SS050-EPDM |
| 50        | 52     | 50     | 55     | VMQ(SILICON) | VC1SLB1SS050-VMQ  |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

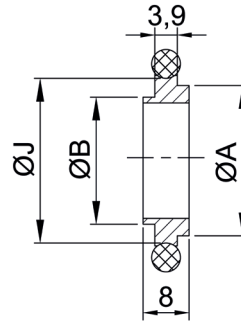
| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 10        | 12     | 10     | 15     | FKM          | VC1SLB2SS010-FKM  |
| 10        | 12     | 10     | 15     | CR           | VC1SLB2SS010-CR   |
| 10        | 12     | 10     | 15     | NBR          | VC1SLB2SS010-NBR  |
| 10        | 12     | 10     | 15     | EPDM         | VC1SLB2SS010-EPDM |
| 10        | 12     | 10     | 15     | VMQ(SILICON) | VC1SLB2SS010-VMQ  |
| 16        | 17     | 16     | 18     | FKM          | VC1SLB2SS016-FKM  |
| 16        | 17     | 16     | 18     | CR           | VC1SLB2SS016-CR   |
| 16        | 17     | 16     | 18     | NBR          | VC1SLB2SS016-NBR  |
| 16        | 17     | 16     | 18     | EPDM         | VC1SLB2SS016-EPDM |
| 16        | 17     | 16     | 18     | VMQ(SILICON) | VC1SLB2SS016-VMQ  |
| 20        | 22     | 20     | 24     | FKM          | VC1SLB2SS020-FKM  |
| 20        | 22     | 20     | 25     | CR           | VC1SLB2SS020-CR   |
| 20        | 22     | 20     | 25     | NBR          | VC1SLB2SS020-NBR  |
| 20        | 22     | 20     | 25     | EPDM         | VC1SLB2SS020-EPDM |
| 20        | 22     | 20     | 25     | VMQ(SILICON) | VC1SLB2SS020-VMQ  |
| 25        | 26     | 24     | 28     | FKM          | VC1SLB2SS025-FKM  |
| 25        | 26     | 24     | 28     | CR           | VC1SLB2SS025-CR   |
| 25        | 26     | 24     | 28     | NBR          | VC1SLB2SS025-NBR  |
| 25        | 26     | 24     | 28     | EPDM         | VC1SLB2SS025-EPDM |
| 25        | 26     | 24     | 28     | VMQ(SILICON) | VC1SLB2SS025-VMQ  |
| 32        | 34     | 32     | 35     | FKM          | VC1SLB2SS032-FKM  |
| 32        | 34     | 32     | 35     | CR           | VC1SLB2SS032-CR   |
| 32        | 34     | 32     | 35     | NBR          | VC1SLB2SS032-NBR  |
| 32        | 34     | 32     | 35     | EPDM         | VC1SLB2SS032-EPDM |
| 32        | 34     | 32     | 35     | VMQ(SILICON) | VC1SLB2SS032-VMQ  |
| 40        | 41     | 40     | 42     | FKM          | VC1SLB2SS040-FKM  |
| 40        | 41     | 40     | 42     | CR           | VC1SLB2SS040-CR   |
| 40        | 41     | 40     | 42     | NBR          | VC1SLB2SS040-NBR  |
| 40        | 41     | 40     | 42     | EPDM         | VC1SLB2SS040-EPDM |
| 40        | 41     | 40     | 42     | VMQ(SILICON) | VC1SLB2SS040-VMQ  |
| 50        | 52     | 50     | 55     | FKM          | VC1SLB2SS050-FKM  |
| 50        | 52     | 50     | 55     | CR           | VC1SLB2SS050-CR   |
| 50        | 52     | 50     | 55     | NBR          | VC1SLB2SS050-NBR  |
| 50        | 52     | 50     | 55     | EPDM         | VC1SLB2SS050-EPDM |
| 50        | 52     | 50     | 55     | VMQ(SILICON) | VC1SLB2SS050-VMQ  |

## ISO-KF Seal Reducer Inner Centering



- Various types of O-ring seals are available.
- Consider O-ring temperature ranges.
- Consider O-ring temperature ranges (See Properties of Elastomer Materials Table on Page 12)

### Dimensions



### Aluminium EN AW-6082/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 10/16     | 17     | 12     | 18     | FKM          | VC1SLC1AL016-FKM  |
| 10/16     | 17     | 12     | 18     | CR           | VC1SLC1AL016-CR   |
| 10/16     | 17     | 12     | 18     | NBR          | VC1SLC1AL016-NBR  |
| 10/16     | 17     | 12     | 18     | EPDM         | VC1SLC1AL016-EPDM |
| 10/16     | 17     | 12     | 18     | VMQ(SILICON) | VC1SLC1AL016-VMQ  |
| 20/25     | 26     | 22     | 28     | FKM          | VC1SLC1AL025-FKM  |
| 20/25     | 26     | 22     | 28     | CR           | VC1SLC1AL025-CR   |
| 20/25     | 26     | 22     | 28     | NBR          | VC1SLC1AL025-NBR  |
| 20/25     | 26     | 22     | 28     | EPDM         | VC1SLC1AL025-EPDM |
| 20/25     | 26     | 22     | 28     | VMQ(SILICON) | VC1SLC1AL025-VMQ  |
| 32/40     | 41     | 34     | 42     | FKM          | VC1SLC1AL040-FKM  |
| 32/40     | 41     | 34     | 42     | CR           | VC1SLC1AL040-CR   |
| 32/40     | 41     | 34     | 42     | NBR          | VC1SLC1AL040-NBR  |
| 32/40     | 41     | 34     | 42     | EPDM         | VC1SLC1AL040-EPDM |
| 32/40     | 41     | 34     | 42     | VMQ(SILICON) | VC1SLC1AL040-VMQ  |

### PTFE

- Temperature Range: -15 to 150 C°

| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring | Order No         |
|-----------|--------|--------|--------|--------|------------------|
| 10/16     | 17     | 12     | 18     | FKM    | VC1SLC1PL016-FKM |
| 20/25     | 26     | 22     | 28     | FKM    | VC1SLC1PL025-FKM |
| 32/40     | 41     | 34     | 42     | FKM    | VC1SLC1PL040-FKM |

**Stainless Steel 304/1.4301**

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 10/16     | 17     | 12     | 18     | FKM          | VC1SLC1SS016-FKM  |
| 10/16     | 17     | 12     | 18     | CR           | VC1SLC1SS016-CR   |
| 10/16     | 17     | 12     | 18     | NBR          | VC1SLC1SS016-NBR  |
| 10/16     | 17     | 12     | 18     | EPDM         | VC1SLC1SS016-EPDM |
| 10/16     | 17     | 12     | 18     | VMQ(SILICON) | VC1SLC1SS016-VMQ  |
| 20/25     | 26     | 22     | 28     | FKM          | VC1SLC1SS025-FKM  |
| 20/25     | 26     | 22     | 28     | CR           | VC1SLC1SS025-CR   |
| 20/25     | 26     | 22     | 28     | NBR          | VC1SLC1SS025-NBR  |
| 20/25     | 26     | 22     | 28     | EPDM         | VC1SLC1SS025-EPDM |
| 20/25     | 26     | 22     | 28     | VMQ(SILICON) | VC1SLC1SS025-VMQ  |
| 32/40     | 41     | 34     | 42     | FKM          | VC1SLC1SS040-FKM  |
| 32/40     | 41     | 34     | 42     | CR           | VC1SLC1SS040-CR   |
| 32/40     | 41     | 34     | 42     | NBR          | VC1SLC1SS040-NBR  |
| 32/40     | 41     | 34     | 42     | EPDM         | VC1SLC1SS040-EPDM |
| 32/40     | 41     | 34     | 42     | VMQ(SILICON) | VC1SLC1SS040-VMQ  |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

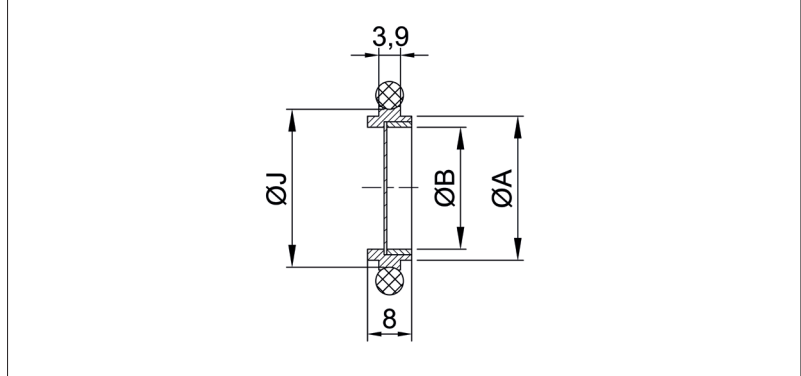
| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 10/16     | 17     | 12     | 18     | FKM          | VC1SLC2SS016-FKM  |
| 10/16     | 17     | 12     | 18     | CR           | VC1SLC2SS016-CR   |
| 10/16     | 17     | 12     | 18     | NBR          | VC1SLC2SS016-NBR  |
| 10/16     | 17     | 12     | 18     | EPDM         | VC1SLC2SS016-EPDM |
| 10/16     | 17     | 12     | 18     | VMQ(SILICON) | VC1SLC2SS016-VMQ  |
| 20/25     | 26     | 22     | 28     | FKM          | VC1SLC2SS025-FKM  |
| 20/25     | 26     | 22     | 28     | CR           | VC1SLC2SS025-CR   |
| 20/25     | 26     | 22     | 28     | NBR          | VC1SLC2SS025-NBR  |
| 20/25     | 26     | 22     | 28     | EPDM         | VC1SLC2SS025-EPDM |
| 20/25     | 26     | 22     | 28     | VMQ(SILICON) | VC1SLC2SS025-VMQ  |
| 32/40     | 41     | 34     | 42     | FKM          | VC1SLC2SS040-FKM  |
| 32/40     | 41     | 34     | 42     | CR           | VC1SLC2SS040-CR   |
| 32/40     | 41     | 34     | 42     | NBR          | VC1SLC2SS040-NBR  |
| 32/40     | 41     | 34     | 42     | EPDM         | VC1SLC2SS040-EPDM |
| 32/40     | 41     | 34     | 42     | VMQ(SILICON) | VC1SLC2SS040-VMQ  |

## ISO-KF Seal Inner Centered with Mesh Screen



- Various types of O-ring seals are available.
- Filter Material: Stainless Steel
- Wire thickness: Approximately 0.3 mm
- Mesh: Approximately 1 mm
- Consider O-ring temperature ranges (See Properties of Elastomer Materials Table on Page 12)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring | Order No         |
|-----------|--------|--------|--------|--------|------------------|
| 10        | 12     | 8      | 15     | FKM    | VC1SLD1SS010-FKM |
| 16        | 17     | 13     | 18     | FKM    | VC1SLD1SS016-FKM |
| 25        | 26     | 21     | 28     | FKM    | VC1SLD1SS025-FKM |
| 40        | 41     | 36     | 42     | FKM    | VC1SLD1SS040-FKM |
| 50        | 52     | 47     | 55     | FKM    | VC1SLD1SS050-FKM |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

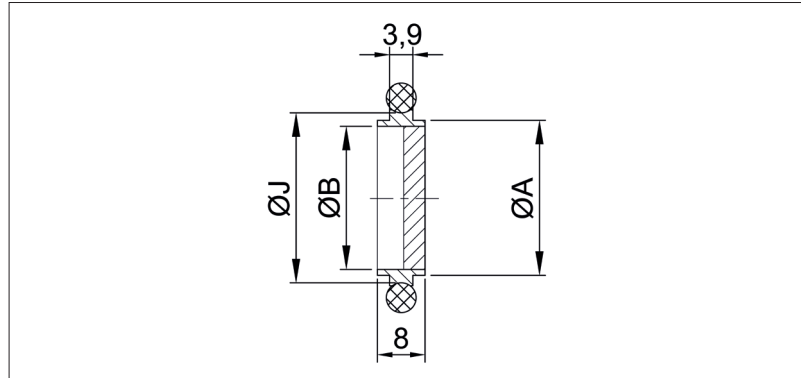
| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring | Order No         |
|-----------|--------|--------|--------|--------|------------------|
| 10        | 12     | 8      | 15     | FKM    | VC1SLD2SS010-FKM |
| 16        | 17     | 13     | 18     | FKM    | VC1SLD2SS016-FKM |
| 25        | 26     | 21     | 28     | FKM    | VC1SLD2SS025-FKM |
| 40        | 41     | 36     | 42     | FKM    | VC1SLD2SS040-FKM |
| 50        | 52     | 47     | 55     | FKM    | VC1SLD2SS050-FKM |

## ISO-KF Seal Inner Centered With Sintered Metal Filter



- Various types of O-ring seals are available
- Material: Sintered Bronze
- Pore size approximately 0.02 mm
- Consider O-ring temperature ranges (See Properties of Elastomer Materials Table on Page 12)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 10        | 12     | 8      | 15     | FKM          | VC1SLE1SS010-FKM  |
| 10        | 12     | 8      | 15     | CR           | VC1SLE1SS010-CR   |
| 10        | 12     | 8      | 15     | NBR          | VC1SLE1SS010-NBR  |
| 10        | 12     | 8      | 15     | EPDM         | VC1SLE1SS010-EPDM |
| 10        | 12     | 8      | 15     | VMQ(SILICON) | VC1SLE1SS010-VMQ  |
| 16        | 17     | 14     | 18     | FKM          | VC1SLE1SS016-FKM  |
| 16        | 17     | 14     | 18     | CR           | VC1SLE1SS016-CR   |
| 16        | 17     | 14     | 18     | NBR          | VC1SLE1SS016-NBR  |
| 16        | 17     | 14     | 18     | EPDM         | VC1SLE1SS016-EPDM |
| 16        | 17     | 14     | 18     | VMQ(SILICON) | VC1SLE1SS016-VMQ  |
| 20        | 22     | 18     | 24     | FKM          | VC1SLE1SS020-FKM  |
| 20        | 22     | 18     | 24     | CR           | VC1SLE1SS020-CR   |
| 20        | 22     | 18     | 24     | NBR          | VC1SLE1SS020-NBR  |
| 20        | 22     | 18     | 24     | EPDM         | VC1SLE1SS020-EPDM |
| 20        | 22     | 18     | 24     | VMQ(SILICON) | VC1SLE1SS020-VMQ  |
| 25        | 26     | 22     | 28     | FKM          | VC1SLE1SS025-FKM  |
| 25        | 26     | 22     | 28     | CR           | VC1SLE1SS025-CR   |
| 25        | 26     | 22     | 28     | NBR          | VC1SLE1SS025-NBR  |
| 25        | 26     | 22     | 28     | EPDM         | VC1SLE1SS025-EPDM |
| 25        | 26     | 22     | 28     | VMQ(SILICON) | VC1SLE1SS025-VMQ  |
| 32        | 34     | 30     | 35     | FKM          | VC1SLE1SS032-FKM  |
| 32        | 34     | 30     | 35     | CR           | VC1SLE1SS032-CR   |
| 32        | 34     | 30     | 35     | NBR          | VC1SLE1SS032-NBR  |
| 32        | 34     | 30     | 35     | EPDM         | VC1SLE1SS032-EPDM |
| 32        | 34     | 30     | 35     | VMQ(SILICON) | VC1SLE1SS032-VMQ  |
| 40        | 41     | 38     | 42     | FKM          | VC1SLE1SS040-FKM  |
| 40        | 41     | 38     | 42     | CR           | VC1SLE1SS040-CR   |
| 40        | 41     | 38     | 42     | NBR          | VC1SLE1SS040-NBR  |



| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 40        | 41     | 38     | 42     | EPDM         | VC1SLE1SS040-EPDM |
| 40        | 41     | 38     | 42     | VMQ(SILICON) | VC1SLE1SS040-VMQ  |
| 50        | 52     | 48     | 55     | FKM          | VC1SLE1SS050-FKM  |
| 50        | 52     | 48     | 55     | CR           | VC1SLE1SS050-CR   |
| 50        | 52     | 48     | 55     | NBR          | VC1SLE1SS050-NBR  |
| 50        | 52     | 48     | 55     | EPDM         | VC1SLE1SS050-EPDM |
| 50        | 52     | 48     | 55     | VMQ(SILICON) | VC1SLE1SS050-VMQ  |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

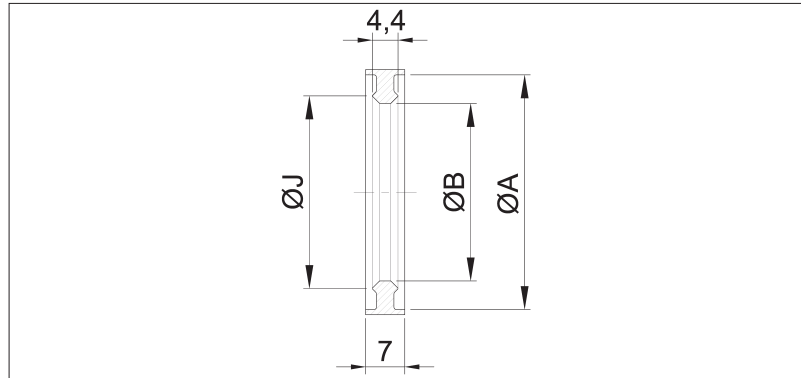
| Size (DN) | A (mm) | B (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------|--------------|-------------------|
| 10        | 12     | 8      | 15     | FKM          | VC1SLE2SS010-FKM  |
| 10        | 12     | 8      | 15     | CR           | VC1SLE2SS010-CR   |
| 10        | 12     | 8      | 15     | NBR          | VC1SLE2SS010-NBR  |
| 10        | 12     | 8      | 15     | EPDM         | VC1SLE2SS010-EPDM |
| 10        | 12     | 8      | 15     | VMQ(SILICON) | VC1SLE2SS010-VMQ  |
| 16        | 17     | 14     | 18     | FKM          | VC1SLE2SS016-FKM  |
| 16        | 17     | 14     | 18     | CR           | VC1SLE2SS016-CR   |
| 16        | 17     | 14     | 18     | NBR          | VC1SLE2SS016-NBR  |
| 16        | 17     | 14     | 18     | EPDM         | VC1SLE2SS016-EPDM |
| 16        | 17     | 14     | 18     | VMQ(SILICON) | VC1SLE2SS016-VMQ  |
| 20        | 22     | 18     | 24     | FKM          | VC1SLE2SS020-FKM  |
| 20        | 22     | 18     | 24     | CR           | VC1SLE2SS020-CR   |
| 20        | 22     | 18     | 24     | NBR          | VC1SLE2SS020-NBR  |
| 20        | 22     | 18     | 24     | EPDM         | VC1SLE2SS020-EPDM |
| 20        | 22     | 18     | 24     | VMQ(SILICON) | VC1SLE2SS020-VMQ  |
| 25        | 26     | 22     | 28     | FKM          | VC1SLE2SS025-FKM  |
| 25        | 26     | 22     | 28     | CR           | VC1SLE2SS025-CR   |
| 25        | 26     | 22     | 28     | NBR          | VC1SLE2SS025-NBR  |
| 25        | 26     | 22     | 28     | EPDM         | VC1SLE2SS025-EPDM |
| 25        | 26     | 22     | 28     | VMQ(SILICON) | VC1SLE2SS025-VMQ  |
| 32        | 34     | 30     | 35     | FKM          | VC1SLE2SS032-FKM  |
| 32        | 34     | 30     | 35     | CR           | VC1SLE2SS032-CR   |
| 32        | 34     | 30     | 35     | NBR          | VC1SLE2SS032-NBR  |
| 32        | 34     | 30     | 35     | EPDM         | VC1SLE2SS032-EPDM |
| 32        | 34     | 30     | 35     | VMQ(SILICON) | VC1SLE2SS032-VMQ  |
| 40        | 41     | 38     | 42     | FKM          | VC1SLE2SS040-FKM  |
| 40        | 41     | 38     | 42     | CR           | VC1SLE2SS040-CR   |
| 40        | 41     | 38     | 42     | NBR          | VC1SLE2SS040-NBR  |
| 40        | 41     | 38     | 42     | EPDM         | VC1SLE2SS040-EPDM |
| 40        | 41     | 38     | 42     | VMQ(SILICON) | VC1SLE2SS040-VMQ  |
| 50        | 52     | 48     | 55     | FKM          | VC1SLE2SS050-FKM  |
| 50        | 52     | 48     | 55     | CR           | VC1SLE2SS050-CR   |
| 50        | 52     | 48     | 55     | NBR          | VC1SLE2SS050-NBR  |
| 50        | 52     | 48     | 55     | EPDM         | VC1SLE2SS050-EPDM |
| 50        | 52     | 48     | 55     | VMQ(SILICON) | VC1SLE2SS050-VMQ  |

## ISO-KF Edge Seal Outer Centered



- No gas permeation
- Cryo, radiation tolerant and nuclear application
- Clean room application compatible
- For stainless steel flanges
- Fastener: ISO-KF Clamp for metal seals
- For single use only

### Dimensions



### Aluminium EN AW-1050

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | J (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10/16     | 30     | 20     | 23     | VC1SLF2AL016 |
| 20/25     | 40     | 32     | 33     | VC1SLF2AL025 |
| 32/40     | 55     | 45     | 48     | VC1SLF2AL040 |
| 50        | 75     | 65     | 68     | VC1SLF2AL050 |

### Copper

- Temperature Range: -196 to 200 C°

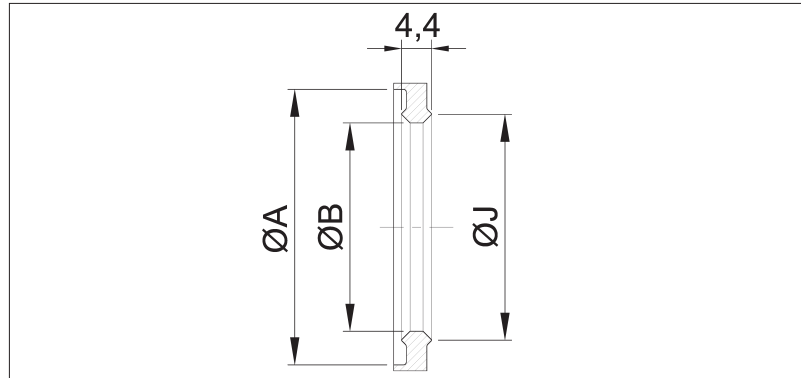
| Size (DN) | A (mm) | B (mm) | J (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10/16     | 30     | 20     | 23     | VC1SLF1CU016 |
| 20/25     | 40     | 32     | 33     | VC1SLF1CU025 |
| 32/40     | 55     | 45     | 48     | VC1SLF1CU040 |
| 50        | 75     | 65     | 68     | VC1SLF1CU050 |

## ISO-KF Edge Seal One-Side Outer Centered



- No gas permeation
- Cryo, radiation tolerant and nuclear application
- Clean room application compatible
- For stainless steel flanges
- Fastener: ISO-KF Clamp for metal seals
- For single use only

### Dimensions



### Aluminium EN AW-1050

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | J (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10/16     | 30     | 20     | 23     | VC1SLG2AL016 |
| 20/25     | 40     | 32     | 33     | VC1SLG2AL025 |
| 32/40     | 55     | 45     | 48     | VC1SLG2AL040 |
| 50        | 75     | 65     | 68     | VC1SLG2AL050 |

### Copper

- Temperature Range: -196 to 200 C°

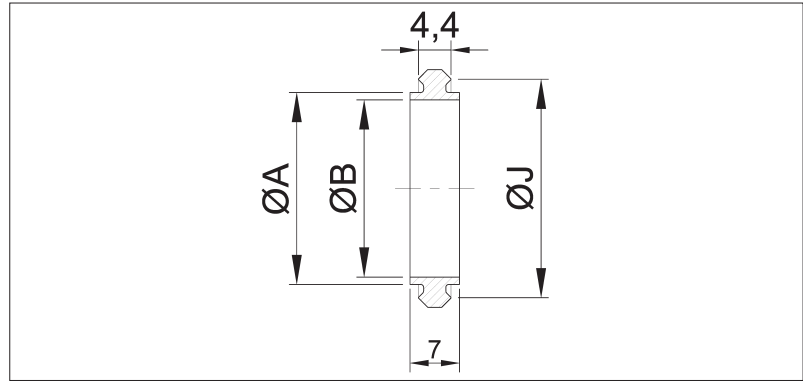
| Size (DN) | A (mm) | B (mm) | J (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10/16     | 30     | 20     | 23     | VC1SLG1CU016 |
| 20/25     | 40     | 32     | 33     | VC1SLG1CU025 |
| 32/40     | 55     | 45     | 48     | VC1SLG1CU040 |
| 50        | 75     | 65     | 68     | VC1SLG1CU050 |

## ISO-KF Edge Seal Inner Centered



- No gas permeation
- Cryo, radiation tolerant and nuclear application
- Clean room application compatible
- For stainless steel flanges
- Fastener: ISO-KF Clamp for metal seals
- For single use only

### Dimensions



### Aluminium EN AW-1050

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | J (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10        | 12     | 10     | 18     | VC1SLH2AL010 |
| 16        | 17     | 15     | 21     | VC1SLH2AL016 |
| 20        | 22     | 20     | 27     | VC1SLH2AL020 |
| 25        | 26     | 24     | 30     | VC1SLH2AL025 |
| 32        | 34     | 32     | 38     | VC1SLH2AL032 |
| 40        | 41     | 39     | 47     | VC1SLH2AL040 |
| 50        | 52     | 50     | 59     | VC1SLH2AL050 |

### Copper

- Temperature Range: -196 to 200 C°

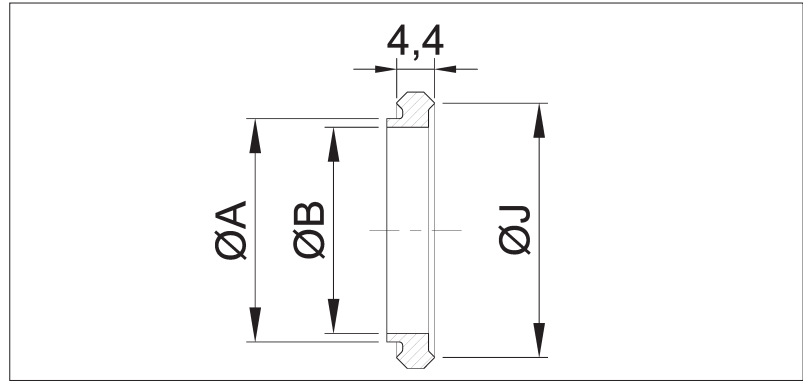
| Size (DN) | A (mm) | B (mm) | J (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10        | 12     | 10     | 18     | VC1SLH1CU010 |
| 16        | 17     | 15     | 21     | VC1SLH1CU016 |
| 20        | 22     | 20     | 27     | VC1SLH1CU020 |
| 25        | 26     | 24     | 30     | VC1SLH1CU025 |
| 32        | 34     | 32     | 38     | VC1SLH1CU032 |
| 40        | 41     | 39     | 47     | VC1SLH1CU040 |
| 50        | 52     | 50     | 59     | VC1SLH1CU050 |

## ISO-KF Edge Seal One-Side Inner Centered



- No gas permeation
- Cryo, radiation tolerant and nuclear application
- Clean room application compatible
- For stainless steel flanges
- Fastener: ISO-KF Clamp for metal seals
- For single use only

### Dimensions



### Aluminium EN AW-1050

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | J (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10        | 12     | 10     | 18     | VC1SLI2AL010 |
| 16        | 17     | 15     | 21     | VC1SLI2AL016 |
| 20        | 22     | 20     | 27     | VC1SLI2AL020 |
| 25        | 26     | 24     | 30     | VC1SLI2AL025 |
| 32        | 34     | 32     | 38     | VC1SLI2AL032 |
| 40        | 41     | 39     | 47     | VC1SLI2AL040 |
| 50        | 52     | 50     | 59     | VC1SLI2AL050 |

### Copper

- Temperature Range: -196 to 200 C°

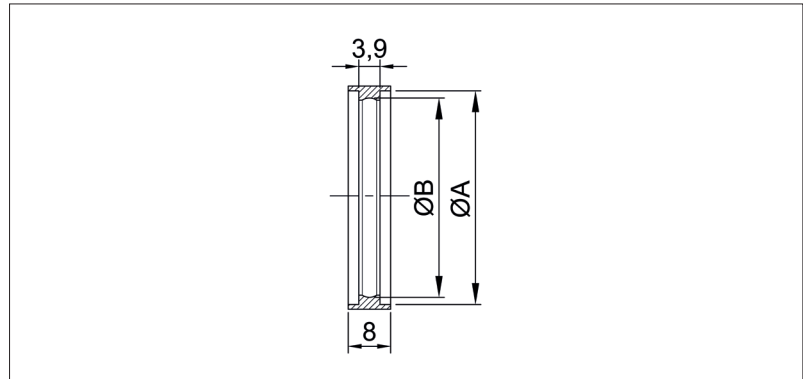
| Size (DN) | A (mm) | B (mm) | J (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10        | 12     | 10     | 18     | VC1SLI1CU010 |
| 16        | 17     | 15     | 21     | VC1SLI1CU016 |
| 20        | 22     | 20     | 27     | VC1SLI1CU020 |
| 25        | 26     | 24     | 30     | VC1SLI1CU025 |
| 32        | 34     | 32     | 38     | VC1SLI1CU032 |
| 40        | 41     | 39     | 47     | VC1SLI1CU040 |
| 50        | 52     | 50     | 59     | VC1SLI1CU050 |

# ISO-KF Outer Centering Outer Ring

- Various types of O-ring seals are available.



## Dimensions



### Aluminium EN AW-6082/T-6

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | Order No     |
|-----------|--------|--------|--------------|
| 10/16     | 30     | 28     | VC1SLK1AL016 |
| 20/25     | 40     | 38     | VC1SLK1AL025 |
| 32/40     | 55     | 53     | VC1SLK1AL040 |
| 50        | 75     | 64     | VC1SLK1AL050 |

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | Order No     |
|-----------|--------|--------|--------------|
| 10/16     | 30     | 28     | VC1SLK1SS016 |
| 20/25     | 40     | 38     | VC1SLK1SS025 |
| 32/40     | 55     | 53     | VC1SLK1SS040 |
| 50        | 75     | 64     | VC1SLK1SS050 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | Order No     |
|-----------|--------|--------|--------------|
| 10/16     | 30     | 28     | VC1SLK2SS016 |
| 20/25     | 40     | 38     | VC1SLK2SS025 |
| 32/40     | 55     | 53     | VC1SLK2SS040 |
| 50        | 75     | 64     | VC1SLK2SS050 |

### PTFE

- Temperature Range: -15 to 150 C°

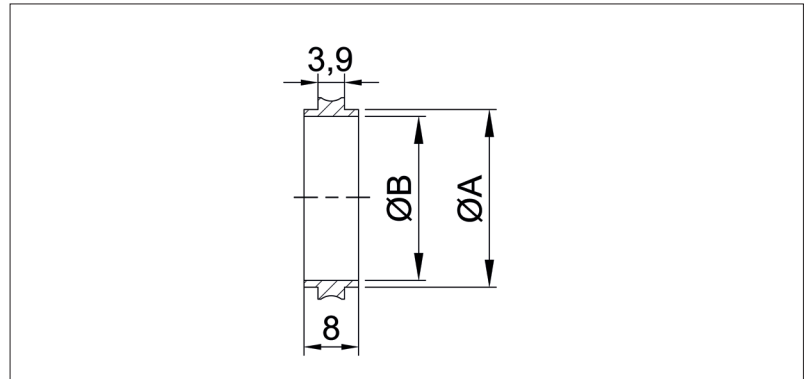
| Size (DN) | A (mm) | B (mm) | Order No     |
|-----------|--------|--------|--------------|
| 10/16     | 30     | 28     | VC1SLK1PL016 |
| 20/25     | 40     | 38     | VC1SLK1PL025 |
| 32/40     | 55     | 53     | VC1SLK1PL040 |
| 50        | 75     | 64     | VC1SLK1PL050 |

## ISO-KF Inner Centered Inner Ring

- Various types of O-ring seals are available.



### Dimensions



### Aluminium EN AW-6082/T-6

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | Order No     |
|-----------|--------|--------|--------------|
| 10        | 12     | 10     | VC1SLM1AL010 |
| 16        | 17     | 16     | VC1SLM1AL016 |
| 20        | 22     | 20     | VC1SLM1AL020 |
| 25        | 26     | 24     | VC1SLM1AL025 |
| 32        | 34     | 32     | VC1SLM1AL032 |
| 40        | 41     | 40     | VC1SLM1AL040 |
| 50        | 52     | 50     | VC1SLM1AL050 |

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | Order No     |
|-----------|--------|--------|--------------|
| 10        | 12     | 10     | VC1SLM1SS010 |
| 16        | 17     | 16     | VC1SLM1SS016 |
| 20        | 22     | 20     | VC1SLM1SS020 |
| 25        | 26     | 24     | VC1SLM1SS025 |
| 32        | 34     | 32     | VC1SLM1SS032 |
| 40        | 41     | 40     | VC1SLM1SS040 |
| 50        | 52     | 50     | VC1SLM1SS050 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | Order No     |
|-----------|--------|--------|--------------|
| 10        | 12     | 10     | VC1SLM2SS010 |
| 16        | 17     | 16     | VC1SLM2SS016 |
| 20        | 22     | 20     | VC1SLM2SS020 |
| 25        | 26     | 24     | VC1SLM2SS025 |
| 32        | 34     | 32     | VC1SLM2SS032 |
| 40        | 41     | 40     | VC1SLM2SS040 |
| 50        | 52     | 50     | VC1SLM2SS050 |

**PTFE**

- Temperature Range: -15 to 150 C°

| Size (DN) | A (mm) | B (mm) | Order No     |
|-----------|--------|--------|--------------|
| 10        | 12     | 10     | VC1SLM1PL010 |
| 16        | 17     | 16     | VC1SLM1PL016 |
| 20        | 22     | 20     | VC1SLM1PL020 |
| 25        | 26     | 24     | VC1SLM1PL025 |
| 32        | 34     | 32     | VC1SLM1PL032 |
| 40        | 41     | 40     | VC1SLM1PL040 |
| 50        | 52     | 50     | VC1SLM1PL050 |

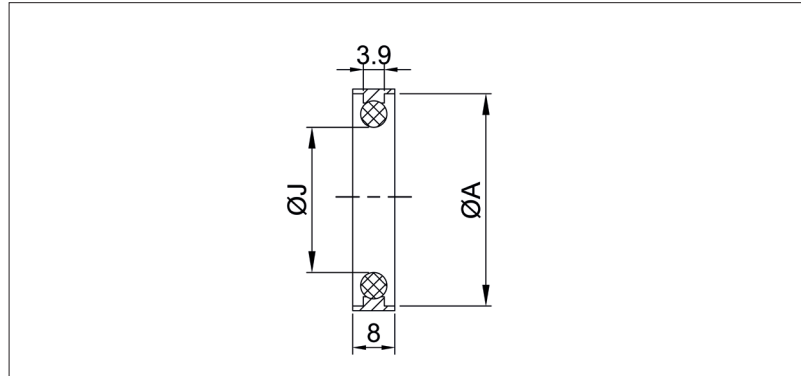


## ISO-KF Seal Outer Centering Without Support



- Consider O-ring temperature ranges (See Properties of Elastomer Materials Table on Page 12)
- Various types of O-ring seals are available.

### Dimensions



### Aluminium EN AW-6082/T-6

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------------|-------------------|
| 10/16     | 30     | 23     | FKM          | VC1SLR1AL016-FKM  |
| 10/16     | 30     | 23     | CR           | VC1SLR1AL016-CR   |
| 10/16     | 30     | 23     | NBR          | VC1SLR1AL016-NBR  |
| 10/16     | 30     | 23     | EPDM         | VC1SLR1AL016-EPDM |
| 10/16     | 30     | 23     | VMQ(SILICON) | VC1SLR1AL016-VMQ  |
| 20/25     | 40     | 33     | FKM          | VC1SLR1AL025-FKM  |
| 20/25     | 40     | 33     | CR           | VC1SLR1AL025-CR   |
| 20/25     | 40     | 33     | NBR          | VC1SLR1AL025-NBR  |
| 20/25     | 40     | 33     | EPDM         | VC1SLR1AL025-EPDM |
| 20/25     | 40     | 33     | VMQ(SILICON) | VC1SLR1AL025-VMQ  |
| 32/40     | 55     | 48     | FKM          | VC1SLR1AL040-FKM  |
| 32/40     | 55     | 48     | CR           | VC1SLR1AL040-CR   |
| 32/40     | 55     | 48     | NBR          | VC1SLR1AL040-NBR  |
| 32/40     | 55     | 48     | EPDM         | VC1SLR1AL040-EPDM |
| 32/40     | 55     | 48     | VMQ(SILICON) | VC1SLR1AL040-VMQ  |
| 50        | 75     | 59     | FKM          | VC1SLR1AL050-FKM  |
| 50        | 75     | 59     | CR           | VC1SLR1AL050-CR   |
| 50        | 75     | 59     | NBR          | VC1SLR1AL050-NBR  |
| 50        | 75     | 59     | EPDM         | VC1SLR1AL050-EPDM |
| 50        | 75     | 59     | VMQ(SILICON) | VC1SLR1AL050-VMQ  |

### PTFE

- Temperature Range: -15 to 150 C°

| Size (DN) | A (mm) | J (mm) | O-ring | Order No         |
|-----------|--------|--------|--------|------------------|
| 10/16     | 30     | 23     | FKM    | VC1SLR1PL016-FKM |
| 20/25     | 40     | 33     | FKM    | VC1SLR1PL025-FKM |
| 32/40     | 55     | 48     | FKM    | VC1SLR1PL040-FKM |
| 50        | 75     | 59     | FKM    | VC1SLR1PL050-FKM |

**Stainless Steel 304/1.4301**

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------------|-------------------|
| 10/16     | 30     | 23     | FKM          | VC1SLR1SS016-FKM  |
| 10/16     | 30     | 23     | CR           | VC1SLR1SS016-CR   |
| 10/16     | 30     | 23     | NBR          | VC1SLR1SS016-NBR  |
| 10/16     | 30     | 23     | EPDM         | VC1SLR1SS016-EPDM |
| 10/16     | 30     | 23     | VMQ(SILICON) | VC1SLR1SS016-VMQ  |
| 20/25     | 40     | 33     | FKM          | VC1SLR1SS025-FKM  |
| 20/25     | 40     | 33     | CR           | VC1SLR1SS025-CR   |
| 20/25     | 40     | 33     | NBR          | VC1SLR1SS025-NBR  |
| 20/25     | 40     | 33     | EPDM         | VC1SLR1SS025-EPDM |
| 20/25     | 40     | 33     | VMQ(SILICON) | VC1SLR1SS025-VMQ  |
| 32/40     | 55     | 48     | FKM          | VC1SLR1SS040-FKM  |
| 32/40     | 55     | 48     | CR           | VC1SLR1SS040-CR   |
| 32/40     | 55     | 48     | NBR          | VC1SLR1SS040-NBR  |
| 32/40     | 55     | 48     | EPDM         | VC1SLR1SS040-EPDM |
| 32/40     | 55     | 48     | VMQ(SILICON) | VC1SLR1SS040-VMQ  |
| 50        | 75     | 59     | FKM          | VC1SLR1SS050-FKM  |
| 50        | 75     | 59     | CR           | VC1SLR1SS050-CR   |
| 50        | 75     | 59     | NBR          | VC1SLR1SS050-NBR  |
| 50        | 75     | 59     | EPDM         | VC1SLR1SS050-EPDM |
| 50        | 75     | 59     | VMQ(SILICON) | VC1SLR1SS050-VMQ  |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

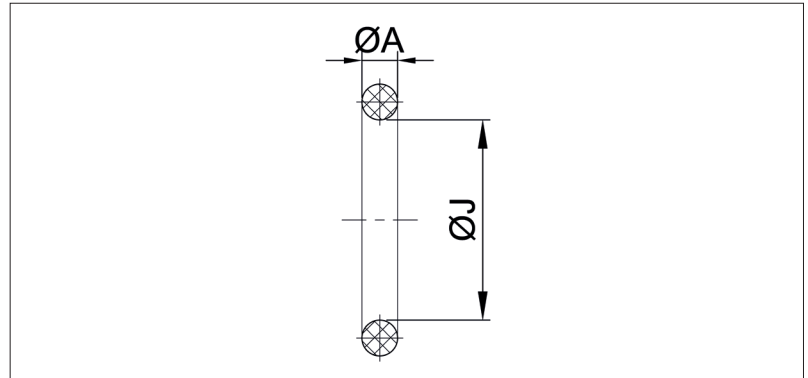
| Size (DN) | A (mm) | J (mm) | O-ring       | Order No          |
|-----------|--------|--------|--------------|-------------------|
| 10/16     | 30     | 23     | FKM          | VC1SLR2SS016-FKM  |
| 10/16     | 30     | 23     | CR           | VC1SLR2SS016-CR   |
| 10/16     | 30     | 23     | NBR          | VC1SLR2SS016-NBR  |
| 10/16     | 30     | 23     | EPDM         | VC1SLR2SS016-EPDM |
| 10/16     | 30     | 23     | VMQ(SILICON) | VC1SLR2SS016-VMQ  |
| 20/25     | 40     | 33     | FKM          | VC1SLR2SS025-FKM  |
| 20/25     | 40     | 33     | CR           | VC1SLR2SS025-CR   |
| 20/25     | 40     | 33     | NBR          | VC1SLR2SS025-NBR  |
| 20/25     | 40     | 33     | EPDM         | VC1SLR2SS025-EPDM |
| 20/25     | 40     | 33     | VMQ(SILICON) | VC1SLR2SS025-VMQ  |
| 32/40     | 55     | 48     | FKM          | VC1SLR2SS040-FKM  |
| 32/40     | 55     | 48     | CR           | VC1SLR2SS040-CR   |
| 32/40     | 55     | 48     | NBR          | VC1SLR2SS040-NBR  |
| 32/40     | 55     | 48     | EPDM         | VC1SLR2SS040-EPDM |
| 32/40     | 55     | 48     | VMQ(SILICON) | VC1SLR2SS040-VMQ  |
| 50        | 75     | 59     | FKM          | VC1SLR2SS050-FKM  |
| 50        | 75     | 59     | CR           | VC1SLR2SS050-CR   |
| 50        | 75     | 59     | NBR          | VC1SLR2SS050-NBR  |
| 50        | 75     | 59     | EPDM         | VC1SLR2SS050-EPDM |
| 50        | 75     | 59     | VMQ(SILICON) | VC1SLR2SS050-VMQ  |

## ISO-KF O-ring

- Various types of O-ring seals are available.



### Dimensions



### FKM

- Temperature range: -15 to 200 °C

| Size (DN) | J (mm) | ØA(mm) | Order No     |
|-----------|--------|--------|--------------|
| 10        | 15     | 5      | VCA07A1EL010 |
| 16        | 18     | 5      | VCA07A1EL016 |
| 20        | 24     | 5      | VCA07A1EL020 |
| 25        | 28     | 5      | VCA07A1EL025 |
| 32        | 35     | 5      | VCA07A1EL032 |
| 40        | 42     | 5      | VCA07A1EL040 |
| 50        | 55     | 5      | VCA07A1EL050 |

### CR

- Temperature range: -40 to 100 °C

| Size (DN) | J (mm) | ØA(mm) | Order No     |
|-----------|--------|--------|--------------|
| 10        | 15     | 5      | VCA07A2EL010 |
| 16        | 18     | 5      | VCA07A2EL016 |
| 20        | 24     | 5      | VCA07A2EL020 |
| 25        | 28     | 5      | VCA07A2EL025 |
| 32        | 35     | 5      | VCA07A2EL032 |
| 40        | 42     | 5      | VCA07A2EL040 |
| 50        | 55     | 5      | VCA07A2EL050 |

**NBR**

- Temperature range: -25 to 120 °C

| Size (DN) | J (mm) | ØA(mm) | Order No     |
|-----------|--------|--------|--------------|
| 10        | 15     | 5      | VCA07A3EL010 |
| 16        | 18     | 5      | VCA07A3EL016 |
| 20        | 24     | 5      | VCA07A3EL020 |
| 25        | 28     | 5      | VCA07A3EL025 |
| 32        | 35     | 5      | VCA07A3EL032 |
| 40        | 42     | 5      | VCA07A3EL040 |
| 50        | 55     | 5      | VCA07A3EL050 |

**EPDM**

- Temperature range: -25 to 120 °C

| Size (DN) | J (mm) | ØA(mm) | Order No (EPDM) |
|-----------|--------|--------|-----------------|
| 10        | 15     | 5      | VCA07A4EL010    |
| 16        | 18     | 5      | VCA07A4EL016    |
| 20        | 24     | 5      | VCA07A4EL020    |
| 25        | 28     | 5      | VCA07A4EL025    |
| 32        | 35     | 5      | VCA07A4EL032    |
| 40        | 42     | 5      | VCA07A4EL040    |
| 50        | 55     | 5      | VCA07A4EL050    |

**VMQ SILICON**

- Temperature range: -25 to 120 °C

| Size (DN) | J (mm) | ØA(mm) | Order No     |
|-----------|--------|--------|--------------|
| 10        | 15     | 5      | VCA07A5EL010 |
| 16        | 18     | 5      | VCA07A5EL016 |
| 20        | 24     | 5      | VCA07A5EL020 |
| 25        | 28     | 5      | VCA07A5EL025 |
| 32        | 35     | 5      | VCA07A5EL032 |
| 40        | 42     | 5      | VCA07A5EL040 |
| 50        | 55     | 5      | VCA07A5EL050 |

# ISO-KF Clamps

This part consists of ISO-KF Clamps.  
Check out this section for products NW10-NW50

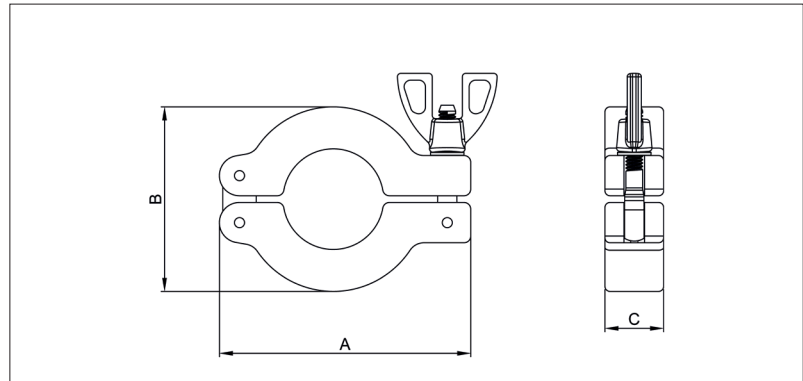


## ISO-KF Wingnut CNC Machined Clamp



- Nominal diameters 10 to 50 mm
- For High Vacuum (HV) Applications
- For inner and outer center rings
- Hinged, two-part device
- Cnc machined clamp
- For extra rigid strength and durability
- Quick assembly and removal.
- Stainless steel bolt and wingnut
- Pressure Range Elastomer seal:  $10^{-7}$  mbar to 1.5 bar

### Dimensions



### Aluminium EN AW-6082/T-6 (Uncoated - For general use)

- Temperature Range: -196 to 150 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No       |
|-----------|--------|--------|--------|----------------|
| 10/16     | 65     | 45     | 17.5   | VC1CLA1AL016-A |
| 20/25     | 75     | 55     | 17.5   | VC1CLA1AL025-A |
| 32/40     | 95     | 72     | 17.5   | VC1CLA1AL040-A |
| 50        | 115    | 95     | 22     | VC1CLA1AL050-A |

### Natural Anodized

- For frequently opened and closing connections
- Low surface friction
- High corrosion resistance
- High wear resistance
- Dielectric property

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No       |
|-----------|--------|--------|--------|----------------|
| 10/16     | 65     | 45     | 17.5   | VC1CLA1AL016-B |
| 20/25     | 75     | 55     | 17.5   | VC1CLA1AL025-B |
| 32/40     | 95     | 72     | 17.5   | VC1CLA1AL040-B |
| 50        | 115    | 95     | 22     | VC1CLA1AL050-B |

### PTFE Plated

- Used with aluminium KF vacuum equipment
- Low surface friction
- High corrosion resistance
- Non stick
- Advanced release feature
- High resistance to chemicals
- Dielectric property

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No       |
|-----------|--------|--------|--------|----------------|
| 10/16     | 65     | 45     | 17.5   | VC1CLA1AL016-C |
| 20/25     | 75     | 55     | 17.5   | VC1CLA1AL025-C |
| 32/40     | 95     | 72     | 17.5   | VC1CLA1AL040-C |
| 50        | 115    | 95     | 22     | VC1CLA1AL050-C |

### Nickel Plated

- High corrosion resistance
- High wear resistance
- View of a glossy surface

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No       |
|-----------|--------|--------|--------|----------------|
| 10/16     | 65     | 45     | 17.5   | VC1CLA1AL016-D |
| 20/25     | 75     | 55     | 17.5   | VC1CLA1AL025-D |
| 32/40     | 95     | 72     | 17.5   | VC1CLA1AL040-D |
| 50        | 115    | 95     | 22     | VC1CLA1AL050-D |

### Plastic

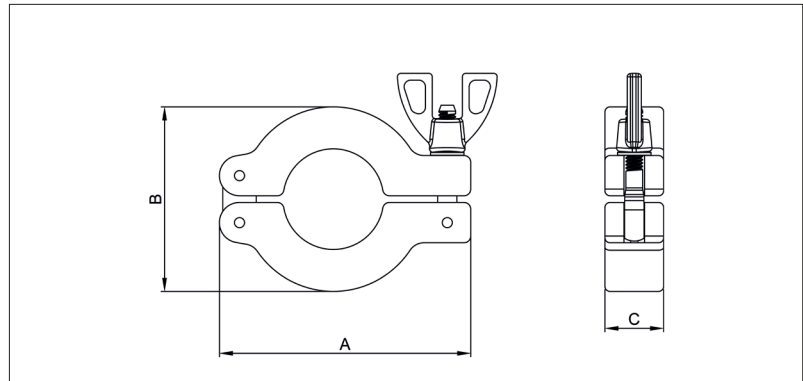
| Size (DN) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10/16     | 65     | 45     | 17.5   | VC1CLA4PL016 |
| 20/25     | 75     | 55     | 17.5   | VC1CLA4PL025 |
| 32/40     | 95     | 72     | 17.5   | VC1CLA4PL040 |
| 50        | 115    | 95     | 22     | VC1CLA4PL050 |

## ISO-KF Wingnut Casting Clamp



- For High Vacuum (HV) Applications
  - For inner and outer center rings
  - Die casting aluminium clamp
  - Hinged, two-part device
  - Quick assembly and removal
  - Stainless steel bolt and wingnut
  - Material Stainless Steel (AISI 304/1.4301, AISI 316L/1.4404)
- Pressure Range Elastomer seal:  $10^{-7}$  mbar to 2.5 bar  
 Metal seal:  $10^{-9}$  mbar to 2.5 bar
- Temperature Range Aluminium: -196 to 150 °C
  - Pressure Range Elastomer seal:  $10^{-7}$  mbar to 1.5 bar

### Dimensions



#### Aluminium EN AC-47100 (Uncoated - For general use)

- Temperature Range: -196 to 150 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10/16     | 62     | 45     | 17     | VC1CLD3AL016 |
| 20/25     | 72     | 55     | 17     | VC1CLD3AL025 |
| 32/40     | 92     | 70     | 17     | VC1CLD3AL040 |
| 50        | 112    | 90     | 22     | VC1CLD3AL050 |

#### Stainless Steel 304/1.4301

SS304/1.4301: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10/16     | 60     | 42     | 16     | VC1CLD1SS016 |
| 20/25     | 70     | 50     | 16     | VC1CLD1SS025 |
| 32/40     | 90     | 66.5   | 16     | VC1CLD1SS040 |
| 50        | 115    | 90     | 19     | VC1CLD1SS050 |

#### Stainless Steel 316L/1.4404

SS316L/1.4404: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 10/16     | 60     | 42     | 16     | VC1CLD2SS016 |
| 20/25     | 70     | 50     | 16     | VC1CLD2SS025 |
| 32/40     | 90     | 66.5   | 16     | VC1CLD2SS040 |
| 50        | 115    | 90     | 19     | VC1CLD2SS050 |

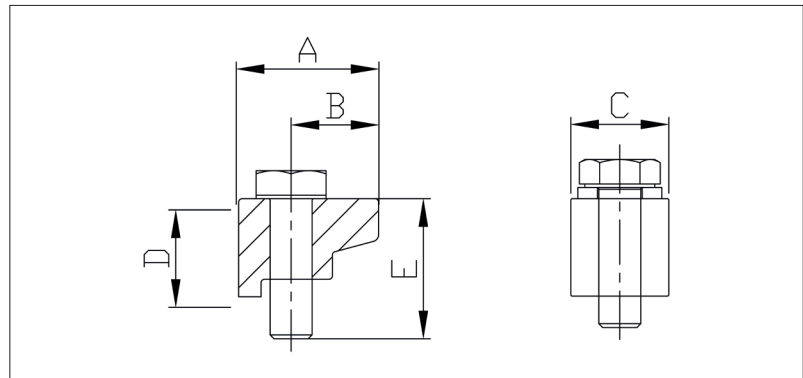


## ISO-KF Claw (Wall) Clamp



- Suitable for use with elastomer seals
- For installing on a base plate with KF centering ring
- Aluminium body, stainless steel bolt.
- Cast steel
- Short and long versions available
- Spring loaded lock-washers, single Claw Clamp for bolting KF flanges to bulkheads
- Can be used instead of bulkhead clamps
- Wide range optimised for many applications
- Holes: Needed number of tapped holes in base plate: 4x90° (Thread: M6, depth: min. 6 mm)
- Material: Aluminium (EN AW-6082 T6)  
Bolt: A2-70 stainless steel (Hexagon Head, M6 x 20 mm)
- Pressure Range  
Elastomer seal:  $10^{-7}$  mbar to 2.5 bar  
Torque max 8 Nm

### Dimensions



#### Aluminium EN AW-6082/3.2315

- Temperature Range: -196 to 200 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------|--------------|
| 10/50     | 20     | 12.5   | 14     | 14     | 20     | VC1CLF1AL050 |

#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

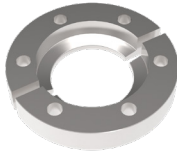
| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------|--------------|
| 10/50     | 20     | 12.5   | 14     | 14     | 20     | VC1CLF1SS050 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

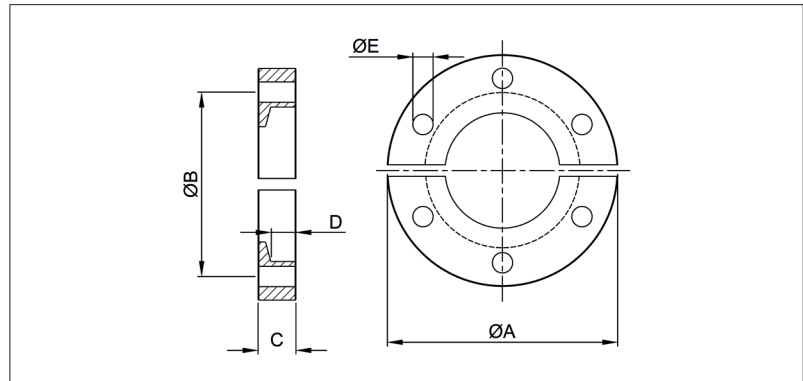
| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------|--------------|
| 10/50     | 20     | 12.5   | 14     | 14     | 20     | VC1CLF2SS050 |

## ISO-KF Bulkhead Clamp



- For installing on a base plate with KF centering ring
- Number of tapped holes in base plate: DN 10-40: 6x60°; DN 50: 8x45° (Thread M5, depth: min. 10 mm)
- Provides simple and secure baseplate connection
- Stainless Steel bolts and washers included
- Suitable for use with elastomer seals
- For mounting on a base plate with KF centered ring
- Material Aluminium (EN AW-6082 T6) Bolt: A2-70 stainless steel DIN933 (Hexagon Head, M5 x 20 mm, Silver Plated)
- Pressure Range Elastomer seal:  $10^{-7}$  mbar to 2.5 bar

### Dimensions



### Aluminium EN AW-6082/3.2315

- Temperature Range: -196 to 150 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------|--------------|
| 10/16     | 50.8   | 38.1   | 9.2    | 6.5    | 5.3    | VC1CLG1AL016 |
| 20/25     | 60.3   | 48     | 9.9    | 6.6    | 5.3    | VC1CLG1AL025 |
| 32/40     | 74.6   | 62     | 9.3    | 6.6    | 5.3    | VC1CLG1AL040 |
| 50        | 94.9   | 82.6   | 10.4   | 6.5    | 5.3    | VC1CLG1AL050 |

## ISO-KF Chain Clamp



- Quick opening and closing of clamp
- Suitable for use with elastomer and metallic seals
- Hand grip: Stainless steel
- Especially for UHV applications
- Cryo applications
- Aluminium

Links constructed of pressure die-cast Aluminium alloy

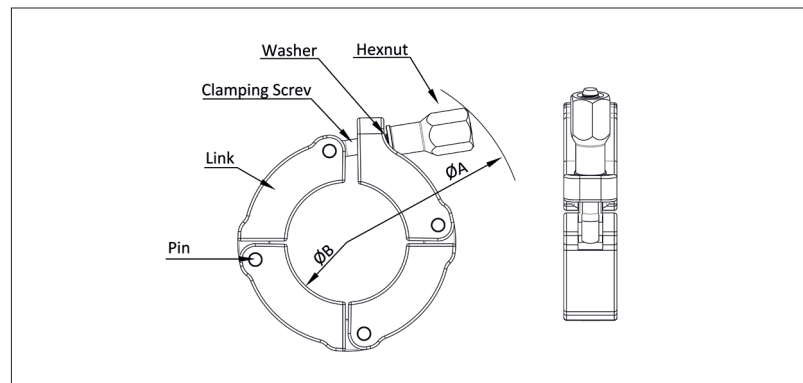
Over pressure max.: 500 mbar

- Stainless Steel

Food and Beverage applications

Pressure range:  $1 \cdot 10^{-11}$  hPa to 300 bar over pressure (metal seal)

### Dimensions



#### Aluminium EN AC-4710

- Temperature Range: -196 to 200 °C

| Size (DN) | A (mm) | B (mm) | Torque (Nm) (Alu) | Torque (Nm) (Copper) | Torque (Nm) (Nickel) | Links | Order No     |
|-----------|--------|--------|-------------------|----------------------|----------------------|-------|--------------|
| 10/16     | 95     | 21     | 2                 | 3.5                  | 6                    | 3     | VC1CLH3AL016 |
| 20/25     | 120    | 30     | 2.5               | 5                    | 8                    | 4     | VC1CLH3AL025 |
| 32/40     | 135    | 45     | 3                 | 6                    | 10                   | 4     | VC1CLH3AL040 |
| 50        | 150    | 60     | 4.5               | 8.5                  | 12                   | 5     | VC1CLH3AL050 |

#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | Torque (Nm) (Alu) | Torque (Nm) (Copper) | Torque (Nm) (Nickel) | Links | Order No     |
|-----------|--------|--------|-------------------|----------------------|----------------------|-------|--------------|
| 10/16     | 95     | 21     | 2                 | 3.5                  | 6                    | 3     | VC1CLH1SS016 |
| 20/25     | 120    | 30     | 2.5               | 5                    | 8                    | 4     | VC1CLH1SS025 |
| 32/40     | 135    | 45     | 3                 | 6                    | 10                   | 4     | VC1CLH1SS040 |
| 50        | 150    | 60     | 4.5               | 8.5                  | 12                   | 5     | VC1CLH1SS050 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

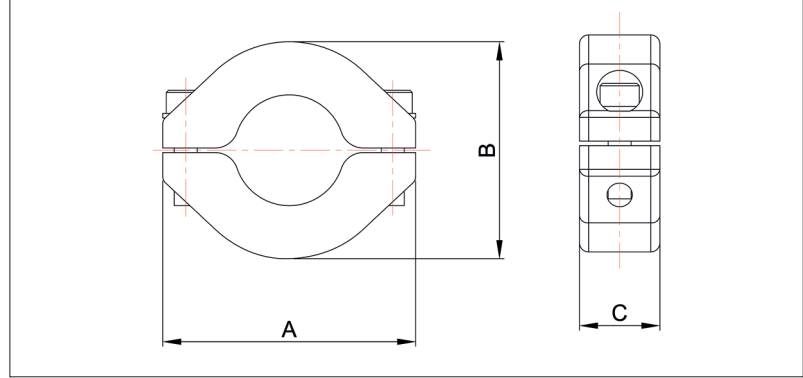
| Size (DN) | A (mm) | B (mm) | Torque (Nm) (Alu) | Torque (Nm) (Copper) | Torque (Nm) (Nickel) | Links | Order No     |
|-----------|--------|--------|-------------------|----------------------|----------------------|-------|--------------|
| 10/16     | 95     | 21     | 2                 | 3.5                  | 6                    | 3     | VC1CLH2SS016 |
| 20/25     | 120    | 30     | 2.5               | 5                    | 8                    | 4     | VC1CLH2SS025 |
| 32/40     | 135    | 45     | 3                 | 6                    | 10                   | 4     | VC1CLH2SS040 |
| 50        | 150    | 60     | 4.5               | 8.5                  | 12                   | 5     | VC1CLH2SS050 |

## ISO-KF Bolt Clamp (2-Part)



- Suitable for use with elastomer and metal seals
- Bolts: Hexagon socket, A2-70 steel
- Recommended using a screw thread lubricant
- Over pressure max.: 500 mbar

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Bolt    | Order No     |
|-----------|--------|--------|--------|---------|--------------|
| 10/16     | 55     | 47     | 18     | M5 x 25 | VC1CLI1SS016 |
| 20/25     | 66     | 57     | 18     | M5 x 25 | VC1CLI1SS025 |
| 32/40     | 82     | 72     | 18     | M5 x 25 | VC1CLI1SS040 |
| 50        | 122    | 96     | 21     | M5 x 25 | VC1CLI1SS050 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Bolt    | Order No     |
|-----------|--------|--------|--------|---------|--------------|
| 10/16     | 55     | 47     | 18     | M5 x 25 | VC1CLI2SS016 |
| 20/25     | 66     | 57     | 18     | M5 x 25 | VC1CLI2SS025 |
| 32/40     | 82     | 72     | 18     | M5 x 25 | VC1CLI2SS040 |
| 50        | 122    | 96     | 21     | M5 x 25 | VC1CLI2SS050 |

# ISO-KF Fittings

This part consists of ISO-KF Fittings.

Check out this section for products NW10-NW50



## ISO-KF Straight Reducer



- Aluminium EN AW-6082 T6/3.2315

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure

- Stainless Steel 304/1.4301

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

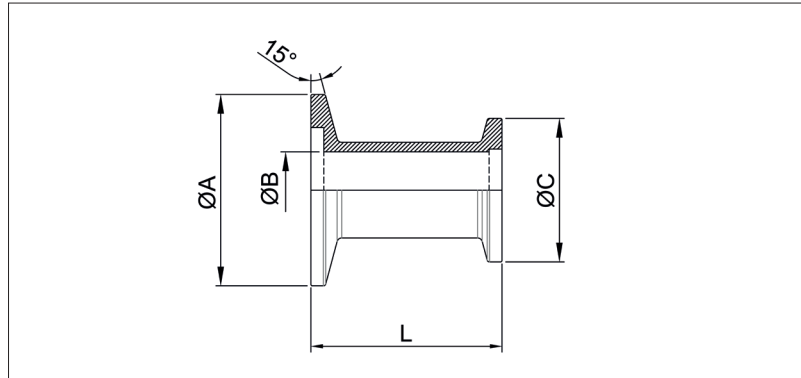
$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

- Stainless Steel 316L/1.4404

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Aluminium EN AW-6082 T6/3.2315

- Temperature Range: -196 to 150 C°

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | L  | Order No            |
|------------------|--------------------------|--------|--------|--------|----|---------------------|
| 25               | 10                       | 40     | 10     | 30     | 28 | VC1FTA1AL025-010-28 |
| 25               | 10                       | 40     | 10     | 30     | 40 | VC1FTA1AL025-010-40 |
| 25               | 16                       | 40     | 16     | 30     | 28 | VC1FTA1AL025-016-28 |
| 25               | 16                       | 40     | 16     | 30     | 40 | VC1FTA1AL025-016-40 |
| 40               | 16                       | 55     | 16     | 30     | 28 | VC1FTA1AL040-016-28 |
| 40               | 16                       | 55     | 16     | 30     | 40 | VC1FTA1AL040-016-40 |
| 40               | 25                       | 55     | 24     | 40     | 28 | VC1FTA1AL040-025-28 |
| 40               | 25                       | 55     | 24     | 40     | 40 | VC1FTA1AL040-025-40 |
| 50               | 16                       | 75     | 16     | 30     | 28 | VC1FTA1AL050-016-28 |
| 50               | 16                       | 75     | 16     | 30     | 40 | VC1FTA1AL050-016-40 |
| 50               | 25                       | 75     | 24     | 40     | 28 | VC1FTA1AL050-025-28 |
| 50               | 25                       | 75     | 24     | 40     | 40 | VC1FTA1AL050-025-40 |
| 50               | 40                       | 75     | 40     | 55     | 28 | VC1FTA1AL050-040-28 |
| 50               | 40                       | 75     | 40     | 55     | 40 | VC1FTA1AL050-040-40 |

**Stainless Steel 304/1.4301**

- Temperature range: -196 to 300 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | L  | Order No            |
|------------------|--------------------------|--------|--------|--------|----|---------------------|
| 25               | 10                       | 40     | 10     | 30     | 28 | VC1FTA1SS025-010-28 |
| 25               | 10                       | 40     | 10     | 30     | 40 | VC1FTA1SS025-010-40 |
| 25               | 16                       | 40     | 16     | 30     | 28 | VC1FTA1SS025-016-28 |
| 25               | 16                       | 40     | 16     | 30     | 40 | VC1FTA1SS025-016-40 |
| 40               | 16                       | 55     | 16     | 30     | 28 | VC1FTA1SS040-016-28 |
| 40               | 16                       | 55     | 16     | 30     | 40 | VC1FTA1SS040-016-40 |
| 40               | 25                       | 55     | 24     | 40     | 28 | VC1FTA1SS040-025-28 |
| 40               | 25                       | 55     | 24     | 40     | 40 | VC1FTA1SS040-025-40 |
| 50               | 16                       | 75     | 16     | 30     | 28 | VC1FTA1SS050-016-28 |
| 50               | 16                       | 75     | 16     | 30     | 40 | VC1FTA1SS050-016-40 |
| 50               | 25                       | 75     | 24     | 40     | 28 | VC1FTA1SS050-025-28 |
| 50               | 25                       | 75     | 24     | 40     | 40 | VC1FTA1SS050-025-40 |
| 50               | 40                       | 75     | 40     | 55     | 28 | VC1FTA1SS050-040-28 |
| 50               | 40                       | 75     | 40     | 55     | 40 | VC1FTA1SS050-040-40 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | L  | Order No            |
|------------------|--------------------------|--------|--------|--------|----|---------------------|
| 25               | 10                       | 40     | 10     | 30     | 28 | VC1FTA2SS025-010-28 |
| 25               | 10                       | 40     | 10     | 30     | 40 | VC1FTA2SS025-010-40 |
| 25               | 16                       | 40     | 16     | 30     | 28 | VC1FTA2SS025-016-28 |
| 25               | 16                       | 40     | 16     | 30     | 40 | VC1FTA2SS025-016-40 |
| 40               | 16                       | 55     | 16     | 30     | 28 | VC1FTA2SS040-016-28 |
| 40               | 16                       | 55     | 16     | 30     | 40 | VC1FTA2SS040-016-40 |
| 40               | 25                       | 55     | 24     | 40     | 28 | VC1FTA2SS040-025-28 |
| 40               | 25                       | 55     | 24     | 40     | 40 | VC1FTA2SS040-025-40 |
| 50               | 16                       | 75     | 16     | 30     | 28 | VC1FTA2SS050-016-28 |
| 50               | 16                       | 75     | 16     | 30     | 40 | VC1FTA2SS050-016-40 |
| 50               | 25                       | 75     | 24     | 40     | 28 | VC1FTA2SS050-025-28 |
| 50               | 25                       | 75     | 24     | 40     | 40 | VC1FTA2SS050-025-40 |
| 50               | 40                       | 75     | 40     | 55     | 28 | VC1FTA2SS050-040-28 |
| 50               | 40                       | 75     | 40     | 55     | 40 | VC1FTA2SS050-040-40 |

# ISO-KF Conical Reducer



- Stainless Steel 304/1.4301

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

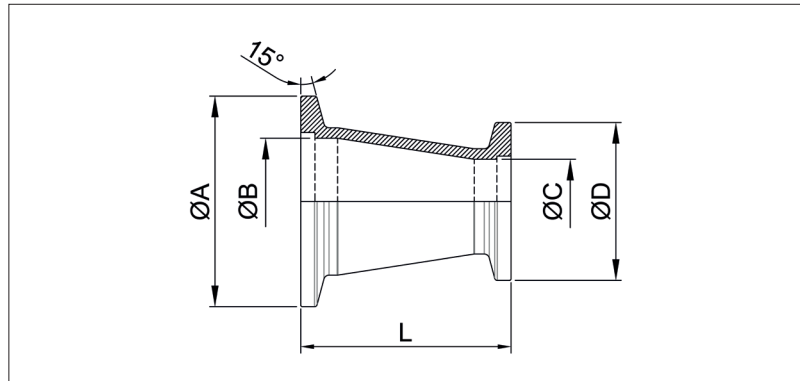
$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

- Stainless Steel 316L/1.4404

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

## Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No            |
|------------------|--------------------------|--------|--------|--------|--------|--------|---------------------|
| 25               | 16                       | 40     | 24     | 16     | 30     | 28     | VC1FTB1SS025-016-28 |
| 25               | 16                       | 40     | 24     | 16     | 30     | 40     | VC1FTB1SS025-016-40 |
| 40               | 16                       | 55     | 24     | 16     | 30     | 28     | VC1FTB1SS040-016-28 |
| 40               | 16                       | 55     | 24     | 16     | 30     | 40     | VC1FTB1SS040-016-40 |
| 40               | 25                       | 55     | 40     | 24     | 40     | 28     | VC1FTB1SS040-025-28 |
| 40               | 25                       | 55     | 40     | 24     | 40     | 40     | VC1FTB1SS040-025-40 |
| 50               | 16                       | 75     | 50     | 16     | 30     | 40     | VC1FTB1SS050-016-40 |
| 50               | 25                       | 75     | 50     | 24     | 40     | 28     | VC1FTB1SS050-025-28 |
| 50               | 25                       | 75     | 50     | 24     | 28     | 40     | VC1FTB1SS050-025-40 |
| 50               | 40                       | 75     | 50     | 40     | 55     | 28     | VC1FTB1SS050-040-28 |
| 50               | 40                       | 75     | 50     | 40     | 55     | 40     | VC1FTB1SS050-040-40 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No            |
|------------------|--------------------------|--------|--------|--------|--------|--------|---------------------|
| 25               | 16                       | 40     | 24     | 16     | 30     | 28     | VC1FTB2SS025-016-28 |
| 25               | 16                       | 40     | 24     | 16     | 30     | 40     | VC1FTB2SS025-016-40 |
| 40               | 16                       | 55     | 24     | 16     | 30     | 28     | VC1FTB2SS040-016-28 |
| 40               | 16                       | 55     | 24     | 16     | 30     | 40     | VC1FTB2SS040-016-40 |
| 40               | 25                       | 55     | 40     | 24     | 40     | 28     | VC1FTB2SS040-025-28 |
| 40               | 25                       | 55     | 40     | 24     | 40     | 40     | VC1FTB2SS040-025-40 |
| 50               | 16                       | 75     | 50     | 16     | 30     | 40     | VC1FTB2SS050-016-40 |
| 50               | 25                       | 75     | 50     | 24     | 40     | 28     | VC1FTB2SS050-025-28 |
| 50               | 25                       | 75     | 50     | 24     | 28     | 40     | VC1FTB2SS050-025-40 |
| 50               | 40                       | 75     | 50     | 40     | 55     | 28     | VC1FTB2SS050-040-28 |
| 50               | 40                       | 75     | 50     | 40     | 55     | 40     | VC1FTB2SS050-040-40 |



## ISO-KF Tee



- Stainless Steel 304/1.4301

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

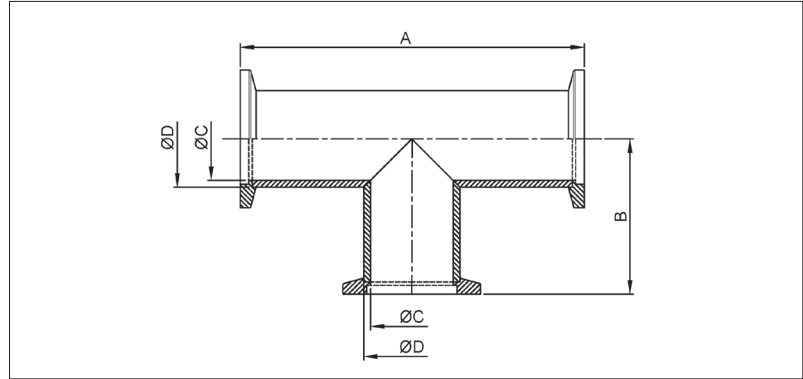
$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

- Stainless Steel 316L/1.4404

Pressure range:  $1 \cdot 10^{-8}$  mbar to 1,5 bar over pressure (elastomer seal)

$1 \cdot 10^{-9}$  mbar to 1,5 bar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|---------------------|--------|--------|--------|--------|--------------|
| 10        | 13x1,5              | 60     | 30     | 10     | 13     | VC1FTC1SS010 |
| 16        | 19x1,5              | 77     | 38,5   | 16     | 19     | VC1FTC1SS016 |
| 25        | 29x1,5              | 107    | 53,5   | 26     | 29     | VC1FTC1SS025 |
| 40        | 41x1,5              | 127    | 63,5   | 38     | 41     | VC1FTC1SS040 |
| 50        | 53x1,5              | 148    | 74     | 50     | 53     | VC1FTC1SS050 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

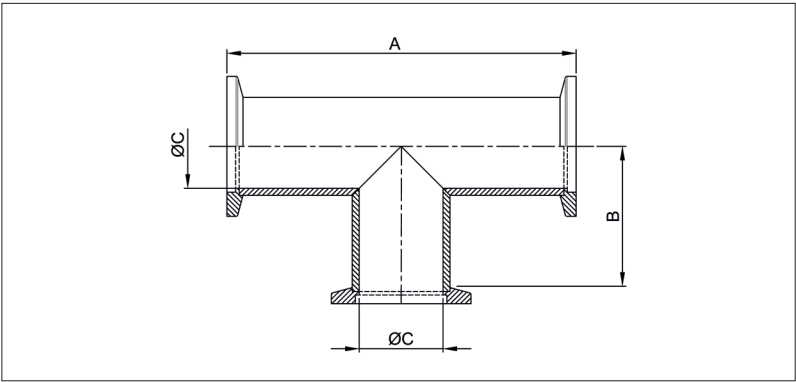
| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|---------------------|--------|--------|--------|--------|--------------|
| 10        | 13x1,5              | 60     | 30     | 10     | 13     | VC1FTC2SS010 |
| 16        | 19x1,5              | 77     | 38,5   | 16     | 19     | VC1FTC2SS016 |
| 25        | 29x1,5              | 107    | 53,5   | 26     | 29     | VC1FTC2SS025 |
| 40        | 41x1,5              | 127    | 63,5   | 38     | 41     | VC1FTC2SS040 |
| 50        | 53x1,5              | 148    | 74     | 50     | 53     | VC1FTC2SS050 |

# ISO-KF Tee (Forging)



- Aluminium EN AW-6082/3.2315
- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure

## Dimensions



### Aluminium EN AW-6082/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No       |
|-----------|--------|--------|--------|----------------|
| 10        | 60     | 30     | 10     | VC1FTC1AL010-F |
| 16        | 80     | 40     | 16     | VC1FTC1AL016-F |
| 25        | 100    | 50     | 24     | VC1FTC1AL025-F |
| 40        | 130    | 65     | 40.5   | VC1FTC1AL040-F |

## ISO-KF Reducer Tee



- Stainless Steel 304/1.4301

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

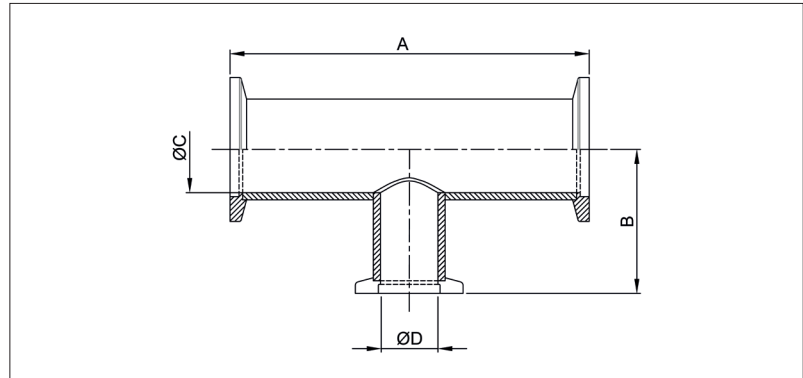
$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

- Stainless Steel 316L/1.4404

Pressure range:  $1 \cdot 10^{-8}$  mbar to 1,5 bar over pressure (elastomer seal)

$1 \cdot 10^{-9}$  mbar to 1,5 bar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | Reducer Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No         |
|-----------|-------------------|--------|--------|--------|--------|------------------|
| 25        | 16                | 100    | 40     | 24     | 16     | VC1FTF1SS025-016 |
| 40        | 16                | 130    | 40     | 40.5   | 16     | VC1FTF1SS040-016 |
| 40        | 25                | 130    | 50     | 40.5   | 24     | VC1FTF1SS040-025 |
| 50        | 16                | 140    | 50     | 50     | 16     | VC1FTF1SS050-016 |
| 50        | 25                | 140    | 65     | 50     | 24     | VC1FTF1SS050-025 |
| 50        | 40                | 140    | 65     | 50     | 40     | VC1FTF1SS050-040 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | Reducer Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No         |
|-----------|-------------------|--------|--------|--------|--------|------------------|
| 25        | 16                | 100    | 40     | 24     | 16     | VC1FTF2SS025-016 |
| 40        | 16                | 130    | 40     | 40.5   | 16     | VC1FTF2SS040-016 |
| 40        | 25                | 130    | 50     | 40.5   | 24     | VC1FTF2SS040-025 |
| 50        | 16                | 140    | 50     | 50     | 16     | VC1FTF2SS050-016 |
| 50        | 25                | 140    | 65     | 50     | 24     | VC1FTF2SS050-025 |
| 50        | 40                | 140    | 65     | 50     | 40     | VC1FTF2SS050-040 |

## ISO-KF 90 Radius Elbow



- Stainless Steel 304/1.4301

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

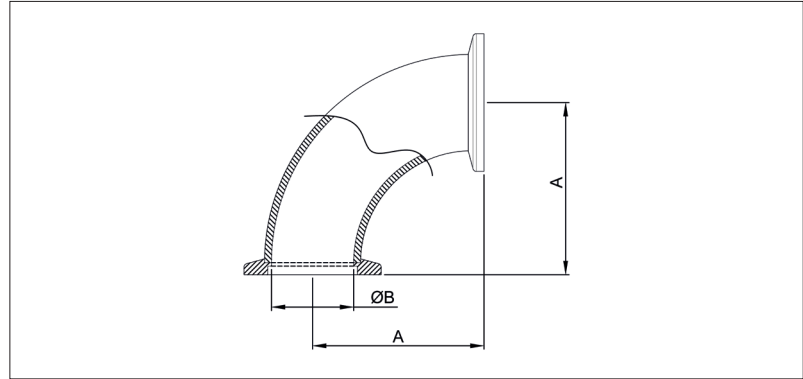
$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

- Stainless Steel 316L/1.4404

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | Order No        |
|-----------|--------|--------|-----------------|
| 10        | 30     | 10     | VC1FTH1SS010-90 |
| 16        | 38.5   | 16     | VC1FTH1SS016-90 |
| 25        | 53.5   | 26     | VC1FTH1SS025-90 |
| 40        | 63.5   | 38     | VC1FTH1SS040-90 |
| 50        | 74     | 50     | VC1FTH1SS050-90 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | Order No        |
|-----------|--------|--------|-----------------|
| 10        | 30     | 10     | VC1FTH2SS010-90 |
| 16        | 38.5   | 16     | VC1FTH2SS016-90 |
| 25        | 53.5   | 26     | VC1FTH2SS025-90 |
| 40        | 63.5   | 38     | VC1FTH2SS040-90 |
| 50        | 74     | 50     | VC1FTH2SS050-90 |

## ISO-KF 45 Radius Elbow



- Stainless Steel 304/1.4301

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

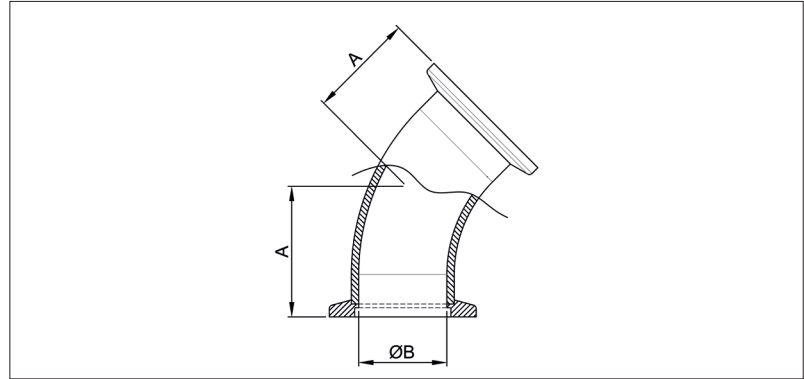
$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

- Stainless Steel 316L/1.4404

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | Order No        |
|-----------|--------|--------|-----------------|
| 10        | 30     | 10     | VC1FTI1SS010-45 |
| 16        | 25     | 16     | VC1FTI1SS016-45 |
| 25        | 32     | 26     | VC1FTI1SS025-45 |
| 40        | 40     | 38     | VC1FTI1SS040-45 |
| 50        | 50     | 50     | VC1FTI1SS050-45 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

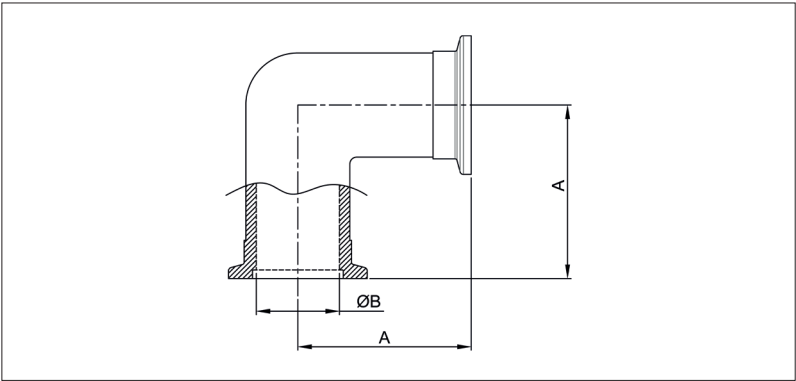
| Size (DN) | A (mm) | B (mm) | Order No        |
|-----------|--------|--------|-----------------|
| 10        | 30     | 10     | VC1FTI2SS010-45 |
| 16        | 25     | 16     | VC1FTI2SS016-45 |
| 25        | 32     | 26     | VC1FTI2SS025-45 |
| 40        | 40     | 38     | VC1FTI2SS040-45 |
| 50        | 50     | 50     | VC1FTI2SS050-45 |

# ISO-KF 90 Elbow (Forging)

Aluminium EN AW-6082 T6/3.2315  
Pressure range: 1 · 10<sup>-8</sup> mbar to 500 mbar over pressure



## Dimensions



### Aluminium EN AW-6082/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | Order No          |
|-----------|--------|--------|-------------------|
| 10        | 30     | 10     | VC1FTK1AL010-90-F |
| 16        | 40     | 16     | VC1FTK1AL016-90-F |
| 25        | 50     | 24     | VC1FTK1AL025-90-F |
| 40        | 65     | 40.5   | VC1FTK1AL040-90-F |

## ISO KF 4 Way Cross



- Stainless Steel 304/1.4301

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

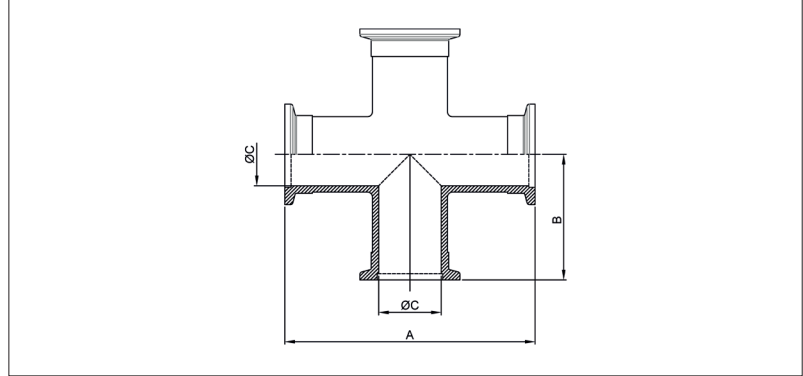
$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

- Stainless Steel 316L/1.4404

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No         |
|-----------|--------|--------|--------|------------------|
| 10        | 60     | 30     | 10     | VC1FTN1SS010-60  |
| 16        | 80     | 40     | 16     | VC1FTN1SS016-80  |
| 25        | 100    | 50     | 24     | VC1FTN1SS025-100 |
| 40        | 130    | 65     | 40.5   | VC1FTN1SS040-130 |
| 50        | 140    | 70     | 50     | VC1FTN1SS050-140 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No         |
|-----------|--------|--------|--------|------------------|
| 10        | 60     | 30     | 10     | VC1FTN2SS010-60  |
| 16        | 80     | 40     | 16     | VC1FTN2SS016-80  |
| 25        | 100    | 50     | 24     | VC1FTN2SS025-100 |
| 40        | 130    | 65     | 40.5   | VC1FTN2SS040-130 |
| 50        | 140    | 70     | 50     | VC1FTN2SS050-140 |

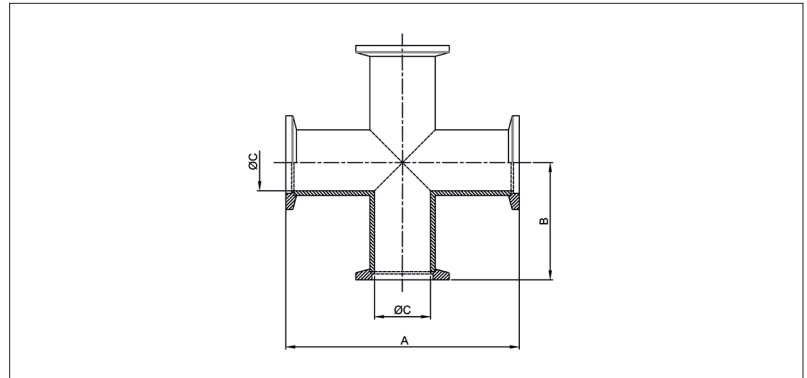
## ISO KF 4 Way Cross (Forging)



• Aluminium EN AW-6082/3.2315

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure

### Dimensions



### Aluminium EN AW-6082/3.2315

• Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No       |
|-----------|--------|--------|--------|----------------|
| 16        | 80     | 40     | 16     | VC1FTN1AL016-F |
| 25        | 100    | 50     | 14     | VC1FTN1AL025-F |
| 40        | 130    | 65     | 40.5   | VC1FTN1AL040-F |

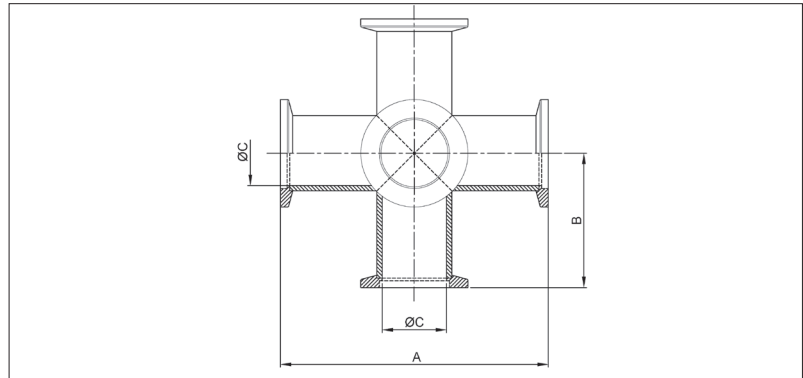


## ISO KF 5 Way Cross



- One rotatable flange per axis
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Order No         |
|------------------|--------|--------|--------|------------------|
| 10               | 60     | 30     | 10     | VC1FTT1SS010-60  |
| 16               | 80     | 40     | 16     | VC1FTT1SS016-80  |
| 25               | 100    | 50     | 24     | VC1FTT1SS025-100 |
| 40               | 130    | 65     | 40.5   | VC1FTT1SS040-130 |
| 50               | 140    | 70     | 50     | VC1FTT1SS050-140 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

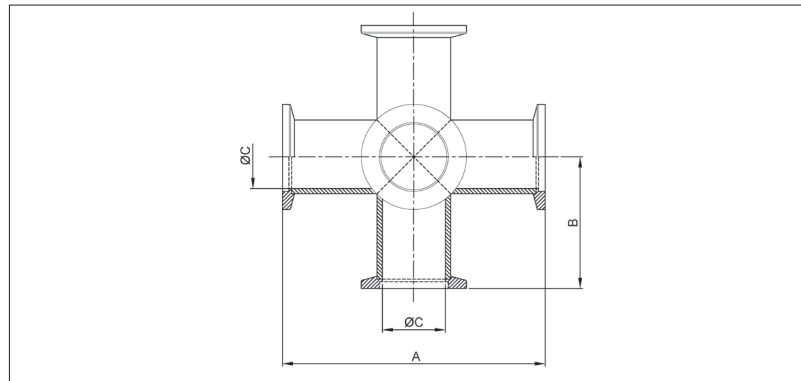
| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Order No         |
|------------------|--------|--------|--------|------------------|
| 10               | 60     | 30     | 10     | VC1FTT2SS010-60  |
| 16               | 80     | 40     | 16     | VC1FTT2SS016-80  |
| 25               | 100    | 50     | 24     | VC1FTT2SS025-100 |
| 40               | 130    | 65     | 40.5   | VC1FTT2SS040-130 |
| 50               | 140    | 70     | 50     | VC1FTT2SS050-140 |

## ISO KF 6 Way Cross



- One rotatable flange per axis
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Order No          |
|------------------|--------|--------|--------|-------------------|
| 10               | 60     | 30     | 10     | VC1FTTU1SS010-60  |
| 16               | 80     | 40     | 16     | VC1FTTU1SS016-80  |
| 25               | 100    | 50     | 24     | VC1FTTU1SS025-100 |
| 40               | 130    | 65     | 40.5   | VC1FTTU1SS040-130 |
| 50               | 140    | 70     | 50     | VC1FTTU1SS050-140 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Order No          |
|------------------|--------|--------|--------|-------------------|
| 10               | 60     | 30     | 10     | VC1FTTU2SS010-60  |
| 16               | 80     | 40     | 16     | VC1FTTU2SS016-80  |
| 25               | 100    | 50     | 24     | VC1FTTU2SS025-100 |
| 40               | 130    | 65     | 40.5   | VC1FTTU2SS040-130 |
| 50               | 140    | 70     | 50     | VC1FTTU2SS050-140 |

## ISO-KF Reducer Cross



- Stainless Steel 304/1.4301

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

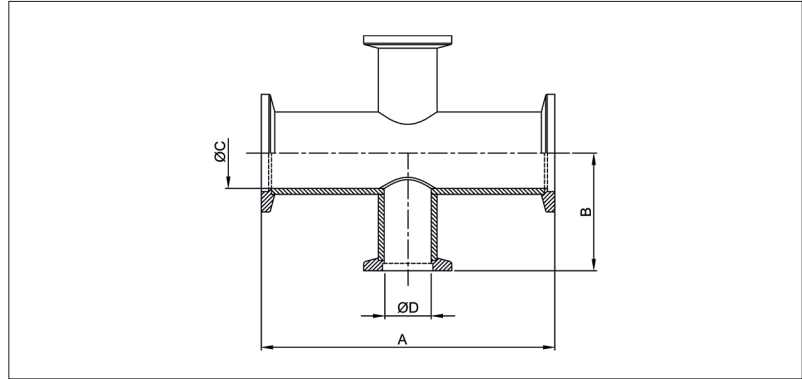
$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

- Stainless Steel 316L/1.4404

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | Size Reducer (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|-----------|-------------------|--------|--------|--------|--------|----------------------|
| 25        | 16                | 100    | 40     | 24     | 16     | VC1FTR1SS025-016-100 |
| 40        | 16                | 130    | 40     | 40.5   | 16     | VC1FTR1SS040-016-130 |
| 40        | 25                | 130    | 50     | 40.5   | 24     | VC1FTR1SS040-025-130 |
| 50        | 16                | 140    | 40     | 50     | 16     | VC1FTR1SS050-016-140 |
| 50        | 25                | 140    | 50     | 50     | 24     | VC1FTR1SS050-025-140 |
| 50        | 40                | 140    | 65     | 50     | 40     | VC1FTR1SS050-040-140 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | Size Reducer (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|-----------|-------------------|--------|--------|--------|--------|----------------------|
| 25        | 16                | 100    | 40     | 24     | 16     | VC1FTR2SS025-016-100 |
| 40        | 16                | 130    | 40     | 40.5   | 16     | VC1FTR2SS040-016-130 |
| 40        | 25                | 130    | 50     | 40.5   | 24     | VC1FTR2SS040-025-130 |
| 50        | 16                | 140    | 40     | 50     | 16     | VC1FTR2SS050-016-140 |
| 50        | 25                | 140    | 50     | 50     | 24     | VC1FTR2SS050-025-140 |
| 50        | 40                | 140    | 65     | 50     | 40     | VC1FTR2SS050-040-140 |

# ISO-KF Adapters

This part consists of KF Adapters.  
Check out this section for products NW10-NW50



## ISO KF Hose Nozzle



Aluminium EN AW-6082 T6/3.2315

- Temperature Range: -196 to 150 C°

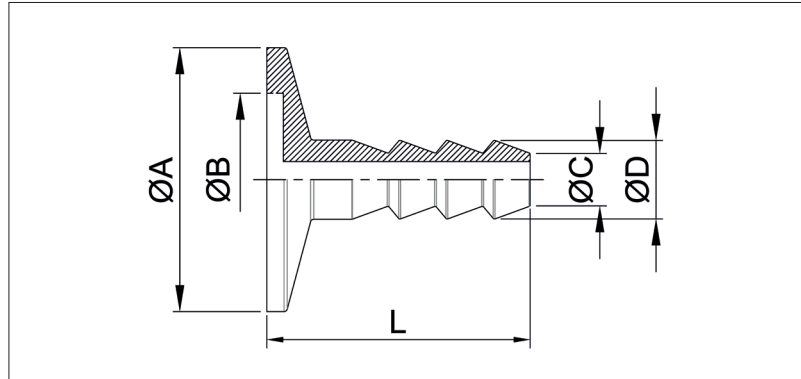
Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

### Dimensions



### Aluminium EN AW-6082 T6/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No           |
|-----------|--------|--------|--------|--------|--------|--------------------|
| 10        | 30     | 12.2   | 4      | 8      | 40     | VC1ADA1AL010-8-40  |
| 10        | 30     | 12.2   | 7      | 12     | 40     | VC1ADA1AL010-12-40 |
| 16        | 30     | 17.2   | 4      | 8      | 40     | VC1ADA1AL016-8-40  |
| 16        | 30     | 17.2   | 7      | 12     | 40     | VC1ADA1AL016-12-40 |
| 25        | 40     | 26.2   | 4      | 8      | 40     | VC1ADA1AL025-8-40  |
| 25        | 40     | 26.2   | 7      | 12     | 40     | VC1ADA1AL025-8-40  |
| 25        | 40     | 26.2   | 12     | 16     | 40     | VC1ADA1AL025-16-40 |
| 40        | 55     | 41.2   | 4      | 8      | 40     | VC1ADA1AL040-8-40  |
| 40        | 55     | 41,2   | 7      | 12     | 40     | VC1ADA1AL040-12-40 |
| 40        | 55     | 41,2   | 12     | 16     | 40     | VC1ADA1AL040-16-40 |
| 40        | 55     | 41,2   | 16     | 20     | 40     | VC1ADA1AL040-20-40 |
| 50        | 75     | 52.2   | 4      | 8      | 40     | VC1ADA1AL050-8-40  |
| 50        | 75     | 52.2   | 7      | 12     | 40     | VC1ADA1AL050-12-40 |
| 50        | 75     | 52.2   | 12     | 16     | 40     | VC1ADA1AL050-16-40 |
| 50        | 75     | 52.2   | 16     | 20     | 40     | VC1ADA1AL050-20-40 |
| 50        | 75     | 52.2   | 21     | 25     | 40     | VC1ADA1AL050-25-40 |

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No           |
|-----------|--------|--------|--------|--------|--------|--------------------|
| 10        | 30     | 12.2   | 4      | 8      | 40     | VC1ADA1SS010-8-40  |
| 10        | 30     | 12.2   | 7      | 12     | 40     | VC1ADA1SS010-12-40 |
| 16        | 30     | 17.2   | 4      | 8      | 40     | VC1ADA1SS016-8-40  |
| 16        | 30     | 17.2   | 7      | 12     | 40     | VC1ADA1SS016-12-40 |
| 25        | 40     | 26.2   | 4      | 8      | 40     | VC1ADA1SS025-8-40  |
| 25        | 40     | 26.2   | 7      | 12     | 40     | VC1ADA1SS025-12-40 |
| 25        | 40     | 26.2   | 12     | 16     | 40     | VC1ADA1SS025-16-40 |
| 40        | 55     | 41.2   | 4      | 8      | 40     | VC1ADA1SS040-8-40  |
| 40        | 55     | 41.2   | 7      | 12     | 40     | VC1ADA1SS040-12-40 |
| 40        | 55     | 41.2   | 12     | 16     | 40     | VC1ADA1SS040-16-40 |
| 40        | 55     | 41.2   | 16     | 20     | 40     | VC1ADA1SS040-20-40 |
| 50        | 75     | 52.2   | 4      | 8      | 40     | VC1ADA1SS050-8-40  |
| 50        | 75     | 52.2   | 7      | 12     | 40     | VC1ADA1SS050-12-40 |
| 50        | 75     | 52.2   | 12     | 16     | 40     | VC1ADA1SS050-16-40 |
| 50        | 75     | 52.2   | 16     | 20     | 40     | VC1ADA1SS050-20-40 |
| 50        | 75     | 52.2   | 21     | 25     | 40     | VC1ADA1SS050-25-40 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

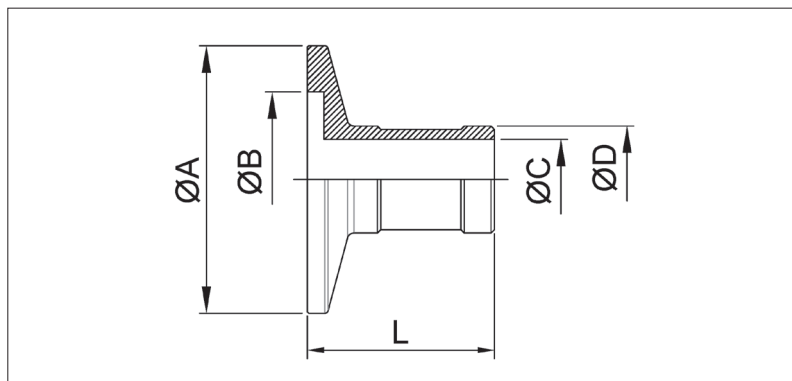
| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No           |
|-----------|--------|--------|--------|--------|--------|--------------------|
| 10        | 30     | 12.2   | 4      | 8      | 40     | VC1ADA2SS010-8-40  |
| 10        | 30     | 12.2   | 7      | 12     | 40     | VC1ADA2SS010-12-40 |
| 16        | 30     | 17.2   | 4      | 8      | 40     | VC1ADA2SS016-8-40  |
| 16        | 30     | 17.2   | 7      | 12     | 40     | VC1ADA2SS016-12-40 |
| 25        | 40     | 26.2   | 4      | 8      | 40     | VC1ADA2SS025-8-40  |
| 25        | 40     | 26.2   | 7      | 12     | 40     | VC1ADA2SS025-12-40 |
| 25        | 40     | 26.2   | 12     | 16     | 40     | VC1ADA2SS025-16-40 |
| 40        | 55     | 41.2   | 4      | 8      | 40     | VC1ADA2SS040-8-40  |
| 40        | 55     | 41.2   | 7      | 12     | 40     | VC1ADA2SS040-12-40 |
| 40        | 55     | 41.2   | 12     | 16     | 40     | VC1ADA2SS040-16-40 |
| 40        | 55     | 41.2   | 16     | 20     | 40     | VC1ADA2SS040-20-40 |
| 50        | 75     | 52.2   | 4      | 8      | 40     | VC1ADA2SS050-8-40  |
| 50        | 75     | 52.2   | 7      | 12     | 40     | VC1ADA2SS050-12-40 |
| 50        | 75     | 52.2   | 12     | 16     | 40     | VC1ADA2SS050-16-40 |
| 50        | 75     | 52.2   | 16     | 20     | 40     | VC1ADA2SS050-20-40 |
| 50        | 75     | 52.2   | 21     | 25     | 40     | VC1ADA2SS050-25-40 |

## ISO-KF Adapter for Pvc Hose



- Material: Aluminium EN AW 6082 and Stainless Steel 304/1.4301, Stainless Steel 316L/1.4404
- For connecting a PVC hose with embedded spring or a CR sleeve

### Dimensions



### Aluminium EN AW-6082 T6/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No           |
|-----------|--------|--------|--------|--------|--------|--------------------|
| 10        | 30     | 12.2   | 9      | 14     | 40     | VC1ADB1AL010-14-40 |
| 16        | 30     | 17.2   | 12     | 16     | 28     | VC1ADB1AL016-16-28 |
| 16        | 30     | 17.2   | 16     | 20     | 40     | VC1ADB1AL016-20-40 |
| 25        | 40     | 26.2   | 12     | 16     | 28     | VC1ADB1AL025-16-28 |
| 25        | 40     | 26.2   | 15     | 20     | 40     | VC1ADB1AL025-20-40 |
| 25        | 40     | 26.2   | 21     | 25     | 40     | VC1ADB1AL025-25-40 |
| 40        | 55     | 41.2   | 40     | 45     | 32     | VC1ADB1AL040-45-32 |
| 40        | 55     | 41.2   | 22     | 26     | 40     | VC1ADB1AL040-26-40 |
| 40        | 55     | 41.2   | 37     | 41     | 40     | VC1ADB1AL040-41-40 |
| 50        | 75     | 52.2   | 45     | 50     | 60     | VC1ADB1AL050-50-60 |

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No           |
|-----------|--------|--------|--------|--------|--------|--------------------|
| 16        | 30     | 17.2   | 12     | 16     | 28     | VC1ADB1SS016-16-28 |
| 25        | 40     | 26.2   | 21     | 25     | 28     | VC1ADB1SS025-25-28 |
| 40        | 55     | 41.2   | 40     | 45     | 32     | VC1ADB1SS040-45-32 |
| 50        | 75     | 52.2   | 45     | 50     | 60     | VC1ADB1SS050-50-60 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | L (mm) | Order No           |
|-----------|--------|--------|--------|--------|--------|--------------------|
| 16        | 30     | 17.2   | 12     | 16     | 28     | VC1ADB2SS016-16-28 |
| 25        | 40     | 26.2   | 21     | 25     | 28     | VC1ADB2SS025-25-28 |
| 40        | 55     | 41.2   | 40     | 45     | 32     | VC1ADB2SS040-45-32 |
| 50        | 75     | 52.2   | 45     | 50     | 60     | VC1ADB2SS050-50-60 |

## ISO-KF Flange With Pipe Thread Male

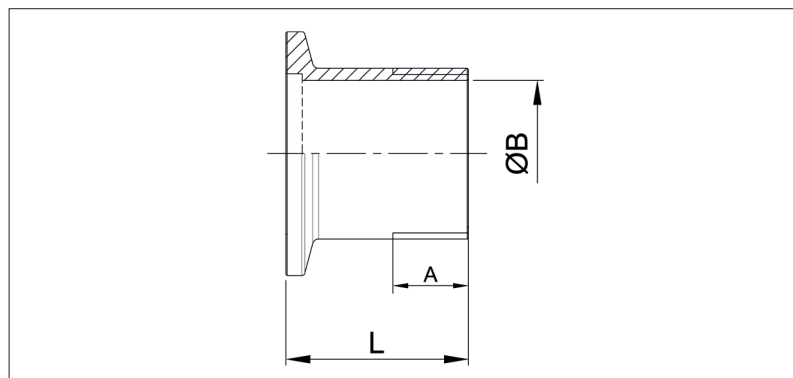


• Material:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

**Dimensions**



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | L (mm) | Thread | Order No           |
|-----------|--------|--------|--------|--------|--------------------|
| 10        | 12     | 10     | 30     | G3/8   | VC1ADC1SS010-04-30 |
| 16        | 9      | 9      | 30     | G1/4   | VC1ADC1SS016-03-30 |
| 16        | 12     | 16     | 30     | G1/2   | VC1ADC1SS016-05-30 |
| 16        | 12     | 16     | 30     | G3/8   | VC1ADC1SS016-04-30 |
| 25        | 12     | 16     | 30     | G1/2   | VC1ADC1SS025-05-30 |
| 25        | 12     | 20     | 30     | G3/4   | VC1ADC1SS025-07-30 |
| 25        | 12     | 24     | 30     | G1     | VC1ADC1SS025-09-30 |
| 40        | 14     | 35     | 30     | G1.25  | VC1ADC1SS040-11-30 |
| 40        | 12     | 41     | 30     | G1.5   | VC1ADC1SS040-13-30 |
| 50        | 16     | 51     | 35     | G2     | VC1ADC1SS050-15-35 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | L (mm) | Thread | Order No           |
|-----------|--------|--------|--------|--------|--------------------|
| 10        | 12     | 10     | 30     | G3/8   | VC1ADC2SS010-04-30 |
| 16        | 9      | 9      | 30     | G1/4   | VC1ADC2SS016-03-30 |
| 16        | 12     | 16     | 30     | G1/2   | VC1ADC2SS016-05-30 |
| 16        | 12     | 16     | 30     | G3/8   | VC1ADC2SS016-04-30 |
| 25        | 12     | 16     | 30     | G1/2   | VC1ADC2SS025-05-30 |
| 25        | 12     | 20     | 30     | G3/4   | VC1ADC2SS025-07-30 |
| 25        | 12     | 24     | 30     | G1     | VC1ADC2SS025-09-30 |
| 40        | 14     | 35     | 30     | G1.25  | VC1ADC2SS040-11-30 |
| 40        | 12     | 41     | 30     | G1.5   | VC1ADC2SS040-13-30 |
| 50        | 16     | 51     | 35     | G2     | VC1ADC2SS050-15-35 |



## ISO-KF Flange with Pipe Thread Male and FKM Seal



- Pipe Material:

Stainless Steel 304/1.4301

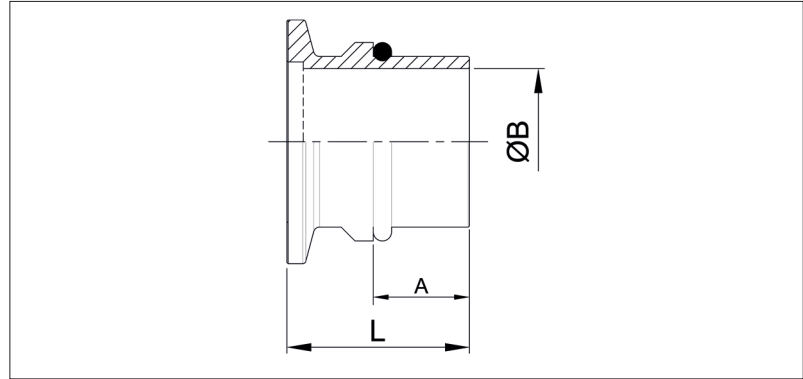
Stainless Steel 316L/1.4404

- O Ring Material: FKM

Temperature range: -15 to 150 °C (Consider O-ring temperature ranges.)

Pressure range: 10<sup>-8</sup> hPa - 500 hPa

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | L (mm) | Thread | Order No           |
|-----------|--------|--------|--------|--------|--------------------|
| 10        | 16     | 10     | 35     | G3/8   | VC1ADD1SS010-04-35 |
| 16        | 16     | 15     | 35     | G1/2   | VC1ADD1SS016-05-35 |
| 25        | 24     | 21     | 45     | G3/4   | VC1ADD1SS025-07-45 |
| 25        | 24     | 24     | 45     | G1     | VC1ADD1SS025-09-45 |
| 40        | 28     | 40     | 50     | G1.5   | VC1ADD1SS040-13-50 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | L (mm) | Thread | Order No           |
|-----------|--------|--------|--------|--------|--------------------|
| 10        | 16     | 10     | 35     | G3/8   | VC1ADD2SS010-04-35 |
| 16        | 16     | 15     | 35     | G1/2   | VC1ADD2SS016-05-35 |
| 25        | 24     | 21     | 45     | G3/4   | VC1ADD2SS025-07-45 |
| 25        | 24     | 24     | 45     | G1     | VC1ADD2SS025-09-45 |
| 40        | 28     | 40     | 50     | G1.5   | VC1ADD2SS040-13-50 |

## ISO-KF Flange With Pipe Thread Female



- Material:

Stainless Steel 304/1.4301

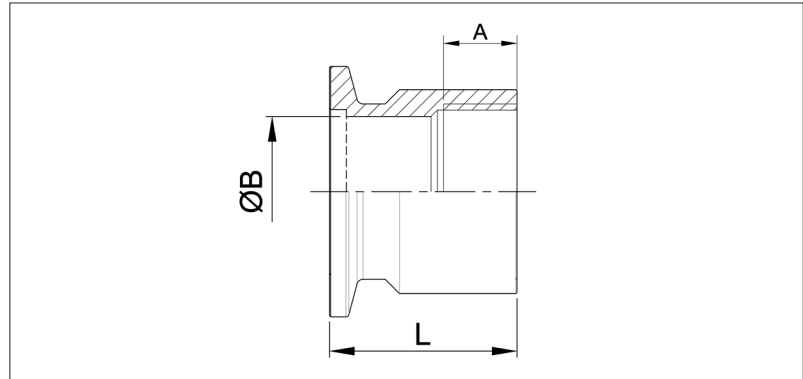
Stainless Steel 316L/1.4404

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar

- O Ring Material: FKM

Temperature range: -15 to 150 °C (Consider O-ring temperature ranges.)

### Dimensions



### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | L (mm) | Thread | Order No           |
|-----------|--------|--------|--------|--------|--------------------|
| 10        | 15     | 10     | 30     | G3/8   | VC1ADE1SS010-04-30 |
| 16        | 9      | 16     | 30     | G1/2   | VC1ADE1SS016-05-30 |
| 25        | 12     | 24     | 30     | G3/4   | VC1ADE1SS025-07-30 |
| 40        | 16     | 28     | 30     | G1     | VC1ADE1SS040-09-30 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | L (mm) | Thread | Order No           |
|-----------|--------|--------|--------|--------|--------------------|
| 10        | 15     | 10     | 30     | G3/8   | VC1ADE2SS010-04-30 |
| 16        | 9      | 16     | 30     | G1/2   | VC1ADE2SS016-05-30 |
| 25        | 12     | 24     | 30     | G3/4   | VC1ADE2SS025-07-30 |
| 40        | 16     | 28     | 30     | G1     | VC1ADE2SS040-09-30 |

## ISO-KF Flange with Pipe Thread Female and FKM Seal



- Material:

Stainless Steel 304/1.4301

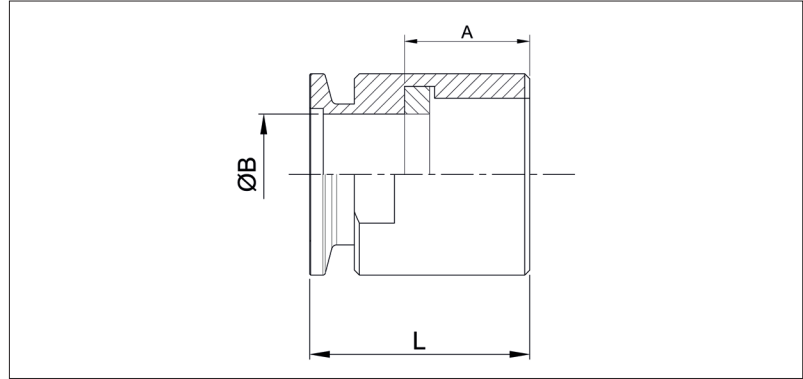
Stainless Steel 316L/1.4404

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar

- O Ring Material: FKM

Temperature range: -15 to 150 °C (Consider O-ring temperature ranges.)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | L (mm) | Thread | Order No           |
|-----------|--------|--------|--------|--------|--------------------|
| 10        | 15     | 10     | 35     | G3/8   | VC1ADF1SS010-04-35 |
| 16        | 16     | 15     | 35     | G1/2   | VC1ADF1SS016-05-35 |
| 25        | 25     | 24     | 45     | G1     | VC1ADF1SS025-09-45 |
| 40        | 26     | 40     | 50     | G1.5   | VC1ADF1SS040-13-50 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | L (mm) | Thread | Order No           |
|-----------|--------|--------|--------|--------|--------------------|
| 10        | 15     | 10     | 35     | G3/8   | VC1ADF2SS010-04-35 |
| 16        | 16     | 15     | 35     | G1/2   | VC1ADF2SS016-05-35 |
| 25        | 25     | 24     | 45     | G1     | VC1ADF2SS025-09-45 |
| 40        | 26     | 40     | 50     | G1.5   | VC1ADF2SS040-13-50 |

## ISO-KF Flange With NPT Thread Male

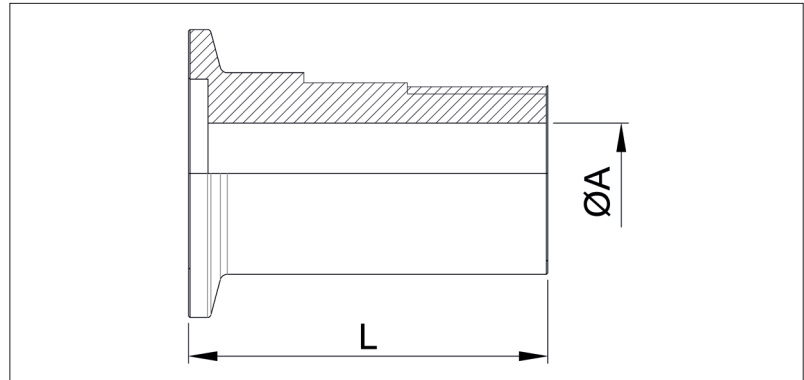


- Material:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | L (mm) | Thread  | Order No           |
|-----------|--------|--------|---------|--------------------|
| 16        | 7.1    | 50     | NPT 1/4 | VC1ADG1SS016-03-50 |
| 25        | 7.1    | 50     | NPT 1/4 | VC1ADG1SS025-03-50 |
| 25        | 11.9   | 75     | NPT 1/2 | VC1ADG1SS025-05-75 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | L (mm) | Thread  | Order No           |
|-----------|--------|--------|---------|--------------------|
| 16        | 7.1    | 50     | NPT 1/4 | VC1ADG2SS016-03-50 |
| 25        | 7.1    | 50     | NPT 1/4 | VC1ADG2SS025-03-50 |
| 25        | 11.9   | 75     | NPT 1/2 | VC1ADG2SS025-05-75 |

## ISO-KF Flange With NPT Thread Female



- Material:

Stainless Steel 304/1.4301

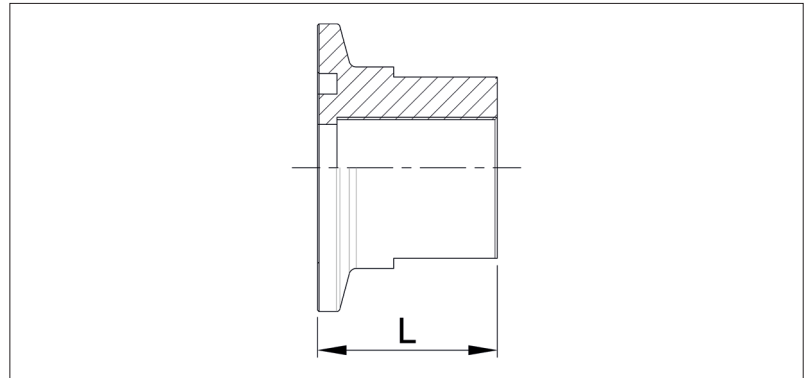
Stainless Steel 316L/1.4404

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar

- O-ring Material: FKM

Temperature range: -15 to 150 °C (Consider O-ring temperature ranges.)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | L (mm) | Thread  | Order No           |
|-----------|--------|---------|--------------------|
| 16        | 20     | NPT 1/8 | VC1ADH1SS016-02-20 |
| 16        | 20     | NPT 1/4 | VC1ADH1SS016-03-20 |
| 25        | 20     | NPT 1/8 | VC1ADH1SS025-02-20 |
| 25        | 20     | NPT 1/4 | VC1ADH1SS025-03-20 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | L (mm) | Thread  | Order No           |
|-----------|--------|---------|--------------------|
| 16        | 20     | NPT 1/8 | VC1ADH2SS016-02-20 |
| 16        | 20     | NPT 1/4 | VC1ADH2SS016-03-20 |
| 25        | 20     | NPT 1/8 | VC1ADH2SS025-02-20 |
| 25        | 20     | NPT 1/4 | VC1ADH2SS025-03-20 |

## ISO-KF 90 Elbow with Hose Adapter

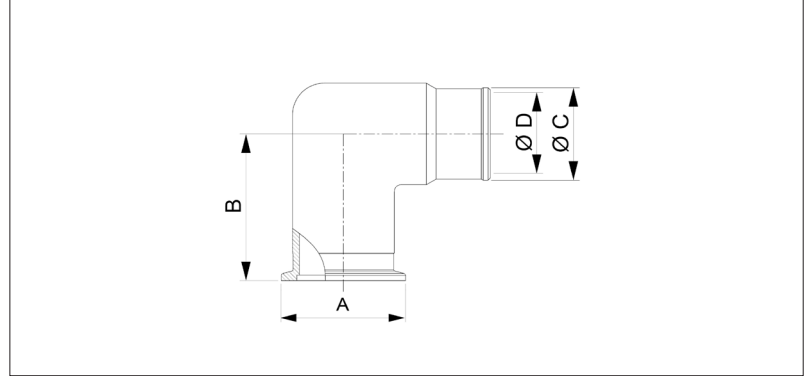


- Material:

Aluminium EN AW-6082 T6/3.2315

For connecting a PVC hose or a CR sleeve

### Dimensions

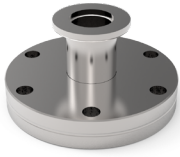


### Aluminium EN AW-6082 T6/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No        |
|-----------|--------|--------|--------|--------|-----------------|
| 16        | 40     | 40     | 17     | 13     | VC1ADI1AL016-40 |
| 25        | 50     | 50     | 26     | 22     | VC1ADI1AL025-50 |
| 40        | 65     | 65     | 41     | 37     | VC1ADI1AL040-65 |

## ISO-KF to CF Adapter



- Flange Materials:

Stainless Steel 304/1.4301

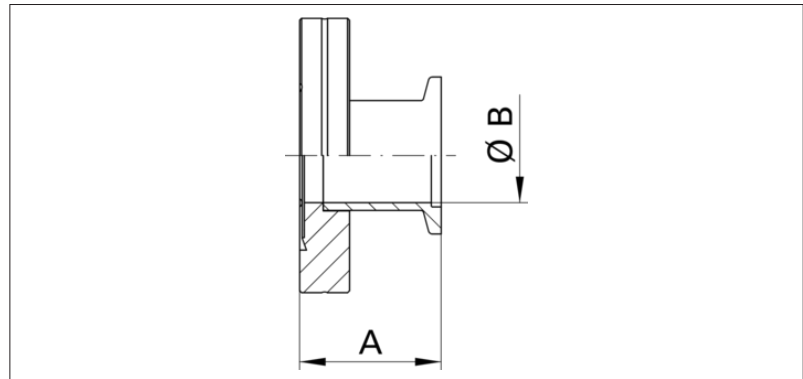
Stainless Steel 316L/1.4404

- Other nominal diameters and dimensions on request

- Pressure range:  $1 \cdot 10^{-8}$  mbar to ambient pressure (elastomer seal);

- $1 \cdot 10^{-9}$  mbar to ambient pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

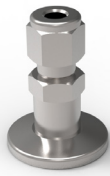
| Nominal diameter reduced (DN-KF) | Size (DN-CF) | A (mm) | B (mm) | Order No            |
|----------------------------------|--------------|--------|--------|---------------------|
| 16                               | 36           | 16     | 16     | VC1ADK1SS016-016-36 |
| 16                               | 36           | 16     | 25     | VC1ADK1SS016-025-36 |
| 16                               | 36           | 16     | 40     | VC1ADK1SS016-040-36 |
| 40                               | 36           | 16     | 16     | VC1ADK1SS040-016-36 |
| 40                               | 36           | 24     | 25     | VC1ADK1SS040-025-36 |
| 40                               | 50           | 40.5   | 40     | VC1ADK1SS040-040-50 |
| 63                               | 50           | 40.5   | 40     | VC1ADK1SS063-040-50 |
| 100                              | 50           | 40.5   | 40     | VC1ADK1SS100-040-50 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Nominal diameter reduced (DN-KF) | Size (DN-CF) | A (mm) | B (mm) | Order No            |
|----------------------------------|--------------|--------|--------|---------------------|
| 16                               | 36           | 16     | 16     | VC1ADK2SS016-016-36 |
| 16                               | 36           | 16     | 25     | VC1ADK2SS016-025-36 |
| 16                               | 36           | 16     | 40     | VC1ADK2SS016-040-36 |
| 40                               | 36           | 16     | 16     | VC1ADK2SS040-016-36 |
| 40                               | 36           | 24     | 25     | VC1ADK2SS040-025-36 |
| 40                               | 50           | 40.5   | 40     | VC1ADK2SS040-040-50 |
| 63                               | 50           | 40.5   | 40     | VC1ADK2SS063-040-50 |
| 100                              | 50           | 40.5   | 40     | VC1ADK2SS100-040-50 |

## ISO-KF Swagelok Adapter

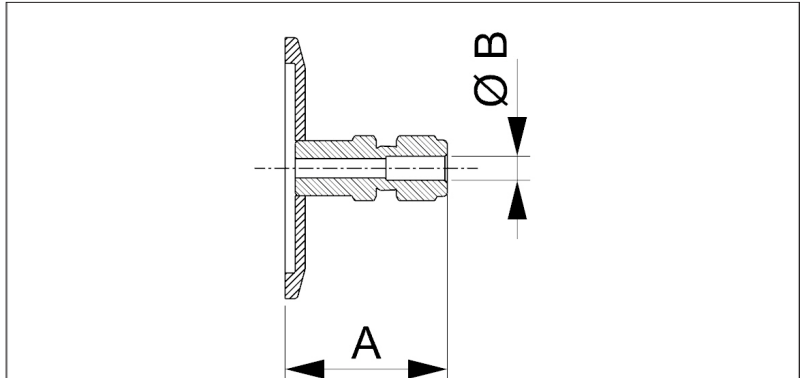


Swagelok® fitting

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | Order No         |
|-----------|--------|--------|------------------|
| 16        | 40     | 6 mm   | VC1ADL1SS016-M6  |
| 16        | 41     | 8 mm   | VC1ADL1SS016-M8  |
| 25        | 38     | 6 mm   | VC1ADL1SS025-M6  |
| 25        | 39     | 8 mm   | VC1ADL1SS025-M8  |
| 25        | 41     | 10 mm  | VC1ADL1SS025-M10 |
| 25        | 43     | 12 mm  | VC1ADL1SS025-M12 |
| 40        | 38     | 6 mm   | VC1ADL1SS040-M6  |
| 16        | 40     | 1/4"   | VC1ADL1SS016-05  |
| 16        | 53     | 1/2"   | VC1ADL1SS016-03  |
| 25        | 38     | 1/4"   | VC1ADL1SS025-05  |
| 25        | 53     | 1/2"   | VC1ADL1SS025-03  |
| 40        | 38     | 1/2"   | VC1ADL1SS040-05  |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | Order No         |
|-----------|--------|--------|------------------|
| 16        | 40     | 6 mm   | VC1ADL2SS016-M6  |
| 16        | 41     | 8 mm   | VC1ADL2SS016-M8  |
| 25        | 38     | 6 mm   | VC1ADL2SS025-M6  |
| 25        | 39     | 8 mm   | VC1ADL2SS025-M8  |
| 25        | 41     | 10 mm  | VC1ADL2SS025-M10 |
| 25        | 43     | 12 mm  | VC1ADL2SS025-M12 |
| 40        | 38     | 6 mm   | VC1ADL2SS040-M6  |
| 16        | 40     | 1/4"   | VC1ADL2SS016-05  |
| 16        | 53     | 1/2"   | VC1ADL2SS016-03  |
| 25        | 38     | 1/4"   | VC1ADL2SS025-05  |
| 25        | 53     | 1/2"   | VC1ADL2SS025-03  |
| 40        | 38     | 1/2"   | VC1ADL2SS040-05  |



## ISO-KF Vcr Adapter Female



Swagelok® VCR adapter

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal);

$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

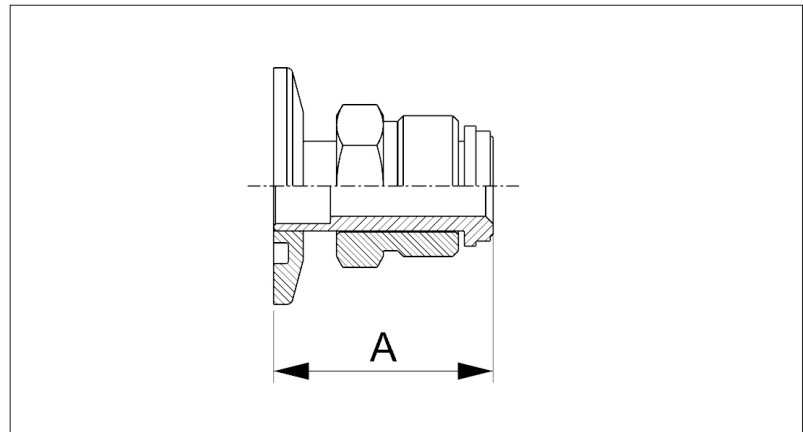
Materials: Stainless steel 304/1.4301

Temperature range: -196 to 300 °C

Materials: Stainless steel 316L/1.4404

Temperature range: -196 to 350 °C

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | VCR Connection | Order No           |
|-----------|--------|----------------|--------------------|
| 16        | 36     | NPT 1/4"       | VC1ADM1SS016-03-36 |
| 16        | 41     | NPT 1/2"       | VC1ADM1SS016-05-41 |
| 25        | 33     | NPT 1/4"       | VC1ADM1SS025-03-33 |
| 25        | 37     | NPT 1/2"       | VC1ADM1SS025-05-37 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | VCR Connection | Order No           |
|-----------|--------|----------------|--------------------|
| 16        | 36     | NPT 1/4"       | VC1ADM2SS016-03-36 |
| 16        | 41     | NPT 1/2"       | VC1ADM2SS016-05-41 |
| 25        | 33     | NPT 1/4"       | VC1ADM2SS025-03-33 |
| 25        | 37     | NPT 1/2"       | VC1ADM2SS025-05-37 |

## ISO-KF Vcr Adapter Male



Swagelok® VCR adapter

Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal);

$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

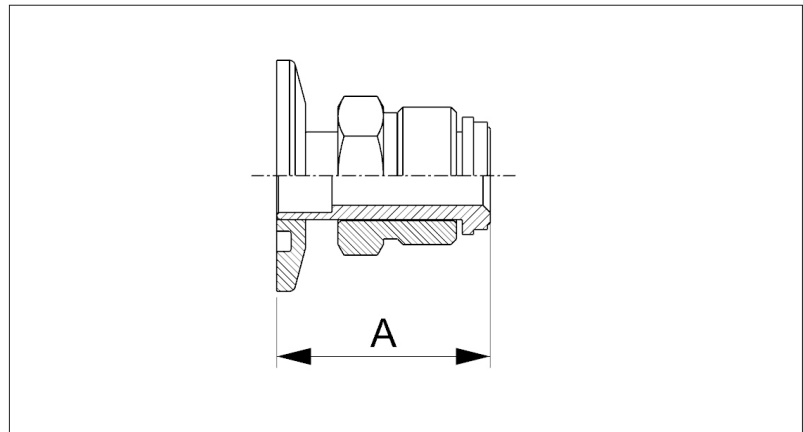
Materials: Stainless steel 304/1.4301

Temperature range: -196 to 300 °C

Materials: Stainless steel 316L/1.4404

Temperature range: -196 to 350 °C

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | VCR Connection | Order No           |
|-----------|--------|----------------|--------------------|
| 16        | 36     | NPT 1/4"       | VC1ADN1SS016-03-36 |
| 16        | 41     | NPT 1/2"       | VC1ADN1SS016-05-41 |
| 25        | 33     | NPT 1/4"       | VC1ADN1SS025-03-33 |
| 25        | 37     | NPT 1/2"       | VC1ADN1SS025-05-37 |
| 40        | 33     | NPT 1/4"       | VC1ADN1SS040-03-33 |
| 40        | 37     | NPT 1/2"       | VC1ADN1SS040-05-37 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | VCR Connection | Order No           |
|-----------|--------|----------------|--------------------|
| 16        | 36     | NPT 1/4"       | VC1ADN2SS016-03-36 |
| 16        | 41     | NPT 1/2"       | VC1ADN2SS016-05-41 |
| 25        | 33     | NPT 1/4"       | VC1ADN2SS025-03-33 |
| 25        | 37     | NPT 1/2"       | VC1ADN2SS025-05-37 |
| 40        | 33     | NPT 1/4"       | VC1ADN2SS040-03-33 |
| 40        | 37     | NPT 1/2"       | VC1ADN2SS040-05-37 |

# ISO-KF Hoses

This part consists of KF Hoses.  
Check out this section for products NW10-NW50

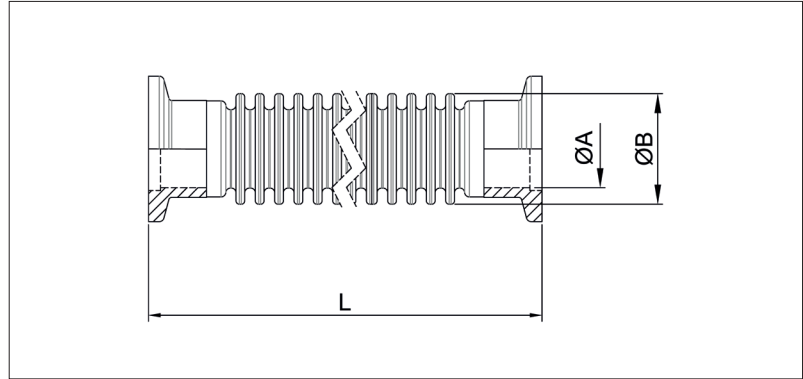


## ISO-KF Flexible Hose



- Flange connection length: 15 mm
- Custom lengths on request
- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar
- Materials:  
Stainless Steel 316L/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | L (mm) | A (mm) | B (mm) | Bending radius movement (mm) | One-Time Bending Radius. Frequent Movement (mm) | Order No          |
|-----------|--------|--------|--------|------------------------------|-------------------------------------------------|-------------------|
| 10        | 250    | 10     | 16     | 17                           | 100                                             | VC1HSA1SS010-250  |
| 10        | 500    | 10     | 16     | 17                           | 100                                             | VC1HSA1SS010-500  |
| 10        | 750    | 10     | 16     | 17                           | 100                                             | VC1HSA1SS010-750  |
| 10        | 1000   | 10     | 16     | 17                           | 100                                             | VC1HSA1SS010-1000 |
| 10        | 1500   | 10     | 16     | 17                           | 100                                             | VC1HSA1SS010-1500 |
| 16        | 250    | 16     | 23     | 26                           | 140                                             | VC1HSA1SS016-250  |
| 16        | 500    | 16     | 23     | 26                           | 140                                             | VC1HSA1SS016-500  |
| 16        | 750    | 16     | 23     | 26                           | 140                                             | VC1HSA1SS016-750  |
| 16        | 1000   | 16     | 23     | 26                           | 140                                             | VC1HSA1SS016-1000 |
| 16        | 1500   | 16     | 23     | 26                           | 140                                             | VC1HSA1SS016-1500 |
| 25        | 250    | 24     | 33     | 38                           | 180                                             | VC1HSA1SS025-250  |
| 25        | 500    | 24     | 33     | 38                           | 180                                             | VC1HSA1SS025-500  |
| 25        | 750    | 24     | 33     | 38                           | 180                                             | VC1HSA1SS025-750  |
| 25        | 1000   | 24     | 33     | 38                           | 180                                             | VC1HSA1SS025-1000 |
| 25        | 1500   | 24     | 33     | 38                           | 180                                             | VC1HSA1SS025-1500 |
| 40        | 250    | 40.5   | 52     | 59                           | 240                                             | VC1HSA1SS040-250  |
| 40        | 500    | 40.5   | 52     | 59                           | 240                                             | VC1HSA1SS040-500  |
| 40        | 750    | 40.5   | 52     | 59                           | 240                                             | VC1HSA1SS040-750  |
| 40        | 1000   | 40.5   | 52     | 59                           | 240                                             | VC1HSA1SS040-1000 |
| 40        | 1500   | 40.5   | 52     | 59                           | 240                                             | VC1HSA1SS040-1500 |
| 50        | 250    | 50     | 63     | 72                           | 280                                             | VC1HSA1SS050-250  |
| 50        | 500    | 50     | 63     | 72                           | 280                                             | VC1HSA1SS050-500  |
| 50        | 750    | 50     | 63     | 72                           | 280                                             | VC1HSA1SS050-750  |
| 50        | 1000   | 50     | 63     | 72                           | 280                                             | VC1HSA1SS050-1000 |
| 50        | 1500   | 50     | 63     | 72                           | 280                                             | VC1HSA1SS050-1500 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

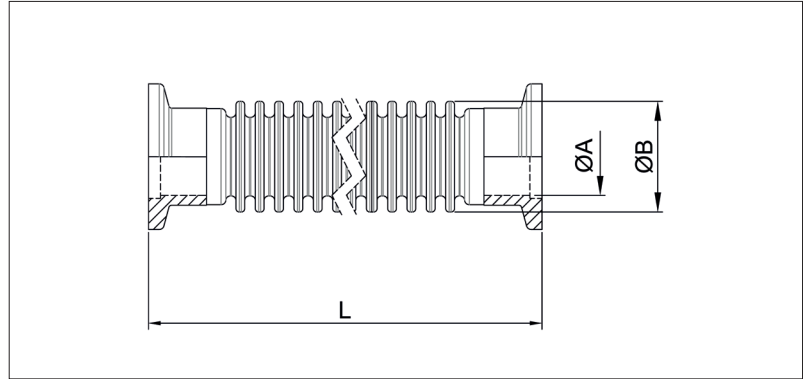
| Size (DN) | L (mm) | A (mm) | B (mm) | Bending radius<br>movement (mm) | One-Time Bending Radius.<br>Frequent Movement (mm) | Order No          |
|-----------|--------|--------|--------|---------------------------------|----------------------------------------------------|-------------------|
| 10        | 250    | 10     | 16     | 17                              | 100                                                | VC1HSA2SS010-250  |
| 10        | 500    | 10     | 16     | 17                              | 100                                                | VC1HSA2SS010-500  |
| 10        | 750    | 10     | 16     | 17                              | 100                                                | VC1HSA2SS010-750  |
| 10        | 1000   | 10     | 16     | 17                              | 100                                                | VC1HSA2SS010-1000 |
| 10        | 1500   | 10     | 16     | 17                              | 100                                                | VC1HSA2SS010-1500 |
| 16        | 250    | 16     | 23     | 26                              | 140                                                | VC1HSA2SS016-250  |
| 16        | 500    | 16     | 23     | 26                              | 140                                                | VC1HSA2SS016-500  |
| 16        | 750    | 16     | 23     | 26                              | 140                                                | VC1HSA2SS016-750  |
| 16        | 1000   | 16     | 23     | 26                              | 140                                                | VC1HSA2SS016-1000 |
| 16        | 1500   | 16     | 23     | 26                              | 140                                                | VC1HSA2SS016-1500 |
| 25        | 250    | 24     | 33     | 38                              | 180                                                | VC1HSA2SS025-250  |
| 25        | 500    | 24     | 33     | 38                              | 180                                                | VC1HSA2SS025-500  |
| 25        | 750    | 24     | 33     | 38                              | 180                                                | VC1HSA2SS025-750  |
| 25        | 1000   | 24     | 33     | 38                              | 180                                                | VC1HSA2SS025-1000 |
| 25        | 1500   | 24     | 33     | 38                              | 180                                                | VC1HSA2SS025-1500 |
| 40        | 250    | 40.5   | 52     | 59                              | 240                                                | VC1HSA2SS040-250  |
| 40        | 500    | 40.5   | 52     | 59                              | 240                                                | VC1HSA2SS040-500  |
| 40        | 750    | 40.5   | 52     | 59                              | 240                                                | VC1HSA2SS040-750  |
| 40        | 1000   | 40.5   | 52     | 59                              | 240                                                | VC1HSA2SS040-1000 |
| 40        | 1500   | 40.5   | 52     | 59                              | 240                                                | VC1HSA2SS040-1500 |
| 50        | 250    | 50     | 63     | 72                              | 280                                                | VC1HSA2SS050-250  |
| 50        | 500    | 50     | 63     | 72                              | 280                                                | VC1HSA2SS050-500  |
| 50        | 750    | 50     | 63     | 72                              | 280                                                | VC1HSA2SS050-750  |
| 50        | 1000   | 50     | 63     | 72                              | 280                                                | VC1HSA2SS050-1000 |
| 50        | 1500   | 50     | 63     | 72                              | 280                                                | VC1HSA2SS050-1500 |

## ISO-KF Flexible Hose Thin Wall



- Flange connection length: 15 mm
- Custom lengths on request
- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar
- Materials:  
Stainless Steel 316L/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | L (mm) | Bend radius,<br>unique movement (mm) | Bend radius,<br>often movement (mm) | Order No          |
|-----------|--------|--------|--------|--------------------------------------|-------------------------------------|-------------------|
| 16        | 250    | 16     | 26     | 26                                   | 105                                 | VC1HSB1SS016-250  |
| 16        | 500    | 16     | 26     | 26                                   | 105                                 | VC1HSB1SS016-500  |
| 16        | 750    | 16     | 26     | 26                                   | 105                                 | VC1HSB1SS016-750  |
| 16        | 1000   | 16     | 26     | 26                                   | 105                                 | VC1HSB1SS016-1000 |
| 16        | 1500   | 16     | 26     | 26                                   | 105                                 | VC1HSB1SS016-1500 |
| 25        | 250    | 24     | 37     | 38                                   | 135                                 | VC1HSB1SS025-250  |
| 25        | 500    | 24     | 37     | 38                                   | 135                                 | VC1HSB1SS025-500  |
| 25        | 750    | 24     | 37     | 38                                   | 135                                 | VC1HSB1SS025-750  |
| 25        | 1000   | 24     | 37     | 38                                   | 135                                 | VC1HSB1SS025-1000 |
| 25        | 1500   | 24     | 37     | 38                                   | 135                                 | VC1HSB1SS025-1500 |
| 40        | 250    | 40.5   | 56     | 59                                   | 180                                 | VC1HSB1SS040-250  |
| 40        | 500    | 40.5   | 56     | 59                                   | 180                                 | VC1HSB1SS040-500  |
| 40        | 750    | 40.5   | 56     | 59                                   | 180                                 | VC1HSB1SS040-750  |
| 40        | 1000   | 40.5   | 56     | 59                                   | 180                                 | VC1HSB1SS040-1000 |
| 40        | 1500   | 40.5   | 56     | 59                                   | 180                                 | VC1HSB1SS040-1500 |
| 50        | 250    | 50     | 67     | 72                                   | 210                                 | VC1HSB1SS050-250  |
| 50        | 500    | 50     | 67     | 72                                   | 210                                 | VC1HSB1SS050-500  |
| 50        | 750    | 50     | 67     | 72                                   | 210                                 | VC1HSB1SS050-750  |
| 50        | 1000   | 50     | 67     | 72                                   | 210                                 | VC1HSB1SS050-1000 |
| 50        | 1500   | 50     | 67     | 72                                   | 210                                 | VC1HSB1SS050-1500 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

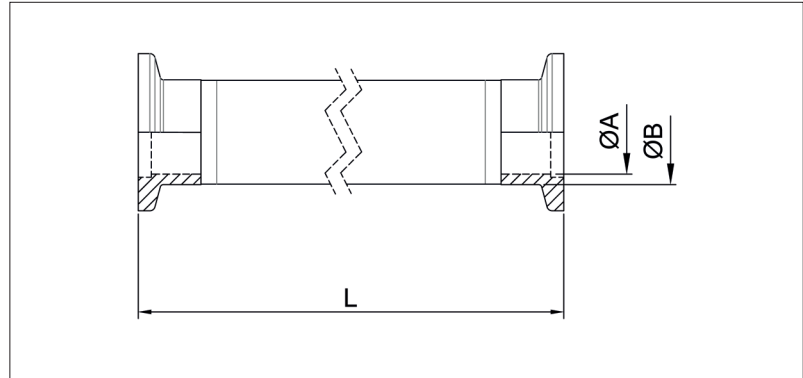
| Size (DN) | A (mm) | B (mm) | L (mm) | Bend radius,<br>unique movement (mm) | Bend radius,<br>often movement (mm) | Order No          |
|-----------|--------|--------|--------|--------------------------------------|-------------------------------------|-------------------|
| 16        | 250    | 16     | 26     | 26                                   | 105                                 | VC1HSB2SS016-250  |
| 16        | 500    | 16     | 26     | 26                                   | 105                                 | VC1HSB2SS016-500  |
| 16        | 750    | 16     | 26     | 26                                   | 105                                 | VC1HSB2SS016-750  |
| 16        | 1000   | 16     | 26     | 26                                   | 105                                 | VC1HSB2SS016-1000 |
| 16        | 1500   | 16     | 26     | 26                                   | 105                                 | VC1HSB2SS016-1500 |
| 25        | 250    | 24     | 37     | 38                                   | 135                                 | VC1HSB2SS025-250  |
| 25        | 500    | 24     | 37     | 38                                   | 135                                 | VC1HSB2SS025-500  |
| 25        | 750    | 24     | 37     | 38                                   | 135                                 | VC1HSB2SS025-750  |
| 25        | 1000   | 24     | 37     | 38                                   | 135                                 | VC1HSB2SS025-1500 |
| 25        | 1500   | 24     | 37     | 38                                   | 135                                 | VC1HSB2SS025-1000 |
| 40        | 250    | 40.5   | 56     | 59                                   | 180                                 | VC1HSB2SS040-250  |
| 40        | 500    | 40.5   | 56     | 59                                   | 180                                 | VC1HSB2SS040-500  |
| 40        | 750    | 40.5   | 56     | 59                                   | 180                                 | VC1HSB2SS040-750  |
| 40        | 1000   | 40.5   | 56     | 59                                   | 180                                 | VC1HSB2SS040-1000 |
| 40        | 1500   | 40.5   | 56     | 59                                   | 180                                 | VC1HSB2SS040-1500 |
| 50        | 250    | 50     | 67     | 72                                   | 210                                 | VC1HSB2SS050-250  |
| 50        | 500    | 50     | 67     | 72                                   | 210                                 | VC1HSB2SS050-500  |
| 50        | 750    | 50     | 67     | 72                                   | 210                                 | VC1HSB2SS050-750  |
| 50        | 1000   | 50     | 67     | 72                                   | 210                                 | VC1HSB2SS050-1000 |
| 50        | 1500   | 50     | 67     | 72                                   | 210                                 | VC1HSB2SS050-1500 |

## ISO-KF Flexible Hose, Sheathed



- Custom lengths on request
- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500
- Materials:  
Stainless Steel 316L/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Bend radius,<br>unique movement (mm) | Bend radius,<br>often movement (mm) | Order No          |
|-----------|--------|--------|--------|--------------------------------------|-------------------------------------|-------------------|
| 16        | 250    | 15.9   | 24.9   | 44                                   | 140                                 | VC1HSC1SS016-250  |
| 16        | 500    | 15.9   | 24.9   | 44                                   | 140                                 | VC1HSC1SS016-500  |
| 16        | 750    | 15.9   | 24.9   | 44                                   | 140                                 | VC1HSC1SS016-750  |
| 16        | 1000   | 15.9   | 24.9   | 44                                   | 140                                 | VC1HSC1SS016-1000 |
| 16        | 1500   | 15.9   | 24.9   | 44                                   | 140                                 | VC1HSC1SS016-1500 |
| 25        | 250    | 24     | 35.1   | 64                                   | 180                                 | VC1HSC1SS025-250  |
| 25        | 500    | 24     | 35.1   | 64                                   | 180                                 | VC1HSC1SS025-500  |
| 25        | 750    | 24     | 35.1   | 64                                   | 180                                 | VC1HSC1SS025-750  |
| 25        | 1000   | 24     | 35.1   | 64                                   | 180                                 | VC1HSC1SS025-1000 |
| 25        | 1500   | 24     | 35.1   | 64                                   | 180                                 | VC1HSC1SS025-1500 |
| 40        | 250    | 40.5   | 54.7   | 98                                   | 240                                 | VC1HSC1SS040-250  |
| 40        | 500    | 40.5   | 54.7   | 98                                   | 240                                 | VC1HSC1SS040-500  |
| 40        | 750    | 40.5   | 54.7   | 98                                   | 240                                 | VC1HSC1SS040-750  |
| 40        | 1000   | 40.5   | 54.7   | 98                                   | 240                                 | VC1HSC1SS040-1000 |
| 40        | 1500   | 40.5   | 54.7   | 98                                   | 240                                 | VC1HSC1SS040-1500 |
| 50        | 250    | 49.9   | 65.7   | 120                                  | 280                                 | VC1HSC1SS050-250  |
| 50        | 500    | 49.9   | 65.7   | 120                                  | 280                                 | VC1HSC1SS050-500  |
| 50        | 750    | 49.9   | 65.7   | 120                                  | 280                                 | VC1HSC1SS050-750  |
| 50        | 1000   | 49.9   | 65.7   | 120                                  | 280                                 | VC1HSC1SS050-1000 |
| 50        | 1500   | 49.9   | 65.7   | 120                                  | 280                                 | VC1HSC1SS050-1500 |

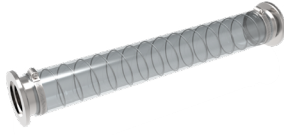


**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

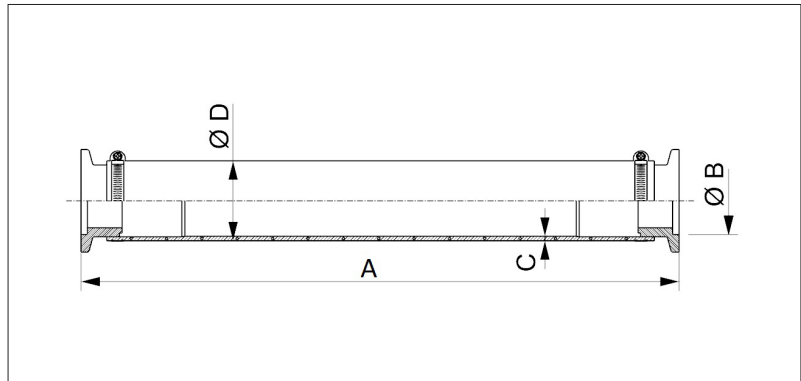
| Size (DN) | A (mm) | B (mm) | C (mm) | Bend radius,<br>unique movement (mm) | Bend radius,<br>often movement (mm) | Order No          |
|-----------|--------|--------|--------|--------------------------------------|-------------------------------------|-------------------|
| 16        | 250    | 15.9   | 24.9   | 44                                   | 140                                 | VC1HSC2SS016-250  |
| 16        | 500    | 15.9   | 24.9   | 44                                   | 140                                 | VC1HSC2SS016-500  |
| 16        | 750    | 15.9   | 24.9   | 44                                   | 140                                 | VC1HSC2SS016-750  |
| 16        | 1000   | 15.9   | 24.9   | 44                                   | 140                                 | VC1HSC2SS016-1000 |
| 16        | 1500   | 15.9   | 24.9   | 44                                   | 140                                 | VC1HSC2SS016-1500 |
| 25        | 250    | 24     | 35.1   | 64                                   | 180                                 | VC1HSC2SS025-250  |
| 25        | 500    | 24     | 35.1   | 64                                   | 180                                 | VC1HSC2SS025-500  |
| 25        | 750    | 24     | 35.1   | 64                                   | 180                                 | VC1HSC2SS025-750  |
| 25        | 1000   | 24     | 35.1   | 64                                   | 180                                 | VC1HSC2SS025-1000 |
| 25        | 1500   | 24     | 35.1   | 64                                   | 180                                 | VC1HSC2SS025-1500 |
| 40        | 250    | 40.5   | 54.7   | 98                                   | 240                                 | VC1HSC2SS040-250  |
| 40        | 500    | 40.5   | 54.7   | 98                                   | 240                                 | VC1HSC2SS040-500  |
| 40        | 750    | 40.5   | 54.7   | 98                                   | 240                                 | VC1HSC2SS040-750  |
| 40        | 1000   | 40.5   | 54.7   | 98                                   | 240                                 | VC1HSC2SS040-1000 |
| 40        | 1500   | 40.5   | 54.7   | 98                                   | 240                                 | VC1HSC2SS040-1500 |
| 50        | 250    | 49.9   | 65.7   | 120                                  | 280                                 | VC1HSC2SS050-250  |
| 50        | 500    | 49.9   | 65.7   | 120                                  | 280                                 | VC1HSC2SS050-500  |
| 50        | 750    | 49.9   | 65.7   | 120                                  | 280                                 | VC1HSC2SS050-750  |
| 50        | 1000   | 49.9   | 65.7   | 120                                  | 280                                 | VC1HSC2SS050-1000 |
| 50        | 1500   | 49.9   | 65.7   | 120                                  | 280                                 | VC1HSC2SS050-1500 |

## ISO-KF PVC Hose and Flanges



- Inner Tube: PVC, transparent
- Hose cover: PVC, transparent
- Casing: Steel coil
- Smooth inner and outer walls
- Custom lengths on request
- Pressure range:  $1 \cdot 10^{-4}$  mbar to ambient pressure
- Temperature range: -5 to 40 °C (Consider PVC temperature range.)
- Flange materials:  
Stainless Steel 316L/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

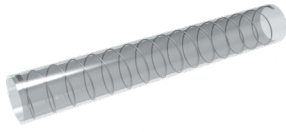
| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Bend radius [mm] | Order No          |
|-----------|--------|--------|--------|--------|------------------|-------------------|
| 16        | 500    | 12     | 3.1    | 22     | 50               | VC1HSD1SS016-500  |
| 16        | 1000   | 12     | 3.1    | 22     | 50               | VC1HSD1SS016-1000 |
| 25        | 500    | 21     | 4      | 33     | 85               | VC1HSD1SS025-500  |
| 25        | 1000   | 21     | 4      | 33     | 85               | VC1HSD1SS025-1000 |
| 40        | 500    | 40.5   | 4.9    | 55     | 145              | VC1HSD1SS040-500  |
| 40        | 1000   | 40.5   | 4.9    | 55     | 145              | VC1HSD1SS040-1000 |
| 50        | 500    | 45     | 5      | 61     | 195              | VC1HSD1SS050-500  |
| 50        | 1000   | 45     | 5      | 61     | 195              | VC1HSD1SS050-1000 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

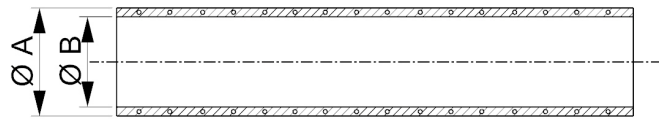
| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Bend radius [mm] | Order No          |
|-----------|--------|--------|--------|--------|------------------|-------------------|
| 16        | 500    | 12     | 3.1    | 22     | 50               | VC1HSD2SS016-500  |
| 16        | 1000   | 12     | 3.1    | 22     | 50               | VC1HSD2SS016-1000 |
| 25        | 500    | 21     | 4      | 33     | 85               | VC1HSD2SS025-500  |
| 25        | 1000   | 21     | 4      | 33     | 85               | VC1HSD2SS025-1000 |
| 40        | 500    | 40.5   | 4.9    | 55     | 145              | VC1HSD2SS040-500  |
| 40        | 1000   | 40.5   | 4.9    | 55     | 145              | VC1HSD2SS040-1000 |
| 50        | 500    | 45     | 5      | 61     | 195              | VC1HSD2SS050-500  |
| 50        | 1000   | 45     | 5      | 61     | 195              | VC1HSD2SS050-1000 |

## ISO-KF PVC Hose with Embeded Spring



- Inner Tube: PVC, transparent
- Hose cover: PVC, transparent
- Casing: Steel coil
- Smooth inner and outer walls
- Custom lengths on request
- Pressure range:  $1 \cdot 10^{-4}$  mbar to ambient pressure
- Temperature range: -5 to 40 °C
- Connection: with hose adapter and hose clamp

### Dimensions



### PVC

| A (mm) | B (mm) | Bend radius (mm) | Order No        |
|--------|--------|------------------|-----------------|
| 22     | 16     | 50               | VC1HSE3PL016-16 |
| 16     | 10     | 30               | VC1HSE3PL016-10 |
| 19.2   | 13     | 40               | VC1HSE3PL016-13 |
| 26     | 19     | 60               | VC1HSE3PL016-19 |
| 33     | 25     | 85               | VC1HSE3PL025-25 |
| 55     | 45     | 145              | VC1HSE3PL040-45 |
| 48.8   | 40     | 200              | VC1HSE3PL040-40 |
| 61     | 51     | 195              | VC1HSE3PL050-51 |

# ISO-K / ISO-F SYSTEM

This part consists of ISO-K/ ISO-System.

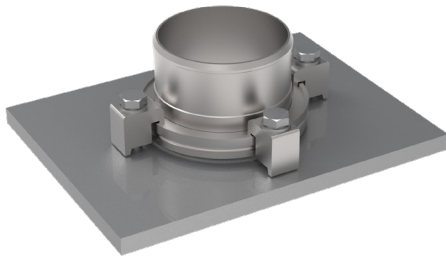
Check out this section for products NW63-NW630

## ISO-K & ISO-F Components

Anadolu Vacuum ISO Flange components are manufactured on the strength of DIN 28404 and ISO 1609. ISO flanges (also called Large ISO) have a sexless design and are made from stainless or Aluminium. All components produced by Anadolu Vacuum are 100% leak-tested and have leak rates better than  $10^{-9}$  mbar l/s.

Standard sizes are NW 63 to 320. Nominal widths of up to 630 can be manufactured upon request. ISO-K clamping flange components are appropriate for building up high-vacuum connection from  $10^{-9}$  mbar to 1.5 bar. Assembly is via screw clamps, claws or a collar flange with snap ring and screws. The clamps, claws or screws must be fixed with so that the flanges butt against the centering ring. This requires a remarkable increment in torque. Sealing takes place according to the particular necessities via elastomer seals or an aluminium ring. In this case metal seals, the increased contact forces mean that accordingly more screw clamps are required. A collar flange supply a problem-free progress to ISO-F. The progress to KF components and also CF components is effectively conceivable using ISO-K/KF or ISO-K/CF adapter pieces.

Please consider the product information given on the product pages.



# ISO-K / ISO-F Flanges

This part consists of ISO-K / ISO-F Flanges.  
Check out this section for products NW63- NW630

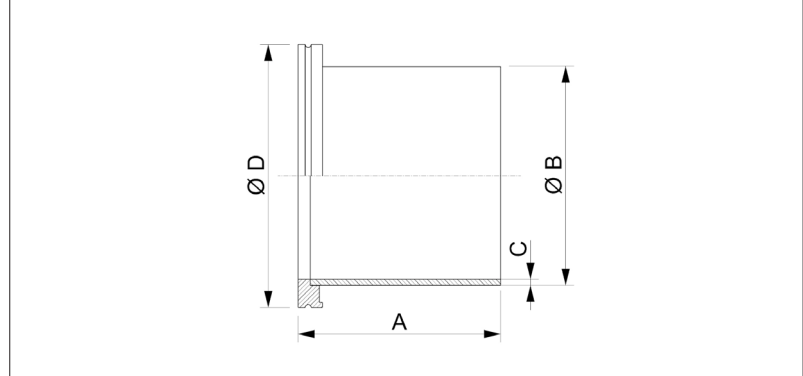


## ISO-K Half Flange



- Pressure range:  $1 \cdot 10^{-8}$  mbar to 1.5 bar (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 1.5 bar (metal seal)
- Custom lengths available upon request

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Material: Flange: Stainless Steel 304/1.4301; tube: stainless steel 304/1.4301 or better

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|-----------|---------------------|--------|--------|--------|--------|----------------------|
| 63        | 63.5x1.65           | 100    | 63.5   | 1.65   | 95     | VC2FLA1SS063-63-100  |
| 63        | 76.1x3              | 100    | 76.1   | 3      | 95     | VC2FLA1SS063-76-100  |
| 80        | 76.1x3              | 100    | 76.1   | 3      | 110    | VC2FLA1SS080-76-100  |
| 80        | 88.9x3              | 100    | 88.9   | 3      | 110    | VC2FLA1SS080-88-100  |
| 100       | 101.6x2.1           | 100    | 101.6  | 2.1    | 130    | VC2FLA1SS100-101-100 |
| 100       | 108x3               | 100    | 108    | 3      | 130    | VC2FLA1SS100-108-100 |
| 160       | 152.4x2.4           | 100    | 152.4  | 2.4    | 180    | VC2FLA1SS160-152-100 |
| 160       | 159x3               | 100    | 159    | 3      | 180    | VC2FLA1SS160-159-100 |
| 200       | 203.2x2.4           | 100    | 203.2  | 2.4    | 240    | VC2FLA1SS200-203-100 |
| 200       | 219x3               | 100    | 219    | 3      | 240    | VC2FLA1SS200-219-100 |
| 250       | 254x2               | 100    | 254    | 2      | 290    | VC2FLA1SS250-254-100 |
| 250       | 273x3               | 100    | 273    | 3      | 290    | VC2FLA1SS250-273-100 |
| 320       | 324x3               | 100    | 324    | 3      | 370    | VC2FLA1SS320-324-100 |
| 400       | 406.4x3             | 100    | 406.4  | 3      | 450    | VC2FLA1SS400-406-100 |
| 500       | 508x4               | 100    | 508    | 4      | 550    | VC2FLA1SS500-508-100 |
| 630       | 660x5               | 100    | 660    | 5      | 690    | VC2FLA1SS630-660-100 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C
- Material: Flange: stainless steel 316L/1.4404; tube: stainless steel 316L/1.4404 or better

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|-----------|---------------------|--------|--------|--------|--------|----------------------|
| 63        | 63.5x1.65           | 100    | 63.5   | 1.65   | 95     | VC2FLA2SS063-63-100  |
| 63        | 76.1x3              | 100    | 76.1   | 3      | 95     | VC2FLA2SS063-76-100  |
| 80        | 76.1x3              | 100    | 76.1   | 3      | 110    | VC2FLA2SS080-76-100  |
| 80        | 88.9x3              | 100    | 88.9   | 3      | 110    | VC2FLA2SS080-88-100  |
| 100       | 101.6x2.1           | 100    | 101.6  | 2.1    | 130    | VC2FLA2SS100-101-100 |
| 100       | 108x3               | 100    | 108    | 3      | 130    | VC2FLA2SS100-108-100 |
| 160       | 152.4x2.4           | 100    | 152.4  | 2.4    | 180    | VC2FLA2SS160-152-100 |
| 160       | 159x3               | 100    | 159    | 3      | 180    | VC2FLA2SS160-159-100 |
| 200       | 203.2x2.4           | 100    | 203.2  | 2.4    | 240    | VC2FLA2SS200-203-100 |
| 200       | 219x3               | 100    | 219    | 3      | 240    | VC2FLA2SS200-219-100 |
| 250       | 254x2               | 100    | 254    | 2      | 290    | VC2FLA2SS250-254-100 |
| 250       | 273x3               | 100    | 273    | 3      | 290    | VC2FLA2SS250-273-100 |
| 320       | 324x3               | 100    | 324    | 3      | 370    | VC2FLA2SS320-324-100 |
| 400       | 406.4x3             | 100    | 406.4  | 3      | 450    | VC2FLA2SS400-406-100 |
| 500       | 508x4               | 100    | 508    | 4      | 550    | VC2FLA2SS500-508-100 |
| 630       | 660x5               | 100    | 660    | 5      | 690    | VC2FLA2SS630-660-100 |

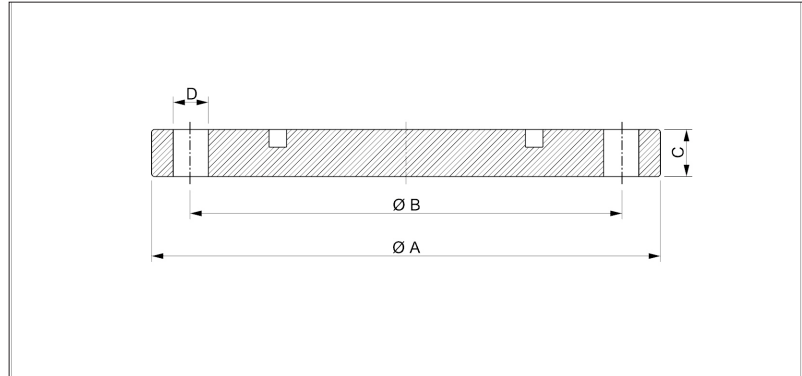


## ISO-F Blanking Flange



- Pressure range:  $1 \cdot 10^{-8}$  mbar to 1.5 bar (elastomer seal)
- $1 \cdot 10^{-9}$  mbar to 1.5 bar (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 63        | 130    | 110    | 12     | 9      | VC3FLA1SS063 |
| 100       | 165    | 145    | 12     | 9      | VC3FLA1SS100 |
| 160       | 225    | 200    | 16     | 11     | VC3FLA1SS160 |
| 200       | 285    | 260    | 16     | 11     | VC3FLA1SS200 |
| 250       | 335    | 310    | 16     | 11     | VC3FLA1SS250 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

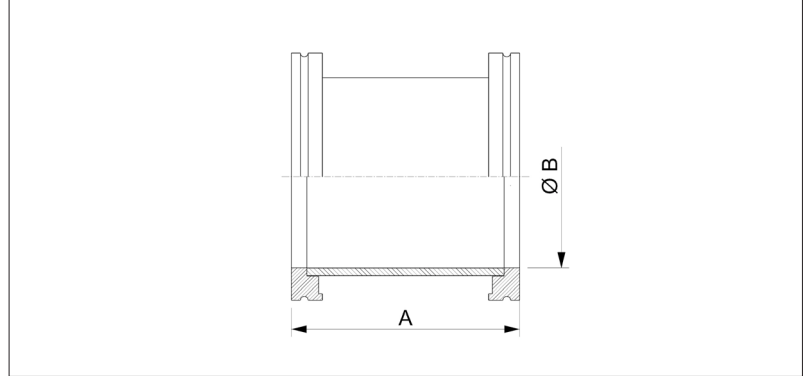
| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 63        | 130    | 110    | 12     | 9      | VC3FLA2SS063 |
| 100       | 165    | 145    | 12     | 9      | VC3FLA2SS100 |
| 160       | 225    | 200    | 16     | 11     | VC3FLA2SS160 |
| 200       | 285    | 260    | 16     | 11     | VC3FLA2SS200 |
| 250       | 335    | 310    | 16     | 11     | VC3FLA2SS250 |

## ISO-K Full Flange



- Pressure range:  $1 \cdot 10^{-8}$  mbar to 1.5 bar (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 1.5 bar (metal seal)
- Custom lengths available upon request

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

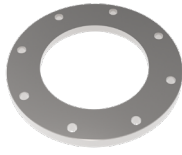
| Size (DN) | A (mm) | B (mm) | Order No         |
|-----------|--------|--------|------------------|
| 63        | 88     | 70     | VC2FLB1SS063-88  |
| 63        | 176    | 70     | VC2FLB1SS063-176 |
| 100       | 108    | 102    | VC2FLB1SS100-108 |
| 100       | 216    | 102    | VC2FLB1SS100-216 |
| 160       | 138    | 153    | VC2FLB1SS160-138 |
| 160       | 276    | 153    | VC2FLB1SS160-276 |
| 200       | 178    | 213    | VC2FLB1SS200-178 |
| 250       | 208    | 261    | VC2FLB1SS250-208 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

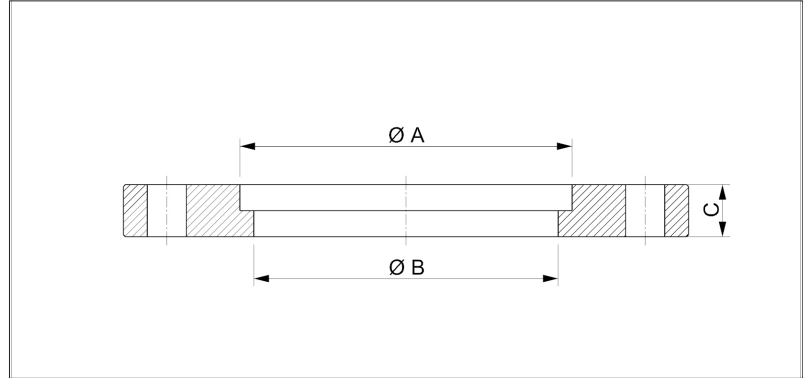
| Size (DN) | A (mm) | B (mm) | Order No         |
|-----------|--------|--------|------------------|
| 63        | 88     | 70     | VC2FLB2SS063-88  |
| 63        | 176    | 70     | VC2FLB2SS063-176 |
| 100       | 108    | 102    | VC2FLB2SS100-108 |
| 100       | 216    | 102    | VC2FLB2SS100-216 |
| 160       | 138    | 153    | VC2FLB2SS160-138 |
| 160       | 276    | 153    | VC2FLB2SS160-276 |
| 200       | 178    | 213    | VC2FLB2SS200-178 |
| 250       | 208    | 261    | VC2FLB2SS250-208 |

## ISO-F Weld Ring Flange



- Pressure range:  $1 \cdot 10^{-8}$  mbar to 1.5 bar (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 1.5 bar (metal seal)
- Materials:  
Stainless Steel 304/1.4301  
Stainless Steel 316L/1.4404

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | Order No         |
|-----------|---------------------|--------|--------|--------|------------------|
| 63        | 76,1x3              | 76.4   | 70     | 12     | VC3FLB1SS063-76  |
| 100       | 108x3               | 108.3  | 102    | 12     | VC3FLB1SS100-108 |
| 160       | 159x3               | 159.3  | 153    | 16     | VC3FLB1SS160-159 |
| 200       | 219x3               | 219.4  | 213    | 16     | VC3FLB1SS200-219 |
| 250       | 273x3               | 273.4  | 261    | 16     | VC3FLB1SS250-273 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

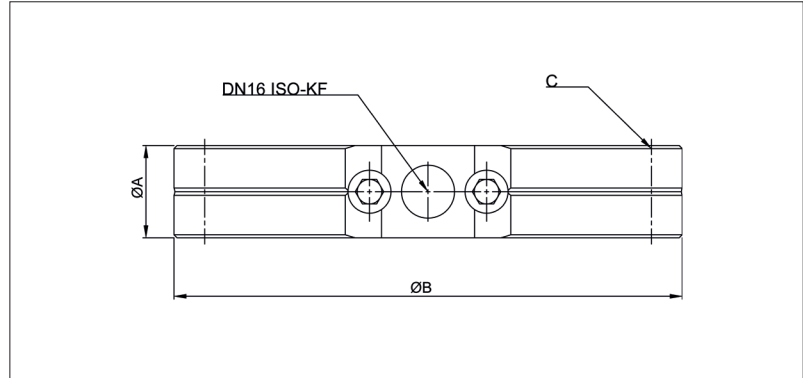
| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | Order No         |
|-----------|---------------------|--------|--------|--------|------------------|
| 63        | 76,1x3              | 76.4   | 70     | 12     | VC3FLB2SS063-76  |
| 100       | 108x3               | 108.3  | 102    | 12     | VC3FLB2SS100-108 |
| 160       | 159x3               | 159.3  | 153    | 16     | VC3FLB2SS160-159 |
| 200       | 219x3               | 219.4  | 213    | 16     | VC3FLB2SS200-219 |
| 250       | 273x3               | 273.4  | 261    | 16     | VC3FLB2SS250-273 |

## ISO-F Measurement Flange



- Suitable for application with elastomer seal
- Pressure range:  $1 \cdot 10^{-8}$  mbar to 1.5 bar
- Materials:  
Stainless Steel 304/1.4301  
Stainless Steel 316L/1.4404
- Temperature range: Consider O-ring temperature ranges

### Dimensions



### Aluminium EN AW-6082 T6/3.2315

- Temperature Range: -196 to 150 C°

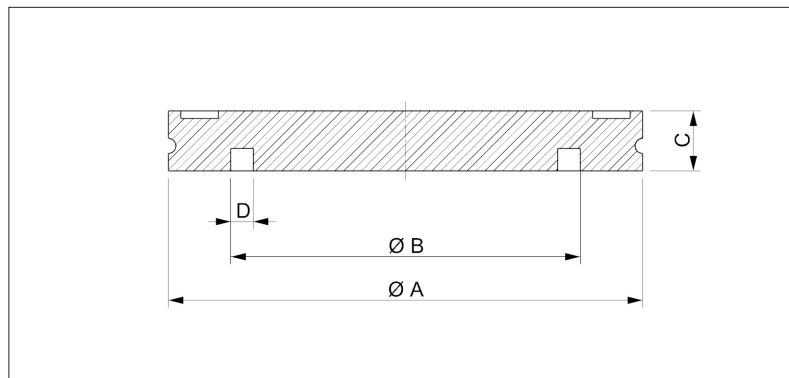
| Size (DN) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 63        | 35     | 130    | 4 x M8 | VC3FLC1AL063 |
| 80        | 35     | 145    | 8 x M8 | VC3FLC1AL080 |
| 100       | 35     | 165    | 8 x M8 | VC3FLC1AL100 |

## ISO-K Blanking Flange



- Pressure range:  $1 \cdot 10^{-8}$  mbar to 1.5 bar (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 1.5 bar (metal seal)
- Custom lengths available upon request

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 63        | 95     | 70     | 12     | 4.5    | VC2FLC1SS063 |
| 80        | 110    | 83     | 12     | 4.5    | VC2FLC1SS080 |
| 100       | 130    | 102    | 12     | 4.5    | VC2FLC1SS100 |
| 160       | 180    | 153    | 12     | 4.5    | VC2FLC1SS160 |
| 200       | 240    | 213    | 12     | 4.5    | VC2FLC1SS200 |
| 250       | 290    | 261    | 12     | 4.5    | VC2FLC1SS250 |
| 320       | 370    | 318    | 17     | 4.5    | VC2FLC1SS320 |
| 400       | 450    | 400    | 17     | 4.5    | VC2FLC1SS400 |
| 500       | 550    | 501    | 17     | 4.5    | VC2FLC1SS500 |
| 630       | 690    | 651    | 22     | 4.5    | VC2FLC1SS630 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 63        | 95     | 70     | 12     | 4.5    | VC2FLC2SS063 |
| 80        | 110    | 83     | 12     | 4.5    | VC2FLC2SS080 |
| 100       | 130    | 102    | 12     | 4.5    | VC2FLC2SS100 |
| 160       | 180    | 153    | 12     | 4.5    | VC2FLC2SS160 |
| 200       | 240    | 213    | 12     | 4.5    | VC2FLC2SS200 |
| 250       | 290    | 261    | 12     | 4.5    | VC2FLC2SS250 |
| 320       | 370    | 318    | 17     | 4.5    | VC2FLC2SS320 |
| 400       | 450    | 400    | 17     | 4.5    | VC2FLC2SS400 |
| 500       | 550    | 501    | 17     | 4.5    | VC2FLC2SS500 |
| 630       | 690    | 651    | 22     | 4.5    | VC2FLC2SS630 |

# ISO-K Weld Ring Flange



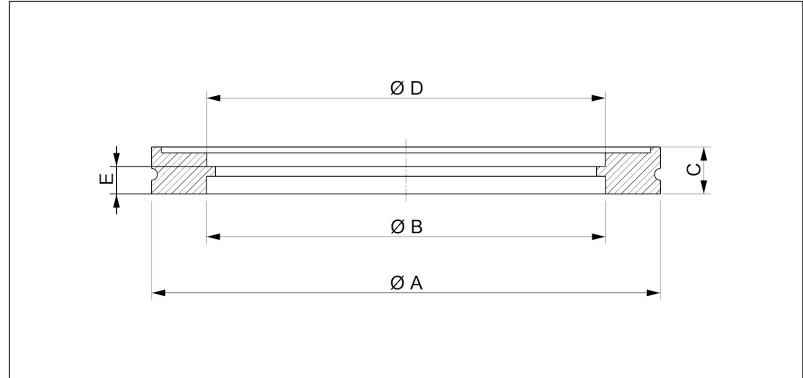
- Pressure range:  $1 \cdot 10^{-8}$  mbar to 1.5 bar over pressure (elastomer seal);  
 $1 \cdot 10^{-9}$  mbar to 1.5 bar over pressure (metal seal)

- Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

## Dimensions



## Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Order No           |
|-----------|---------------------|--------|--------|--------|--------|--------|--------------------|
| 63        | 63.5x1.65           | 95     | 70     | 12     | 63.8   | 7      | VC2FLD1SS063-63    |
| 63        | 70x2                | 95     | 70     | 12     | 70.3   | 7      | VC2FLD1SS063-70    |
| 63        | 76.1x3              | 95     | 70     | 12     | 76.4   | 6      | VC2FLD1SS063-76    |
| 63        | 76.1x3              | 95     | 70     | 12     | 76.4   | 8      | VC2FLD1SS063-76-S  |
| 80        | 76.1x3              | 110    | 83     | 12     | 76.4   | 7      | VC2FLD1SS080-76    |
| 80        | 88.9x3              | 110    | 83     | 12     | 89.2   | 6      | VC2FLD1SS080-88    |
| 100       | 101.6x2.1           | 130    | 102    | 12     | 101.9  | 7      | VC2FLD1SS100-101   |
| 100       | 104x2               | 130    | 102    | 12     | 104.3  | 7      | VC2FLD1SS100-104   |
| 100       | 108x3               | 130    | 102    | 12     | 108.3  | 6      | VC2FLD1SS100-108   |
| 100       | 108x3               | 130    | 102    | 12     | 108.3  | 8      | VC2FLD1SS100-108-S |
| 100       | 114.3x2             | 130    | 102    | 12     | 114.6  | 6      | VC2FLD1SS100-114   |
| 160       | 152.4x2.4           | 180    | 153    | 12     | 152.7  | 7      | VC2FLD1SS160-152   |
| 160       | 159x3               | 180    | 153    | 12     | 159.3  | 6      | VC2FLD1SS160-159   |
| 160       | 159x3               | 180    | 153    | 12     | 159.3  | 8      | VC2FLD1SS160-159-S |
| 200       | 203.2x2.4           | 240    | 213    | 12     | 203.6  | 7      | VC2FLD1SS200-203   |
| 200       | 219x3               | 240    | 213    | 12     | 219.4  | 6      | VC2FLD1SS200-219   |
| 200       | 219x3               | 240    | 213    | 12     | 219.4  | 8      | VC2FLD1SS200-219-S |
| 250       | 254x2               | 290    | 261    | 12     | 254.4  | 7      | VC2FLD1SS250-254   |
| 250       | 273x3               | 290    | 261    | 12     | 273.4  | 6      | VC2FLD1SS250-273   |
| 250       | 273x3               | 290    | 21     | 12     | 273.4  | 8      | VC2FLD1SS250-273-S |
| 320       | 324x3               | 370    | 318    | 17     | 324.4  | 8      | VC2FLD1SS320-324   |
| 320       | 324x3               | 370    | 318    | 17     | 324.4  | 10     | VC2FLD1SS320-324-S |
| 400       | 406x3               | 450    | 400    | 17     | 406.5  | 8      | VC2FLD1SS400-406   |
| 500       | 508x4               | 550    | 501    | 17     | 508.5  | 8      | VC2FLD1SS500-508   |
| 630       | 660x5               | 690    | 651    | 22     | 660.5  | 12     | VC2FLD1SS630-660   |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Order No           |
|-----------|---------------------|--------|--------|--------|--------|--------|--------------------|
| 63        | 63.5x1.65           | 95     | 70     | 12     | 63.8   | 7      | VC2FLD2SS063-63    |
| 63        | 70x2                | 95     | 70     | 12     | 70.3   | 7      | VC2FLD2SS063-70    |
| 63        | 76.1x3              | 95     | 70     | 12     | 76.4   | 6      | VC2FLD2SS063-76    |
| 63        | 76.1x3              | 95     | 70     | 12     | 76.4   | 8      | VC2FLD2SS063-76-S  |
| 80        | 76.1x3              | 110    | 83     | 12     | 76.4   | 7      | VC2FLD2SS080-76    |
| 80        | 88.9x3              | 110    | 83     | 12     | 89.2   | 6      | VC2FLD2SS080-88    |
| 100       | 101.6x2.1           | 130    | 102    | 12     | 101.9  | 7      | VC2FLD2SS100-101   |
| 100       | 104x2               | 130    | 102    | 12     | 104.3  | 7      | VC2FLD2SS100-104   |
| 100       | 108x3               | 130    | 102    | 12     | 108.3  | 6      | VC2FLD2SS100-108   |
| 100       | 108x3               | 130    | 102    | 12     | 108.3  | 8      | VC2FLD2SS100-108-S |
| 100       | 114.3x2             | 130    | 102    | 12     | 114.6  | 6      | VC2FLD2SS100-114   |
| 160       | 152.4x2.4           | 180    | 153    | 12     | 152.7  | 7      | VC2FLD2SS160-152   |
| 160       | 159x3               | 180    | 153    | 12     | 159.3  | 6      | VC2FLD2SS160-159   |
| 160       | 159x3               | 180    | 153    | 12     | 159.3  | 8      | VC2FLD2SS160-159-S |
| 200       | 203.2x2.4           | 240    | 213    | 12     | 203.6  | 7      | VC2FLD2SS200-203   |
| 200       | 219x3               | 240    | 213    | 12     | 219.4  | 6      | VC2FLD2SS200-219   |
| 200       | 219x3               | 240    | 213    | 12     | 219.4  | 8      | VC2FLD2SS200-219-S |
| 250       | 254x2               | 290    | 261    | 12     | 254.4  | 7      | VC2FLD2SS250-254   |
| 250       | 273x3               | 290    | 261    | 12     | 273.4  | 6      | VC2FLD2SS250-273   |
| 250       | 273x3               | 290    | 21     | 12     | 273.4  | 8      | VC2FLD2SS250-273-S |
| 320       | 324x3               | 370    | 318    | 17     | 324.4  | 8      | VC2FLD2SS320-324   |
| 320       | 324x3               | 370    | 318    | 17     | 324.4  | 10     | VC2FLD2SS320-324-S |
| 400       | 406x3               | 450    | 400    | 17     | 406.5  | 8      | VC2FLD2SS400-406   |
| 500       | 508x4               | 550    | 501    | 17     | 508.5  | 8      | VC2FLD2SS500-508   |
| 630       | 660x5               | 690    | 651    | 22     | 660.5  | 12     | VC2FLD2SS630-660   |

## ISO-K Rotatable Bolt Ring



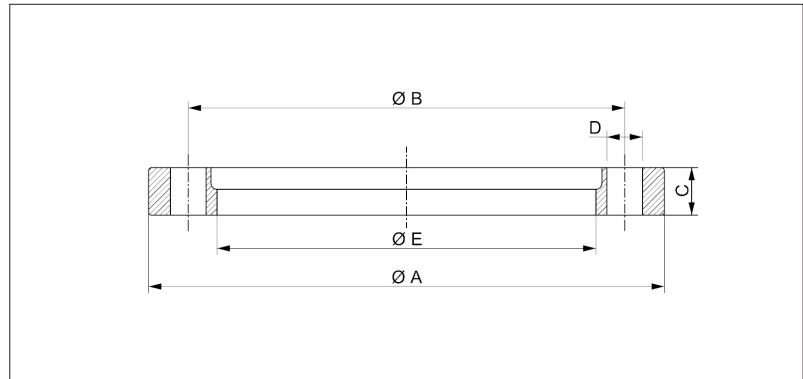
- Circlip included
- Fixation: Set of screws
- Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

- With this product you can convert an ISO-K flange into a Rotatable ISO-F flange

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------|--------------|
| 63        | 130    | 110    | 12     | 9      | 95.5   | VC2FLE1SS063 |
| 80        | 145    | 125    | 12     | 9      | 110.5  | VC2FLE1SS080 |
| 100       | 165    | 145    | 12     | 9      | 130.5  | VC2FLE1SS100 |
| 160       | 225    | 200    | 16     | 11     | 180.7  | VC2FLE1SS160 |
| 200       | 285    | 260    | 16     | 11     | 240.7  | VC2FLE1SS200 |
| 250       | 335    | 310    | 16     | 11     | 290.7  | VC2FLE1SS250 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------|--------------|
| 63        | 130    | 110    | 12     | 9      | 95.5   | VC2FLE2SS063 |
| 80        | 145    | 125    | 12     | 9      | 110.5  | VC2FLE2SS080 |
| 100       | 165    | 145    | 12     | 9      | 130.5  | VC2FLE2SS100 |
| 160       | 225    | 200    | 16     | 11     | 180.7  | VC2FLE2SS160 |
| 200       | 285    | 260    | 16     | 11     | 240.7  | VC2FLE2SS200 |
| 250       | 335    | 310    | 16     | 11     | 290.7  | VC2FLE2SS250 |



## ISO-K to ISO-F Adapter Flange



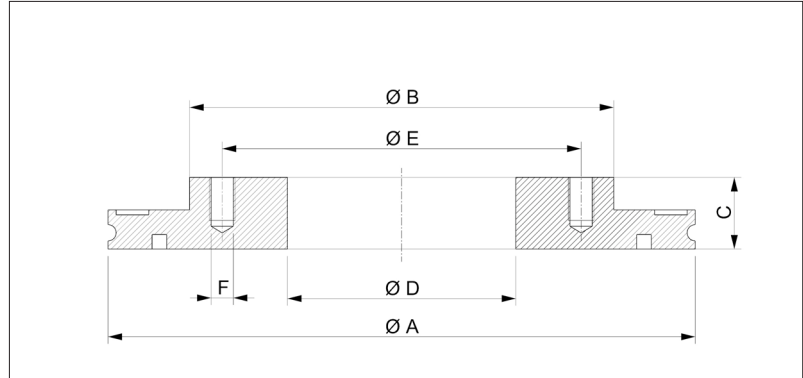
- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | Nominal diameter reduced | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F   | Order No         |
|-----------|--------------------------|--------|--------|--------|--------|--------|-----|------------------|
| 160       | 63                       | 180    | 130    | 22     | 70     | 110    | M8  | VC2FLF1SS160-063 |
| 160       | 100                      | 180    | 165    | 22     | 102    | 145    | M8  | VC2FLF1SS160-100 |
| 200       | 100                      | 240    | 165    | 20     | 102    | 145    | M8  | VC2FLF1SS200-100 |
| 200       | 160                      | 240    | 225    | 26     | 153    | 200    | M10 | VC2FLF1SS200-160 |
| 250       | 160                      | 290    | 225    | 22     | 153    | 200    | M10 | VC2FLF1SS250-160 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

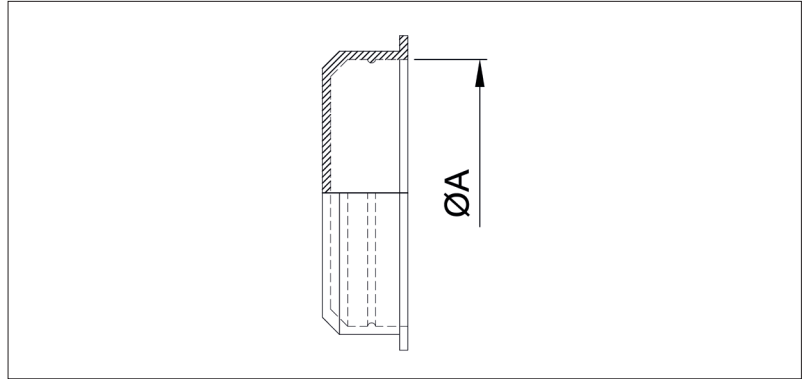
| Size (DN) | Nominal diameter reduced | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F   | Order No         |
|-----------|--------------------------|--------|--------|--------|--------|--------|-----|------------------|
| 160       | 63                       | 180    | 130    | 22     | 70     | 110    | M8  | VC2FLF2SS160-063 |
| 160       | 100                      | 180    | 165    | 22     | 102    | 145    | M8  | VC2FLF2SS160-100 |
| 200       | 100                      | 240    | 165    | 20     | 102    | 145    | M8  | VC2FLF2SS200-100 |
| 200       | 160                      | 240    | 225    | 26     | 153    | 200    | M10 | VC2FLF2SS200-160 |
| 250       | 160                      | 290    | 225    | 22     | 153    | 200    | M10 | VC2FLF2SS250-160 |

## ISO-K Flange Caps



Material: Plastic  
Polyethelene (PE)

### Dimensions



### Polietilen

| Size (DN) | A (mm) | Package (Qty.) | Order No     |
|-----------|--------|----------------|--------------|
| 63        | 95     | 5              | VC2FLG2PL063 |
| 80        | 110    | 5              | VC2FLG2PL080 |
| 100       | 130    | 5              | VC2FLG2PL100 |
| 160       | 180    | 5              | VC2FLG2PL160 |
| 200       | 240    | 5              | VC2FLG2PL200 |
| 250       | 290    | 5              | VC2FLG2PL250 |

# ISO-K / ISO-F Seals

This part consists of ISO K/F Seals.  
Check out this section for products NW63-NW630

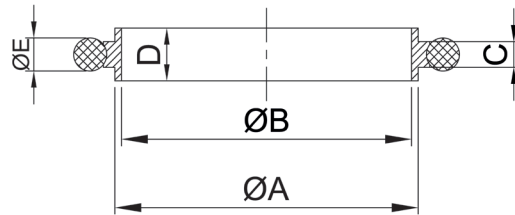


## ISO-K Seal Inner Centered



- Consider O-ring temperature ranges (See Properties of Elastomer Materials Table on Page 12)
- Various types of O-ring seals are available
- Inner ring materials:  
Aluminium EN AW-6082 T6  
Stainless Steel 304/1.4301  
Stainless Steel 316/1.4404

### Dimensions



### Aluminium EN AW-6082 T6/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | O-ring material | Order No         |
|-----------|--------|--------|--------|--------|--------|-----------------|------------------|
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | FKM             | VC2SLA1AL063-FKM |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | FKM             | VC2SLA1AL080-FKM |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | FKM             | VC2SLA1AL100-FKM |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | FKM             | VC2SLA1AL160-FKM |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | FKM             | VC2SLA1AL200-FKM |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | FKM             | VC2SLA1AL250-FKM |
| 320       | 318    | 313    | 5.6    | 14     | 7      | FKM             | VC2SLA1AL320-FKM |
| 400       | 400    | 395    | 5.6    | 14     | 7      | FKM             | VC2SLA1AL400-FKM |
| 500       | 501    | 496    | 5.6    | 14     | 7      | FKM             | VC2SLA1AL500-FKM |
| 630       | 651    | 646    | 5.6    | 14     | 7      | FKM             | VC2SLA1AL630-FKM |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | CR              | VC2SLA1AL063-CR  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | CR              | VC2SLA1AL080-CR  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | CR              | VC2SLA1AL100-CR  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | CR              | VC2SLA1AL160-CR  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | CR              | VC2SLA1AL200-CR  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | CR              | VC2SLA1AL250-CR  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | CR              | VC2SLA1AL320-CR  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | CR              | VC2SLA1AL400-CR  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | CR              | VC2SLA1AL500-CR  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | CR              | VC2SLA1AL630-CR  |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | NBR             | VC2SLA1AL063-NBR |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | NBR             | VC2SLA1AL080-NBR |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | NBR             | VC2SLA1AL100-NBR |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | NBR             | VC2SLA1AL160-NBR |

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | O-ring material | Order No          |
|-----------|--------|--------|--------|--------|--------|-----------------|-------------------|
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | NBR             | VC2SLA1AL200-NBR  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | NBR             | VC2SLA1AL250-NBR  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | NBR             | VC2SLA1AL320-NBR  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | NBR             | VC2SLA1AL400-NBR  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | NBR             | VC2SLA1AL500-NBR  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | NBR             | VC2SLA1AL630-NBR  |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | EPDM            | VC2SLA1AL063-EPDM |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | EPDM            | VC2SLA1AL080-EPDM |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | EPDM            | VC2SLA1AL100-EPDM |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | EPDM            | VC2SLA1AL160-EPDM |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | EPDM            | VC2SLA1AL200-EPDM |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | EPDM            | VC2SLA1AL250-EPDM |
| 320       | 318    | 313    | 5.6    | 14     | 7      | EPDM            | VC2SLA1AL320-EPDM |
| 400       | 400    | 395    | 5.6    | 14     | 7      | EPDM            | VC2SLA1AL400-EPDM |
| 500       | 501    | 496    | 5.6    | 14     | 7      | EPDM            | VC2SLA1AL500-EPDM |
| 630       | 651    | 646    | 5.6    | 14     | 7      | EPDM            | VC2SLA1AL630-EPDM |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA1AL063-VMQ  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA1AL080-VMQ  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA1AL100-VMQ  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA1AL160-VMQ  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA1AL200-VMQ  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA1AL250-VMQ  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLA1AL320-VMQ  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLA1AL400-VMQ  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLA1AL500-VMQ  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLA1AL630-VMQ  |

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | O-ring material | Order No         |
|-----------|--------|--------|--------|--------|--------|-----------------|------------------|
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | FKM             | VC2SLA1SS063-FKM |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | FKM             | VC2SLA1SS080-FKM |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | FKM             | VC2SLA1SS100-FKM |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | FKM             | VC2SLA1SS160-FKM |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | FKM             | VC2SLA1SS200-FKM |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | FKM             | VC2SLA1SS250-FKM |
| 320       | 318    | 313    | 5.6    | 14     | 7      | FKM             | VC2SLA1SS320-FKM |
| 400       | 400    | 395    | 5.6    | 14     | 7      | FKM             | VC2SLA1SS400-FKM |
| 500       | 501    | 496    | 5.6    | 14     | 7      | FKM             | VC2SLA1SS500-FKM |
| 630       | 651    | 646    | 5.6    | 14     | 7      | FKM             | VC2SLA1SS630-FKM |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | CR              | VC2SLA1SS063-CR  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | CR              | VC2SLA1SS080-CR  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | CR              | VC2SLA1SS100-CR  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | CR              | VC2SLA1SS160-CR  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | CR              | VC2SLA1SS200-CR  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | CR              | VC2SLA1SS250-CR  |

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | O-ring material | Order No          |
|-----------|--------|--------|--------|--------|--------|-----------------|-------------------|
| 320       | 318    | 313    | 5.6    | 14     | 7      | CR              | VC2SLA1SS320-CR   |
| 400       | 400    | 395    | 5.6    | 14     | 7      | CR              | VC2SLA1SS400-CR   |
| 500       | 501    | 496    | 5.6    | 14     | 7      | CR              | VC2SLA1SS500-CR   |
| 630       | 651    | 646    | 5.6    | 14     | 7      | CR              | VC2SLA1SS630-CR   |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | NBR             | VC2SLA1SS063-NBR  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | NBR             | VC2SLA1SS080-NBR  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | NBR             | VC2SLA1SS100-NBR  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | NBR             | VC2SLA1SS160-NBR  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | NBR             | VC2SLA1SS200-NBR  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | NBR             | VC2SLA1SS250-NBR  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | NBR             | VC2SLA1SS320-NBR  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | NBR             | VC2SLA1SS400-NBR  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | NBR             | VC2SLA1SS500-NBR  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | NBR             | VC2SLA1SS630-NBR  |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | EPDM            | VC2SLA1SS063-EPDM |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | EPDM            | VC2SLA1SS080-EPDM |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | EPDM            | VC2SLA1SS100-EPDM |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | EPDM            | VC2SLA1SS160-EPDM |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | EPDM            | VC2SLA1SS200-EPDM |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | EPDM            | VC2SLA1SS250-EPDM |
| 320       | 318    | 313    | 5.6    | 14     | 7      | EPDM            | VC2SLA1SS320-EPDM |
| 400       | 400    | 395    | 5.6    | 14     | 7      | EPDM            | VC2SLA1SS400-EPDM |
| 500       | 501    | 496    | 5.6    | 14     | 7      | EPDM            | VC2SLA1SS500-EPDM |
| 630       | 651    | 646    | 5.6    | 14     | 7      | EPDM            | VC2SLA1SS630-EPDM |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA1SS063-VMQ  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA1SS080-VMQ  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA1SS100-VMQ  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA1SS160-VMQ  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA1SS200-VMQ  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA1SS250-VMQ  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLA1SS320-VMQ  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLA1SS400-VMQ  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLA1SS500-VMQ  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLA1SS630-VMQ  |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | O-ring material | Order No         |
|-----------|--------|--------|--------|--------|--------|-----------------|------------------|
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | FKM             | VC2SLA2SS063-FKM |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | FKM             | VC2SLA2SS080-FKM |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | FKM             | VC2SLA2SS100-FKM |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | FKM             | VC2SLA2SS160-FKM |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | FKM             | VC2SLA2SS200-FKM |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | FKM             | VC2SLA2SS250-FKM |
| 320       | 318    | 313    | 5.6    | 14     | 7      | FKM             | VC2SLA2SS320-FKM |
| 400       | 400    | 395    | 5.6    | 14     | 7      | FKM             | VC2SLA2SS400-FKM |
| 500       | 501    | 496    | 5.6    | 14     | 7      | FKM             | VC2SLA2SS500-FKM |
| 630       | 651    | 646    | 5.6    | 14     | 7      | FKM             | VC2SLA2SS630-FKM |

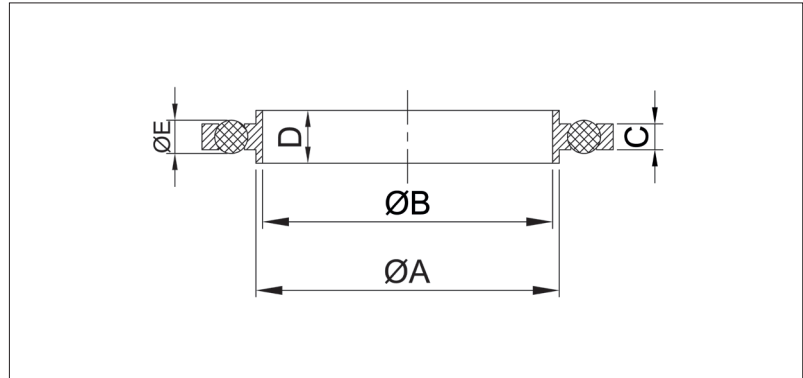
| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | O-ring material | Order No          |
|-----------|--------|--------|--------|--------|--------|-----------------|-------------------|
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | CR              | VC2SLA2SS063-CR   |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | CR              | VC2SLA2SS080-CR   |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | CR              | VC2SLA2SS100-CR   |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | CR              | VC2SLA2SS160-CR   |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | CR              | VC2SLA2SS200-CR   |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | CR              | VC2SLA2SS250-CR   |
| 320       | 318    | 313    | 5.6    | 14     | 7      | CR              | VC2SLA2SS320-CR   |
| 400       | 400    | 395    | 5.6    | 14     | 7      | CR              | VC2SLA2SS400-CR   |
| 500       | 501    | 496    | 5.6    | 14     | 7      | CR              | VC2SLA2SS500-CR   |
| 630       | 651    | 646    | 5.6    | 14     | 7      | CR              | VC2SLA2SS630-CR   |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | NBR             | VC2SLA2SS063-NBR  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | NBR             | VC2SLA2SS080-NBR  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | NBR             | VC2SLA2SS100-NBR  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | NBR             | VC2SLA2SS160-NBR  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | NBR             | VC2SLA2SS200-NBR  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | NBR             | VC2SLA2SS250-NBR  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | NBR             | VC2SLA2SS320-NBR  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | NBR             | VC2SLA2SS400-NBR  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | NBR             | VC2SLA2SS500-NBR  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | NBR             | VC2SLA2SS630-NBR  |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | EPDM            | VC2SLA2SS063-EPDM |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | EPDM            | VC2SLA2SS080-EPDM |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | EPDM            | VC2SLA2SS100-EPDM |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | EPDM            | VC2SLA2SS160-EPDM |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | EPDM            | VC2SLA2SS200-EPDM |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | EPDM            | VC2SLA2SS250-EPDM |
| 320       | 318    | 313    | 5.6    | 14     | 7      | EPDM            | VC2SLA2SS320-EPDM |
| 400       | 400    | 395    | 5.6    | 14     | 7      | EPDM            | VC2SLA2SS400-EPDM |
| 500       | 501    | 496    | 5.6    | 14     | 7      | EPDM            | VC2SLA2SS500-EPDM |
| 630       | 651    | 646    | 5.6    | 14     | 7      | EPDM            | VC2SLA2SS630-EPDM |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA2SS063-VMQ  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA2SS080-VMQ  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA2SS100-VMQ  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA2SS160-VMQ  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA2SS200-VMQ  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLA2SS250-VMQ  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLA2SS320-VMQ  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLA2SS400-VMQ  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLA2SS500-VMQ  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLA2SS630-VMQ  |

## ISO-K Seal Inner Centered With Support



- Consider O-ring temperature ranges (See Properties of Elastomer Materials Table on Page 12)
- Various types of O-ring seals are available
- Inner ring materials:  
Aluminium EN AW-6082 T6  
Stainless Steel 304/1.4301  
Stainless Steel 316/1.4404

### Dimensions



### Aluminium EN AW-6082 T6/3.2315

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | O-ring material | Order No         |
|-----------|--------|--------|--------|--------|--------|-----------------|------------------|
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | FKM             | VC2SLB1AL063-FKM |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | FKM             | VC2SLB1AL080-FKM |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | FKM             | VC2SLB1AL100-FKM |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | FKM             | VC2SLB1AL160-FKM |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | FKM             | VC2SLB1AL200-FKM |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | FKM             | VC2SLB1AL250-FKM |
| 320       | 318    | 313    | 5.6    | 14     | 7      | FKM             | VC2SLB1AL320-FKM |
| 400       | 400    | 395    | 5.6    | 14     | 7      | FKM             | VC2SLB1AL400-FKM |
| 500       | 501    | 496    | 5.6    | 14     | 7      | FKM             | VC2SLB1AL500-FKM |
| 630       | 651    | 646    | 5.6    | 14     | 7      | FKM             | VC2SLB1AL630-FKM |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | CR              | VC2SLB1AL063-CR  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | CR              | VC2SLB1AL080-CR  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | CR              | VC2SLB1AL100-CR  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | CR              | VC2SLB1AL160-CR  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | CR              | VC2SLB1AL200-CR  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | CR              | VC2SLB1AL250-CR  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | CR              | VC2SLB1AL320-CR  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | CR              | VC2SLB1AL400-CR  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | CR              | VC2SLB1AL500-CR  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | CR              | VC2SLB1AL630-CR  |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | NBR             | VC2SLB1AL063-NBR |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | NBR             | VC2SLB1AL080-NBR |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | NBR             | VC2SLB1AL100-NBR |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | NBR             | VC2SLB1AL160-NBR |



| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | O-ring material | Order No          |
|-----------|--------|--------|--------|--------|--------|-----------------|-------------------|
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | NBR             | VC2SLB1AL200-NBR  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | NBR             | VC2SLB1AL250-NBR  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | NBR             | VC2SLB1AL320-NBR  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | NBR             | VC2SLB1AL400-NBR  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | NBR             | VC2SLB1AL500-NBR  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | NBR             | VC2SLB1AL630-NBR  |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | EPDM            | VC2SLB1AL063-EPDM |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | EPDM            | VC2SLB1AL080-EPDM |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | EPDM            | VC2SLB1AL100-EPDM |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | EPDM            | VC2SLB1AL160-EPDM |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | EPDM            | VC2SLB1AL200-EPDM |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | EPDM            | VC2SLB1AL250-EPDM |
| 320       | 318    | 313    | 5.6    | 14     | 7      | EPDM            | VC2SLB1AL320-EPDM |
| 400       | 400    | 395    | 5.6    | 14     | 7      | EPDM            | VC2SLB1AL400-EPDM |
| 500       | 501    | 496    | 5.6    | 14     | 7      | EPDM            | VC2SLB1AL500-EPDM |
| 630       | 651    | 646    | 5.6    | 14     | 7      | EPDM            | VC2SLB1AL630-EPDM |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB1AL063-VMQ  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB1AL080-VMQ  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB1AL100-VMQ  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB1AL160-VMQ  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB1AL200-VMQ  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB1AL250-VMQ  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLB1AL320-VMQ  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLB1AL400-VMQ  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLB1AL500-VMQ  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLB1AL630-VMQ  |

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | O-ring material | Order No         |
|-----------|--------|--------|--------|--------|--------|-----------------|------------------|
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | FKM             | VC2SLB1SS063-FKM |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | FKM             | VC2SLB1SS080-FKM |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | FKM             | VC2SLB1SS100-FKM |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | FKM             | VC2SLB1SS160-FKM |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | FKM             | VC2SLB1SS200-FKM |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | FKM             | VC2SLB1SS250-FKM |
| 320       | 318    | 313    | 5.6    | 14     | 7      | FKM             | VC2SLB1SS320-FKM |
| 400       | 400    | 395    | 5.6    | 14     | 7      | FKM             | VC2SLB1SS400-FKM |
| 500       | 501    | 496    | 5.6    | 14     | 7      | FKM             | VC2SLB1SS500-FKM |
| 630       | 651    | 646    | 5.6    | 14     | 7      | FKM             | VC2SLB1SS630-FKM |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | CR              | VC2SLB1SS063-CR  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | CR              | VC2SLB1SS080-CR  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | CR              | VC2SLB1SS100-CR  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | CR              | VC2SLB1SS160-CR  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | CR              | VC2SLB1SS200-CR  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | CR              | VC2SLB1SS250-CR  |

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | O-ring material | Order No          |
|-----------|--------|--------|--------|--------|--------|-----------------|-------------------|
| 320       | 318    | 313    | 5.6    | 14     | 7      | CR              | VC2SLB1SS320-CR   |
| 400       | 400    | 395    | 5.6    | 14     | 7      | CR              | VC2SLB1SS400-CR   |
| 500       | 501    | 496    | 5.6    | 14     | 7      | CR              | VC2SLB1SS500-CR   |
| 630       | 651    | 646    | 5.6    | 14     | 7      | CR              | VC2SLB1SS630-CR   |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | NBR             | VC2SLB1SS063-NBR  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | NBR             | VC2SLB1SS080-NBR  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | NBR             | VC2SLB1SS100-NBR  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | NBR             | VC2SLB1SS160-NBR  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | NBR             | VC2SLB1SS200-NBR  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | NBR             | VC2SLB1SS250-NBR  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | NBR             | VC2SLB1SS320-NBR  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | NBR             | VC2SLB1SS400-NBR  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | NBR             | VC2SLB1SS500-NBR  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | NBR             | VC2SLB1SS630-NBR  |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | EPDM            | VC2SLB1SS063-EPDM |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | EPDM            | VC2SLB1SS080-EPDM |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | EPDM            | VC2SLB1SS100-EPDM |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | EPDM            | VC2SLB1SS160-EPDM |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | EPDM            | VC2SLB1SS200-EPDM |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | EPDM            | VC2SLB1SS250-EPDM |
| 320       | 318    | 313    | 5.6    | 14     | 7      | EPDM            | VC2SLB1SS320-EPDM |
| 400       | 400    | 395    | 5.6    | 14     | 7      | EPDM            | VC2SLB1SS400-EPDM |
| 500       | 501    | 496    | 5.6    | 14     | 7      | EPDM            | VC2SLB1SS500-EPDM |
| 630       | 651    | 646    | 5.6    | 14     | 7      | EPDM            | VC2SLB1SS630-EPDM |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB1SS063-VMQ  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB1SS080-VMQ  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB1SS100-VMQ  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB1SS160-VMQ  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB1SS200-VMQ  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB1SS250-VMQ  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLB1SS320-VMQ  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLB1SS400-VMQ  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLB1SS500-VMQ  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLB1SS630-VMQ  |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | O-ring material | Order No         |
|-----------|--------|--------|--------|--------|--------|-----------------|------------------|
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | FKM             | VC2SLB2SS063-FKM |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | FKM             | VC2SLB2SS080-FKM |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | FKM             | VC2SLB2SS100-FKM |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | FKM             | VC2SLB2SS160-FKM |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | FKM             | VC2SLB2SS200-FKM |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | FKM             | VC2SLB2SS250-FKM |
| 320       | 318    | 313    | 5.6    | 14     | 7      | FKM             | VC2SLB2SS320-FKM |
| 400       | 400    | 395    | 5.6    | 14     | 7      | FKM             | VC2SLB2SS400-FKM |
| 500       | 501    | 496    | 5.6    | 14     | 7      | FKM             | VC2SLB2SS500-FKM |
| 630       | 651    | 646    | 5.6    | 14     | 7      | FKM             | VC2SLB2SS630-FKM |

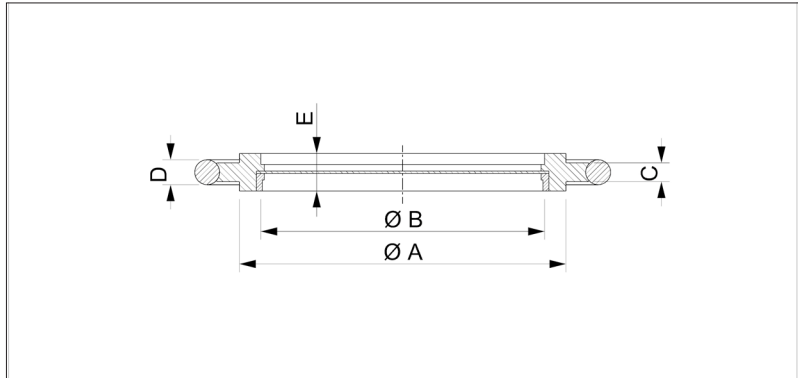
| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | O-ring material | Order No          |
|-----------|--------|--------|--------|--------|--------|-----------------|-------------------|
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | CR              | VC2SLB2SS063-CR   |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | CR              | VC2SLB2SS080-CR   |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | CR              | VC2SLB2SS100-CR   |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | CR              | VC2SLB2SS160-CR   |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | CR              | VC2SLB2SS200-CR   |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | CR              | VC2SLB2SS250-CR   |
| 320       | 318    | 313    | 5.6    | 14     | 7      | CR              | VC2SLB2SS320-CR   |
| 400       | 400    | 395    | 5.6    | 14     | 7      | CR              | VC2SLB2SS400-CR   |
| 500       | 501    | 496    | 5.6    | 14     | 7      | CR              | VC2SLB2SS500-CR   |
| 630       | 651    | 646    | 5.6    | 14     | 7      | CR              | VC2SLB2SS630-CR   |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | NBR             | VC2SLB2SS063-NBR  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | NBR             | VC2SLB2SS080-NBR  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | NBR             | VC2SLB2SS100-NBR  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | NBR             | VC2SLB2SS160-NBR  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | NBR             | VC2SLB2SS200-NBR  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | NBR             | VC2SLB2SS250-NBR  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | NBR             | VC2SLB2SS320-NBR  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | NBR             | VC2SLB2SS400-NBR  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | NBR             | VC2SLB2SS500-NBR  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | NBR             | VC2SLB2SS630-NBR  |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | EPDM            | VC2SLB2SS063-EPDM |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | EPDM            | VC2SLB2SS080-EPDM |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | EPDM            | VC2SLB2SS100-EPDM |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | EPDM            | VC2SLB2SS160-EPDM |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | EPDM            | VC2SLB2SS200-EPDM |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | EPDM            | VC2SLB2SS250-EPDM |
| 320       | 318    | 313    | 5.6    | 14     | 7      | EPDM            | VC2SLB2SS320-EPDM |
| 400       | 400    | 395    | 5.6    | 14     | 7      | EPDM            | VC2SLB2SS400-EPDM |
| 500       | 501    | 496    | 5.6    | 14     | 7      | EPDM            | VC2SLB2SS500-EPDM |
| 630       | 651    | 646    | 5.6    | 14     | 7      | EPDM            | VC2SLB2SS630-EPDM |
| 63        | 70     | 68     | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB2SS063-VMQ  |
| 80        | 83     | 81     | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB2SS080-VMQ  |
| 100       | 102    | 100    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB2SS100-VMQ  |
| 160       | 153    | 151    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB2SS160-VMQ  |
| 200       | 213    | 211    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB2SS200-VMQ  |
| 250       | 261    | 259    | 3.9    | 8      | 5.33   | VMQ(SILICON)    | VC2SLB2SS250-VMQ  |
| 320       | 318    | 313    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLB2SS320-VMQ  |
| 400       | 400    | 395    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLB2SS400-VMQ  |
| 500       | 501    | 496    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLB2SS500-VMQ  |
| 630       | 651    | 646    | 5.6    | 14     | 7      | VMQ(SILICON)    | VC2SLB2SS630-VMQ  |

## ISO-K Seal Inner Centered With Mesh Screen



- Wire thickness: Approximately 0.3 mm
- Mesh: Approximately 1 mm
- Consider O-ring temperature ranges (See Properties of Elastomer Materials Table on Page 12)
- Various types of O-ring are available
- Seal Materials:  
Aluminium EN AW-6082 T6  
Stainless Steel 304/1.4301  
Stainless Steel 316/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

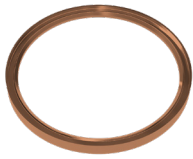
| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Mesh (mm) | Wire thickness (mm) | O-ring material | Order No         |
|-----------|--------|--------|--------|--------|--------|-----------|---------------------|-----------------|------------------|
| 63        | 70     | 60     | 3.9    | 5.33   | 8      | 0.5       | 0.2                 | FKM             | VC2SLC1SS063-FKM |
| 80        | 83     | 73     | 3.9    | 5.33   | 8      | 0.6       | 0.2                 | FKM             | VC2SLC1SS080-FKM |
| 100       | 102    | 92     | 3.9    | 5.33   | 8      | 0.8       | 0.2                 | FKM             | VC2SLC1SS100-FKM |
| 160       | 153    | 143    | 3.9    | 5.33   | 8      | 1.2       | 0.2                 | FKM             | VC2SLC1SS160-FKM |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | Mesh (mm) | Wire thickness (mm) | O-ring material | Order No         |
|-----------|--------|--------|--------|--------|--------|-----------|---------------------|-----------------|------------------|
| 63        | 70     | 60     | 3.9    | 5.33   | 8      | 0.5       | 0.2                 | FKM             | VC2SLC2SS063-FKM |
| 80        | 83     | 73     | 3.9    | 5.33   | 8      | 0.6       | 0.2                 | FKM             | VC2SLC2SS080-FKM |
| 100       | 102    | 92     | 3.9    | 5.33   | 8      | 0.8       | 0.2                 | FKM             | VC2SLC2SS100-FKM |
| 160       | 153    | 143    | 3.9    | 5.33   | 8      | 1.2       | 0.2                 | FKM             | VC2SLC2SS160-FKM |

## ISO-K Edge Seal Outer Centered

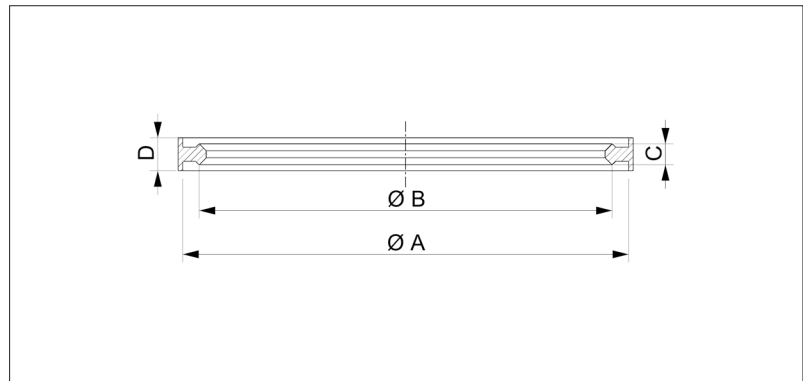


- No gas permeation
- Cryo, Radiation tolerant and nuclear application
- Clean room application compatible
- For stainless steel flanges
- Fastener: ISO-K Claw Clamp for Metal Seals
- For single use only
- Material:

Aluminium EN AW-1050

Copper

### Dimensions



### Aluminium EN AW-1050

- Temperature Range: -196 to 150 C°

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 63        | 95     | 88     | 4.5    | 7      | VC2SLD2AL063 |
| 80        | 110    | 103    | 4.5    | 7      | VC2SLD2AL080 |
| 100       | 130    | 123    | 4.5    | 7      | VC2SLD2AL100 |
| 160       | 180    | 173    | 4.5    | 7      | VC2SLD2AL160 |
| 200       | 240    | 233    | 4.5    | 7      | VC2SLD2AL200 |
| 250       | 290    | 283    | 4.5    | 7      | VC2SLD2AL250 |

### Copper

- Temperature Range: -196 to 200 C°

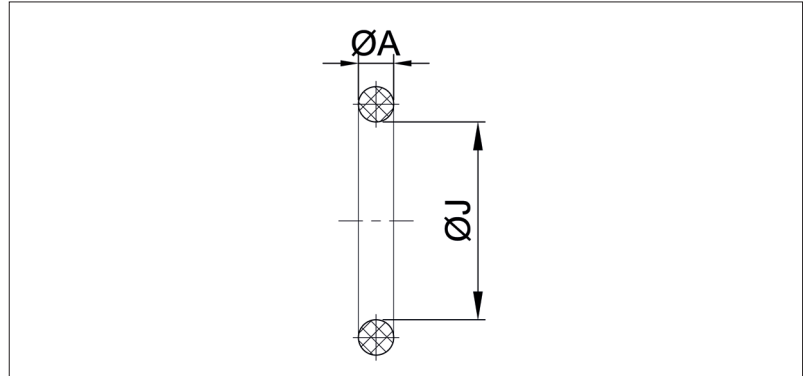
| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 63        | 95     | 88     | 4.5    | 7      | VC2SLD1CU063 |
| 80        | 110    | 103    | 4.5    | 7      | VC2SLD1CU080 |
| 100       | 130    | 123    | 4.5    | 7      | VC2SLD1CU100 |
| 160       | 180    | 173    | 4.5    | 7      | VC2SLD1CU160 |
| 200       | 240    | 233    | 4.5    | 7      | VC2SLD1CU200 |
| 250       | 290    | 283    | 4.5    | 7      | VC2SLD1CU250 |

## ISO-K/F O-ring

- Various types of O-ring seals are available.



### Dimensions



### FKM

- Temperature range: -196 to 350 °C

| Size (DN) | J (mm) | ØA(mm) | Order No     |
|-----------|--------|--------|--------------|
| 63        | 76     | 5,33   | VCA07B1EL063 |
| 80        | 88,27  | 5,33   | VCA07B1EL080 |
| 100       | 107    | 5,33   | VCA07B1EL100 |
| 160       | 158    | 5,33   | VCA07B1EL160 |
| 200       | 209    | 5,33   | VCA07B1EL200 |
| 250       | 253    | 5,33   | VCA07B1EL250 |
| 320       | 317    | 7      | VCA07C1EL320 |
| 400       | 405    | 7      | VCA07C1EL400 |
| 500       | 507    | 7      | VCA07C1EL500 |
| 630       | 659    | 7      | VCA07C1EL630 |

### CR

- Temperature range: -196 to 350 °C

| Size (DN) | J (mm) | ØA(mm) | Order No     |
|-----------|--------|--------|--------------|
| 63        | 76     | 5,33   | VCA07B2EL063 |
| 80        | 88,27  | 5,33   | VCA07B2EL080 |
| 100       | 107    | 5,33   | VCA07B2EL100 |
| 160       | 158    | 5,33   | VCA07B2EL160 |
| 200       | 209    | 5,33   | VCA07B2EL200 |
| 250       | 253    | 5,33   | VCA07B2EL250 |
| 320       | 317    | 7      | VCA07C2EL320 |
| 400       | 405    | 7      | VCA07C2EL400 |
| 500       | 507    | 7      | VCA07C2EL500 |
| 630       | 659    | 7      | VCA07C2EL630 |

**NBR**

- Temperature range: -25 to 120 °C

| Size (DN) | J (mm) | ØA(mm) | Order No     |
|-----------|--------|--------|--------------|
| 63        | 76     | 5,33   | VCA07B3EL063 |
| 80        | 88,27  | 5,33   | VCA07B3EL080 |
| 100       | 107    | 5,33   | VCA07B3EL100 |
| 160       | 158    | 5,33   | VCA07B3EL160 |
| 200       | 209    | 5,33   | VCA07B3EL200 |
| 250       | 253    | 5,33   | VCA07B3EL250 |
| 320       | 317    | 7      | VCA07C3EL320 |
| 400       | 405    | 7      | VCA07C3EL400 |
| 500       | 507    | 7      | VCA07C3EL500 |
| 630       | 659    | 7      | VCA07C3EL630 |

**EPDM**

- Temperature range: -25 to 120 °C

| Size (DN) | J (mm) | ØA(mm) | Order No     |
|-----------|--------|--------|--------------|
| 63        | 76     | 5,33   | VCA07B4EL063 |
| 80        | 88,27  | 5,33   | VCA07B4EL080 |
| 100       | 107    | 5,33   | VCA07B4EL100 |
| 160       | 158    | 5,33   | VCA07B4EL160 |
| 200       | 209    | 5,33   | VCA07B4EL200 |
| 250       | 253    | 5,33   | VCA07B4EL250 |
| 320       | 317    | 7      | VCA07C4EL320 |
| 400       | 405    | 7      | VCA07C4EL400 |
| 500       | 507    | 7      | VCA07C4EL500 |
| 630       | 659    | 7      | VCA07C4EL630 |

**VMQ SILICON**

- Temperature range: -25 to 120 °C

| Size (DN) | J (mm) | ØA(mm) | Order No     |
|-----------|--------|--------|--------------|
| 63        | 76     | 5,33   | VCA07B5EL063 |
| 80        | 88,27  | 5,33   | VCA07B5EL080 |
| 100       | 107    | 5,33   | VCA07B5EL100 |
| 160       | 158    | 5,33   | VCA07B5EL160 |
| 200       | 209    | 5,33   | VCA07B5EL200 |
| 250       | 253    | 5,33   | VCA07B5EL250 |
| 320       | 317    | 7      | VCA07C5EL320 |
| 400       | 405    | 7      | VCA07C5EL400 |
| 500       | 507    | 7      | VCA07C5EL500 |
| 630       | 659    | 7      | VCA07C5EL630 |

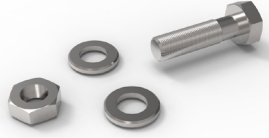
# ISO-K / ISO-F Clamps

This part consists of ISO K/F Clamps.  
Check out this section for products NW63-NW630



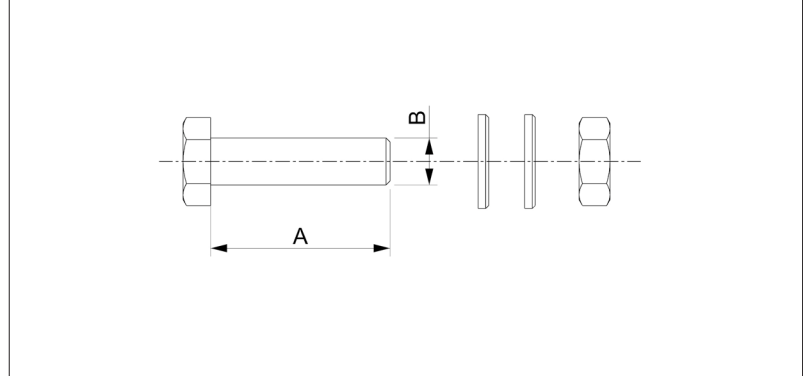


## ISO-F Screw Set



- Suitable for use with metal and elastomer seals
- Package include: One hexagon bolt, two washers and one nut
- These bolt packages fit ISO-F flanges for tapped ISO-F flanges: Include bolts and washers.

### Dimensions



### Stainless Steel A2-70

| Size (DN) | A (mm) | B (mm) | Package (Qty.) | Order No            |
|-----------|--------|--------|----------------|---------------------|
| 63-100    | 40     | M8     | 8              | VC3CLA1SS100-M8-40  |
| 160-250   | 50     | M10    | 12             | VC3CLA1SS250-M10-50 |
| 320-500   | 65     | M12    | 16             | VC3CLA1SS500-M12-65 |
| 630       | 70     | M12    | 20             | VC3CLA1SS630-M12-70 |

### Zinc-plated Steel

Property Class 8.8

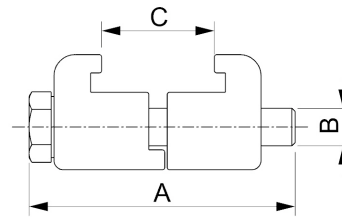
| Size (DN) | A (mm) | B (mm) | Package (Qty.) | Order No              |
|-----------|--------|--------|----------------|-----------------------|
| 63-100    | 40     | M8     | 8              | VC3CLA1ST100-M8-40-Z  |
| 160-250   | 50     | M10    | 12             | VC3CLA1ST250-M10-50-Z |
| 320-500   | 65     | M12    | 16             | VC3CLA1ST500-M12-65-Z |
| 630       | 70     | M12    | 20             | VC3CLA1ST630-M12-70-Z |

## ISO-K Double Claw Clamp



- Suitable for use with elastomer seals
- Bolt: A2-70 stainless steel
- Do not use in turbo pump assembly
- Torque (max)  
DN63-250: 16 Nm, DN320-630: 26 Nm
- Pressure Range: Elastomer seal:  $10^{-7}$  mbar to 2.5 bar

### Dimensions



### Aluminium EN AW-6082 T6/3.2315

- Temperature Range: -196 to 150 °C

| Size (DN) | A (mm) | B   | C (mm)        | Order No     |
|-----------|--------|-----|---------------|--------------|
| 63-100    | 50     | M8  | 24 mm - 27 mm | VC2CLA1AL100 |
| 160-250   | 52     | M10 | 27 mm - 32 mm | VC2CLA1AL250 |
| 320-500   | 75     | M12 | 32 mm - 38 mm | VC2CLA1AL500 |

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B   | C (mm)        | Order No     |
|-----------|--------|-----|---------------|--------------|
| 63-250    | 61.5   | M10 | 15 mm - 27 mm | VC2CLA1SS250 |
| 320-500   | 75     | M12 | 27 mm - 33 mm | VC2CLA1SS500 |
| 630       | 85     | M12 | 36 mm - 44 mm | VC2CLA1SS630 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

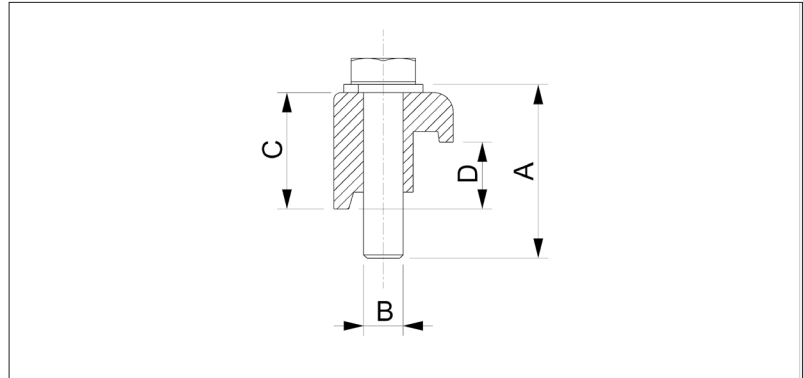
| Size (DN) | A (mm) | B   | C (mm)        | Order No     |
|-----------|--------|-----|---------------|--------------|
| 63-250    | 61.5   | M10 | 15 mm - 27 mm | VC2CLA2SS250 |
| 320-500   | 75     | M12 | 27 mm - 33 mm | VC2CLA2SS500 |
| 630       | 85     | M12 | 36 mm - 44 mm | VC2CLA2SS630 |

## ISO-K Claw Clamp



- Suitable for use with elastomer seals and metal seals
- Aluminum version: Suitable for use with elastomer seals
- For installing on a base plate with ISO-K centering ring
- Bolt: A2-70 stainless steel
- Do not use in turbo pump assembly
- Torque (max)  
DN63-250: 16 Nm, DN320-630: 26 Nm
- Pressure Range: Elastomer seal:  $10^{-7}$  mbar to 2.5 bar

### Dimensions



#### Aluminium EN AW-6082 T6/3.2315

- Temperature Range: -196 to 150 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 63-100    | 35     | M8     | 23     | 14     | VC2CLB1AL100 |
| 160-250   | 35     | M10    | 23     | 14     | VC2CLB1AL250 |
| 320-500   | 50     | M12    | 30     | 21     | VC2CLB1AL500 |

#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 63-100    | 35     | M8     | 23     | 14     | VC2CLB1SS100 |
| 160-250   | 35     | M10    | 23     | 14     | VC2CLB1SS250 |
| 320-500   | 50     | M12    | 30     | 21     | VC2CLB1SS500 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

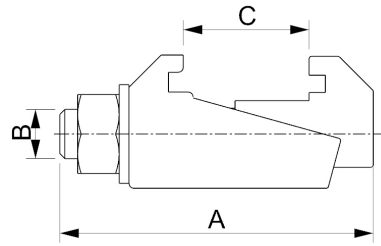
| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 63-100    | 35     | M8     | 23     | 14     | VC2CLB2SS100 |
| 160-250   | 35     | M10    | 23     | 14     | VC2CLB2SS250 |
| 320-500   | 50     | M12    | 30     | 21     | VC2CLB2SS500 |

## ISO-K Claw Clamp Casting



- Suitable for use with elastomer seals and metal seals
- Aluminum version: Suitable for use with elastomer seals
- For installing on a base plate with ISO-K centering ring
- Bolt: A2-70 stainless steel
- Do not use in turbo pump assembly
- Torque (max)  
DN63-250: 16 Nm, DN320-630: 26 Nm
- Pressure Range: Elastomer seal:  $10^{-7}$  mbar to 2.5 bar

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm)       | Order No     |
|-----------|--------|--------|--------------|--------------|
| 63-250    | 61.5   | M10    | 17 mm- 27 mm | VC2CLC1SS250 |
| 320-500   | 75     | M12    | 27 mm- 33 mm | VC2CLC1SS500 |
| 630       | 86     | M12    | 36 mm- 44 mm | VC2CLC1SS630 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm)       | Order No     |
|-----------|--------|--------|--------------|--------------|
| 63-250    | 61.5   | M10    | 15 mm- 27 mm | VC2CLC2SS250 |
| 320-500   | 75     | M12    | 27 mm- 33 mm | VC2CLC2SS500 |
| 630       | 86     | M12    | 36 mm- 44 mm | VC2CLC2SS630 |

# ISO-K / ISO-F Fittings

This part consists of ISO K/F Clamps.  
Check out this section for products NW63-NW630



## ISO-K Straight Reducer



- Materials:

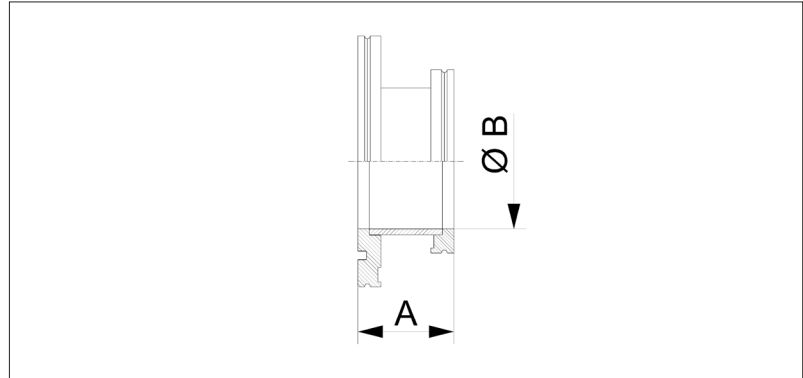
Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)

$1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | Order No            |
|------------------|--------------------------|--------|--------|---------------------|
| 100              | 63                       | 50     | 70     | VC2FTA1SS100-63-50  |
| 160              | 63                       | 50     | 70     | VC2FTA1SS160-63-50  |
| 160              | 100                      | 50     | 102    | VC2FTA1SS160-100-50 |
| 200              | 100                      | 50     | 102    | VC2FTA1SS200-100-50 |
| 200              | 160                      | 50     | 153    | VC2FTA1SS200-160-50 |
| 250              | 160                      | 50     | 153    | VC2FTA1SS250-160-50 |
| 250              | 200                      | 50     | 213    | VC2FTA1SS250-200-50 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | Order No            |
|------------------|--------------------------|--------|--------|---------------------|
| 100              | 63                       | 50     | 70     | VC2FTA2SS100-63-50  |
| 160              | 63                       | 50     | 70     | VC2FTA2SS160-63-50  |
| 160              | 100                      | 50     | 102    | VC2FTA2SS160-100-50 |
| 200              | 100                      | 50     | 102    | VC2FTA2SS200-100-50 |
| 200              | 160                      | 50     | 153    | VC2FTA2SS200-160-50 |
| 250              | 160                      | 50     | 153    | VC2FTA2SS250-160-50 |
| 250              | 200                      | 50     | 213    | VC2FTA2SS250-200-50 |

## ISO-K Conical Reducer



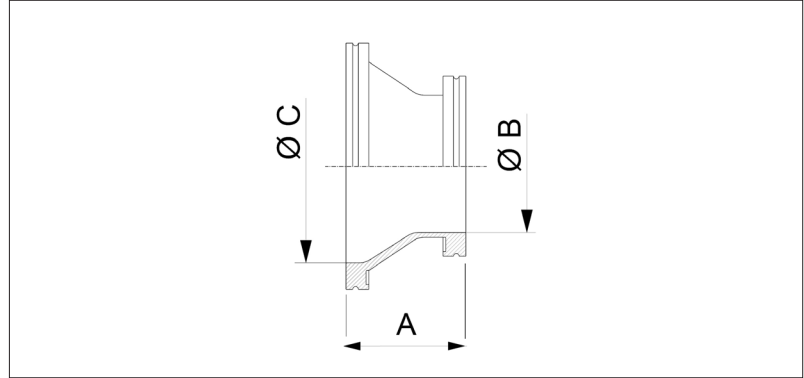
- Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C(mm) | Order No             |
|------------------|--------------------------|--------|--------|-------|----------------------|
| 100              | 63                       | 63     | 70     | 102   | VC2FTB1SS100-63-63   |
| 160              | 63                       | 63     | 70     | 153   | VC2FTB1SS160-63-63   |
| 160              | 100                      | 104    | 102    | 153   | VC2FTB1SS160-100-104 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C(mm) | Order No             |
|------------------|--------------------------|--------|--------|-------|----------------------|
| 100              | 63                       | 63     | 70     | 102   | VC2FTB2SS100-63-63   |
| 160              | 63                       | 63     | 70     | 153   | VC2FTB2SS160-63-63   |
| 160              | 100                      | 104    | 102    | 153   | VC2FTB2SS160-100-104 |

## ISO-K Tee



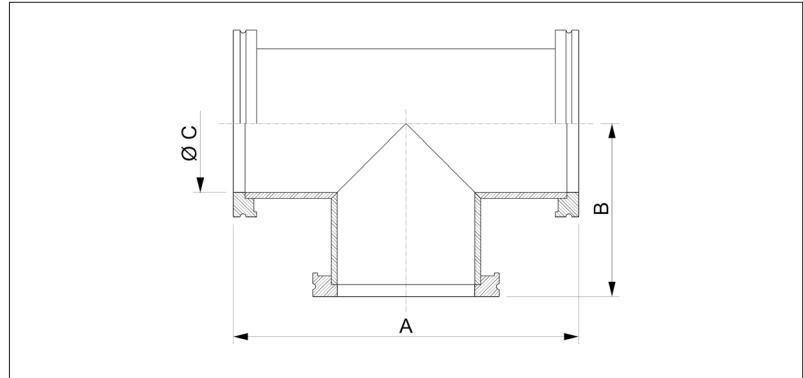
### • Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | A (mm) | B (mm) | C(mm) | Order No         |
|------------------|--------|--------|-------|------------------|
| 63               | 176    | 88     | 70    | VC2FTC1SS063-176 |
| 100              | 216    | 108    | 102   | VC2FTC1SS100-216 |
| 160              | 276    | 138    | 153   | VC2FTC1SS160-276 |
| 200              | 356    | 178    | 213   | VC2FTC1SS200-356 |
| 250              | 416    | 208    | 261   | VC2FTC1SS250-416 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | A (mm) | B (mm) | C(mm) | Order No         |
|------------------|--------|--------|-------|------------------|
| 63               | 176    | 88     | 70    | VC2FTC2SS063-176 |
| 100              | 216    | 108    | 102   | VC2FTC2SS100-216 |
| 160              | 276    | 138    | 153   | VC2FTC2SS160-276 |
| 200              | 356    | 178    | 213   | VC2FTC2SS200-356 |
| 250              | 416    | 208    | 261   | VC2FTC2SS250-416 |



## ISO-K Reducer Tee



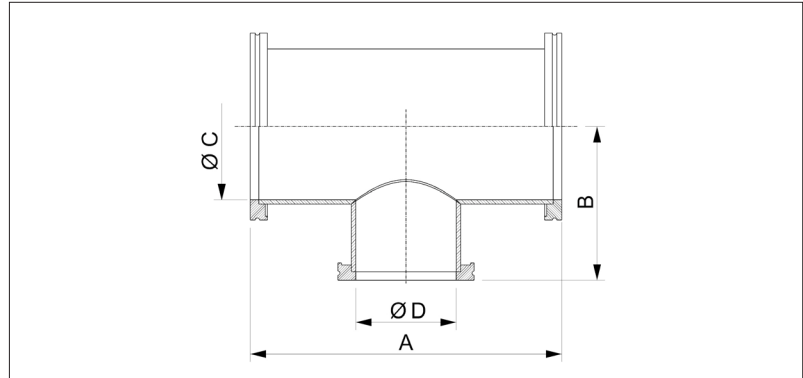
### • Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|------------------|--------------------------|--------|--------|--------|--------|----------------------|
| 100              | 63                       | 216    | 107    | 102    | 70     | VC2FTD1SS100-063-216 |
| 160              | 63                       | 276    | 130    | 153    | 70     | VC2FTD1SS160-063-276 |
| 160              | 100                      | 276    | 130    | 153    | 102    | VC2FTD1SS160-100-276 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|------------------|--------------------------|--------|--------|--------|--------|----------------------|
| 100              | 63                       | 216    | 107    | 102    | 70     | VC2FTD2SS100-063-216 |
| 160              | 63                       | 276    | 130    | 153    | 70     | VC2FTD2SS160-063-276 |
| 160              | 100                      | 276    | 130    | 153    | 102    | VC2FTD2SS160-100-276 |

## ISO-K to KF Reducer Tee



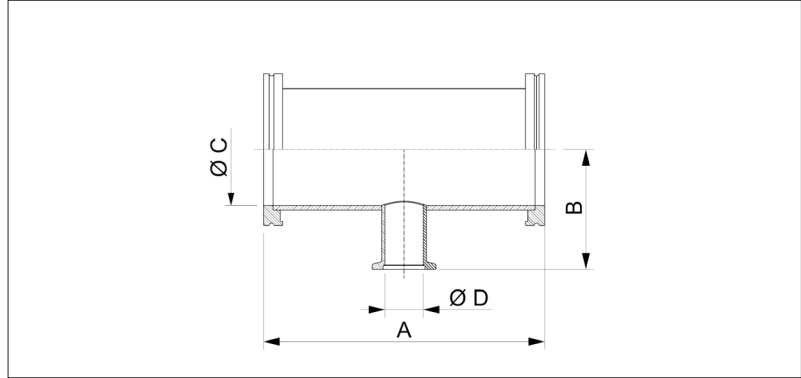
### • Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|------------------|--------------------------|--------|--------|--------|--------|----------------------|
| 63               | 25                       | 176    | 75     | 70     | 24     | VC2FTE1SS063-025-176 |
| 63               | 40                       | 176    | 75     | 70     | 40.5   | VC2FTE1SS063-040-176 |
| 100              | 25                       | 216    | 100    | 102    | 24     | VC2FTE1SS100-025-216 |
| 100              | 40                       | 216    | 100    | 102    | 40.5   | VC2FTE1SS100-040-216 |
| 160              | 25                       | 276    | 125    | 153    | 24     | VC2FTE1SS160-025-276 |
| 160              | 40                       | 276    | 125    | 153    | 40.5   | VC2FTE1SS160-040-276 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|------------------|--------------------------|--------|--------|--------|--------|----------------------|
| 63               | 25                       | 176    | 75     | 70     | 24     | VC2FTE2SS063-025-176 |
| 63               | 40                       | 176    | 75     | 70     | 40.5   | VC2FTE2SS063-040-176 |
| 100              | 25                       | 216    | 100    | 102    | 24     | VC2FTE2SS100-025-216 |
| 100              | 40                       | 216    | 100    | 102    | 40.5   | VC2FTE2SS100-040-216 |
| 160              | 25                       | 276    | 125    | 153    | 24     | VC2FTE2SS160-025-276 |
| 160              | 40                       | 276    | 125    | 153    | 40.5   | VC2FTE2SS160-040-276 |

## ISO-K Elbow Radius 90



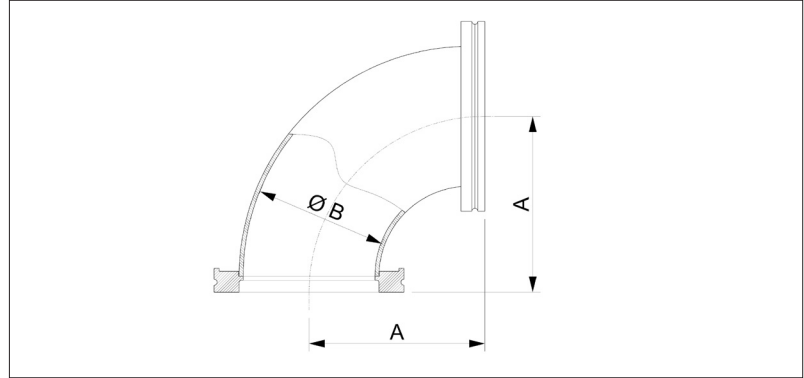
### • Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | A (mm) | B (mm) | Order No        |
|------------------|--------|--------|-----------------|
| 63               | 87     | 66     | VC2FTF1SS063-90 |
| 100              | 107    | 100    | VC2FTF1SS100-90 |
| 160              | 232    | 150    | VC2FTF1SS160-90 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | A (mm) | B (mm) | Order No        |
|------------------|--------|--------|-----------------|
| 63               | 87     | 66     | VC2FTF2SS063-90 |
| 100              | 107    | 100    | VC2FTF2SS100-90 |
| 160              | 232    | 150    | VC2FTF2SS160-90 |

## ISO-K Elbow 90



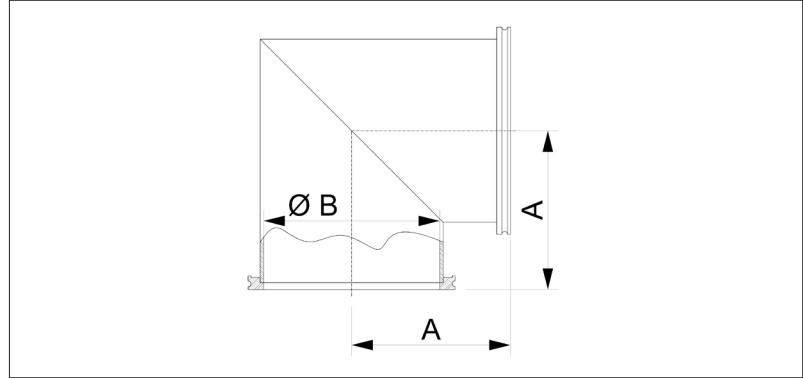
- Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | A (mm) | B (mm) | Order No        |
|------------------|--------|--------|-----------------|
| 160              | 138    | 153    | VC2FTG1SS160-90 |
| 200              | 178    | 213    | VC2FTG1SS200-90 |
| 250              | 208    | 261    | VC2FTG1SS250-90 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | A (mm) | B (mm) | Order No        |
|------------------|--------|--------|-----------------|
| 160              | 138    | 153    | VC2FTG2SS160-90 |
| 200              | 178    | 213    | VC2FTG2SS200-90 |
| 250              | 208    | 261    | VC2FTG2SS250-90 |

## ISO-K 4 Way Cross



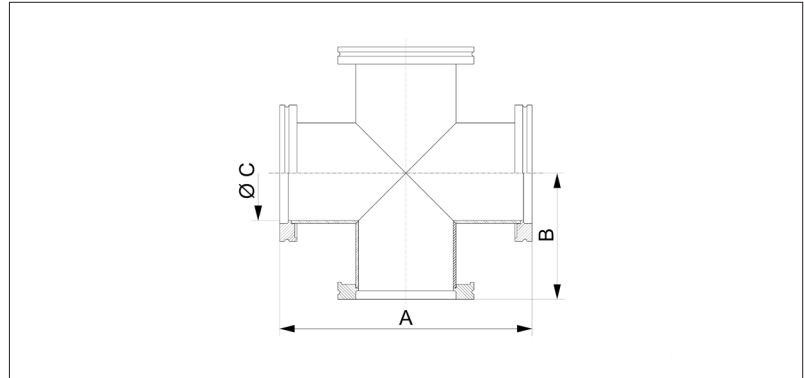
### • Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Order No         |
|------------------|--------|--------|--------|------------------|
| 63               | 176    | 88     | 66     | VC2FTH1SS063-176 |
| 100              | 216    | 108    | 100    | VC2FTH1SS100-216 |
| 160              | 276    | 138    | 153    | VC2FTH1SS160-276 |
| 200              | 356    | 178    | 213    | VC2FTH1SS200-356 |
| 250              | 416    | 208    | 261    | VC2FTH1SS250-416 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Order No         |
|------------------|--------|--------|--------|------------------|
| 63               | 176    | 88     | 66     | VC2FTH2SS063-176 |
| 100              | 216    | 108    | 100    | VC2FTH2SS100-216 |
| 160              | 276    | 138    | 153    | VC2FTH2SS160-276 |
| 200              | 356    | 178    | 213    | VC2FTH2SS200-356 |
| 250              | 416    | 208    | 261    | VC2FTH2SS250-416 |

## ISO-K Reducer Cross



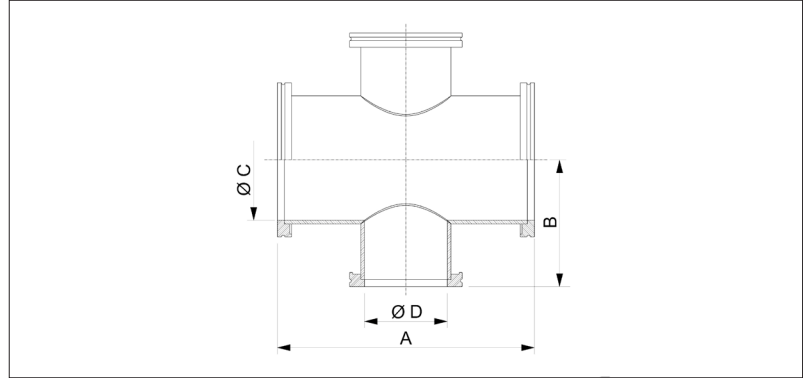
### • Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

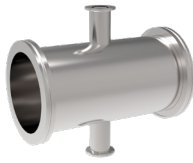
| Flange Size (DN) | Nominal diameter reduced | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|------------------|--------------------------|--------|--------|--------|--------|----------------------|
| 100              | 63                       | 216    | 107    | 102    | 70     | VC2FTI1SS100-063-216 |
| 160              | 63                       | 276    | 130    | 153    | 70     | VC2FTI1SS160-063-276 |
| 160              | 100                      | 276    | 130    | 153    | 102    | VC2FTI1SS160-100-276 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | Nominal diameter reduced | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|------------------|--------------------------|--------|--------|--------|--------|----------------------|
| 100              | 63                       | 216    | 107    | 102    | 70     | VC2FTI2SS100-063-216 |
| 160              | 63                       | 276    | 130    | 153    | 70     | VC2FTI2SS160-063-276 |
| 160              | 100                      | 276    | 130    | 153    | 102    | VC2FTI2SS160-100-276 |

## ISO-K to KF Adapter Cross



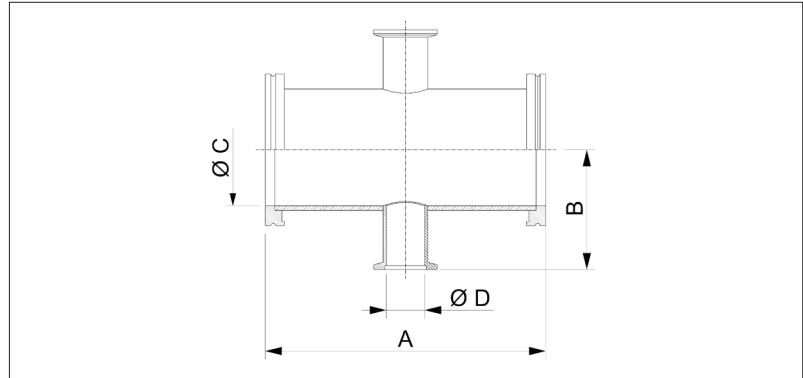
### • Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar over pressure (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to 500 mbar over pressure (metal seal)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|------------------|--------------------------|--------|--------|--------|--------|----------------------|
| 63               | 25                       | 176    | 75     | 70     | 24     | VC2FTK1SS063-025-176 |
| 63               | 40                       | 176    | 75     | 70     | 40.5   | VC2FTK1SS063-040-176 |
| 100              | 25                       | 216    | 100    | 102    | 24     | VC2FTK1SS100-025-216 |
| 100              | 40                       | 216    | 100    | 102    | 40.5   | VC2FTK1SS100-040-216 |
| 160              | 25                       | 276    | 125    | 153    | 24     | VC2FTK1SS160-025-276 |
| 160              | 40                       | 276    | 125    | 153    | 40.5   | VC2FTK1SS160-040-276 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|------------------|--------------------------|--------|--------|--------|--------|----------------------|
| 63               | 25                       | 176    | 75     | 70     | 24     | VC2FTK2SS063-025-176 |
| 63               | 40                       | 176    | 75     | 70     | 40.5   | VC2FTK2SS063-040-176 |
| 100              | 25                       | 216    | 100    | 102    | 24     | VC2FTK2SS100-025-216 |
| 100              | 40                       | 216    | 100    | 102    | 40.5   | VC2FTK2SS100-040-216 |
| 160              | 25                       | 276    | 125    | 153    | 24     | VC2FTK2SS160-025-276 |
| 160              | 40                       | 276    | 125    | 153    | 40.5   | VC2FTK2SS160-040-276 |

# ISO-K / ISO-F Adapters

This part consists of Large KF Adapters.  
Check out this section for products NW63-NW630



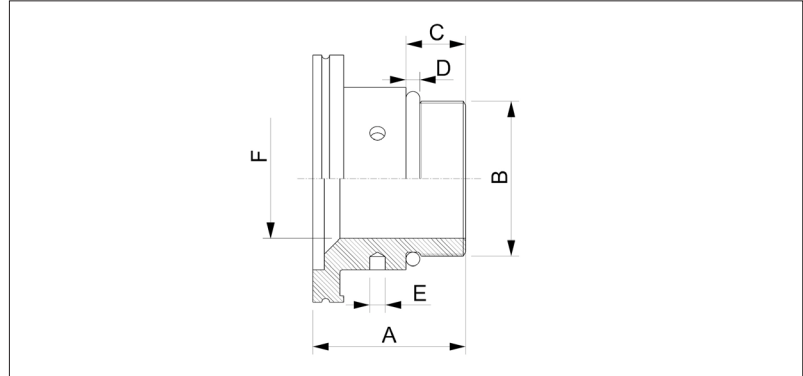


## ISO-K Flange With Pipe Thread and FKM Seal, Male



- O-ring Material: FKM
- Temperature range: -15 to 150 °C (Consider O-ring temperature ranges.)

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | Order No           |
|------------------|--------|--------|--------|--------|--------|--------|--------------------|
| 63               | 59     | G2"    | 23     | 5      | 6      | 48     | VC2ADA1SS063-15-59 |
| 63               | 60     | G3"    | 23     | 5      | 6      | 50     | VC2ADA1SS063-22-60 |
| 100              | 60     | G3"    | 23     | 5      | 6      | 70     | VC2ADA1SS100-22-60 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

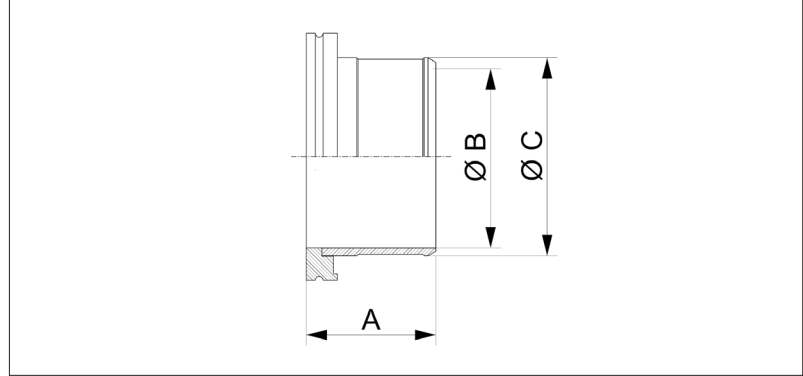
| Flange Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | Order No           |
|------------------|--------|--------|--------|--------|--------|--------|--------------------|
| 63               | 59     | G2"    | 23     | 5      | 6      | 48     | VC2ADA2SS063-15-59 |
| 63               | 60     | G3"    | 23     | 5      | 6      | 50     | VC2ADA2SS063-22-60 |
| 100              | 60     | G3"    | 23     | 5      | 6      | 70     | VC2ADA2SS100-22-60 |

## ISO-K Hose Adapter



- Materials:  
Stainless Steel 304/1.4301  
Stainless Steel 316L/1.4404
- For connecting a PVC hose or a CR sleeve

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Order No        |
|------------------|--------|--------|--------|-----------------|
| 63               | 50     | 70     | 76.1   | VC2ADB1SS063-50 |
| 100              | 50     | 95     | 101.6  | VC2ADB1SS100-50 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

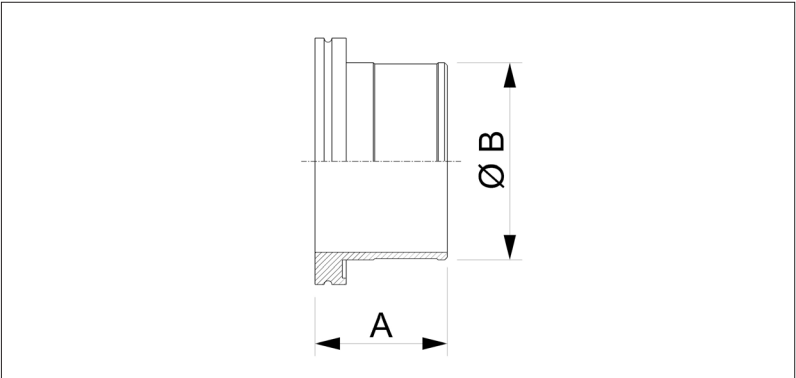
| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Order No        |
|------------------|--------|--------|--------|-----------------|
| 63               | 50     | 70     | 76.1   | VC2ADB2SS063-50 |
| 100              | 50     | 95     | 101.6  | VC2ADB2SS100-50 |

# ISO-K Sleeve Adapter



- Material  
Aluminium EN AW-6082 T6  
For connecting a CR sleeve

## Dimensions

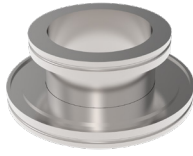


## Aluminium EN AW-6082 T6/3.2315

- Temperature Range: -196 to 150 C°

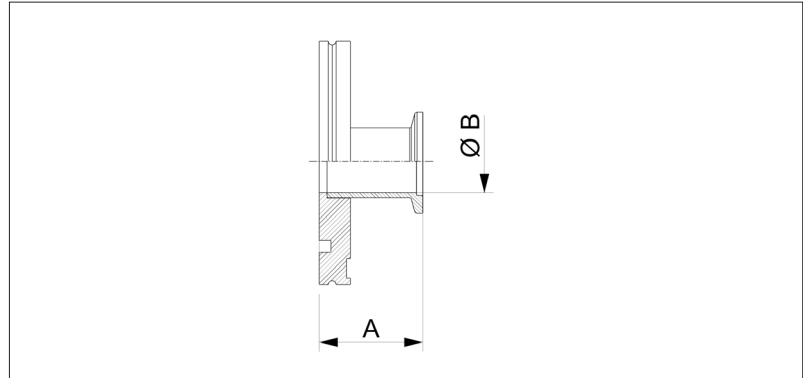
| Flange Size (DN) | A (mm) | B (mm) | Order No        |
|------------------|--------|--------|-----------------|
| 63               | 51     | 76     | VC2ADC1AL063-51 |
| 100              | 56     | 108    | VC2ADC1AL100-56 |
| 160              | 56     | 159    | VC2ADC1AL160-56 |

## ISO-K to KF Straight Adapter



- Other nominal diameters and dimensions on request
- Pressure range:  $1 \cdot 10^{-8}$  mbar to ambient pressure (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to ambient pressure (metal seal)
- Materials:  
Stainless Steel 304/1.4301  
Stainless Steel 316/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | Order No            |
|------------------|--------------------------|--------|--------|---------------------|
| 63               | 25                       | 40     | 24     | VC2ADD1SS063-025-40 |
| 63               | 40                       | 40     | 40.5   | VC2ADD1SS063-040-40 |
| 63               | 50                       | 40     | 50.6   | VC2ADD1SS063-050-40 |
| 100              | 25                       | 40     | 24     | VC2ADD1SS100-025-40 |
| 100              | 40                       | 40     | 40.5   | VC2ADD1SS100-040-40 |
| 100              | 50                       | 40     | 50.6   | VC2ADD1SS100-050-40 |
| 160              | 40                       | 40     | 40.5   | VC2ADD1SS160-040-40 |
| 160              | 50                       | 40     | 50.6   | VC2ADD1SS160-050-40 |
| 160              | 63                       | 40     | 70     | VC2ADD1SS160-063-40 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

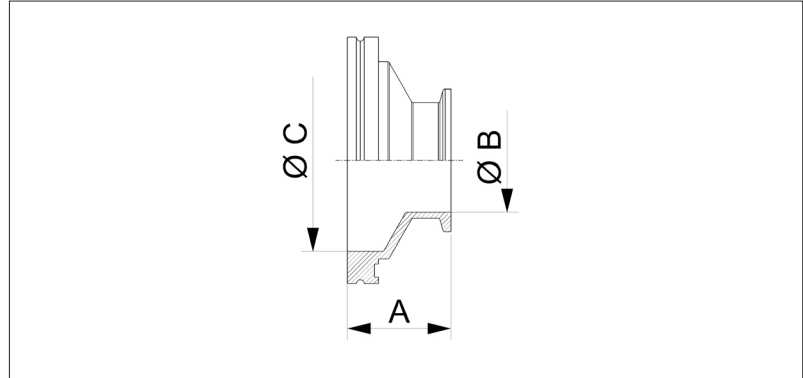
| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | Order No            |
|------------------|--------------------------|--------|--------|---------------------|
| 63               | 25                       | 40     | 24     | VC2ADD2SS063-025-40 |
| 63               | 40                       | 40     | 40.5   | VC2ADD2SS063-040-40 |
| 63               | 50                       | 40     | 50.6   | VC2ADD2SS063-050-40 |
| 100              | 25                       | 40     | 24     | VC2ADD2SS100-025-40 |
| 100              | 40                       | 40     | 40.5   | VC2ADD2SS100-040-40 |
| 100              | 50                       | 40     | 50.6   | VC2ADD2SS100-050-40 |
| 160              | 40                       | 40     | 40.5   | VC2ADD2SS160-040-40 |
| 160              | 50                       | 40     | 50.6   | VC2ADD2SS160-050-40 |
| 160              | 63                       | 40     | 70     | VC2ADD2SS160-063-40 |

## ISO-K to KF Conical Adapter



- Other nominal diameters and dimensions on request
- Pressure range:  $1 \cdot 10^{-8}$  mbar to ambient pressure (elastomer seal)  
 $1 \cdot 10^{-9}$  mbar to ambient pressure (metal seal)
- Elastomer seals are available for EN AW-6082 T6/3.2315

### Dimensions



### Aluminium EN AW-6082 T6/3.2315

- Temperature Range: -196 to 150 °C

| ISO-K Flange Size (DN) | ISO-KF Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | Order No            |
|------------------------|---------------------------------|--------|--------|--------|---------------------|
| 63                     | 25                              | 63     | 24     | 70     | VC2ADE1AL063-025-63 |
| 63                     | 40                              | 63     | 40.5   | 70     | VC2ADE1AL063-040-63 |
| 63                     | 50                              | 63     | 50     | 70     | VC2ADE1AL063-050-63 |
| 100                    | 40                              | 63     | 40.5   | 102    | VC2ADE1AL100-040-63 |
| 100                    | 50                              | 63     | 50     | 102    | VC2ADE1AL100-050-63 |

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| ISO-K Flange Size (DN) | ISO-KF Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | Order No            |
|------------------------|---------------------------------|--------|--------|--------|---------------------|
| 63                     | 25                              | 63     | 24     | 70     | VC2ADE1SS063-025-63 |
| 63                     | 40                              | 63     | 40.5   | 70     | VC2ADE1SS063-040-63 |
| 63                     | 50                              | 63     | 50     | 70     | VC2ADE1SS063-050-63 |
| 100                    | 40                              | 63     | 40.5   | 102    | VC2ADE1SS100-040-63 |
| 100                    | 50                              | 63     | 50     | 102    | VC2ADE1SS100-050-63 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

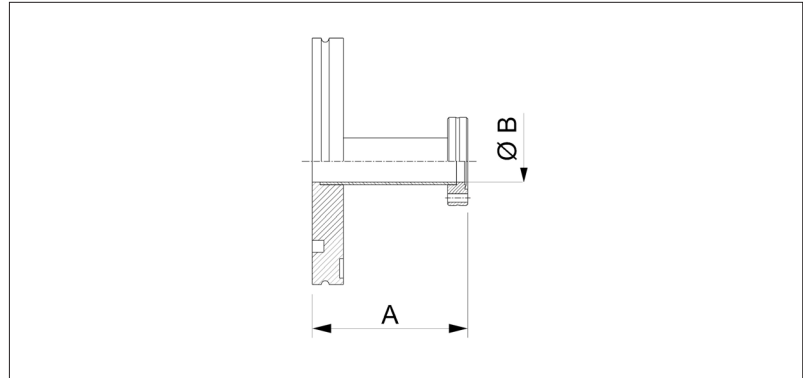
| ISO-K Flange Size (DN) | ISO-KF Reducer Flange Size (DN) | A (mm) | B (mm) | C (mm) | Order No            |
|------------------------|---------------------------------|--------|--------|--------|---------------------|
| 63                     | 25                              | 63     | 24     | 70     | VC2ADE2SS063-025-63 |
| 63                     | 40                              | 63     | 40.5   | 70     | VC2ADE2SS063-040-63 |
| 63                     | 50                              | 63     | 50     | 70     | VC2ADE2SS063-050-63 |
| 100                    | 40                              | 63     | 40.5   | 102    | VC2ADE2SS100-040-63 |
| 100                    | 50                              | 63     | 50     | 102    | VC2ADE2SS100-050-63 |

## ISO-K to CF Adapter



- Other nominal diameters and dimensions on request
- Pressure range:  $1 \cdot 10^{-8}$  mbar to ambient pressure (elastomer seal);  
 $1 \cdot 10^{-9}$  mbar to ambient pressure (metal seal)
- Materials:  
Stainless Steel 304/1.4301  
Stainless Steel 316L/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| CF Reducer Flang Size (DN) | ISO-K Flange Size (DN) | A (mm) | B (mm) | Order No             |
|----------------------------|------------------------|--------|--------|----------------------|
| 63                         | 16                     | 60     | 16     | VC2ADF1SS063-016-60  |
| 63                         | 40                     | 70     | 37     | VC2ADF1SS063-040-70  |
| 63                         | 63                     | 90     | 66     | VC2ADF1SS063-063-90  |
| 100                        | 100                    | 90     | 102    | VC2ADF1SS100-100-90  |
| 160                        | 160                    | 100    | 153    | VC2ADF1SS160-160-100 |

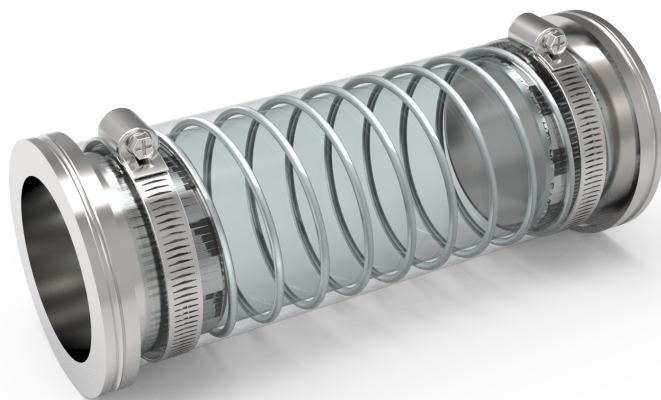
### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| CF Reducer Flang Size (DN) | ISO-K Flange Size (DN) | A (mm) | B (mm) | Order No             |
|----------------------------|------------------------|--------|--------|----------------------|
| 63                         | 16                     | 60     | 16     | VC2ADF2SS063-016-60  |
| 63                         | 40                     | 70     | 37     | VC2ADF2SS063-040-70  |
| 63                         | 63                     | 90     | 66     | VC2ADF2SS063-063-90  |
| 100                        | 100                    | 90     | 102    | VC2ADF2SS100-100-90  |
| 160                        | 160                    | 100    | 153    | VC2ADF2SS160-160-100 |

# ISO-K / ISO-F Hoses

This part consists of ISO-K/F Hoses.  
Check out this section for products NW63-NW630

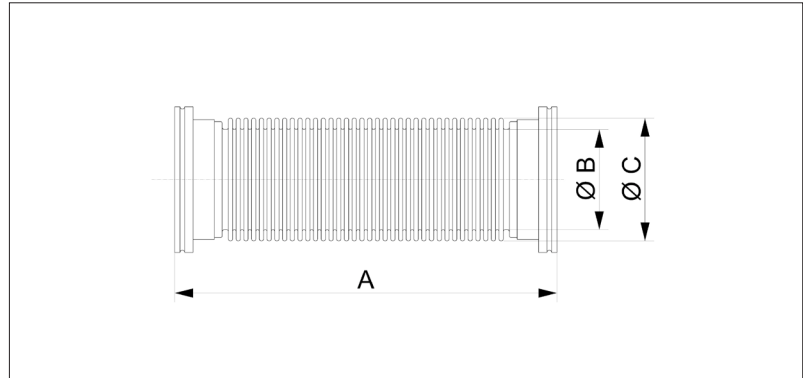


## ISO-K Flexible Hose



- Flange connection length: 30 mm
- Custom lengths on request
- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar
- Materials:  
Stainless Steel 304/1.4301  
Stainless Steel 316L/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Bend radius,<br>unique movement (mm) | Over pressure max.<br>(hPa) | Order No          |
|------------------|--------|--------|--------|--------------------------------------|-----------------------------|-------------------|
| 63               | 250    | 65     | 80     | 90                                   | 500                         | VC2HSA1SS063-250  |
| 63               | 500    | 65     | 80     | 90                                   | 500                         | VC2HSA1SS063-500  |
| 63               | 750    | 65     | 80     | 90                                   | 500                         | VC2HSA1SS063-750  |
| 63               | 1000   | 65     | 80     | 90                                   | 500                         | VC2HSA1SS063-1000 |
| 63               | 1500   | 65     | 80     | 90                                   | 500                         | VC2HSA1SS063-1500 |
| 100              | 250    | 100    | 119    | 131                                  | 300                         | VC2HSA1SS100-250  |
| 100              | 500    | 100    | 119    | 131                                  | 300                         | VC2HSA1SS100-500  |
| 100              | 750    | 100    | 119    | 131                                  | 300                         | VC2HSA1SS100-750  |
| 100              | 1000   | 100    | 119    | 131                                  | 300                         | VC2HSA1SS100-1000 |
| 100              | 1500   | 100    | 119    | 131                                  | 300                         | VC2HSA1SS100-1500 |
| 160              | 250    | 150    | 173    | 216                                  | 100                         | VC2HSA1SS160-250  |
| 160              | 500    | 150    | 173    | 216                                  | 100                         | VC2HSA1SS160-500  |
| 160              | 750    | 150    | 173    | 216                                  | 100                         | VC2HSA1SS160-750  |
| 160              | 1000   | 150    | 173    | 216                                  | 100                         | VC2HSA1SS160-1000 |
| 160              | 1500   | 150    | 173    | 216                                  | 100                         | VC2HSA1SS160-1500 |



**Stainless Steel 316L/1.4404**

• Temperature range: -196 to 350 °C

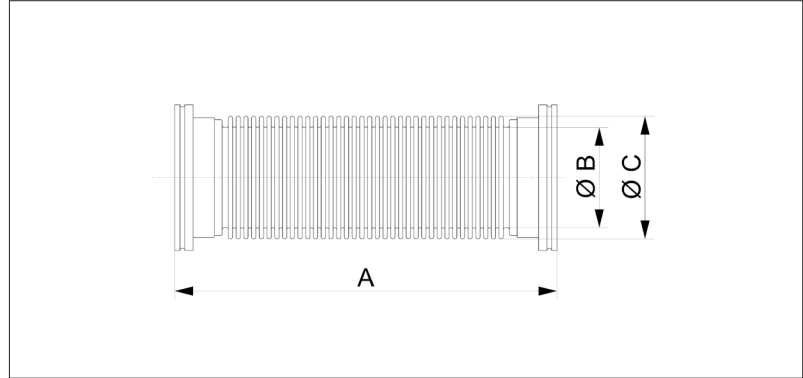
| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Bend radius,<br>unique movement (mm) | Over pressure max.<br>(hPa) | Order No          |
|------------------|--------|--------|--------|--------------------------------------|-----------------------------|-------------------|
| 63               | 250    | 65     | 80     | 90                                   | 500                         | VC2HSA2SS063-250  |
| 63               | 500    | 65     | 80     | 90                                   | 500                         | VC2HSA2SS063-500  |
| 63               | 750    | 65     | 80     | 90                                   | 500                         | VC2HSA2SS063-750  |
| 63               | 1000   | 65     | 80     | 90                                   | 500                         | VC2HSA2SS063-1000 |
| 63               | 1500   | 65     | 80     | 90                                   | 500                         | VC2HSA2SS063-1500 |
| 100              | 250    | 100    | 119    | 131                                  | 300                         | VC2HSA2SS100-250  |
| 100              | 500    | 100    | 119    | 131                                  | 300                         | VC2HSA2SS100-500  |
| 100              | 750    | 100    | 119    | 131                                  | 300                         | VC2HSA2SS100-750  |
| 100              | 1000   | 100    | 119    | 131                                  | 300                         | VC2HSA2SS100-1000 |
| 100              | 1500   | 100    | 119    | 131                                  | 300                         | VC2HSA2SS100-1500 |
| 160              | 250    | 150    | 173    | 216                                  | 100                         | VC2HSA2SS160-250  |
| 160              | 500    | 150    | 173    | 216                                  | 100                         | VC2HSA2SS160-500  |
| 160              | 750    | 150    | 173    | 216                                  | 100                         | VC2HSA2SS160-750  |
| 160              | 1000   | 150    | 173    | 216                                  | 100                         | VC2HSA2SS160-1000 |
| 160              | 1500   | 150    | 173    | 216                                  | 100                         | VC2HSA2SS160-1500 |

## ISO-K Flexible Hose, Annealed



- Lightly-stressed hose (low reset force at the time of bending)
- Flange connection length: 30 mm (Custom lengths on request)
- Pressure range:  $1 \cdot 10^{-8}$  mbar to 500 mbar
- Materials:  
Stainless Steel 304/1.4301  
Stainless Steel 316L/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Bend radius,<br>unique movement (mm) | Over pressure max.<br>(hPa) | Order No          |
|------------------|--------|--------|--------|--------------------------------------|-----------------------------|-------------------|
| 63               | 250    | 65     | 80     | 90                                   | 500                         | VC2HSB1SS063-250  |
| 63               | 500    | 65     | 80     | 90                                   | 500                         | VC2HSB1SS063-500  |
| 63               | 750    | 65     | 80     | 90                                   | 500                         | VC2HSB1SS063-750  |
| 63               | 1000   | 65     | 80     | 90                                   | 500                         | VC2HSB1SS063-1000 |
| 63               | 1500   | 65     | 80     | 90                                   | 500                         | VC2HSB1SS063-1500 |
| 100              | 250    | 100    | 119    | 131                                  | 300                         | VC2HSB1SS100-250  |
| 100              | 500    | 100    | 119    | 131                                  | 300                         | VC2HSB1SS100-500  |
| 100              | 750    | 100    | 119    | 131                                  | 300                         | VC2HSB1SS100-750  |
| 100              | 1000   | 100    | 119    | 131                                  | 300                         | VC2HSB1SS100-1000 |
| 100              | 1500   | 100    | 119    | 131                                  | 300                         | VC2HSB1SS100-1500 |
| 160              | 250    | 150    | 173    | 216                                  | 100                         | VC2HSB1SS160-250  |
| 160              | 500    | 150    | 173    | 216                                  | 100                         | VC2HSB1SS160-500  |
| 160              | 750    | 150    | 173    | 216                                  | 100                         | VC2HSB1SS160-750  |
| 160              | 1000   | 150    | 173    | 216                                  | 100                         | VC2HSB1SS160-1000 |
| 160              | 1500   | 150    | 173    | 216                                  | 100                         | VC2HSB1SS160-1500 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

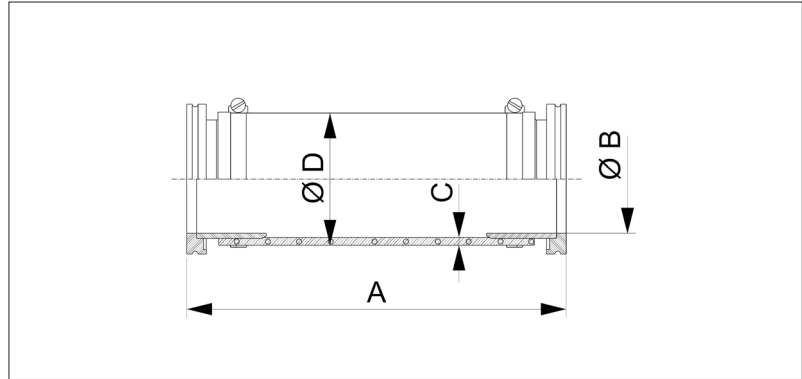
| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Bend radius,<br>unique movement (mm) | Over pressure max.<br>(hPa) | Order No          |
|------------------|--------|--------|--------|--------------------------------------|-----------------------------|-------------------|
| 63               | 250    | 65     | 80     | 90                                   | 500                         | VC2HSB2SS063-250  |
| 63               | 500    | 65     | 80     | 90                                   | 500                         | VC2HSB2SS063-500  |
| 63               | 750    | 65     | 80     | 90                                   | 500                         | VC2HSB2SS063-750  |
| 63               | 1000   | 65     | 80     | 90                                   | 500                         | VC2HSB2SS063-1000 |
| 63               | 1500   | 65     | 80     | 90                                   | 500                         | VC2HSB2SS063-1500 |
| 100              | 250    | 100    | 119    | 131                                  | 300                         | VC2HSB2SS100-250  |
| 100              | 500    | 100    | 119    | 131                                  | 300                         | VC2HSB2SS100-500  |
| 100              | 750    | 100    | 119    | 131                                  | 300                         | VC2HSB2SS100-750  |
| 100              | 1000   | 100    | 119    | 131                                  | 300                         | VC2HSB2SS100-1000 |
| 100              | 1500   | 100    | 119    | 131                                  | 300                         | VC2HSB2SS100-1500 |
| 160              | 250    | 150    | 173    | 216                                  | 100                         | VC2HSB2SS160-250  |
| 160              | 500    | 150    | 173    | 216                                  | 100                         | VC2HSB2SS160-500  |
| 160              | 750    | 150    | 173    | 216                                  | 100                         | VC2HSB2SS160-750  |
| 160              | 1000   | 150    | 173    | 216                                  | 100                         | VC2HSB2SS160-1000 |
| 160              | 1500   | 150    | 173    | 216                                  | 100                         | VC2HSB2SS160-1500 |

## ISO-K PVC Hose and Flanges



- Inner tube: PVC
- Hose cover: PVC, Transparent
- Casing: Steel coil
- Smooth inner and outer walls
- Custom lengths on request
- Pressure range:  $1 \cdot 10^{-4}$  mbar to ambient pressure
- Temperature range: -10 to 60 °C (Consider PVC temperature range.)
- Flange materials:  
Stainless Steel 304/1.4301  
Stainless Steel 316L/1.4404

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Bend radius (mm) | Order No          |
|------------------|--------|--------|--------|--------|------------------|-------------------|
| 63               | 500    | 70     | 7.5    | 90     | 150              | VC2HSC1SS063-500  |
| 63               | 1000   | 70     | 7.5    | 90     | 150              | VC2HSC1SS063-1000 |
| 63               | 1500   | 70     | 7.5    | 90     | 150              | VC2HSC1SS063-1500 |
| 63               | 2000   | 70     | 7.5    | 90     | 150              | VC2HSC1SS063-2000 |
| 100              | 500    | 95     | 8.5    | 117    | 200              | VC2HSC1SS100-500  |
| 100              | 1000   | 95     | 8.5    | 117    | 200              | VC2HSC1SS100-1000 |
| 100              | 1500   | 95     | 8.5    | 117    | 200              | VC2HSC1SS100-1500 |
| 100              | 2000   | 95     | 8.5    | 117    | 200              | VC2HSC1SS100-2000 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

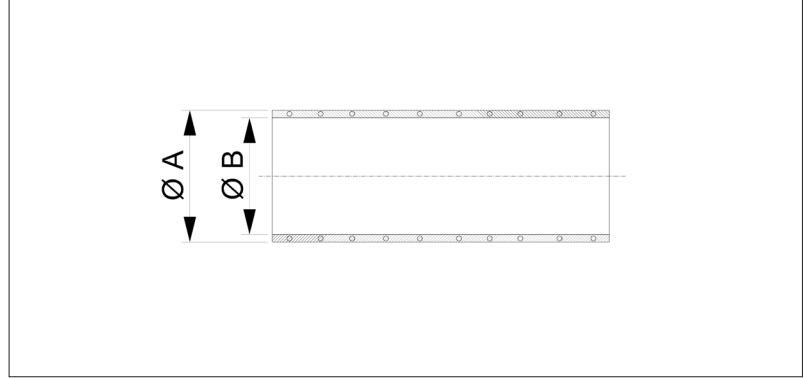
| Flange Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Bend radius (mm) | Order No          |
|------------------|--------|--------|--------|--------|------------------|-------------------|
| 63               | 500    | 70     | 7.5    | 90     | 150              | VC2HSC2SS063-500  |
| 63               | 1000   | 70     | 7.5    | 90     | 150              | VC2HSC2SS063-1000 |
| 63               | 1500   | 70     | 7.5    | 90     | 150              | VC2HSC2SS063-1500 |
| 63               | 2000   | 70     | 7.5    | 90     | 150              | VC2HSC2SS063-2000 |
| 100              | 500    | 95     | 8.5    | 117    | 200              | VC2HSC2SS100-500  |
| 100              | 1000   | 95     | 8.5    | 117    | 200              | VC2HSC2SS100-1000 |
| 100              | 1500   | 95     | 8.5    | 117    | 200              | VC2HSC2SS100-1500 |
| 100              | 2000   | 95     | 8.5    | 117    | 200              | VC2HSC2SS100-2000 |

## ISO-K PVC Hose With Embedded Spring



- Tube: PVC
- Hose cover: PVC
- Casing: Steel coil
- Smooth walls
- Custom lengths on request
- Pressure range:  $1 \cdot 10^{-4}$  mbar to ambient pressure
- Temperature range: -5 to 40 °C

### Dimensions



### PVC

| Inner Diameter (mm) | A (mm) | B (mm) | Bend radius (mm) | Order No         |
|---------------------|--------|--------|------------------|------------------|
| 75                  | 90     | 75     | 150              | VC2HSD3PL063-75  |
| 100                 | 117    | 100    | 200              | VC2HSD3PL100-100 |

# CF SYSTEM

This part consists of CF System.

Check out this section for products NW16-NW350

## CF Components

Anadolu Vacuum CF components are manufactured according to ISO 3669. The CF flange (originally called ConFlat) is a sexless design where both flanges are identical. Typical flange materials are stainless steel types 304, 316L, 316LN ESR. All components are 100% leak-tested and have leak rates better than  $10^{-10}$  mbarl/s. Standard sizes are NW 16 to 250. Other sizes can be produced on request. The ultra high vacuum range (UHV) assigns the pressure range  $<10^{-8}$  mbar. To reach and keep up this low pressure range, a very low outgassing rate is required in the vacuum system. Please consider the product information given on the product pages.

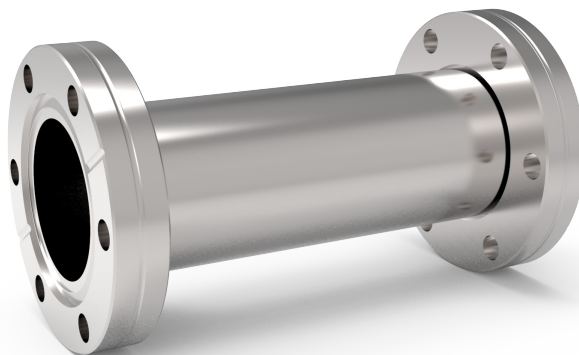
The CF components is sealed off by the cutting edge profile in the flange and a copper sealing washer. The copper sealing washer is embedded in the flange groove and, simultaneously, centres couple of flanges. While bolting the flanges, the cutting edges of the flanges for sealing are pressed deeply into the soft sealing washer, whereby the metal “flows away” radially and is pressed on the outside against the flange groove and limited. Even in the case of material deformation, this guarantees leak-tightness.

The flanges of the CF connections are designed according to ISO 3669. They are compatible with the Con-Flat flanges of other well-known brands. The standard material used is steels type 304. For the most widely recognized flanges and components, higher quality high-grade steels type 316L can also be used. The material number for the component can be found in the respective catalogue sections (“Components Elements Properties”). Because of the bake-out capacity necessary to UHV technology, sealing of the CF flanges is by means of a flat seal made of oxygen-free (OFHC) copper. The contact pressure is composed by diametrical tightening of the screws. The copper seal can only be used once. When baking out CF connections, ensure that heating up and cooling is achieved uniformly and sort of slowly.



# CF Flanges

This part consists of CF Flanges.  
Check out this section for products NW16-NW350



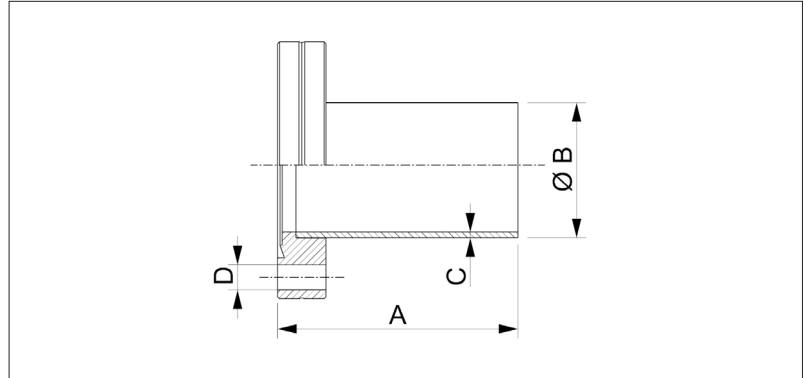


## CF Half Flange



- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|-----------|---------------------|--------|--------|--------|--------|----------------------|
| 16        | 18x1                | 38     | 18     | 1      | 4.4    | VC4FLA1SS016-18-38   |
| 16        | 19,05x1,65          | 38     | 19.05  | 1.65   | 4.4    | VC4FLA1SS016-19-38   |
| 25        | 25,4x1,65           | 52     | 25.4   | 1.65   | 6.6    | VC4FLA1SS025-25-52   |
| 40        | 38x1,5              | 63     | 38     | 1.5    | 6.6    | VC4FLA1SS040-38-63   |
| 40        | 40x1,5              | 63     | 40     | 1.5    | 6.6    | VC4FLA1SS040-40-63   |
| 50        | 50,8x1,65           | 82     | 50.8   | 1.65   | 8.4    | VC4FLA1SS050-50-82   |
| 63        | 63,5x1,65           | 105    | 63.5   | 1.65   | 8.4    | VC4FLA1SS063-63-105  |
| 63        | 70x2                | 105    | 70     | 2      | 8.4    | VC4FLA1SS063-70-105  |
| 75        | 76,1x2              | 90     | 76.1   | 2      | 8.4    | VC4FLA1SS075-76-90   |
| 100       | 101,6x2,1           | 135    | 101.6  | 2.1    | 8.4    | VC4FLA1SS100-101-135 |
| 100       | 108x2               | 135    | 108    | 2      | 8.4    | VC4FLA1SS100-108-135 |
| 160       | 154x2               | 167    | 154    | 2      | 8.4    | VC4FLA1SS160-154-167 |
| 160       | 159x2               | 167    | 159    | 2      | 8.4    | VC4FLA1SS160-159-167 |
| 200       | 203.2X2.4           | 200    | 203.2  | 2.4    | 8.4    | VC4FLA1SS200-203-200 |
| 200       | 204X2               | 200    | 204    | 2      | 8.4    | VC4FLA1SS200-204-200 |
| 200       | 205X2               | 200    | 205    | 2      | 8.4    | VC4FLA1SS200-205-200 |
| 250       | 254X2               | 200    | 254    | 2      | 8.4    | VC4FLA1SS250-254-200 |
| 250       | 256X3               | 200    | 256    | 3      | 8.4    | VC4FLA1SS250-256-200 |
| 300       | 306X3               | 230    | 306    | 3      | 10.4   | VC4FLA1SS300-306-230 |
| 350       | 356X3               | 230    | 356    | 3      | 10.4   | VC4FLA1SS350-356-230 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

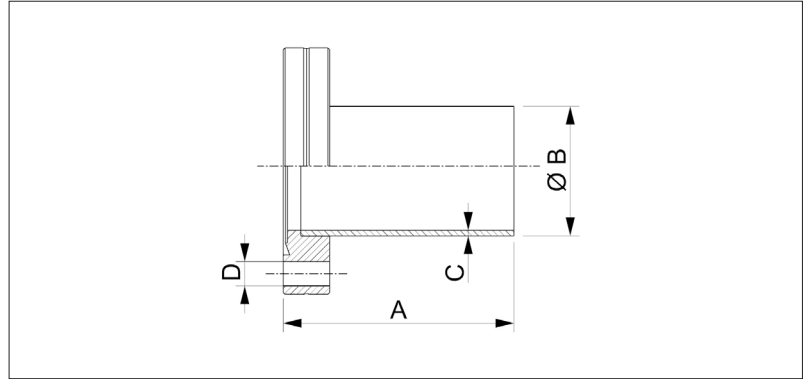
| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|-----------|---------------------|--------|--------|--------|--------|----------------------|
| 16        | 18x1                | 38     | 18     | 1      | 4.4    | VC4FLA2SS016-18-38   |
| 16        | 19,05x1,65          | 38     | 19.05  | 1.65   | 4.4    | VC4FLA2SS016-19-38   |
| 25        | 25,4x1,65           | 52     | 25.4   | 1.65   | 6.6    | VC4FLA2SS025-25-52   |
| 40        | 38x1,5              | 63     | 38     | 1.5    | 6.6    | VC4FLA2SS040-38-63   |
| 40        | 40x1,5              | 63     | 40     | 1.5    | 6.6    | VC4FLA2SS040-40-63   |
| 50        | 50,8x1,65           | 82     | 50.8   | 1.65   | 8.4    | VC4FLA2SS050-50-82   |
| 63        | 63,5x1,65           | 105    | 63.5   | 1.65   | 8.4    | VC4FLA2SS063-63-105  |
| 63        | 70x2                | 105    | 70     | 2      | 8.4    | VC4FLA2SS063-70-105  |
| 75        | 76,1x2              | 90     | 76.1   | 2      | 8.4    | VC4FLA2SS075-76-90   |
| 100       | 101,6x2,1           | 135    | 101.6  | 2.1    | 8.4    | VC4FLA2SS100-101-135 |
| 100       | 108x2               | 135    | 108    | 2      | 8.4    | VC4FLA2SS100-108-135 |
| 160       | 154x2               | 167    | 154    | 2      | 8.4    | VC4FLA2SS160-154-167 |
| 160       | 159x2               | 167    | 159    | 2      | 8.4    | VC4FLA2SS160-159-167 |
| 200       | 203.2X2.4           | 200    | 203.2  | 2.4    | 8.4    | VC4FLA2SS200-203-200 |
| 200       | 204X2               | 200    | 204    | 2      | 8.4    | VC4FLA2SS200-204-200 |
| 200       | 205X2               | 200    | 205    | 2      | 8.4    | VC4FLA2SS200-205-200 |
| 250       | 254X2               | 200    | 254    | 2      | 8.4    | VC4FLA2SS250-254-200 |
| 250       | 256X3               | 200    | 256    | 3      | 8.4    | VC4FLA2SS250-256-200 |
| 300       | 306X3               | 230    | 306    | 3      | 10.4   | VC4FLA2SS300-306-230 |
| 350       | 356X3               | 230    | 356    | 3      | 10.4   | VC4FLA2SS350-356-230 |

## CF Half Flange with Thread



- Flange with threaded holes
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D   | Order No             |
|-----------|---------------------|--------|--------|--------|-----|----------------------|
| 16        | 18x1                | 38     | 18     | 1      | M4  | VC4FLB1SS016-18-38   |
| 16        | 19,05x1,65          | 38     | 19.05  | 1.65   | M4  | VC4FLB1SS016-19-38   |
| 25        | 25,4x1,65           | 52     | 25.4   | 1.65   | M6  | VC4FLB1SS025-25-52   |
| 40        | 38x1,5              | 63     | 38     | 1.5    | M6  | VC4FLB1SS040-38-63   |
| 40        | 40x1,5              | 63     | 40     | 1.5    | M6  | VC4FLB1SS040-40-63   |
| 50        | 50,8x1,65           | 82     | 50.8   | 1.65   | M8  | VC4FLB1SS050-50-82   |
| 63        | 63,5x1,65           | 105    | 63.5   | 1.65   | M8  | VC4FLB1SS063-63-105  |
| 63        | 70x2                | 105    | 70     | 2      | M8  | VC4FLB1SS063-70-105  |
| 75        | 76,1x2              | 90     | 76.1   | 2      | M8  | VC4FLB1SS075-76-90   |
| 100       | 101,6x2,1           | 135    | 101.6  | 2.1    | M8  | VC4FLB1SS100-101-135 |
| 100       | 108x2               | 135    | 108    | 2      | M8  | VC4FLB1SS100-108-135 |
| 160       | 154x2               | 167    | 154    | 2      | M8  | VC4FLB1SS160-154-167 |
| 160       | 159x2               | 167    | 159    | 2      | M8  | VC4FLB1SS160-159-167 |
| 200       | 203.2X2.4           | 200    | 203.2  | 2.4    | M8  | VC4FLB1SS200-203-200 |
| 200       | 204X2               | 200    | 204    | 2      | M8  | VC4FLB1SS200-204-200 |
| 200       | 205X2               | 200    | 205    | 2      | M8  | VC4FLB1SS200-205-200 |
| 250       | 254X2               | 200    | 254    | 2      | M8  | VC4FLB1SS250-254-200 |
| 250       | 256X3               | 200    | 256    | 3      | M8  | VC4FLB1SS250-256-200 |
| 300       | 306X3               | 230    | 306    | 3      | M10 | VC4FLB1SS300-306-230 |
| 350       | 356X3               | 230    | 356    | 3      | M10 | VC4FLB1SS350-356-230 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

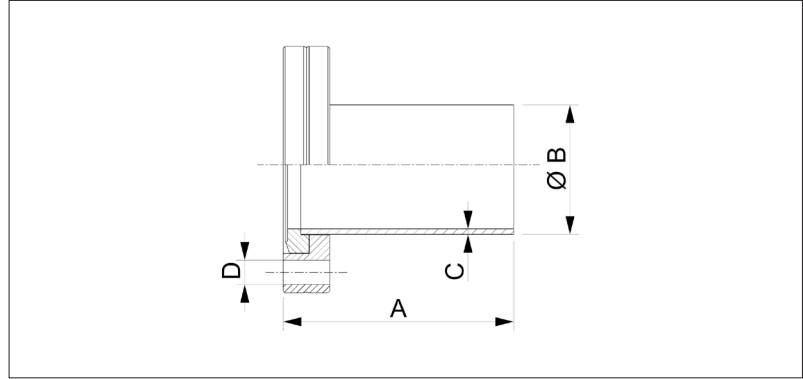
| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D   | Order No             |
|-----------|---------------------|--------|--------|--------|-----|----------------------|
| 16        | 18x1                | 38     | 18     | 1      | M4  | VC4FLB2SS016-18-38   |
| 16        | 19,05x1,65          | 38     | 19.05  | 1.65   | M4  | VC4FLB2SS016-19-38   |
| 25        | 25,4x1,65           | 52     | 25.4   | 1.65   | M6  | VC4FLB2SS025-25-52   |
| 40        | 38x1,5              | 63     | 38     | 1.5    | M6  | VC4FLB2SS040-38-63   |
| 40        | 40x1,5              | 63     | 40     | 1.5    | M6  | VC4FLB2SS040-40-63   |
| 50        | 50,8x1,65           | 82     | 50.8   | 1.65   | M8  | VC4FLB2SS050-50-82   |
| 63        | 63,5x1,65           | 105    | 63.5   | 1.65   | M8  | VC4FLB2SS063-63-105  |
| 63        | 70x2                | 105    | 70     | 2      | M8  | VC4FLB2SS063-70-105  |
| 75        | 76,1x2              | 90     | 76.1   | 2      | M8  | VC4FLB2SS075-76-90   |
| 100       | 101,6x2,1           | 135    | 101.6  | 2.1    | M8  | VC4FLB2SS100-101-135 |
| 100       | 108x2               | 135    | 108    | 2      | M8  | VC4FLB2SS100-108-135 |
| 160       | 154x2               | 167    | 154    | 2      | M8  | VC4FLB2SS160-154-167 |
| 160       | 159x2               | 167    | 159    | 2      | M8  | VC4FLB2SS160-159-167 |
| 200       | 203.2X2.4           | 200    | 203.2  | 2.4    | M8  | VC4FLB2SS200-203-200 |
| 200       | 204X2               | 200    | 204    | 2      | M8  | VC4FLB2SS200-204-200 |
| 200       | 205X2               | 200    | 205    | 2      | M8  | VC4FLB2SS200-205-200 |
| 250       | 254X2               | 200    | 254    | 2      | M8  | VC4FLB2SS250-254-200 |
| 250       | 256X3               | 200    | 256    | 3      | M8  | VC4FLB2SS250-256-200 |
| 300       | 306X3               | 230    | 306    | 3      | M10 | VC4FLB2SS300-306-230 |
| 350       | 356X3               | 230    | 356    | 3      | M10 | VC4FLB2SS350-356-230 |

## CF Half Flange, Rotatable



- Feature a rotatable flange
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|-----------|---------------------|--------|--------|--------|--------|----------------------|
| 16        | 18x1                | 38     | 18     | 1      | 4.4    | VC4FLC1SS016-18-38   |
| 16        | 19,05x1,65          | 38     | 19.05  | 1.65   | 4.4    | VC4FLC1SS016-19-38   |
| 25        | 25,4x1,65           | 52     | 25.4   | 1.65   | 6.6    | VC4FLC1SS025-25-52   |
| 40        | 38x1,5              | 63     | 38     | 1.5    | 6.6    | VC4FLC1SS040-38-63   |
| 40        | 40x1,5              | 63     | 40     | 1.5    | 8.4    | VC4FLC1SS040-40-63   |
| 50        | 50,8x1,65           | 82     | 50.8   | 1.65   | 8.4    | VC4FLC1SS050-50-82   |
| 63        | 63,5x1,65           | 105    | 63.5   | 1.65   | 8.4    | VC4FLC1SS063-63-105  |
| 63        | 70x2                | 105    | 70     | 2      | 8.4    | VC4FLC1SS063-70-105  |
| 75        | 76,1x2              | 90     | 76.1   | 2      | 8.4    | VC4FLC1SS075-76-90   |
| 100       | 101,6x2,1           | 135    | 101.6  | 2.1    | 8.4    | VC4FLC1SS100-101-135 |
| 100       | 108x2               | 135    | 108    | 2      | 8.4    | VC4FLC1SS100-108-135 |
| 160       | 154x2               | 167    | 154    | 2      | 8.4    | VC4FLC1SS160-154-167 |
| 160       | 159x2               | 167    | 159    | 2      | 8.4    | VC4FLC1SS160-159-167 |
| 200       | 203.2X2.4           | 200    | 203.2  | 2.4    | 8.4    | VC4FLC1SS200-203-200 |
| 200       | 204X2               | 200    | 204    | 2      | 8.4    | VC4FLC1SS200-204-200 |
| 200       | 205X2               | 200    | 205    | 2      | 8.4    | VC4FLC1SS200-205-200 |
| 250       | 254X2               | 200    | 254    | 2      | 8.4    | VC4FLC1SS250-254-200 |
| 250       | 256X3               | 200    | 256    | 3      | 8.4    | VC4FLC1SS250-256-200 |
| 300       | 306X3               | 230    | 306    | 3      | 10.4   | VC4FLC1SS300-306-230 |
| 350       | 356X3               | 230    | 356    | 3      | 10.4   | VC4FLC1SS350-356-230 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

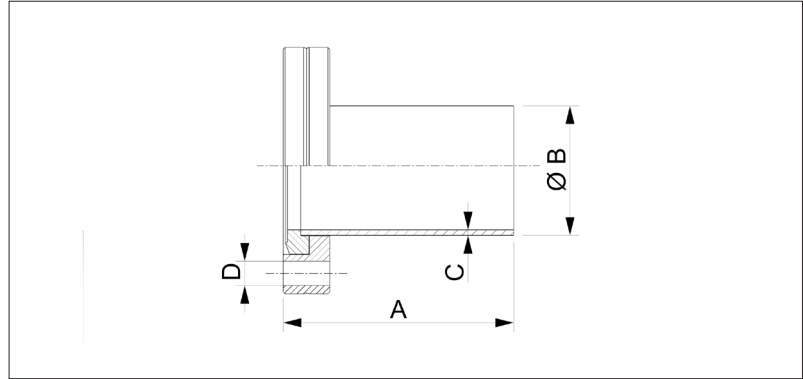
| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D (mm) | Order No             |
|-----------|---------------------|--------|--------|--------|--------|----------------------|
| 16        | 18x1                | 38     | 18     | 1      | 4.4    | VC4FLC2SS016-18-38   |
| 16        | 19,05x1,65          | 38     | 19.05  | 1.65   | 4.4    | VC4FLC2SS016-19-38   |
| 25        | 25,4x1,65           | 52     | 25.4   | 1.65   | 6.6    | VC4FLC2SS025-25-52   |
| 40        | 38x1,5              | 63     | 38     | 1.5    | 6.6    | VC4FLC2SS040-38-63   |
| 40        | 40x1,5              | 63     | 40     | 1.5    | 8.4    | VC4FLC2SS040-40-63   |
| 50        | 50,8x1,65           | 82     | 50.8   | 1.65   | 8.4    | VC4FLC2SS050-50-82   |
| 63        | 63,5x1,65           | 105    | 63.5   | 1.65   | 8.4    | VC4FLC2SS063-63-105  |
| 63        | 70x2                | 105    | 70     | 2      | 8.4    | VC4FLC2SS063-70-105  |
| 75        | 76,1x2              | 90     | 76.1   | 2      | 8.4    | VC4FLC2SS075-76-90   |
| 100       | 101,6x2,1           | 135    | 101.6  | 2.1    | 8.4    | VC4FLC2SS100-101-135 |
| 100       | 108x2               | 135    | 108    | 2      | 8.4    | VC4FLC2SS100-108-135 |
| 160       | 154x2               | 167    | 154    | 2      | 8.4    | VC4FLC2SS160-154-167 |
| 160       | 159x2               | 167    | 159    | 2      | 8.4    | VC4FLC2SS160-159-167 |
| 200       | 203.2X2.4           | 200    | 203.2  | 2.4    | 8.4    | VC4FLC1SS200-203-200 |
| 200       | 204X2               | 200    | 204    | 2      | 8.4    | VC4FLC1SS200-204-200 |
| 200       | 205X2               | 200    | 205    | 2      | 8.4    | VC4FLC1SS200-205-200 |
| 250       | 254X2               | 200    | 254    | 2      | 8.4    | VC4FLC1SS250-254-200 |
| 250       | 256X3               | 200    | 256    | 3      | 8.4    | VC4FLC1SS250-256-200 |
| 300       | 306X3               | 230    | 306    | 3      | 10.4   | VC4FLC1SS300-306-230 |
| 350       | 356X3               | 230    | 356    | 3      | 10.4   | VC4FLC1SS350-356-230 |

## CF Half Flange, Rotatable with Thread



- Feature a rotatable flange with threaded holes
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D  | Order No             |
|-----------|---------------------|--------|--------|--------|----|----------------------|
| 16        | 18x1                | 38     | 18,00  | 1      | M4 | VC4FLD1SS016-18-38   |
| 16        | 19,05x1,65          | 38     | 19.05  | 1.65   | M4 | VC4FLD1SS016-19-38   |
| 25        | 25,4x1,65           | 52     | 25.4   | 1.65   | M6 | VC4FLD1SS025-25-52   |
| 40        | 38x1,5              | 63     | 38,00  | 1.5    | M6 | VC4FLD1SS040-38-63   |
| 40        | 40x1,5              | 38     | 40,00  | 1.5    | M6 | VC4FLD1SS040-40-38   |
| 40        | 40x1,5              | 63     | 40,00  | 1.5    | M8 | VC4FLD1SS040-40-63   |
| 50        | 50,8x1,65           | 82     | 50.8   | 1.65   | M8 | VC4FLD1SS050-50-82   |
| 63        | 63,5x1,65           | 105    | 63.5   | 1.65   | M8 | VC4FLD1SS063-63-105  |
| 63        | 70x2                | 105    | 70,00  | 2      | M8 | VC4FLD1SS063-70-105  |
| 75        | 76,1x2              | 90     | 76.1   | 2      | M8 | VC4FLD1SS075-76-90   |
| 100       | 101,6x2,1           | 135    | 101.6  | 2.1    | M8 | VC4FLD1SS100-101-135 |
| 100       | 108x2               | 135    | 108,00 | 2      | M8 | VC4FLD1SS100-108-135 |
| 160       | 154x2               | 167    | 154,00 | 2      | M8 | VC4FLD1SS160-154-167 |
| 160       | 159x2               | 167    | 159,00 | 2      | M8 | VC4FLD1SS160-159-167 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D  | Order No             |
|-----------|---------------------|--------|--------|--------|----|----------------------|
| 16        | 18x1                | 38     | 18,00  | 1      | M4 | VC4FLD2SS016-18-38   |
| 16        | 19,05x1,65          | 38     | 19.05  | 1.65   | M4 | VC4FLD2SS016-19-38   |
| 25        | 25,4x1,65           | 52     | 25.4   | 1.65   | M6 | VC4FLD2SS025-25-52   |
| 40        | 38x1,5              | 63     | 38,00  | 1.5    | M6 | VC4FLD2SS040-38-63   |
| 40        | 40x1,5              | 38     | 40,00  | 1.5    | M6 | VC4FLD2SS040-40-38   |
| 40        | 40x1,5              | 63     | 40,00  | 1.5    | M8 | VC4FLD2SS040-40-63   |
| 50        | 50,8x1,65           | 82     | 50.8   | 1.65   | M8 | VC4FLD2SS050-50-82   |
| 63        | 63,5x1,65           | 105    | 63.5   | 1.65   | M8 | VC4FLD2SS063-63-105  |
| 63        | 70x2                | 105    | 70,00  | 2      | M8 | VC4FLD2SS063-70-105  |
| 75        | 76,1x2              | 90     | 76.1   | 2      | M8 | VC4FLD2SS075-76-90   |
| 100       | 101,6x2,1           | 135    | 101.6  | 2.1    | M8 | VC4FLD2SS100-101-135 |
| 100       | 108x2               | 135    | 108,00 | 2      | M8 | VC4FLD2SS100-108-135 |
| 160       | 154x2               | 167    | 154,00 | 2      | M8 | VC4FLD2SS160-154-167 |
| 160       | 159x2               | 167    | 159,00 | 2      | M8 | VC4FLD2SS160-159-167 |

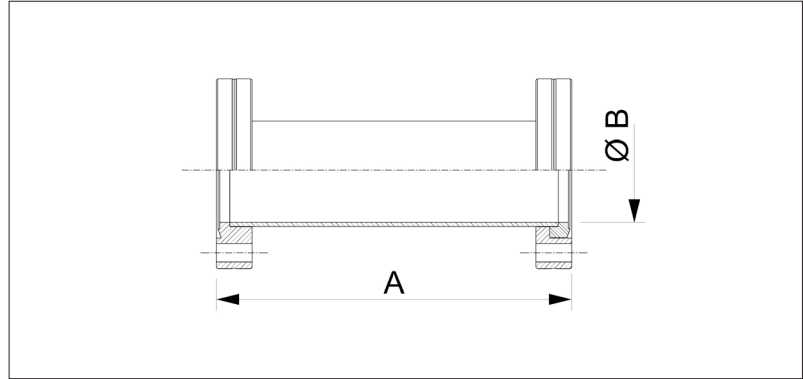


## CF Full Flange



- One fixed and one rotatable flanges
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | Order No         |
|-----------|---------------------|--------|--------|------------------|
| 16        | 18x1                | 76     | 16     | VC4FLE1SS016-76  |
| 40        | 40x1,5              | 126    | 37     | VC4FLE1SS040-126 |
| 63        | 70x2                | 210    | 66     | VC4FLE1SS063-210 |
| 100       | 108x2               | 270    | 104    | VC4FLE1SS100-270 |
| 160       | 159x2               | 334    | 155    | VC4FLE1SS160-334 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | Order No         |
|-----------|---------------------|--------|--------|------------------|
| 16        | 18x1                | 76     | 16     | VC4FLE2SS016-76  |
| 40        | 40x1,5              | 126    | 37     | VC4FLE2SS040-126 |
| 63        | 70x2                | 210    | 66     | VC4FLE2SS063-210 |
| 100       | 108x2               | 270    | 104    | VC4FLE2SS100-270 |
| 160       | 159x2               | 334    | 155    | VC4FLE2SS160-334 |

## CF Blanking Flange



- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Bake out range is up to 450°C
- Materials:

Stainless Steel 304/1.4301

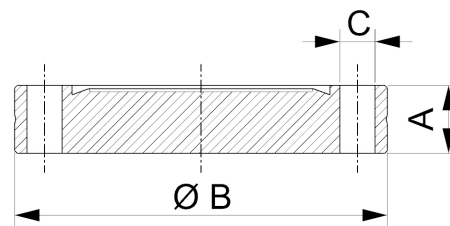
Stainless Steel 316L/1.4404

Stainless Steel 316LN ESR/1.4429

### Stainless Steel 316LN ESR/1.4429 ESU features

- Ideal for constantly dismantled chamber ports
- Electro-slag Remelt (ESR) to improve grain homogeneity and remove gross macro segregation
- Lower magnetic permeability for applications sensitive to magnetic materials ( $\mu \leq 1.005$  vs. 1.03 for 304L SS)
- Low desorption
- Bakeable under vacuum up to 1050 °C
- Pressure range:  $1 \cdot 10^{-13}$  mbar to ambient pressure

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 16        | 7.5    | 34     | 4.4    | VC4FLF1SS016 |
| 25        | 12     | 54     | 6.8    | VC4FLF1SS025 |
| 40        | 13     | 69.9   | 6.8    | VC4FLF1SS040 |
| 50        | 16.5   | 85.7   | 8.4    | VC4FLF1SS050 |
| 63        | 17.5   | 113.5  | 8.4    | VC4FLF1SS063 |
| 75        | 18     | 117.4  | 8.4    | VC4FLF1SS075 |
| 100       | 20     | 152    | 8.4    | VC4FLF1SS100 |
| 125       | 21.5   | 171.4  | 8.4    | VC4FLF1SS125 |
| 160       | 21.5   | 202.4  | 8.4    | VC4FLF1SS160 |
| 200       | 24.5   | 253.2  | 8.4    | VC4FLF1SS200 |
| 250       | 24.5   | 304.8  | 8.4    | VC4FLF1SS250 |
| 300       | 28.5   | 355.6  | 10.8   | VC4FLF1SS300 |
| 350       | 28.5   | 419.1  | 10.8   | VC4FLF1SS350 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 16        | 7.5    | 34     | 4.4    | VC4FLF2SS016 |
| 25        | 12     | 54     | 6.8    | VC4FLF2SS025 |
| 40        | 13     | 69.9   | 6.8    | VC4FLF2SS040 |
| 50        | 16.5   | 85.7   | 8.4    | VC4FLF2SS050 |
| 63        | 17.5   | 113.5  | 8.4    | VC4FLF2SS063 |
| 75        | 18     | 117.4  | 8.4    | VC4FLF2SS075 |
| 100       | 20     | 152    | 8.4    | VC4FLF2SS100 |
| 125       | 21.5   | 171.4  | 8.4    | VC4FLF2SS125 |
| 160       | 21.5   | 202.4  | 8.4    | VC4FLF2SS160 |
| 200       | 24.5   | 253.2  | 8.4    | VC4FLF2SS200 |
| 250       | 24.5   | 304.8  | 8.4    | VC4FLF2SS250 |
| 300       | 28.5   | 355.6  | 10.8   | VC4FLF2SS300 |
| 350       | 28.5   | 419.1  | 10.8   | VC4FLF2SS350 |

**Stainless Steel 316LN ESR/1.4429 ESU**

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 16        | 7.5    | 34     | 4.4    | VC4FLF3SS016 |
| 25        | 12     | 54     | 6.8    | VC4FLF3SS025 |
| 40        | 13     | 69.9   | 6.8    | VC4FLF3SS040 |
| 50        | 16.5   | 85.7   | 8.4    | VC4FLF3SS050 |
| 63        | 17.5   | 113.5  | 8.4    | VC4FLF3SS063 |
| 75        | 18     | 117.4  | 8.4    | VC4FLF3SS075 |
| 100       | 20     | 152    | 8.4    | VC4FLF3SS100 |
| 125       | 21.5   | 171.4  | 8.4    | VC4FLF3SS125 |
| 160       | 21.5   | 202.4  | 8.4    | VC4FLF3SS160 |
| 200       | 24.5   | 253.2  | 8.4    | VC4FLF3SS200 |
| 250       | 24.5   | 304.8  | 8.4    | VC4FLF3SS250 |
| 300       | 28.5   | 355.6  | 10.8   | VC4FLF3SS300 |
| 350       | 28.5   | 419.1  | 10.8   | VC4FLF3SS350 |

## CF Blanking Flange with Thread



- Flange with threaded holes
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Bake out range is up to 450°C
- Materials:

Stainless Steel 304/1.4301

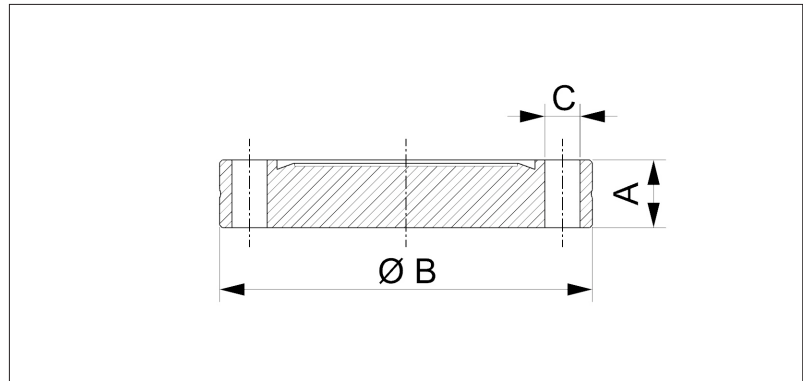
Stainless Steel 316L/1.4404

Stainless Steel 316LN ESR/1.4429

### Stainless Steel 316LN ESR/1.4429 ESU features

- Ideal for constantly dismantled chamber ports
- Electro-slag Remelt (ESR) to improve grain homogeneity and remove gross macro segregation
- Lower magnetic permeability for applications sensitive to magnetic materials ( $\mu \leq 1.005$  vs. 1.03 for 304L SS)
- Low desorption
- Bakeable under vacuum up to 1050 °C
- Pressure range:  $1 \cdot 10^{-13}$  mbar to ambient pressure

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C   | Order No     |
|-----------|--------|--------|-----|--------------|
| 16        | 7.5    | 34     | M4  | VC4FLG1SS016 |
| 40        | 13     | 69.9   | M6  | VC4FLG1SS040 |
| 63        | 17.5   | 113.5  | M8  | VC4FLG1SS063 |
| 100       | 20     | 152    | M8  | VC4FLG1SS100 |
| 160       | 21.5   | 202.4  | M8  | VC4FLG1SS160 |
| 200       | 24.5   | 253.2  | M8  | VC4FLG1SS200 |
| 250       | 24.5   | 304.8  | M8  | VC4FLG1SS250 |
| 300       | 28.5   | 368.3  | M10 | VC4FLG1SS300 |
| 350       | 28.5   | 419.1  | M10 | VC4FLG1SS350 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

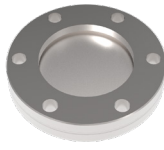
| Size (DN) | A (mm) | B (mm) | C   | Order No     |
|-----------|--------|--------|-----|--------------|
| 16        | 7.5    | 34     | M4  | VC4FLG2SS016 |
| 40        | 13     | 69.9   | M6  | VC4FLG2SS040 |
| 63        | 17.5   | 113.5  | M8  | VC4FLG2SS063 |
| 100       | 20     | 152    | M8  | VC4FLG2SS100 |
| 160       | 21.5   | 202.4  | M8  | VC4FLG2SS160 |
| 200       | 24.5   | 253.2  | M8  | VC4FLG2SS200 |
| 250       | 24.5   | 304.8  | M8  | VC4FLG2SS250 |
| 300       | 28.5   | 368.3  | M10 | VC4FLG2SS300 |
| 350       | 28.5   | 419.1  | M10 | VC4FLG2SS350 |

**Stainless Steel 316LN ESR/1.4429 ESU**

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C   | Order No     |
|-----------|--------|--------|-----|--------------|
| 16        | 7.5    | 34     | M4  | VC4FLG3SS016 |
| 40        | 13     | 69.9   | M6  | VC4FLG3SS040 |
| 63        | 17.5   | 113.5  | M8  | VC4FLG3SS063 |
| 100       | 20     | 152    | M8  | VC4FLG3SS100 |
| 160       | 21.5   | 202.4  | M8  | VC4FLG3SS160 |
| 200       | 24.5   | 253.2  | M8  | VC4FLG3SS200 |
| 250       | 24.5   | 304.8  | M8  | VC4FLG3SS250 |
| 300       | 28.5   | 368.3  | M10 | VC4FLG3SS300 |
| 350       | 28.5   | 419.1  | M10 | VC4FLG3SS350 |

## CF Blanking Flange, Rotatable



- Feature a rotatable flange
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Bake out range is up to 450°C
- Materials:

Stainless Steel 304/1.4301

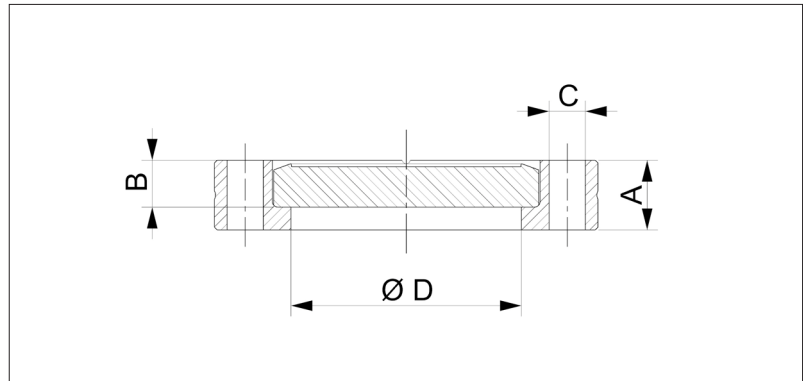
Stainless Steel 316L/1.4404

Stainless Steel 316LN ESR/1.4429

### Stainless Steel 316LN ESR/1.4429 ESU features

- Ideal for constantly dismantled chamber ports
- Electro-slag Remelt (ESR) to improve grain homogeneity and remove gross macro segregation
- Lower magnetic permeability for applications sensitive to magnetic materials ( $\mu \leq 1.005$  vs. 1.03 for 304L SS)
- Low desorption
- Bakeable under vacuum up to 1050 °C
- Pressure range:  $1 \cdot 10^{-13}$  mbar to ambient pressure

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 16        | 7,5    | 6      | 4.4    | 19.2   | VC4FLH1SS016 |
| 25        | 12     | 7      | 6.8    | 28.5   | VC4FLH1SS025 |
| 40        | 13     | 7.5    | 6.8    | 42     | VC4FLH1SS040 |
| 50        | 16.5   | 10     | 8.4    | 52     | VC4FLH1SS050 |
| 63        | 17.5   | 13     | 8.4    | 72     | VC4FLH1SS063 |
| 75        | 18     | 13     | 8.4    | 77.5   | VC4FLH1SS075 |
| 100       | 20     | 14.5   | 8.4    | 109    | VC4FLH1SS100 |
| 125       | 21.5   | 14.5   | 8.4    | 130    | VC4FLH1SS125 |
| 160       | 21.5   | 16     | 8.4    | 161    | VC4FLH1SS160 |
| 200       | 24.5   | 17.5   | 8.4    | 207    | VC4FLH1SS200 |
| 250       | 24.5   | 18.5   | 8.4    | 257    | VC4FLH1SS250 |
| 300       | 28.5   | 20     | 10.8   | 307    | VC4FLH1SS300 |
| 350       | 28.5   | 21     | 10.8   | 357    | VC4FLH1SS350 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 16        | 7,5    | 6      | 4.4    | 19.2   | VC4FLH2SS016 |
| 25        | 12     | 7      | 6.8    | 28.5   | VC4FLH2SS025 |
| 40        | 13     | 7.5    | 6.8    | 42     | VC4FLH2SS040 |
| 50        | 16.5   | 10     | 8.4    | 52     | VC4FLH2SS050 |
| 63        | 17.5   | 13     | 8.4    | 72     | VC4FLH2SS063 |
| 75        | 18     | 13     | 8.4    | 77.5   | VC4FLH2SS075 |
| 100       | 20     | 14.5   | 8.4    | 109    | VC4FLH2SS100 |
| 125       | 21.5   | 14.5   | 8.4    | 130    | VC4FLH2SS125 |
| 160       | 21.5   | 16     | 8.4    | 161    | VC4FLH2SS160 |
| 200       | 24.5   | 17.5   | 8.4    | 207    | VC4FLH2SS200 |
| 250       | 24.5   | 18.5   | 8.4    | 257    | VC4FLH2SS250 |
| 300       | 28.5   | 20     | 10.8   | 307    | VC4FLH2SS300 |
| 350       | 28.5   | 21     | 10.8   | 357    | VC4FLH2SS350 |

**Stainless Steel 316LN ESR/1.4429 ESU**

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 16        | 7,5    | 6      | 4.4    | 19.2   | VC4FLH3SS016 |
| 25        | 12     | 7      | 6.8    | 28.5   | VC4FLH3SS025 |
| 40        | 13     | 7.5    | 6.8    | 42     | VC4FLH3SS040 |
| 50        | 16.5   | 10     | 8.4    | 52     | VC4FLH3SS050 |
| 63        | 17.5   | 13     | 8.4    | 72     | VC4FLH3SS063 |
| 75        | 18     | 13     | 8.4    | 77.5   | VC4FLH3SS075 |
| 100       | 20     | 14.5   | 8.4    | 109    | VC4FLH3SS100 |
| 125       | 21.5   | 14.5   | 8.4    | 130    | VC4FLH3SS125 |
| 160       | 21.5   | 16     | 8.4    | 161    | VC4FLH3SS160 |
| 200       | 24.5   | 17.5   | 8.4    | 207    | VC4FLH3SS200 |
| 250       | 24.5   | 18.5   | 8.4    | 257    | VC4FLH3SS250 |
| 300       | 28.5   | 20     | 10.8   | 307    | VC4FLH3SS300 |
| 350       | 28.5   | 21     | 10.8   | 357    | VC4FLH3SS350 |

## CF Weld Flange



- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Bake out range is up to 450°C
- Materials:

Stainless Steel 304/1.4301

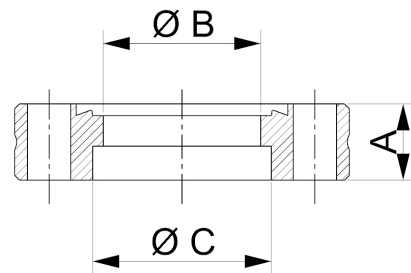
Stainless Steel 316L/1.4404

Stainless Steel 316LN ESR/1.4429

### Stainless Steel 316LN ESR/1.4429 ESU features

- Ideal for constantly dismantled chamber ports
- Electro-slag Remelt (ESR) to improve grain homogeneity and remove gross macro segregation
- Lower magnetic permeability for applications sensitive to magnetic materials ( $\mu \leq 1.005$  vs. 1.03 for 304L SS)
- Low desorption
- Bakeable under vacuum up to 1050 °C
- Pressure range:  $1 \cdot 10^{-13}$  mbar to ambient pressure

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | Order No         |
|-----------|---------------------|--------|--------|--------|------------------|
| 16        | 18x1                | 7.5    | 16     | 18.15  | VC4FLI1SS016-18  |
| 16        | 19.05x1.65          | 7.5    | 15.75  | 19.2   | VC4FLI1SS016-19  |
| 25        | 25.4x1.65           | 12     | 22.1   | 25.6   | VC4FLI1SS025-25  |
| 25        | 28x2                | 12     | 24     | 28.2   | VC4FLI1SS025-28  |
| 40        | 38x1.5              | 13     | 35     | 38.2   | VC4FLI1SS040-38  |
| 40        | 40x1.5              | 13     | 37     | 40.2   | VC4FLI1SS040-40  |
| 40        | 42.4x2              | 13     | 38.4   | 42.6   | VC4FLI1SS040-42  |
| 40        | 44.5x2              | 13     | 40.5   | 44.7   | VC4FLI1SS040-44  |
| 50        | 50.8x1.65           | 16.5   | 47.5   | 51.1   | VC4FLI1SS050-50  |
| 63        | 63.5x1.65           | 17.5   | 60.2   | 63.8   | VC4FLI1SS063-63  |
| 63        | 70x2                | 17.5   | 66     | 70.3   | VC4FLI1SS063-70  |
| 75        | 76.1x2              | 18     | 72.1   | 76.4   | VC4FLI1SS075-76  |
| 100       | 101.6x2.1           | 20     | 97.4   | 101.9  | VC4FLI1SS100-101 |
| 100       | 104x2               | 20     | 100    | 104.3  | VC4FLI1SS100-104 |
| 100       | 108x2               | 20     | 104    | 108.3  | VC4FLI1SS100-108 |



| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | Order No         |
|-----------|---------------------|--------|--------|--------|------------------|
| 125       | 127x1.65            | 21.5   | 123.7  | 127.3  | VC4FLI1SS125-127 |
| 160       | 152.4x2             | 21.5   | 147.6  | 152.7  | VC4FLI1SS160-152 |
| 160       | 154x2               | 21.5   | 150    | 154.3  | VC4FLI1SS160-154 |
| 160       | 159x2               | 21.5   | 155    | 159.3  | VC4FLI1SS160-159 |
| 200       | 203.2x2.4           | 24.5   | 198.4  | 203.5  | VC4FLI1SS200-203 |
| 200       | 204x2               | 24.5   | 200    | 204.3  | VC4FLI1SS200-204 |
| 200       | 205x2.5             | 24.5   | 200    | 205.3  | VC4FLI1SS200-205 |
| 250       | 254x2               | 24.5   | 250    | 254.3  | VC4FLI1SS250-254 |
| 250       | 256x3               | 24.5   | 250    | 256.3  | VC4FLI1SS250-256 |
| 300       | 306x3               | 28.5   | 300    | 306.3  | VC4FLI1SS300-306 |
| 350       | 356x3               | 28.5   | 350    | 356.3  | VC4FLI1SS350-356 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | Order No         |
|-----------|---------------------|--------|--------|--------|------------------|
| 16        | 18x1                | 7.5    | 16     | 18.15  | VC4FLI2SS016-18  |
| 16        | 19.05x1.65          | 7.5    | 15.75  | 19.2   | VC4FLI2SS016-19  |
| 25        | 25.4x1.65           | 12     | 22.1   | 25.6   | VC4FLI2SS025-25  |
| 25        | 28x2                | 12     | 24     | 28.2   | VC4FLI2SS025-28  |
| 40        | 38x1.5              | 13     | 35     | 38.2   | VC4FLI2SS040-38  |
| 40        | 40x1.5              | 13     | 37     | 40.2   | VC4FLI2SS040-40  |
| 40        | 42.4x2              | 13     | 38.4   | 42.6   | VC4FLI2SS040-42  |
| 40        | 44.5x2              | 13     | 40.5   | 44.7   | VC4FLI2SS040-44  |
| 50        | 50.8x1.65           | 16.5   | 47.5   | 51.1   | VC4FLI2SS050-50  |
| 63        | 63.5x1.65           | 17.5   | 60.2   | 63.8   | VC4FLI2SS063-63  |
| 63        | 70x2                | 17.5   | 66     | 70.3   | VC4FLI2SS063-70  |
| 75        | 76.1x2              | 18     | 72.1   | 76.4   | VC4FLI2SS075-76  |
| 100       | 101.6x2.1           | 20     | 97.4   | 101.9  | VC4FLI2SS100-101 |
| 100       | 104x2               | 20     | 100    | 104.3  | VC4FLI2SS100-104 |
| 100       | 108x2               | 20     | 104    | 108.3  | VC4FLI2SS100-108 |
| 125       | 127x1.65            | 21.5   | 123.7  | 127.3  | VC4FLI2SS125-127 |
| 160       | 152.4x2             | 21.5   | 147.6  | 152.7  | VC4FLI2SS160-152 |
| 160       | 154x2               | 21.5   | 150    | 154.3  | VC4FLI2SS160-154 |
| 160       | 159x2               | 21.5   | 155    | 159.3  | VC4FLI2SS160-159 |
| 200       | 203.2x2.4           | 24.5   | 198.4  | 203.5  | VC4FLI2SS200-203 |
| 200       | 204x2               | 24.5   | 200    | 204.3  | VC4FLI2SS200-204 |
| 200       | 205x2.5             | 24.5   | 200    | 205.3  | VC4FLI2SS200-205 |
| 250       | 254x2               | 24.5   | 250    | 254.3  | VC4FLI2SS250-254 |
| 250       | 256x3               | 24.5   | 250    | 256.3  | VC4FLI2SS250-256 |
| 300       | 306x3               | 28.5   | 300    | 306.3  | VC4FLI2SS300-306 |
| 350       | 356x3               | 28.5   | 350    | 356.3  | VC4FLI2SS350-356 |

**Stainless Steel 316LN ESR/1.4 429 ESU**

- Temperature range: -196 to 350 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | Order No         |
|-----------|---------------------|--------|--------|--------|------------------|
| 16        | 18x1                | 7.5    | 16     | 18.15  | VC4FLI3SS016-18  |
| 16        | 19.05x1.65          | 7.5    | 15.75  | 19.2   | VC4FLI3SS016-19  |
| 25        | 25.4x1.65           | 12     | 22.1   | 25.6   | VC4FLI3SS025-25  |
| 25        | 28x2                | 12     | 24     | 28.2   | VC4FLI3SS025-28  |
| 40        | 38x1.5              | 13     | 35     | 38.2   | VC4FLI3SS040-38  |
| 40        | 40x1.5              | 13     | 37     | 40.2   | VC4FLI3SS040-40  |
| 40        | 42.4x2              | 13     | 38.4   | 42.6   | VC4FLI3SS040-42  |
| 40        | 44.5x2              | 13     | 40.5   | 44.7   | VC4FLI3SS040-44  |
| 50        | 50.8x1.65           | 16.5   | 47.5   | 51.1   | VC4FLI3SS050-50  |
| 63        | 63.5x1.65           | 17.5   | 60.2   | 63.8   | VC4FLI3SS063-63  |
| 63        | 70x2                | 17.5   | 66     | 70.3   | VC4FLI3SS063-70  |
| 75        | 76.1x2              | 18     | 72.1   | 76.4   | VC4FLI3SS075-76  |
| 100       | 101.6x2.1           | 20     | 97.4   | 101.9  | VC4FLI3SS100-101 |
| 100       | 104x2               | 20     | 100    | 104.3  | VC4FLI3SS100-104 |
| 100       | 108x2               | 20     | 104    | 108.3  | VC4FLI3SS100-108 |
| 125       | 127x1.65            | 21.5   | 123.7  | 127.3  | VC4FLI3SS125-127 |
| 160       | 152.4x2             | 21.5   | 147.6  | 152.7  | VC4FLI3SS160-152 |
| 160       | 154x2               | 21.5   | 150    | 154.3  | VC4FLI3SS160-154 |
| 160       | 159x2               | 21.5   | 155    | 159.3  | VC4FLI3SS160-159 |
| 200       | 203.2x2.4           | 24.5   | 198.4  | 203.5  | VC4FLI3SS200-203 |
| 200       | 204x2               | 24.5   | 200    | 204.3  | VC4FLI3SS200-204 |
| 200       | 205x2.5             | 24.5   | 200    | 205.3  | VC4FLI3SS200-205 |
| 250       | 254x2               | 24.5   | 250    | 254.3  | VC4FLI3SS250-254 |
| 250       | 256x3               | 24.5   | 250    | 256.3  | VC4FLI3SS250-256 |
| 300       | 306x3               | 28.5   | 300    | 306.3  | VC4FLI3SS300-306 |
| 350       | 356x3               | 28.5   | 350    | 356.3  | VC4FLI3SS350-356 |

## CF Weld Flange with Thread



- Pressure range: 1 · 10<sup>-12</sup> mbar to ambient pressure
- Custom lengths available upon request
- Bake out range is up to 450°C
- Materials:

Stainless Steel 304/1.4301

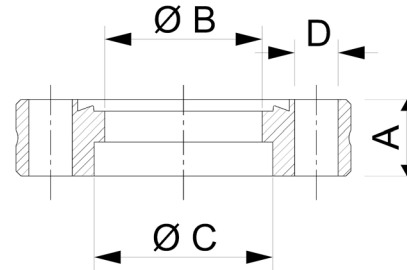
Stainless Steel 316L/1.4404

Stainless Steel 316LN ESR/1.4429

### Stainless Steel 316LN ESR/1.4429 ESU features

- Ideal for constantly dismantled chamber ports
- Electro-slag Remelt (ESR) to improve grain homogeneity and remove gross macro segregation
- Lower magnetic permeability for applications sensitive to magnetic materials ( $\mu \leq 1.005$  vs. 1.03 for 304L SS)
- Pressure range: 1 · 10<sup>-13</sup> mbar to ambient pressure

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D   | Order No         |
|-----------|---------------------|--------|--------|--------|-----|------------------|
| 16        | 18x1                | 7.5    | 16     | 18.15  | M4  | VC4FLK1SS016-18  |
| 25        | 28x2                | 12     | 24     | 28.2   | M6  | VC4FLK1SS025-28  |
| 40        | 38x1.5              | 13     | 35     | 38.2   | M6  | VC4FLK1SS040-38  |
| 40        | 40x1.5              | 13     | 37     | 40.2   | M6  | VC4FLK1SS040-40  |
| 40        | 42.4x2              | 13     | 38.4   | 42.6   | M6  | VC4FLK1SS040-42  |
| 40        | 44.5x2              | 13     | 40.5   | 44.7   | M6  | VC4FLK1SS040-44  |
| 63        | 70x2                | 17.5   | 66     | 70.3   | M8  | VC4FLK1SS063-70  |
| 100       | 104x2               | 20     | 100    | 104.3  | M8  | VC4FLK1SS100-104 |
| 100       | 108x2               | 20     | 104    | 108.3  | M8  | VC4FLK1SS100-108 |
| 160       | 154x2               | 21.5   | 150    | 154.3  | M8  | VC4FLK1SS160-154 |
| 160       | 159x2               | 21.5   | 155    | 159.3  | M8  | VC4FLK1SS160-159 |
| 200       | 204x2               | 24.5   | 200    | 204.3  | M8  | VC4FLK1SS200-204 |
| 200       | 205x2.5             | 24.5   | 200    | 205.3  | M8  | VC4FLK1SS200-205 |
| 250       | 254x2               | 24.5   | 250    | 254.3  | M8  | VC4FLK1SS250-254 |
| 250       | 256x3               | 24.5   | 250    | 256.3  | M8  | VC4FLK1SS250-256 |
| 300       | 306x3               | 28.5   | 300    | 306.3  | M10 | VC4FLK1SS300-306 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D   | Order No         |
|-----------|---------------------|--------|--------|--------|-----|------------------|
| 16        | 18x1                | 7.5    | 16     | 18.15  | M4  | VC4FLK2SS016-18  |
| 25        | 28x2                | 12     | 24     | 28.2   | M6  | VC4FLK2SS025-28  |
| 40        | 38x1.5              | 13     | 35     | 38.2   | M6  | VC4FLK2SS040-38  |
| 40        | 40x1.5              | 13     | 37     | 40.2   | M6  | VC4FLK2SS040-40  |
| 40        | 42.4x2              | 13     | 38.4   | 42.6   | M6  | VC4FLK2SS040-42  |
| 40        | 44.5x2              | 13     | 40.5   | 44.7   | M6  | VC4FLK2SS040-44  |
| 63        | 70x2                | 17.5   | 66     | 70.3   | M8  | VC4FLK2SS063-70  |
| 100       | 104x2               | 20     | 100    | 104.3  | M8  | VC4FLK2SS100-104 |
| 100       | 108x2               | 20     | 104    | 108.3  | M8  | VC4FLK2SS100-108 |
| 160       | 154x2               | 21.5   | 150    | 154.3  | M8  | VC4FLK2SS160-154 |
| 160       | 159x2               | 21.5   | 155    | 159.3  | M8  | VC4FLK2SS160-159 |
| 200       | 204x2               | 24.5   | 200    | 204.3  | M8  | VC4FLK2SS200-204 |
| 200       | 205x2.5             | 24.5   | 200    | 205.3  | M8  | VC4FLK2SS200-205 |
| 250       | 254x2               | 24.5   | 250    | 254.3  | M8  | VC4FLK2SS250-254 |
| 250       | 256x3               | 24.5   | 250    | 256.3  | M8  | VC4FLK2SS250-256 |
| 300       | 306x3               | 28.5   | 300    | 306.3  | M10 | VC4FLK2SS300-306 |

**Stainless Steel 316LN ESR/1.4429 ESU**

- Temperature range: -196 to 350 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D   | Order No         |
|-----------|---------------------|--------|--------|--------|-----|------------------|
| 16        | 18x1                | 7.5    | 16     | 18.15  | M4  | VC4FLK3SS016-18  |
| 25        | 28x2                | 12     | 24     | 28.2   | M6  | VC4FLK3SS025-28  |
| 40        | 38x1.5              | 13     | 35     | 38.2   | M6  | VC4FLK3SS040-38  |
| 40        | 40x1.5              | 13     | 37     | 40.2   | M6  | VC4FLK3SS040-40  |
| 40        | 42.4x2              | 13     | 38.4   | 42.6   | M6  | VC4FLK3SS040-42  |
| 40        | 44.5x2              | 13     | 40.5   | 44.7   | M6  | VC4FLK3SS040-44  |
| 63        | 70x2                | 17.5   | 66     | 70.3   | M8  | VC4FLK3SS063-70  |
| 100       | 104x2               | 20     | 100    | 104.3  | M8  | VC4FLK3SS100-104 |
| 100       | 108x2               | 20     | 104    | 108.3  | M8  | VC4FLK3SS100-108 |
| 160       | 154x2               | 21.5   | 150    | 154.3  | M8  | VC4FLK3SS160-154 |
| 160       | 159x2               | 21.5   | 155    | 159.3  | M8  | VC4FLK3SS160-159 |
| 200       | 204x2               | 24.5   | 200    | 204.3  | M8  | VC4FLK3SS200-204 |
| 200       | 205x2.5             | 24.5   | 200    | 205.3  | M8  | VC4FLK3SS200-205 |
| 250       | 254x2               | 24.5   | 250    | 254.3  | M8  | VC4FLK3SS250-254 |
| 250       | 256x3               | 24.5   | 250    | 256.3  | M8  | VC4FLK3SS250-256 |
| 300       | 306x3               | 28.5   | 300    | 306.3  | M10 | VC4FLK3SS300-306 |

## CF Weld Flange, Rotatable



- Feature a rotatable flange
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Bake out range is up to 450°C
- Materials:

Stainless Steel 304/1.4301

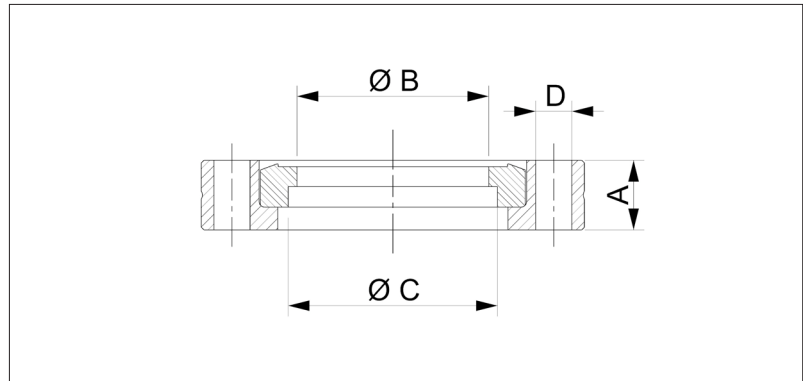
Stainless Steel 316L/1.4404

Stainless Steel 316LN ESR/1.4429

### Stainless Steel 316LN ESR/1.4429 ESU features

- Ideal for constantly dismantled chamber ports
- Electro-slag Remelt (ESR) to improve grain homogeneity and remove gross macro segregation
- Lower magnetic permeability for applications sensitive to magnetic materials ( $\mu \leq 1.005$  vs. 1.03 for 304L SS)
- Low desorption
- Bakeable under vacuum up to 1050 °C
- Pressure range:  $1 \cdot 10^{-13}$  mbar to ambient pressure

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D   | Order No        |
|-----------|---------------------|--------|--------|--------|-----|-----------------|
| 16        | 18x1                | 7.5    | 16     | 18.15  | 4.4 | VC4FLL1SS016-18 |
| 16        | 19.05x1.65          | 7.5    | 15.75  | 19.2   | 4.4 | VC4FLL1SS016-19 |
| 25        | 25.4x1.65           | 12     | 22.1   | 25.6   | 6.6 | VC4FLL1SS025-25 |
| 25        | 28x2                | 12     | 24     | 28.2   | 6.6 | VC4FLL1SS025-28 |
| 40        | 38x1.5              | 13     | 35     | 38.2   | 6.6 | VC4FLL1SS040-38 |
| 40        | 40x1.5              | 13     | 37     | 40.2   | 6.6 | VC4FLL1SS040-40 |
| 40        | 42.4x2              | 13     | 38.4   | 42.6   | 6.6 | VC4FLL1SS040-42 |
| 40        | 44.5x2              | 13     | 40.5   | 44.7   | 6.6 | VC4FLL1SS040-44 |
| 50        | 50.8x1.65           | 16.5   | 47.5   | 51.1   | 8.4 | VC4FLL1SS050-50 |
| 63        | 63.5x1.65           | 17.5   | 60.2   | 63.8   | 8.4 | VC4FLL1SS063-63 |
| 63        | 70x2                | 17.5   | 66     | 70.3   | 8.4 | VC4FLL1SS063-70 |

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D    | Order No         |
|-----------|---------------------|--------|--------|--------|------|------------------|
| 75        | 76.1x2              | 18     | 72.1   | 76.4   | 8.4  | VC4FLL1SS075-76  |
| 100       | 101.6x2.1           | 20     | 97.4   | 101.9  | 8.4  | VC4FLL1SS100-101 |
| 100       | 104x2               | 20     | 100    | 104.3  | 8.4  | VC4FLL1SS100-104 |
| 100       | 108x2               | 20     | 104    | 108.3  | 8.4  | VC4FLL1SS100-108 |
| 125       | 127x1.65            | 21.5   | 123.7  | 127.3  | 8.4  | VC4FLL1SS125-127 |
| 160       | 152.4x2             | 21.5   | 147.6  | 152.7  | 8.4  | VC4FLL1SS160-152 |
| 160       | 154x2               | 21.5   | 150    | 154.3  | 8.4  | VC4FLL1SS160-154 |
| 160       | 159x2               | 21.5   | 155    | 159.3  | 8.4  | VC4FLL1SS160-159 |
| 200       | 203.2x2.4           | 24.5   | 198.4  | 203.5  | 8.4  | VC4FLL1SS200-203 |
| 200       | 204x2               | 24.5   | 200    | 204.3  | 8.4  | VC4FLL1SS200-204 |
| 200       | 205x2.5             | 24.5   | 200    | 205.3  | 8.4  | VC4FLL1SS200-205 |
| 250       | 254x2               | 24.5   | 250    | 254.3  | 8.4  | VC4FLL1SS250-254 |
| 250       | 256x3               | 24.5   | 250    | 256.3  | 8.4  | VC4FLL1SS250-256 |
| 300       | 306x3               | 28.5   | 300    | 306.3  | 10.5 | VC4FLL1SS300-306 |
| 350       | 356x3               | 28.5   | 350    | 356.3  | 10.5 | VC4FLL1SS350-356 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D    | Order No         |
|-----------|---------------------|--------|--------|--------|------|------------------|
| 16        | 18x1                | 7.5    | 16     | 18.15  | 4.4  | VC4FLL2SS016-18  |
| 16        | 19.05x1.65          | 7.5    | 15.75  | 19.2   | 4.4  | VC4FLL2SS016-19  |
| 25        | 25.4x1.65           | 12     | 22.1   | 25.6   | 6.6  | VC4FLL2SS025-25  |
| 25        | 28x2                | 12     | 24     | 28.2   | 6.6  | VC4FLL2SS025-28  |
| 40        | 38x1.5              | 13     | 35     | 38.2   | 6.6  | VC4FLL2SS040-38  |
| 40        | 40x1.5              | 13     | 37     | 40.2   | 6.6  | VC4FLL2SS040-40  |
| 40        | 42.4x2              | 13     | 38.4   | 42.6   | 6.6  | VC4FLL2SS040-42  |
| 40        | 44.5x2              | 13     | 40.5   | 44.7   | 6.6  | VC4FLL2SS040-44  |
| 50        | 50.8x1.65           | 16.5   | 47.5   | 51.1   | 8.4  | VC4FLL2SS050-50  |
| 63        | 63.5x1.65           | 17.5   | 60.2   | 63.8   | 8.4  | VC4FLL2SS063-63  |
| 63        | 70x2                | 17.5   | 66     | 70.3   | 8.4  | VC4FLL2SS063-70  |
| 75        | 76.1x2              | 18     | 72.1   | 76.4   | 8.4  | VC4FLL2SS075-76  |
| 100       | 101.6x2.1           | 20     | 97.4   | 101.9  | 8.4  | VC4FLL2SS100-101 |
| 100       | 104x2               | 20     | 100    | 104.3  | 8.4  | VC4FLL2SS100-104 |
| 100       | 108x2               | 20     | 104    | 108.3  | 8.4  | VC4FLL2SS100-108 |
| 130       | 127x1.65            | 21.5   | 123.7  | 127.3  | 8.4  | VC4FLL2SS125-127 |
| 160       | 152.4x2             | 21.5   | 147.6  | 152.7  | 8.4  | VC4FLL2SS160-152 |
| 160       | 154x2               | 21.5   | 150    | 154.3  | 8.4  | VC4FLL2SS160-154 |
| 160       | 159x2               | 21.5   | 155    | 159.3  | 8.4  | VC4FLL2SS160-159 |
| 200       | 203.2x2.4           | 24.5   | 198.4  | 203.5  | 8.4  | VC4FLL2SS200-203 |
| 200       | 204x2               | 24.5   | 200    | 204.3  | 8.4  | VC4FLL2SS200-204 |
| 200       | 205x2.5             | 24.5   | 200    | 205.3  | 8.4  | VC4FLL2SS200-205 |
| 250       | 254x2               | 24.5   | 250    | 254.3  | 8.4  | VC4FLL2SS250-254 |
| 250       | 256x3               | 24.5   | 250    | 256.3  | 8.4  | VC4FLL2SS250-256 |
| 300       | 306x3               | 28.5   | 300    | 306.3  | 10.5 | VC4FLL2SS300-306 |
| 350       | 356x3               | 28.5   | 350    | 356.3  | 10.5 | VC4FLL2SS350-356 |

**Stainless Steel 316LN ESR/1.4 429 ESU**

- Temperature range: -196 to 350 °C

| Size (DN) | Tube Dimension (mm) | A (mm) | B (mm) | C (mm) | D    | Order No         |
|-----------|---------------------|--------|--------|--------|------|------------------|
| 16        | 18x1                | 7.5    | 16     | 18.15  | 4.4  | VC4FLL3SS016-18  |
| 16        | 19.05x1.65          | 7.5    | 15.75  | 19.2   | 4.4  | VC4FLL3SS016-19  |
| 25        | 25.4x1.65           | 12     | 22.1   | 25.6   | 6.6  | VC4FLL3SS025-25  |
| 25        | 28x2                | 12     | 24     | 28.2   | 6.6  | VC4FLL3SS025-28  |
| 40        | 38x1.5              | 13     | 35     | 38.2   | 6.6  | VC4FLL3SS040-38  |
| 40        | 40x1.5              | 13     | 37     | 40.2   | 6.6  | VC4FLL3SS040-40  |
| 40        | 42.4x2              | 13     | 38.4   | 42.6   | 6.6  | VC4FLL3SS040-42  |
| 40        | 44.5x2              | 13     | 40.5   | 44.7   | 6.6  | VC4FLL3SS040-44  |
| 50        | 50.8x1.65           | 16.5   | 47.5   | 51.1   | 8.4  | VC4FLL3SS050-50  |
| 63        | 63.5x1.65           | 17.5   | 60.2   | 63.8   | 8.4  | VC4FLL3SS063-63  |
| 63        | 70x2                | 17.5   | 66     | 70.3   | 8.4  | VC4FLL3SS063-70  |
| 75        | 76.1x2              | 18     | 72.1   | 76.4   | 8.4  | VC4FLL3SS075-76  |
| 100       | 101.6x2.1           | 20     | 97.4   | 101.9  | 8.4  | VC4FLL3SS100-101 |
| 100       | 104x2               | 20     | 100    | 104.3  | 8.4  | VC4FLL3SS100-104 |
| 100       | 108x2               | 20     | 104    | 108.3  | 8.4  | VC4FLL3SS100-108 |
| 130       | 127x1.65            | 21.5   | 123.7  | 127.3  | 8.4  | VC4FLL3SS125-127 |
| 160       | 152.4x2             | 21.5   | 147.6  | 152.7  | 8.4  | VC4FLL3SS160-152 |
| 160       | 154x2               | 21.5   | 150    | 154.3  | 8.4  | VC4FLL3SS160-154 |
| 160       | 159x2               | 21.5   | 155    | 159.3  | 8.4  | VC4FLL3SS160-159 |
| 200       | 203.2x2.4           | 24.5   | 198.4  | 203.5  | 8.4  | VC4FLL3SS200-203 |
| 200       | 204x2               | 24.5   | 200    | 204.3  | 8.4  | VC4FLL3SS200-204 |
| 200       | 205x2.5             | 24.5   | 200    | 205.3  | 8.4  | VC4FLL3SS200-205 |
| 250       | 254x2               | 24.5   | 250    | 254.3  | 8.4  | VC4FLL3SS250-254 |
| 250       | 256x3               | 24.5   | 250    | 256.3  | 8.4  | VC4FLL3SS250-256 |
| 300       | 306x3               | 28.5   | 300    | 306.3  | 10.5 | VC4FLL3SS300-306 |
| 350       | 356x3               | 28.5   | 350    | 356.3  | 10.5 | VC4FLL3SS350-356 |

## CF Spacer Flange

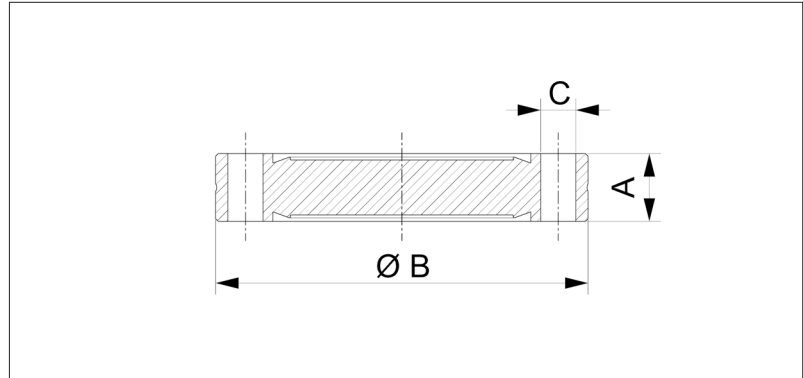


- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Bake out range is up to 450°C
- Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 16        | 7.5    | 34     | 4.4    | VC4FLM1SS016 |
| 40        | 13     | 69.9   | 6.6    | VC4FLM1SS040 |
| 63        | 17.5   | 113.5  | 8.4    | VC4FLM1SS063 |
| 100       | 20     | 152    | 8.4    | VC4FLM1SS100 |
| 160       | 21.5   | 202.4  | 8.4    | VC4FLM1SS160 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 16        | 7.5    | 34     | 4.4    | VC4FLM2SS016 |
| 40        | 13     | 69.9   | 6.6    | VC4FLM2SS040 |
| 63        | 17.5   | 113.5  | 8.4    | VC4FLM2SS063 |
| 100       | 20     | 152    | 8.4    | VC4FLM2SS100 |
| 160       | 21.5   | 202.4  | 8.4    | VC4FLM2SS160 |



## CF Spacer Flange with Bore Holes

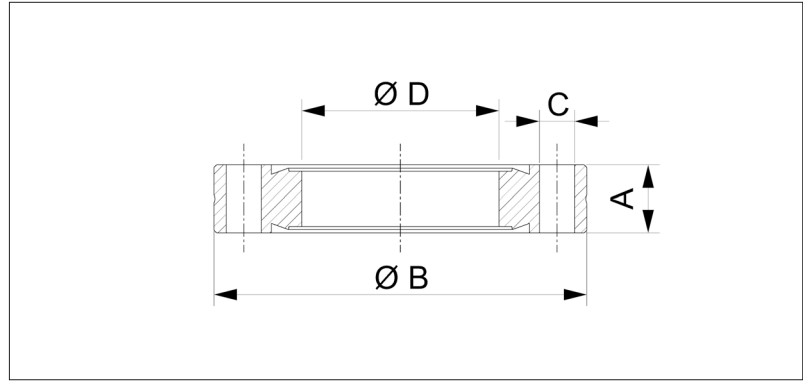


- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Bake out range is up to 500°C
- Materials:

Stainless Steel 304/1.4301

Stainless Steel 316L/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 16        | 7.5    | 34     | 4.4    | 16     | VC4FLN1SS016 |
| 40        | 13     | 69.9   | 6.6    | 37     | VC4FLN1SS040 |
| 63        | 17.5   | 113.5  | 8.4    | 66     | VC4FLN1SS063 |
| 100       | 20     | 152    | 8.4    | 102    | VC4FLN1SS100 |
| 160       | 21.5   | 202.4  | 8.4    | 155    | VC4FLN1SS160 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | D (mm) | Order No     |
|-----------|--------|--------|--------|--------|--------------|
| 16        | 7.5    | 34     | 4.4    | 16     | VC4FLN2SS016 |
| 40        | 13     | 69.9   | 6.6    | 37     | VC4FLN2SS040 |
| 63        | 17.5   | 113.5  | 8.4    | 66     | VC4FLN2SS063 |
| 100       | 20     | 152    | 8.4    | 102    | VC4FLN2SS100 |
| 160       | 21.5   | 202.4  | 8.4    | 155    | VC4FLN2SS160 |

## CF Reducer Flange



- The reduced-size flange has blind tapped holes. Please ensure the screws used for assembly are in the right length.
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Bake out range is up to 450°C
- Materials:

Stainless Steel 304/1.4301

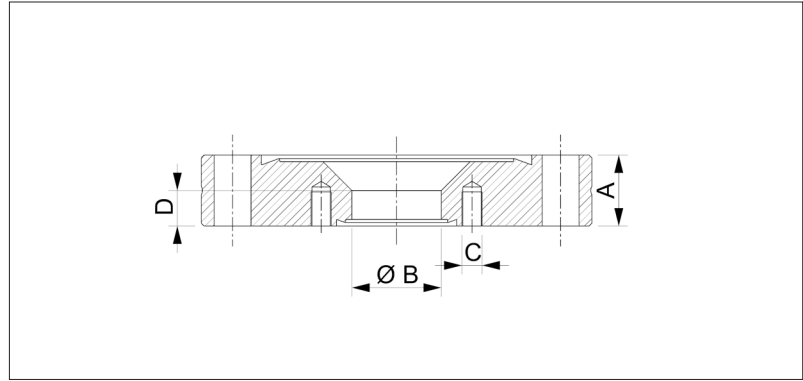
Stainless Steel 316L/1.4404

Stainless Steel 316LN ESR/1.4429

### Stainless Steel 316LN ESR/1.4429 ESU features

- Ideal for constantly dismantled chamber ports
- Electro-slag Remelt (ESR) to improve grain homogeneity and remove gross macro segregation
- Lower magnetic permeability for applications sensitive to magnetic materials ( $\mu \leq 1.005$  vs. 1.03 for 304L SS)
- Low desorption
- Bakeable under vacuum up to 1050 °C
- Pressure range:  $1 \cdot 10^{-13}$  mbar to ambient pressure

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C  | D (mm) | Order No         |
|-----------|--------------------------|--------|--------|----|--------|------------------|
| 40        | 16                       | 13     | 16     | M4 | 6      | VC4FLO1SS040-016 |
| 63        | 16                       | 17.5   | 16     | M4 | 6      | VC4FLO1SS063-016 |
| 63        | 40                       | 17.5   | 37     | M6 | 9      | VC4FLO1SS063-040 |
| 100       | 40                       | 20     | 37     | M6 | 9      | VC4FLO1SS100-040 |
| 100       | 50                       | 20     | 47.5   | M8 | 10     | VC4FLO1SS100-050 |
| 100       | 63                       | 20     | 66     | M8 | 13     | VC4FLO1SS100-063 |
| 160       | 40                       | 21.5   | 37     | M6 | 9      | VC4FLO1SS160-040 |
| 160       | 63                       | 21.5   | 66     | M8 | 13     | VC4FLO1SS160-063 |
| 160       | 100                      | 21.5   | 100    | M8 | 13     | VC4FLO1SS160-100 |
| 200       | 40                       | 24.5   | 37     | M6 | 9      | VC4FLO1SS200-040 |
| 200       | 63                       | 24.5   | 66     | M8 | 13     | VC4FLO1SS200-063 |
| 200       | 100                      | 24.5   | 100    | M8 | 13     | VC4FLO1SS200-100 |
| 200       | 160                      | 24.5   | 155    | M8 | 13     | VC4FLO1SS200-160 |
| 250       | 40                       | 26     | 37     | M6 | 9      | VC4FLO1SS250-040 |
| 250       | 63                       | 26     | 66     | M8 | 13     | VC4FLO1SS250-063 |
| 250       | 100                      | 26     | 100    | M8 | 13     | VC4FLO1SS250-100 |
| 250       | 160                      | 26     | 155    | M8 | 13     | VC4FLO1SS250-160 |
| 250       | 200                      | 26     | 200    | M8 | 13     | VC4FLO1SS250-200 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

| Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C  | D (mm) | Order No         |
|-----------|--------------------------|--------|--------|----|--------|------------------|
| 40        | 16                       | 13     | 16     | M4 | 6      | VC4FLO2SS040-016 |
| 63        | 16                       | 17.5   | 16     | M4 | 6      | VC4FLO2SS063-016 |
| 63        | 40                       | 17.5   | 37     | M6 | 9      | VC4FLO2SS063-040 |
| 100       | 40                       | 20     | 37     | M6 | 9      | VC4FLO2SS100-040 |
| 100       | 50                       | 20     | 47.5   | M8 | 10     | VC4FLO1SS100-050 |
| 100       | 63                       | 20     | 66     | M8 | 13     | VC4FLO2SS100-063 |
| 160       | 40                       | 21.5   | 37     | M6 | 9      | VC4FLO2SS160-040 |
| 160       | 63                       | 21.5   | 66     | M8 | 13     | VC4FLO2SS160-063 |
| 160       | 100                      | 21.5   | 100    | M8 | 13     | VC4FLO2SS160-100 |
| 200       | 40                       | 24.5   | 37     | M6 | 9      | VC4FLO2SS200-040 |
| 200       | 63                       | 24.5   | 66     | M8 | 13     | VC4FLO2SS200-063 |
| 200       | 100                      | 24.5   | 100    | M8 | 13     | VC4FLO2SS200-100 |
| 200       | 160                      | 24.5   | 155    | M8 | 13     | VC4FLO2SS200-160 |
| 250       | 40                       | 26     | 37     | M6 | 9      | VC4FLO2SS250-040 |
| 250       | 63                       | 26     | 66     | M8 | 13     | VC4FLO2SS250-063 |
| 250       | 100                      | 26     | 100    | M8 | 13     | VC4FLO2SS250-100 |
| 250       | 160                      | 26     | 155    | M8 | 13     | VC4FLO2SS250-160 |
| 250       | 200                      | 26     | 200    | M8 | 13     | VC4FLO2SS250-200 |

**Stainless Steel 316LN ESR/1.4429 ESU**

- Temperature range: -196 to 350 °C

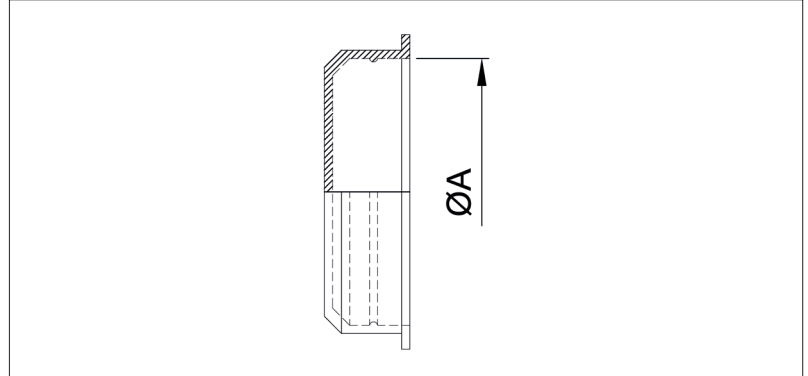
| Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | C  | D (mm) | Order No         |
|-----------|--------------------------|--------|--------|----|--------|------------------|
| 40        | 16                       | 13     | 16     | M4 | 6      | VC4FLO1SS040-016 |
| 63        | 16                       | 17.5   | 16     | M4 | 6      | VC4FLO1SS063-016 |
| 63        | 40                       | 17.5   | 37     | M6 | 9      | VC4FLO1SS063-040 |
| 100       | 40                       | 20     | 37     | M6 | 9      | VC4FLO1SS100-040 |
| 100       | 50                       | 20     | 47.5   | M8 | 10     | VC4FLO1SS100-050 |
| 100       | 63                       | 20     | 66     | M8 | 13     | VC4FLO1SS100-063 |
| 160       | 40                       | 21.5   | 37     | M6 | 9      | VC4FLO1SS160-040 |
| 160       | 63                       | 21.5   | 66     | M8 | 13     | VC4FLO1SS160-063 |
| 160       | 100                      | 21.5   | 100    | M8 | 13     | VC4FLO1SS160-100 |
| 200       | 40                       | 24.5   | 37     | M6 | 9      | VC4FLO1SS200-040 |
| 200       | 63                       | 24.5   | 66     | M8 | 13     | VC4FLO1SS200-063 |
| 200       | 100                      | 24.5   | 100    | M8 | 13     | VC4FLO1SS200-100 |
| 200       | 160                      | 24.5   | 155    | M8 | 13     | VC4FLO1SS200-160 |
| 250       | 40                       | 26     | 37     | M6 | 9      | VC4FLO1SS250-040 |
| 250       | 63                       | 26     | 66     | M8 | 13     | VC4FLO1SS250-063 |
| 250       | 100                      | 26     | 100    | M8 | 13     | VC4FLO1SS250-100 |
| 250       | 160                      | 26     | 155    | M8 | 13     | VC4FLO1SS250-160 |
| 250       | 200                      | 26     | 200    | M8 | 13     | VC4FLO1SS250-200 |

## CF Flange Caps



Material: Plastic  
Polyethylene (PE)

### Dimensions

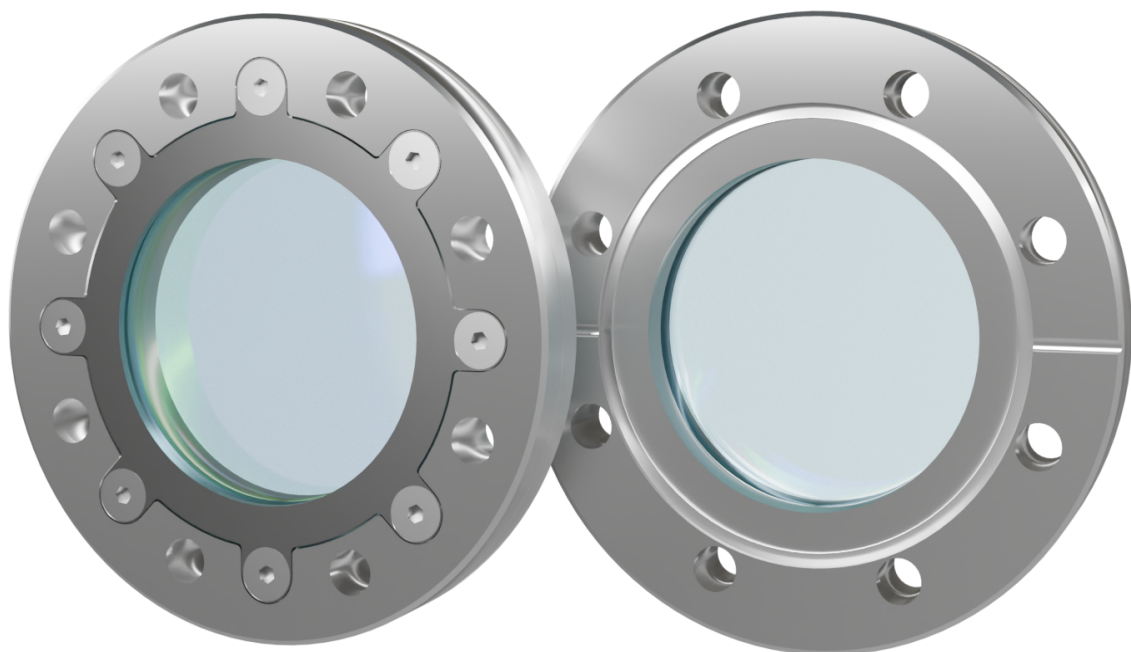


(PE)

| Size (DN) | A (mm) | Package (Qty.) | Order No     |
|-----------|--------|----------------|--------------|
| 10        | 25     | 5              | VC4FLT2PL010 |
| 16        | 33.8   | 5              | VC4FLT2PL016 |
| 25        | 54     | 5              | VC4FLT2PL025 |
| 40        | 69.9   | 5              | VC4FLT2PL040 |
| 50        | 85.7   | 5              | VC4FLT2PL050 |
| 63        | 114.3  | 5              | VC4FLT2PL063 |
| 75        | 117.4  | 5              | VC4FLT2PL075 |
| 100       | 152.4  | 5              | VC4FLT2PL100 |
| 125       | 171.5  | 5              | VC4FLT2PL125 |
| 160       | 203.2  | 5              | VC4FLT2PL160 |
| 200       | 254    | 5              | VC4FLT2PL200 |
| 250       | 304    | 5              | VC4FLT2PL250 |

# CF Viewport Flange

This part consists of CF Viewport Flanges  
Check out this section for products NW40-NW160

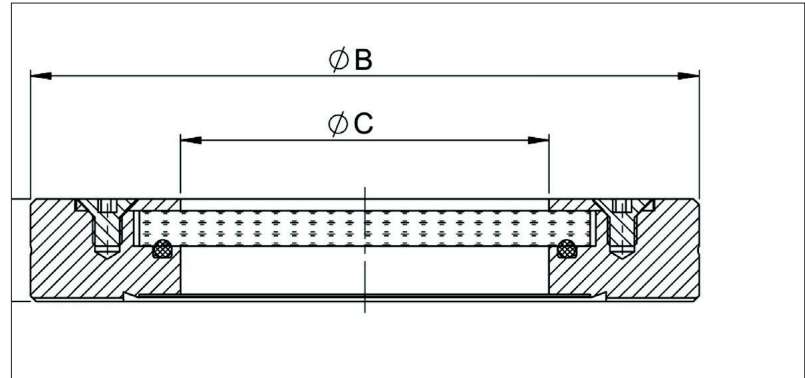


## CF Elastomer Gasket



- Pressure range:  $1 \cdot 10^{-8}$  mbar to ambient pressure
- Custom dimensions available upon request

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: 0 to 160 ° C
- Flange Material : SS304 / 1.4301
- Glass material : Borosilicate / Quartz
- O ring material : FKM / Viton

| Size (DN) | Glass Thickness (mm) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|----------------------|--------|--------|--------|--------------|
| 40        | 5                    | 13     | 69,9   | 32     | VC4VWB1SS040 |
| 63        | 6                    | 17,5   | 114,3  | 63     | VC4VWB1SS063 |
| 100       | 6                    | 20     | 152,4  | 90     | VC4VWB1SS100 |
| 160       | 10                   | 63     | 203,2  | 125    | VC4VWB1SS160 |

### Stainless Steel SS316L/1.4404

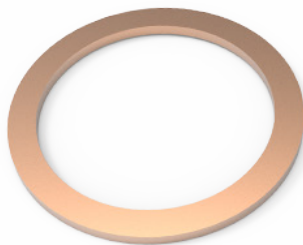
- Temperature range: 0 to 160 ° C
- Flange Material : SS316L/ 1.4404
- Glass material : Borosilicate / Quartz
- O ring material : FKM / Viton

| Size (DN) | Glass Thickness (mm) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|----------------------|--------|--------|--------|--------------|
| 40        | 5                    | 13     | 69,9   | 32     | VC4VWB2SS040 |
| 63        | 6                    | 17,5   | 114,3  | 63     | VC4VWB2SS063 |
| 100       | 6                    | 20     | 152,4  | 90     | VC4VWB2SS100 |
| 160       | 10                   | 63     | 203,2  | 125    | VC4VWB2SS160 |

# CF Seals

This part consists of CF Seals.

Check out this section for products NW16-NW350

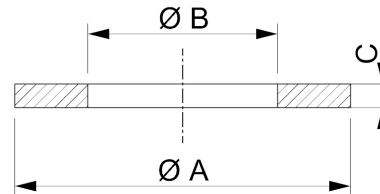


## CF Elastomer Gasket



- With a flat cross-section
- Convenient and reusable in non-critical, non-UHV applications
- Especially in applications requiring recurrent reassembly
- Temperature range: -15 to 150 °C
- Pressure range:  $1 \cdot 10^{-8}$  hPa to ambient pressure

### Dimensions



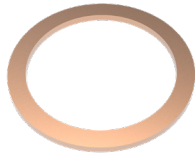
### FKM

- Temperature range: -15 to 200 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 16        | 21.4   | 16     | 3      | VC4SLA1EL016 |
| 25        | 32.8   | 25.5   | 3      | VC4SLA1EL025 |
| 40        | 48.2   | 37     | 3      | VC4SLA1EL040 |
| 50        | 61.6   | 50.8   | 3      | VC4SLA1EL050 |
| 63        | 82.4   | 63     | 3      | VC4SLA1EL063 |
| 100       | 120.5  | 102    | 3      | VC4SLA1EL100 |
| 160       | 171.3  | 152    | 3      | VC4SLA1EL160 |
| 200       | 222.1  | 203    | 3      | VC4SLA1EL200 |
| 250       | 272.9  | 254    | 3      | VC4SLA1EL250 |

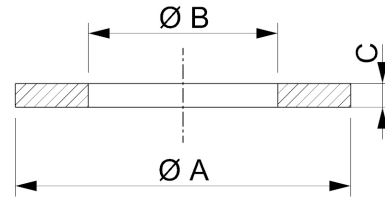


## CF Metal Gasket



- Especially well-suited for viewports
- For single use only
- Pressure range:  $1 \cdot 10^{-13}$  mbar to ambient pressure
- Materials  
OFHC Copper (Oxygen-free copper Alloy 101/C10100)  
Silver-Plated OFHC Copper

### Dimensions



### OFHC Copper (Oxygen-free)

- Temperature range: -196 to 200 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No     |
|-----------|--------|--------|--------|--------------|
| 16        | 21.3   | 16     | 2      | VC4SLB1CU016 |
| 25        | 32.8   | 25.5   | 2      | VC4SLB1CU025 |
| 40        | 48.2   | 36.6   | 2      | VC4SLB1CU040 |
| 50        | 61.6   | 50.8   | 2      | VC4SLB1CU050 |
| 63        | 82.4   | 63.4   | 2      | VC4SLB1CU063 |
| 75        | 91.4   | 76.3   | 2      | VC4SLB1CU075 |
| 100       | 120.5  | 101.6  | 2      | VC4SLB1CU100 |
| 125       | 141.4  | 127.1  | 2      | VC4SLB1CU125 |
| 160       | 171.3  | 152.4  | 2      | VC4SLB1CU160 |
| 200       | 222.1  | 203.3  | 2      | VC4SLB1CU200 |
| 250       | 272.9  | 254    | 2      | VC4SLB1CU250 |
| 300       | 313.2  | 300    | 2      | VC4SLB1CU300 |
| 350       | 376.6  | 356.5  | 2      | VC4SLB1CU350 |

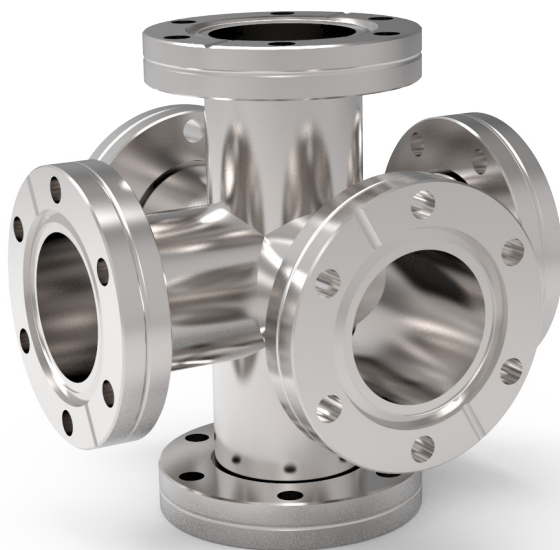
### Silver-Plated OFHC Copper

- Temperature range: -196 to 450 °C

| Size (DN) | A (mm) | B (mm) | C (mm) | Order No       |
|-----------|--------|--------|--------|----------------|
| 16        | 21.3   | 16     | 2      | VC4SLB1CU016-S |
| 25        | 32.8   | 25.5   | 2      | VC4SLB1CU025-S |
| 40        | 48.2   | 36.6   | 2      | VC4SLB1CU040-S |
| 50        | 61.6   | 50.8   | 2      | VC4SLB1CU050-S |
| 63        | 82.4   | 63.4   | 2      | VC4SLB1CU063-S |
| 75        | 91.4   | 76.3   | 2      | VC4SLB1CU075-S |
| 100       | 120.5  | 101.6  | 2      | VC4SLB1CU100-S |
| 125       | 141.4  | 127.1  | 2      | VC4SLB1CU125-S |
| 160       | 171.3  | 152.4  | 2      | VC4SLB1CU160-S |
| 200       | 222.1  | 203.3  | 2      | VC4SLB1CU200-S |
| 250       | 272.9  | 254    | 2      | VC4SLB1CU250-S |
| 300       | 313.2  | 300    | 2      | VC4SLB1CU300-S |
| 350       | 376.6  | 356.5  | 2      | VC4SLB1CU350-S |

# CF Fittings

This part consists of CF Fittings.  
Check out this section for products NW16-NW350

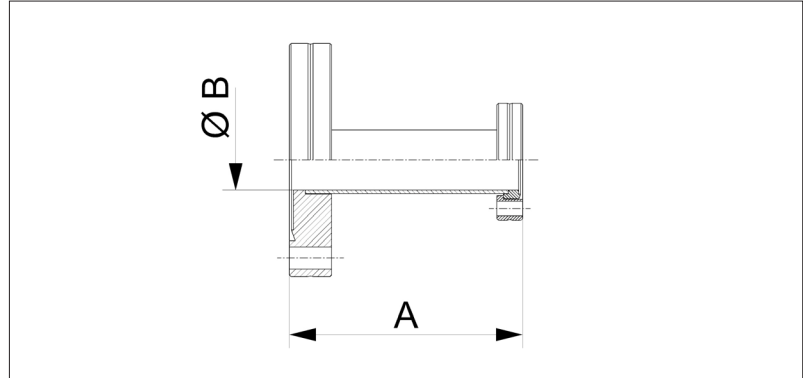


## CF Straight Reducer



- Feature a rotatable flange (reduced flange)
- Other nominal diameters and dimensions on request
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Flange Size (DN) | Reducer Flange Size (DN) | Tube Dimensions (mm) | A (mm) | B (mm) | Order No             |
|------------------|--------------------------|----------------------|--------|--------|----------------------|
| 40               | 16                       | 18x1                 | 70     | 16     | VC4FTA1SS040-016-70  |
| 63               | 16                       | 18x1                 | 70     | 16     | VC4FTA1SS063-016-70  |
| 63               | 40                       | 40x1.5               | 70     | 37     | VC4FTA1SS063-040-70  |
| 100              | 40                       | 40x1.5               | 70     | 37     | VC4FTA1SS100-040-70  |
| 100              | 63                       | 70x2                 | 70     | 66     | VC4FTA1SS100-063-70  |
| 160              | 40                       | 40x1.5               | 70     | 37     | VC4FTA1SS160-040-70  |
| 160              | 63                       | 70x2                 | 127    | 66     | VC4FTA1SS160-063-127 |
| 160              | 100                      | 108x2                | 127    | 104    | VC4FTA1SS160-100-127 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 300 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

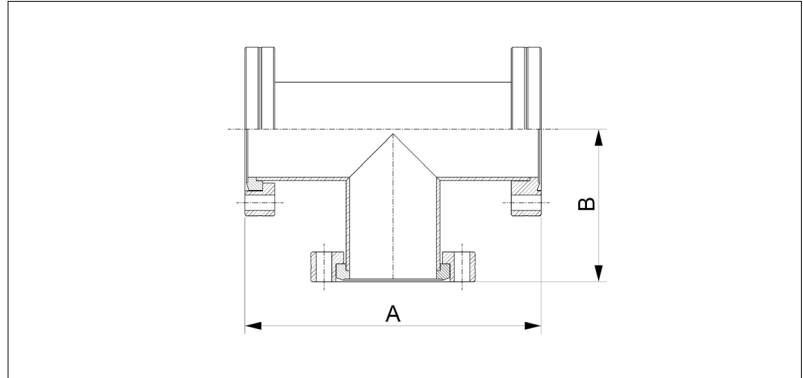
| Flange Size (DN) | Reducer Flange Size (DN) | Tube Dimensions (mm) | A (mm) | B (mm) | Order No             |
|------------------|--------------------------|----------------------|--------|--------|----------------------|
| 40               | 16                       | 18x1                 | 70     | 16     | VC4FTA2SS040-016-70  |
| 63               | 16                       | 18x1                 | 70     | 16     | VC4FTA2SS063-016-70  |
| 63               | 40                       | 40x1.5               | 70     | 37     | VC4FTA2SS063-040-70  |
| 100              | 40                       | 40x1.5               | 70     | 37     | VC4FTA2SS100-040-70  |
| 100              | 63                       | 70x2                 | 70     | 66     | VC4FTA2SS100-063-70  |
| 160              | 40                       | 40x1.5               | 70     | 37     | VC4FTA2SS160-040-70  |
| 160              | 63                       | 70x2                 | 127    | 66     | VC4FTA2SS160-063-127 |
| 160              | 100                      | 108x2                | 127    | 104    | VC4FTA2SS160-100-127 |

## CF Tee



- One fixed and two rotatable (one on each axis) flanges
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Flange Size (DN) | A (mm) | B (mm) | Order No         |
|------------------|--------|--------|------------------|
| 16               | 76     | 38     | VC4FTB1SS016-76  |
| 40               | 126    | 63     | VC4FTB1SS040-126 |
| 63               | 210    | 105    | VC4FTB1SS063-210 |
| 100              | 270    | 135    | VC4FTB1SS100-270 |
| 160              | 334    | 167    | VC4FTB1SS160-334 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

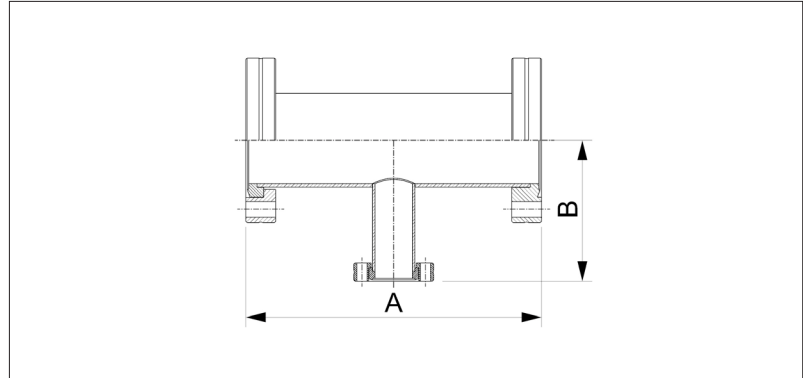
| Flange Size (DN) | A (mm) | B (mm) | Order No         |
|------------------|--------|--------|------------------|
| 16               | 76     | 38     | VC4FTB2SS016-76  |
| 40               | 126    | 63     | VC4FTB2SS040-126 |
| 63               | 210    | 105    | VC4FTB2SS063-210 |
| 100              | 270    | 135    | VC4FTB2SS100-270 |
| 160              | 334    | 167    | VC4FTB2SS160-334 |

## CF Reducer Tee



- One fixed and two rotatable (one on each axis) flanges
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | Order No             |
|------------------|--------------------------|--------|--------|----------------------|
| 40               | 16                       | 126    | 60     | VC4FTC1SS040-016-126 |
| 63               | 40                       | 210    | 77     | VC4FTC1SS063-040-210 |
| 100              | 40                       | 270    | 95     | VC4FTC1SS100-040-270 |
| 100              | 63                       | 270    | 95     | VC4FTC1SS100-063-270 |
| 160              | 40                       | 334    | 120    | VC4FTC1SS160-040-334 |
| 160              | 63                       | 334    | 120    | VC4FTC1SS160-063-334 |
| 160              | 100                      | 334    | 120    | VC4FTC1SS160-100-334 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

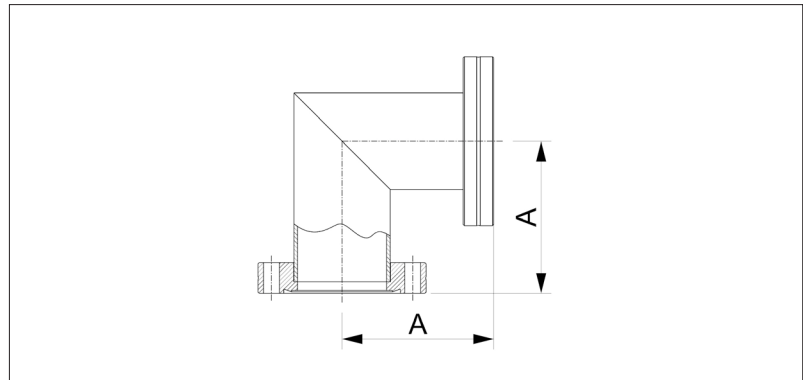
| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | Order No             |
|------------------|--------------------------|--------|--------|----------------------|
| 40               | 16                       | 126    | 60     | VC4FTC2SS040-016-126 |
| 63               | 40                       | 210    | 77     | VC4FTC2SS063-040-210 |
| 100              | 40                       | 270    | 95     | VC4FTC2SS100-040-270 |
| 100              | 63                       | 270    | 95     | VC4FTC2SS100-063-270 |
| 160              | 40                       | 334    | 120    | VC4FTC2SS160-040-334 |
| 160              | 63                       | 334    | 120    | VC4FTC2SS160-063-334 |
| 160              | 100                      | 334    | 120    | VC4FTC2SS160-100-334 |

## CF Elbow 90



- One end fixed and one end rotatable flanges
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Flange Size (DN) | A (mm) | Order No            |
|------------------|--------|---------------------|
| 16               | 38     | VC4FTD1SS016-90-38  |
| 40               | 63     | VC4FTD1SS040-90-63  |
| 63               | 105    | VC4FTD1SS063-90-105 |
| 100              | 135    | VC4FTD1SS100-90-135 |
| 160              | 167    | VC4FTD1SS160-90-167 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

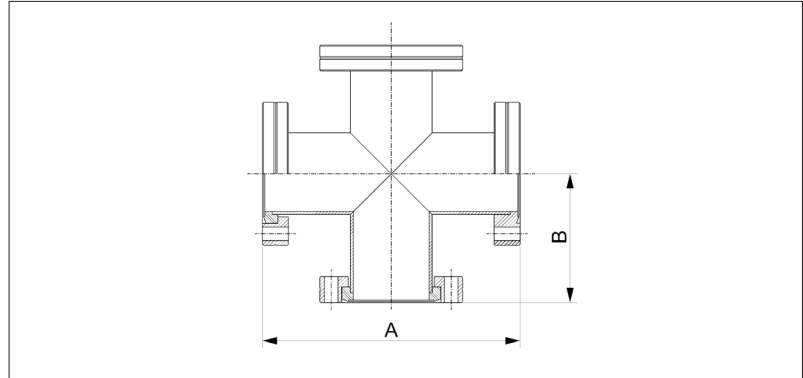
| Flange Size (DN) | A (mm) | Order No            |
|------------------|--------|---------------------|
| 16               | 38     | VC4FTD2SS016-90-38  |
| 40               | 63     | VC4FTD2SS040-90-63  |
| 63               | 105    | VC4FTD2SS063-90-105 |
| 100              | 135    | VC4FTD2SS100-90-135 |
| 160              | 167    | VC4FTD2SS160-90-167 |

## CF 4 Way Cross



- One rotatable flange per axis
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Flange Size (DN) | A (mm) | B (mm) | Order No         |
|------------------|--------|--------|------------------|
| 16               | 76     | 38     | VC4FTE1SS016-76  |
| 40               | 126    | 63     | VC4FTE1SS040-126 |
| 63               | 210    | 105    | VC4FTE1SS063-210 |
| 100              | 270    | 135    | VC4FTE1SS100-270 |
| 160              | 334    | 167    | VC4FTE1SS160-334 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

| Flange Size (DN) | A (mm) | B (mm) | Order No         |
|------------------|--------|--------|------------------|
| 16               | 76     | 38     | VC4FTE2SS016-76  |
| 40               | 126    | 63     | VC4FTE2SS040-126 |
| 63               | 210    | 105    | VC4FTE2SS063-210 |
| 100              | 270    | 135    | VC4FTE2SS100-270 |
| 160              | 334    | 167    | VC4FTE2SS160-334 |

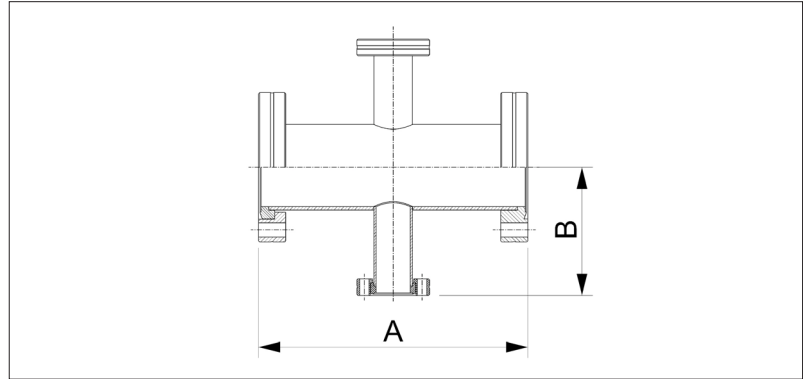


## CF 4 Way Reducer Cross



- One rotatable flange per axis
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | Order No             |
|------------------|--------------------------|--------|--------|----------------------|
| 40               | 16                       | 126    | 60     | VC4FTF1SS040-016-126 |
| 63               | 40                       | 210    | 77     | VC4FTF1SS063-040-210 |
| 100              | 40                       | 270    | 95     | VC4FTF1SS100-040-270 |
| 100              | 63                       | 270    | 95     | VC4FTF1SS100-063-270 |
| 160              | 40                       | 334    | 120    | VC4FTF1SS160-040-334 |
| 160              | 63                       | 334    | 120    | VC4FTF1SS160-063-334 |
| 160              | 100                      | 334    | 120    | VC4FTF1SS160-100-334 |

#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

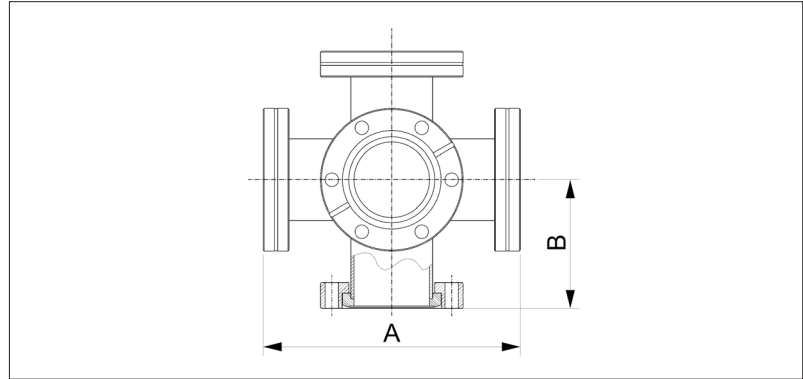
| Flange Size (DN) | Reducer Flange Size (DN) | A (mm) | B (mm) | Order No             |
|------------------|--------------------------|--------|--------|----------------------|
| 40               | 16                       | 126    | 60     | VC4FTF2SS040-016-126 |
| 63               | 40                       | 210    | 77     | VC4FTF2SS063-040-210 |
| 100              | 40                       | 270    | 95     | VC4FTF2SS100-040-270 |
| 100              | 63                       | 270    | 95     | VC4FTF2SS100-063-270 |
| 160              | 40                       | 334    | 120    | VC4FTF2SS160-040-334 |
| 160              | 63                       | 334    | 120    | VC4FTF2SS160-063-334 |
| 160              | 100                      | 334    | 120    | VC4FTF2SS160-100-334 |

## CF 5 Way Cross



- One rotatable flange per axis
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Flange Size (DN) | A (mm) | B (mm) | Order No         |
|------------------|--------|--------|------------------|
| 16               | 76     | 38     | VC4FTG1SS016-76  |
| 40               | 126    | 63     | VC4FTG1SS040-126 |
| 63               | 210    | 105    | VC4FTG1SS063-210 |
| 100              | 270    | 135    | VC4FTG1SS100-270 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

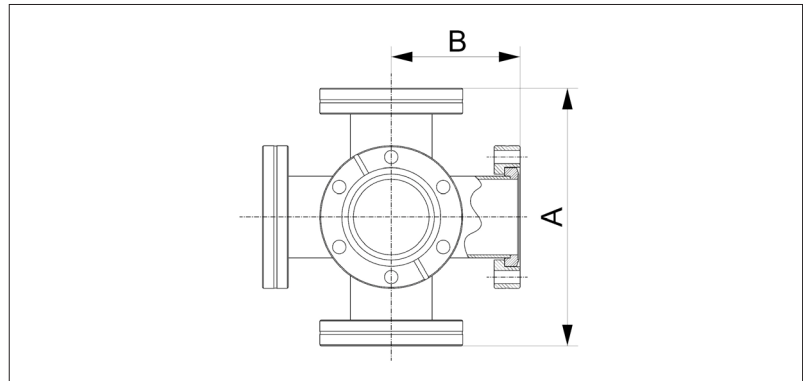
| Flange Size (DN) | A (mm) | B (mm) | Order No         |
|------------------|--------|--------|------------------|
| 16               | 76     | 38     | VC4FTG2SS016-76  |
| 40               | 126    | 63     | VC4FTG2SS040-126 |
| 63               | 210    | 105    | VC4FTG2SS063-210 |
| 100              | 270    | 135    | VC4FTG2SS100-270 |

## CF 6 Way Cross



- One rotatable flange per axis
- Pressure range:  $1 \cdot 10^{-12}$  mbar to ambient pressure
- Custom lengths available upon request
- Tube surface: Glass bead blasted (polished version on request)
- Tightness:  $\leq 1 \cdot 10^{-10}$  mbar l/s
- Bake out range is up to 450°C

### Dimensions



#### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Flange material: SS304 / 1.4301
- Tube material: SS304 / 1.4301

| Flange Size (DN) | A (mm) | B (mm) | Order No         |
|------------------|--------|--------|------------------|
| 16               | 76     | 38     | VC4FTH1SS016-76  |
| 40               | 126    | 63     | VC4FTH1SS040-126 |
| 63               | 210    | 105    | VC4FTH1SS063-210 |
| 100              | 270    | 135    | VC4FTH1SS100-270 |
| 160              | 334    | 167    | VC4FTH1SS160-334 |
| 200              | 406    | 203    | VC4FTH1SS200-406 |

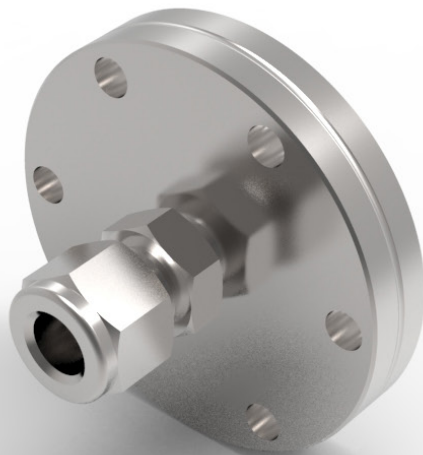
#### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C
- Flange material: SS316L / 1.4404
- Tube material: SS316L / 1.4404

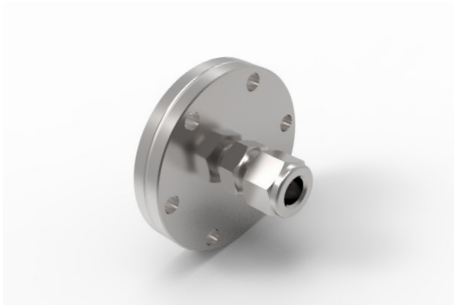
| Flange Size (DN) | A (mm) | B (mm) | Order No         |
|------------------|--------|--------|------------------|
| 16               | 76     | 38     | VC4FTH2SS016-76  |
| 40               | 126    | 63     | VC4FTH2SS040-126 |
| 63               | 210    | 105    | VC4FTH2SS063-210 |
| 100              | 270    | 135    | VC4FTH2SS100-270 |
| 160              | 334    | 167    | VC4FTH2SS160-334 |
| 200              | 406    | 203    | VC4FTH2SS200-406 |

# CF Adapters

This part consists of CF Adapter  
Check out this section for products NW16-NW350



## CF Swagelok® Adapter

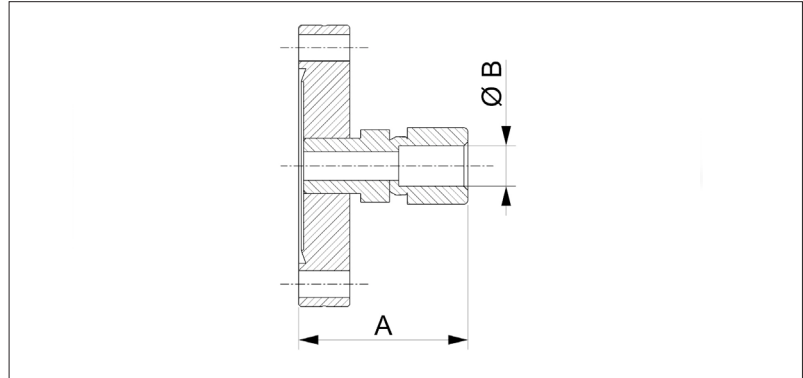


### Swagelok® Adapter

For metric and imperial (inch) pipe diameters

Pressure range:  $1 \cdot 10^{-9}$  mbar to 500 mbar to ambient pressure

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C
- Stainless Steel for Metric Tube Sizes

| Flange Size (DN) | A (mm) | B (mm) | Order No         |
|------------------|--------|--------|------------------|
| 16               | 39     | M6     | VC4ADA1SS016-M6  |
| 16               | 40     | M8     | VC4ADA1SS016-M8  |
| 40               | 39     | M6     | VC4ADA1SS040-M6  |
| 40               | 40     | M8     | VC4ADA1SS040-M8  |
| 40               | 42     | M10    | VC4ADA1SS040-M10 |
| 40               | 45     | M12    | VC4ADA1SS040-M12 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C
- Stainless Steel for Metric Tube Sizes

| Flange Size (DN) | A (mm) | B (mm) | Order No         |
|------------------|--------|--------|------------------|
| 16               | 39     | M6     | VC4ADA2SS016-M6  |
| 16               | 40     | M8     | VC4ADA2SS016-M8  |
| 40               | 39     | M6     | VC4ADA2SS040-M6  |
| 40               | 40     | M8     | VC4ADA2SS040-M8  |
| 40               | 42     | M10    | VC4ADA2SS040-M10 |
| 40               | 45     | M12    | VC4ADA2SS040-M12 |

**Stainless Steel 304/1.4301**

• Temperature range: -196 to 300 °C

• Stainless Steel for Metric Tube Sizes

| Flange Size (DN) | A (mm) | B (mm) | Order No        |
|------------------|--------|--------|-----------------|
| 16               | 32     | 1/8"   | VC4ADA1SS016-02 |
| 16               | 39     | 1/4"   | VC4ADA1SS016-03 |
| 40               | 41     | 1/4"   | VC4ADA1SS040-05 |
| 40               | 50     | 1/2"   | VC4ADA1SS040-03 |

**Stainless Steel 316L/1.4404**

• Temperature range: -196 to 350 °C

• Stainless Steel for Metric Tube Sizes

| Flange Size (DN) | A (mm) | B (mm) | Order No        |
|------------------|--------|--------|-----------------|
| 16               | 32     | 1/8"   | VC4ADA1SS016-02 |
| 16               | 39     | 1/4"   | VC4ADA1SS016-03 |
| 40               | 41     | 1/4"   | VC4ADA1SS040-05 |
| 40               | 50     | 1/2"   | VC4ADA1SS040-03 |

## CF Swagelok® VCR Adapter, Male



Swagelok® VCR adapter

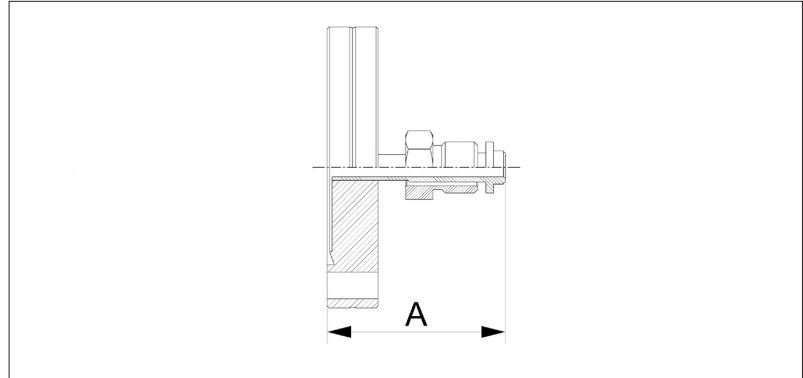
Pressure range: 1 · 10<sup>-11</sup> mbar to ambient pressure

Tightness: ≤ 1 · 10<sup>-10</sup> mbar l/s

Materials: Flange: Stainless steel 304L; VCR adapter: 316L/1.4404

Temperature range: -196 to 300 °C

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | A (mm) | VCR Connection | Order No           |
|------------------|--------|----------------|--------------------|
| 16               | 44     | 1/4"           | VC4ADB1SS016-03-44 |
| 16               | 47     | 1/2"           | VC4ADB1SS016-05-47 |
| 40               | 44     | 1/4"           | VC4ADB1SS040-03-44 |
| 40               | 47     | 1/2"           | VC4ADB1SS040-05-47 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | A (mm) | VCR Connection | Order No           |
|------------------|--------|----------------|--------------------|
| 16               | 44     | 1/4"           | VC4ADB2SS016-03-44 |
| 16               | 47     | 1/2"           | VC4ADB2SS016-05-47 |
| 40               | 44     | 1/4"           | VC4ADB2SS040-03-44 |
| 40               | 47     | 1/2"           | VC4ADB2SS040-05-47 |

## CF Swagelok® VCR Adapter, Female



Swagelok® VCR adapter

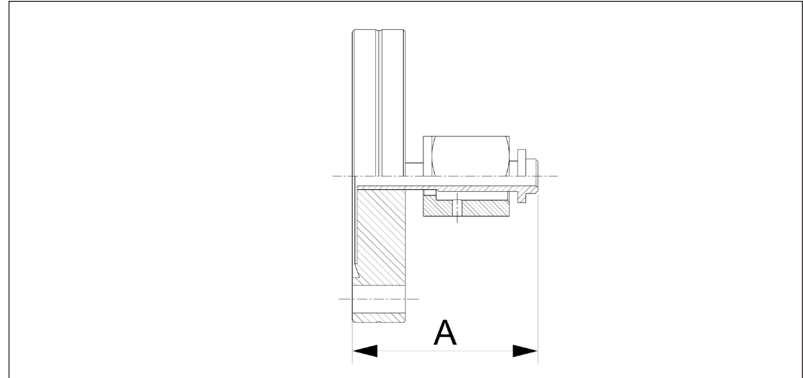
Pressure range: 1 · 10<sup>-11</sup> mbar to ambient pressure

Tightness: ≤ 1 · 10<sup>-10</sup> mbar l/s

Materials: Flange: Stainless steel 304L; VCR adapter: 316L/1.4404

Temperature range: -196 to 300 °C

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | A (mm) | VCR Connection | Order No           |
|------------------|--------|----------------|--------------------|
| 16               | 44     | 1/4"           | VC4ADC1SS016-03-44 |
| 16               | 47     | 1/2"           | VC4ADC1SS016-05-47 |
| 40               | 44     | 1/4"           | VC4ADC1SS040-03-44 |
| 40               | 47     | 1/2"           | VC4ADC1SS040-05-47 |

### Stainless Steel 316L/1.4404

- Temperature range: -196 to 350 °C

| Flange Size (DN) | A (mm) | VCR Connection | Order No           |
|------------------|--------|----------------|--------------------|
| 16               | 44     | 1/4"           | VC4ADC2SS016-03-44 |
| 16               | 47     | 1/2"           | VC4ADC2SS016-05-47 |
| 40               | 44     | 1/4"           | VC4ADC2SS040-03-44 |
| 40               | 47     | 1/2"           | VC4ADC2SS040-05-47 |



# CF Hoses

This part consists of CF Hose.

Check out this section for products NW16-NW350

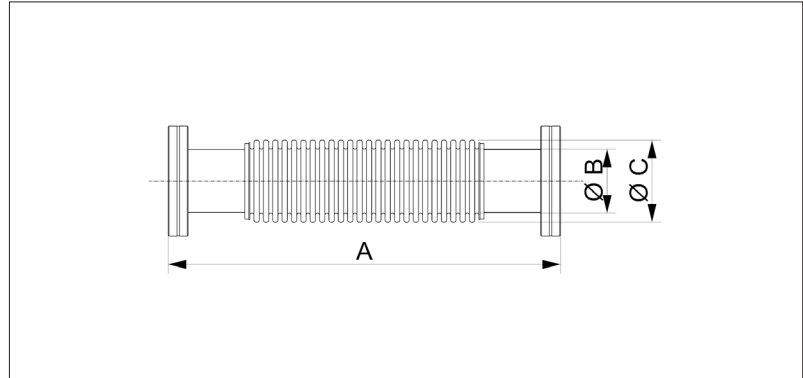


## CF Flexible Hose



- Custom lengths on request
- One flange rotatable
- Pressure range:  $1 \cdot 10^{-9}$  mbar to ambient pressure
- Materials:  
Stainless Steel 316L/1.4404

### Dimensions



### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Bend radius,<br>unique movement (mm) | Bend radius, often<br>unique movement (mm) | Order No          |
|------------------|--------|--------|--------|--------------------------------------|--------------------------------------------|-------------------|
| 16               | 250    | 12     | 17     | 50                                   | 200                                        | VC4HSA1SS016-250  |
| 16               | 500    | 12     | 17     | 50                                   | 200                                        | VC4HSA1SS016-500  |
| 16               | 750    | 12     | 17     | 50                                   | 200                                        | VC4HSA1SS016-750  |
| 16               | 1000   | 12     | 17     | 50                                   | 200                                        | VC4HSA1SS016-1000 |
| 16               | 1500   | 12     | 17     | 50                                   | 200                                        | VC4HSA1SS016-1500 |
| 40               | 250    | 37     | 52     | 130                                  | 250                                        | VC4HSA1SS040-250  |
| 40               | 500    | 37     | 52     | 130                                  | 250                                        | VC4HSA1SS040-500  |
| 40               | 750    | 37     | 52     | 130                                  | 250                                        | VC4HSA1SS040-750  |
| 40               | 1000   | 37     | 52     | 130                                  | 250                                        | VC4HSA1SS040-1000 |
| 40               | 1500   | 37     | 52     | 130                                  | 250                                        | VC4HSA1SS040-1500 |
| 63               | 250    | 65     | 81     | 200                                  | 410                                        | VC4HSA1SS063-250  |
| 63               | 500    | 65     | 81     | 200                                  | 410                                        | VC4HSA1SS063-500  |
| 63               | 750    | 65     | 81     | 200                                  | 410                                        | VC4HSA1SS063-750  |
| 63               | 1000   | 65     | 81     | 200                                  | 410                                        | VC4HSA1SS063-1000 |
| 63               | 1500   | 65     | 81     | 200                                  | 410                                        | VC4HSA1SS063-1500 |
| 100              | 250    | 100    | 119    | 230                                  | 560                                        | VC4HSA1SS100-250  |
| 100              | 500    | 100    | 119    | 230                                  | 560                                        | VC4HSA1SS100-500  |
| 100              | 750    | 100    | 119    | 230                                  | 560                                        | VC4HSA1SS100-750  |
| 100              | 1000   | 100    | 119    | 230                                  | 560                                        | VC4HSA1SS100-1000 |
| 100              | 1500   | 100    | 119    | 230                                  | 560                                        | VC4HSA1SS100-1500 |

**Stainless Steel 316L/1.4404**

- Temperature range: -196 to 350 °C

| Flange Size (DN) | A (mm) | B (mm) | C (mm) | Bend radius,<br>unique movement (mm) | Bend radius, often<br>unique movement (mm) | Order No          |
|------------------|--------|--------|--------|--------------------------------------|--------------------------------------------|-------------------|
| 16               | 250    | 12     | 17     | 50                                   | 200                                        | VC4HSA2SS016-250  |
| 16               | 500    | 12     | 17     | 50                                   | 200                                        | VC4HSA2SS016-500  |
| 16               | 750    | 12     | 17     | 50                                   | 200                                        | VC4HSA2SS016-750  |
| 16               | 1000   | 12     | 17     | 50                                   | 200                                        | VC4HSA2SS016-1000 |
| 16               | 1500   | 12     | 17     | 50                                   | 200                                        | VC4HSA2SS016-1500 |
| 40               | 250    | 37     | 52     | 130                                  | 250                                        | VC4HSA2SS040-250  |
| 40               | 500    | 37     | 52     | 130                                  | 250                                        | VC4HSA2SS040-500  |
| 40               | 750    | 37     | 52     | 130                                  | 250                                        | VC4HSA2SS040-750  |
| 40               | 1000   | 37     | 52     | 130                                  | 250                                        | VC4HSA2SS040-1000 |
| 40               | 1500   | 37     | 52     | 130                                  | 250                                        | VC4HSA2SS040-1500 |
| 63               | 250    | 65     | 81     | 200                                  | 410                                        | VC4HSA2SS063-250  |
| 63               | 500    | 65     | 81     | 200                                  | 410                                        | VC4HSA2SS063-500  |
| 63               | 750    | 65     | 81     | 200                                  | 410                                        | VC4HSA2SS063-750  |
| 63               | 1000   | 65     | 81     | 200                                  | 410                                        | VC4HSA2SS063-1000 |
| 63               | 1500   | 65     | 81     | 200                                  | 410                                        | VC4HSA2SS063-1500 |
| 100              | 250    | 100    | 119    | 230                                  | 560                                        | VC4HSA2SS100-250  |
| 100              | 500    | 100    | 119    | 230                                  | 560                                        | VC4HSA2SS100-500  |
| 100              | 750    | 100    | 119    | 230                                  | 560                                        | VC4HSA2SS100-750  |
| 100              | 1000   | 100    | 119    | 230                                  | 560                                        | VC4HSA2SS100-1000 |
| 100              | 1500   | 100    | 119    | 230                                  | 560                                        | VC4HSA2SS100-1500 |

# VACUUM CHAMBERS

This part consists of CF System.

Check out this section for products NW16-NW350

## Vacuum Chambers

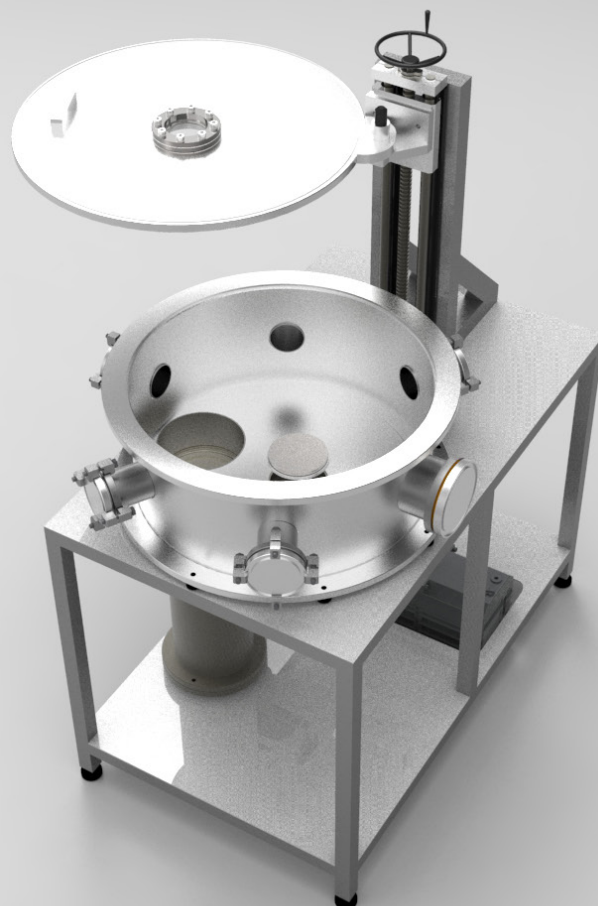
Vacuum systems contain multiple components. It is possible to connect vacuum components with detachable pipes or flexible hoses to the flanges on the vacuum chambers. We can design our vacuum chambers in the dimensions you want, include the vacuum components you want in the system, and make special designs for you.

Anadolu Vacuum manufactures products meticulously, based on quality production. It meets the high standards of vacuum technology and high degree of sealing with quality and clean production. Vacuum chambers and components can be modified to meet your needs, or we can find a custom solution to fulfill your needs. Leak tightness tests are carried out in all our vacuum chambers.



| Levels                    | Pressure Boundaries (mbar) | Pressure Boundaries (Pa) |
|---------------------------|----------------------------|--------------------------|
| Low Vacuum (LV)           | 1000-1                     | $10^5 - 10^2$            |
| Medium Vacuum (MV)        | $1 - 10^{-3}$              | $10^2 - 10^{-1}$         |
| High Vacuum (HV)          | $10^{-3} - 10^{-9}$        | $10^{-7} - 10^{-1}$      |
| Ultra-High Vacuum (UHV)   | $10^{-9} - 10^{-12}$       | $10^{-7} - 10^{-10}$     |
| Extreme High Vacuum (XHV) | $> 10^{-12}$               | $> 10^{-10}$             |

# Customized Vacuum Chambers



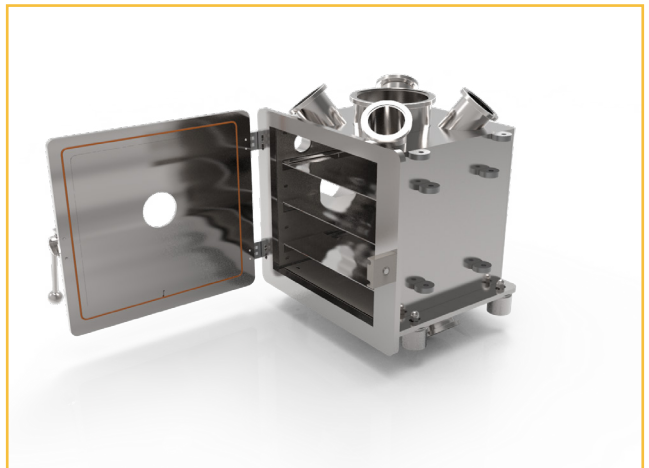
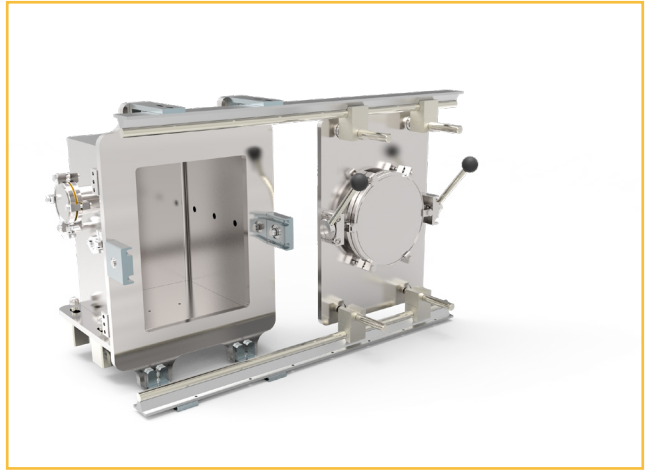
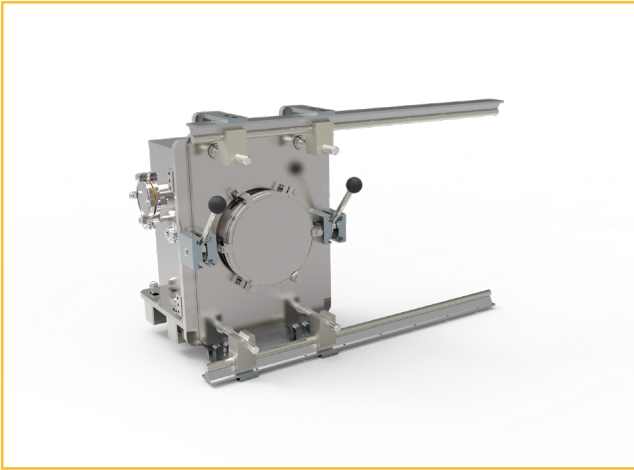
## Customized Vacuum Chambers

In addition to making quality production in special vacuum chambers in line with the demands of our customers, we can also make custom designs with our experienced R&D team.

In the vacuum chambers, pipes and flanges according to your needs; we can provide service with 1.4301/304 stainless steel, 1.4307/304L stainless steel and 1.4404/316L stainless steel materials.

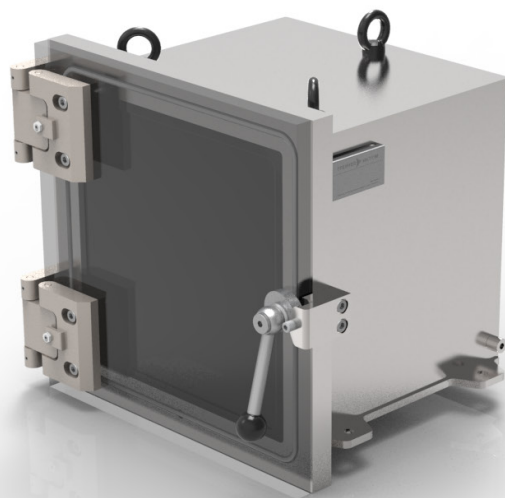
We carry out helium leak tests in all vacuum chambers.



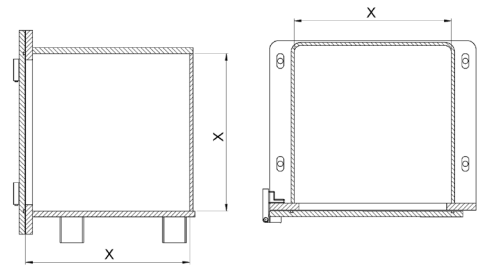




# High Vacuum Chambers



## High Vacuum Chamber, Cubical



### Product Description

- Cubical chamber body
- Door with hinges, locking mechanism and FKM seal
- Surface: inside and outside glass bead blasted
- Chamber with foot-plates and ring bolts
- Feet available separately
- Chamber ports available
- Helium leak test performed for quality assurance

### Technical Properties

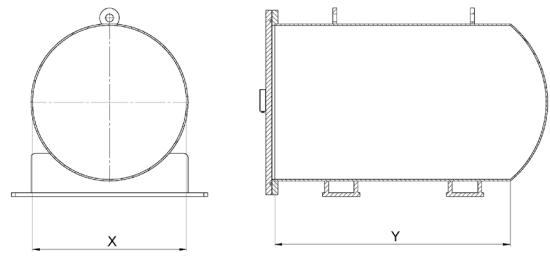
- Material: Chamber body and door made from stainless steel 304 (1.4301)
- Ultimate Pressure/Vacuum Level :  $1 \cdot 10^{-7}$  hPa
- Temperature Range: -15 – 150 °C
- Tightness:  $< 1 \cdot 10^{-9}$  Pa m<sup>3</sup>/s

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | X (mm) | Order No     |
|-----------|--------|--------------|
| 300       | 300    | VX1CB1SS0300 |
| 500       | 500    | VX1CB1SS0500 |
| 750       | 750    | VX1CB1SS0750 |

## High Vacuum Chamber, Horizontal



### Product Description

- Cylindrical, horizontal chamber body; back side welded dished end
- Stainless steel door with hinges, quick clamps and FKM-door seal
- Surface: inside and outside glass bead blasted
- Chamber with foot-plates and ring bolts
- Feet available separately
- Chamber ports available
- Helium leak test performed for quality assurance

### Technical Properties

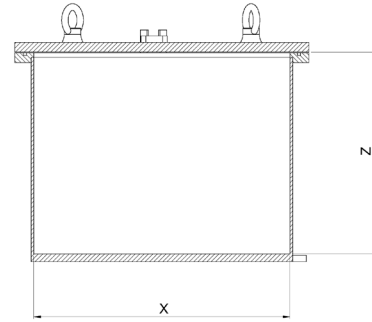
- Material: Chamber body and door made from stainless steel 304 (1.4301)
- Ultimate Pressure/Vacuum Level :  $1 \cdot 10^{-7}$  hPa
- Temperature Range: -15 – 150 °C
- Tightness:  $< 1 \cdot 10^{-9}$  Pa m<sup>3</sup>/s

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | X (mm) | Y (mm) | Order No         |
|-----------|--------|--------|------------------|
| 320       | 320    | 500    | VX1HR1SS0320-500 |
| 400       | 400    | 600    | VX1HR1SS0400-600 |
| 500       | 500    | 750    | VX1HR1SS0500-750 |
| 600       | 600    | 900    | VX1HR1SS0600-900 |

## High Vacuum Chamber, Vertical



### Product Description

- Cylindrical, vertical chamber body; welded flat bottom and top flange
- Stainless steel door with ring bolts and FKM-door seal for sealing
- Surface: inside and outside glass bead blasted
- Chamber with foot-plates and ring bolts
- Chamber ports available
- Helium leak test performed for quality assurance

### Technical Properties

- Material: Chamber body and door made from stainless steel 304 (1.4301)
- Ultimate Pressure/Vacuum Level :  $1 \cdot 10^{-7}$  hPa
- Temperature Range: -15 – 150 °C
- Tightness:  $< 1 \cdot 10^{-9}$  Pa m<sup>3</sup>/s

### Stainless Steel 304/1.4301

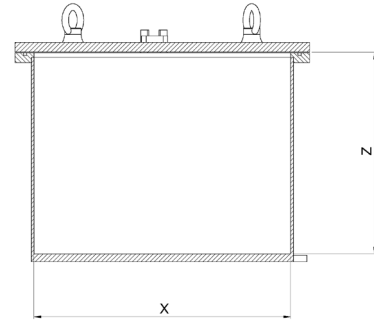
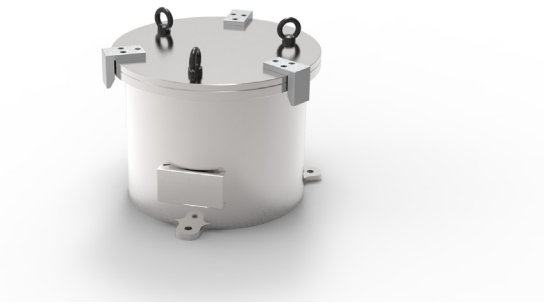
- Temperature range: -196 to 300 °C

| Size (DN) | X (mm) | Y (mm) | Order No         |
|-----------|--------|--------|------------------|
| 320       | 320    | 250    | VX1VR1SS0320-250 |
| 400       | 400    | 300    | VX1VR1SS0400-300 |
| 500       | 500    | 350    | VX1VR1SS0500-350 |
| 600       | 600    | 400    | VX1VR1SS0600-400 |

# Medium Vacuum Chambers



## Medium Vacuum Chamber, Vertical



### Product Description

- Cylindrical, vertical chamber body; welded flat bottom and top flange
- Acrylic glass cover (PMMA) with handles and FKM-door seal for sealing
- Surface: inside and outside glass bead blasted
- Chamber with mounting straps
- Chamber ports available
- Helium leak test performed for quality assurance

### Technical Properties

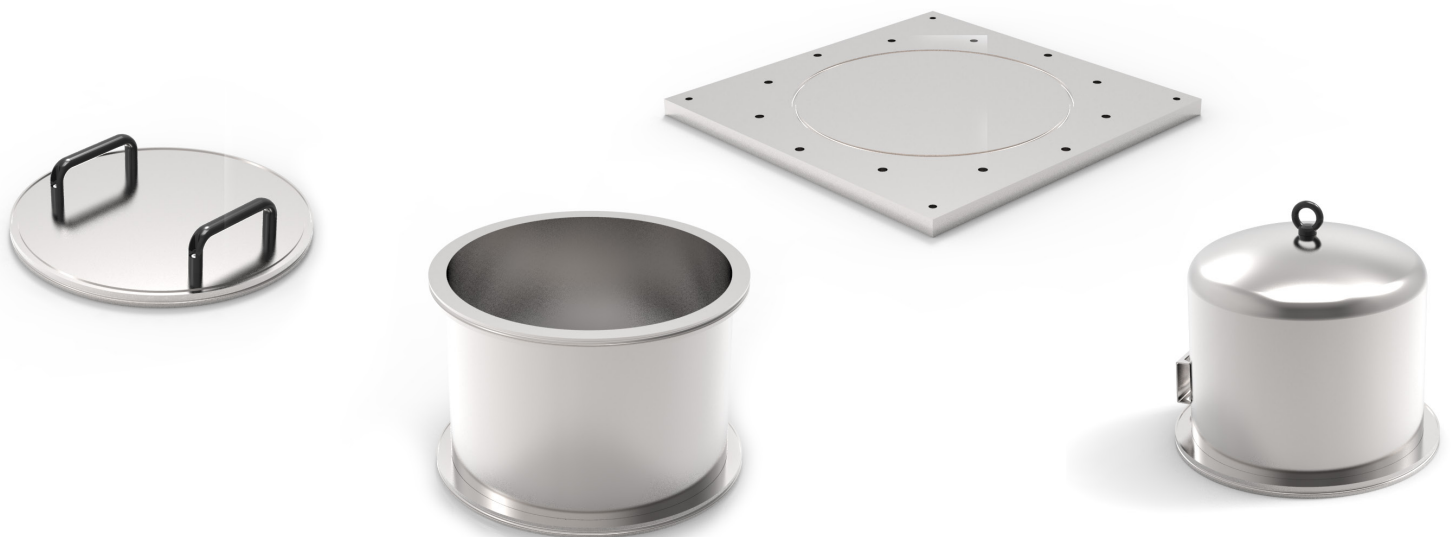
- Material: Chamber body made from stainless steel 304 (1.4301), chamber cover made from acrylic glass (PMMA)
- Ultimate Pressure/Vacuum Level :  $1 \cdot 10^{-5}$  hPa
- Temperature Range: -15 – 150 °C
- Tightness:  $< 1 \cdot 10^{-9}$  Pa m<sup>3</sup>/s

### Stainless Steel 304/1.4301

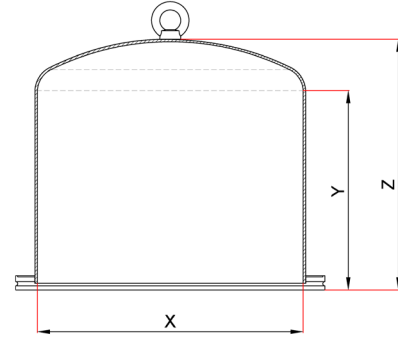
- Temperature range: -196 to 300 °C

| Size (DN) | X (mm) | Y (mm) | Order No         |
|-----------|--------|--------|------------------|
| 250       | 250    | 300    | VX2VR1SS0250-300 |
| 320       | 320    | 350    | VX2VR1SS0320-350 |
| 400       | 400    | 400    | VX2VR1SS0400-400 |

# Modular Vacuum Chambers



## Modular Vacuum Chamber, Bell



### Product Description

- Cylindrical, vertical chamber body; ISO-K base flange and back side welded dished end
- Surface: inside and outside glass bead blasted
- Eye bolt
- Chamber ports available
- Helium leak test performed for quality assurance

### Technical Properties

- Material: Chamber body and cover made from stainless steel 304 (1.4301)
- Pressure/Vacuum Level Range:  $1 \cdot 10^{-7}$  hPa –  $5 \cdot 10^2$  hPa over pressure
- Temperature Range: -15 – 150 °C
- Tightness:  $< 1 \cdot 10^{-9}$  Pa m<sup>3</sup>/s

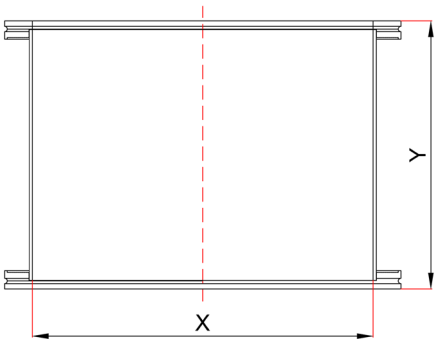
### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | X (mm) | Y (mm) | Z (mm) | Order No. (AISI 304) |
|-----------|--------|--------|--------|----------------------|
| 320 ISO-K | 318    | 235    | 300    | VX3BE1SS0320-300     |
| 400 ISO-K | 400    | 320    | 400    | VX3BE1SS0400-400     |
| 500 ISO-K | 500    | 400    | 500    | VX3BE1SS0500-500     |



# Modular Vacuum Chamber, Extension



## Product Description

- Cylindrical, vertical chamber body; both sides are welded to ISO-K base flange
- Surface: inside and outside glass bead blasted
- Chamber ports available
- Helium leak test performed for quality assurance

## Technical Properties

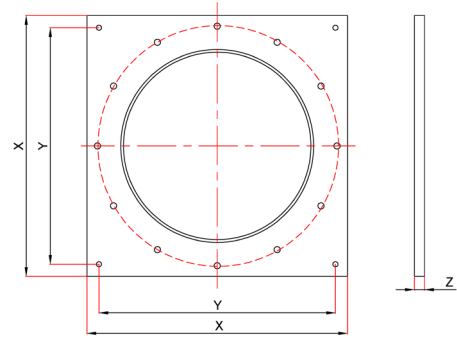
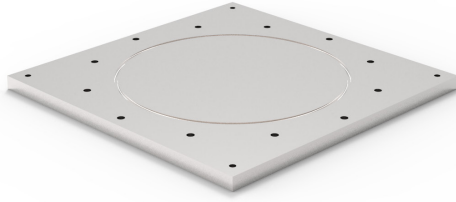
- Material: Chamber body and cover made from stainless steel 304 (1.4301)
- Pressure/Vacuum Level Range:  $1 \cdot 10^{-7}$  hPa –  $5 \cdot 10^2$  hPa over pressure
- Temperature Range: -15 – 150 °C
- Tightness:  $< 1 \cdot 10^{-9}$  Pa m³/s

## Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | X (mm) | Y (mm) | Order No. (AISI 304) |
|-----------|--------|--------|----------------------|
| 320 ISO-K | 318    | 250    | VX3EX1SS0320-250     |
| 400 ISO-K | 400    | 300    | VX3EX1SS0400-300     |
| 500 ISO-K | 500    | 400    | VX3EX1SS0500-400     |

## Modular Vacuum Chamber, Base Plate



### Product Description

- Square base plate with centering groove and sealing surface for an ISO-K centering ring and bolt circle with threaded holes for ISO-K claw clamps
- Fixing holes for easy mounting
- Ground surface

### Technical Properties

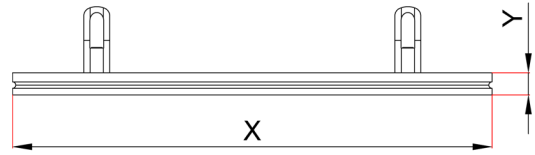
- Material: Chamber plate made from stainless steel 304 (1.4301)
- Pressure/Vacuum Level Range:  $1 \cdot 10^{-7}$  hPa –  $5 \cdot 10^2$  hPa over pressure
- Temperature Range: -15 – 150 °C
- Tightness:  $< 1 \cdot 10^{-9}$  Pa m<sup>3</sup>/s

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | X (mm) | Y (mm) | Z (mm) | Order No. (AISI 304) |
|-----------|--------|--------|--------|----------------------|
| 320 ISO-K | 430    | 390    | 20     | VX3BA1SS0320         |
| 400 ISO-K | 520    | 480    | 20     | VX3BA1SS0400         |
| 500 ISO-K | 620    | 580    | 20     | VX3BA1SS0500         |

## Modular Vacuum Chamber, Cover



### Product Description

- ISO-K blind flange with handles (DN 320) or eye bolts (DN 400/500)
- Smoothed surface

### Technical Properties

- Material: Chamber body and cover made from stainless steel 304 (1.4301)
- Pressure/Vacuum Level Range:  $1 \cdot 10^{-7}$  hPa –  $5 \cdot 10^2$  hPa over pressure
- Temperature Range: -15 – 150 °C
- Tightness:  $< 1 \cdot 10^{-9}$  Pa m<sup>3</sup>/s

### Stainless Steel 304/1.4301

- Temperature range: -196 to 300 °C

| Size (DN) | X (mm) | Y (mm) | Order No. (AISI 304) |
|-----------|--------|--------|----------------------|
| 320 ISO-K | 370    | 17     | VX3CO1SS0320         |
| 400 ISO-K | 450    | 17     | VX3CO1SS0400         |
| 500 ISO-K | 550    | 17     | VX3CO1SS0500         |

# Product List

Vacuum Components

Vacuum Chambers

ISO-KF

ISO-K/ISO-F

CF SYSTEMS

## ISO-KF System

|                                                            |    |
|------------------------------------------------------------|----|
| ISO-KF Short Half Flange.....                              | 17 |
| ISO-KF Long Half Flange .....                              | 19 |
| ISO-KF Full Flange.....                                    | 21 |
| ISO-KF Blanking Flange .....                               | 22 |
| ISO-KF Weld Ring Flange.....                               | 23 |
| ISO-KF Flange Caps (Plastics) .....                        | 24 |
| ISO-KF Seals Outer Centered.....                           | 26 |
| ISO-KF Seal Inner Centered .....                           | 28 |
| ISO-KF Seal Reducer Inner Centering .....                  | 32 |
| ISO-KF Seal Inner Centered with Mesh Screen .....          | 34 |
| ISO-KF Seal Inner Centered With Sintered Metal Filter..... | 35 |
| ISO-KF Edge Seal Outer Centered .....                      | 37 |
| ISO-KF Edge Seal One-Side Outer Centered .....             | 38 |
| ISO-KF Edge Seal Inner Centered.....                       | 39 |
| ISO-KF Edge Seal One-Side Inner Centered.....              | 40 |
| ISO-KF Outer Centering Outer Ring.....                     | 41 |
| ISO-KF Inner Centered Inner Ring.....                      | 42 |
| ISO-KF Seal Outer Centering Without Support.....           | 44 |
| ISO-KF O-ring.....                                         | 46 |
| ISO-KF Wingnut CNC Machined Clamp .....                    | 49 |
| ISO-KF Wingnut Casting Clamp.....                          | 51 |
| ISO-KF Claw (Wall) Clamp .....                             | 52 |
| ISO-KF Bulkhead Clamp.....                                 | 53 |
| ISO-KF Chain Clamp.....                                    | 54 |
| ISO-KF Bolt Clamp (2-Part).....                            | 55 |
| ISO-KF Straight Reducer .....                              | 57 |
| ISO-KF Conical Reducer.....                                | 59 |
| ISO-KF Tee .....                                           | 60 |
| ISO-KF Tee (Forging).....                                  | 61 |
| ISO-KF Reducer Tee .....                                   | 62 |
| ISO-KF 90 Radius Elbow .....                               | 63 |
| ISO-KF 45 Radius Elbow .....                               | 64 |
| ISO-KF 90 Elbow (Forging) .....                            | 65 |
| ISO KF 4 Way Cross .....                                   | 66 |
| ISO KF 4 Way Cross (Forging).....                          | 67 |

|                                                         |    |
|---------------------------------------------------------|----|
| ISO KF 5 Way Cross .....                                | 68 |
| ISO KF 6 Way Cross .....                                | 69 |
| ISO-KF Reducer Cross.....                               | 70 |
| ISO KF Hose Nozzle.....                                 | 72 |
| ISO-KF Adapter for Pvc Hose .....                       | 74 |
| ISO-KF Flange With Pipe Thread Male.....                | 75 |
| ISO-KF Flange with Pipe Thread Male and FKM Seal .....  | 76 |
| ISO-KF Flange With Pipe Thread Female.....              | 77 |
| ISO-KF Flange with Pipe Thread Female and FKM Seal..... | 78 |
| ISO-KF Flange With NPT Thread Male .....                | 79 |
| ISO-KF Flange With NPT Thread Female .....              | 80 |
| ISO-KF 90 Elbow with Hose Adapter.....                  | 81 |
| ISO-KF to CF Adapter .....                              | 82 |
| ISO-KF Swagelok Adapter.....                            | 83 |
| ISO-KF Vcr Adapter Female.....                          | 84 |
| ISO-KF Vcr Adapter Male.....                            | 85 |
| ISO-KF Flexible Hose .....                              | 87 |
| ISO-KF Flexible Hose Thin Wall .....                    | 89 |
| ISO-KF Flexible Hose, Sheathed.....                     | 91 |
| ISO-KF PVC Hose and Flanges.....                        | 93 |
| ISO-KF PVC Hose with Embedded Spring .....              | 94 |
| ISO-K Half Flange .....                                 | 98 |

## **ISO-K / ISO-F System**

|                                              |     |
|----------------------------------------------|-----|
| ISO-F Blanking Flange.....                   | 100 |
| ISO-K Full Flange .....                      | 101 |
| ISO-F Weld Ring Flange .....                 | 102 |
| ISO-F Measurement Flange.....                | 103 |
| ISO-K Blanking Flange .....                  | 104 |
| ISO-K Weld Ring Flange .....                 | 105 |
| ISO-K Rotatable Bolt Ring.....               | 107 |
| ISO-K to ISO-F Adapter Flange .....          | 108 |
| ISO-K Flange Caps .....                      | 109 |
| ISO-K Seal Inner Centered .....              | 111 |
| ISO-K Seal Inner Centered With Support ..... | 115 |

|                                                        |     |
|--------------------------------------------------------|-----|
| ISO-K Seal Inner Centered With Mesh Screen .....       | 119 |
| ISO-K Edge Seal Outer Centered .....                   | 120 |
| ISO-K/F O-ring .....                                   | 121 |
| ISO-F Screw Set.....                                   | 124 |
| ISO-K Double Claw Clamp .....                          | 125 |
| ISO-K Claw Clamp .....                                 | 126 |
| ISO-K Claw Clamp Casting.....                          | 127 |
| ISO-K Straight Reducer .....                           | 129 |
| ISO-K Conical Reducer.....                             | 130 |
| ISO-K Tee .....                                        | 131 |
| ISO-K Reducer Tee .....                                | 132 |
| ISO-K to KF Reducer Tee.....                           | 133 |
| ISO-K Elbow Radius 90 .....                            | 134 |
| ISO-K Elbow 90.....                                    | 135 |
| ISO-K 4 Way Cross .....                                | 136 |
| ISO-K Reducer Cross.....                               | 137 |
| ISO-K to KF Adapter Cross .....                        | 138 |
| ISO-K Flange With Pipe Thread and FKM Seal, Male ..... | 140 |
| ISO-K Hose Adapter .....                               | 141 |
| ISO-K Sleeve Adapter .....                             | 142 |
| ISO-K to KF Straight Adapter .....                     | 143 |
| ISO-K to KF Conical Adapter.....                       | 144 |
| ISO-K to CF Adapter .....                              | 145 |
| ISO-K Flexible Hose.....                               | 147 |
| ISO-K Flexible Hose, Annealed .....                    | 149 |
| ISO-K PVC Hose and Flanges.....                        | 151 |
| ISO-K PVC Hose With Embedded Spring.....               | 152 |

## **CF System**

|                                             |     |
|---------------------------------------------|-----|
| CF Half Flange.....                         | 156 |
| CF Half Flange with Thread .....            | 158 |
| CF Half Flange, Rotatable.....              | 160 |
| CF Half Flange, Rotatable with Thread ..... | 162 |
| CF Full Flange.....                         | 164 |
| CF Blanking Flange .....                    | 165 |
| CF Blanking Flange with Thread .....        | 167 |

|                                       |     |
|---------------------------------------|-----|
| CF Blanking Flange, Rotatable .....   | 169 |
| CF Weld Flange .....                  | 171 |
| CF Weld Flange with Thread.....       | 174 |
| CF Weld Flange, Rotatable .....       | 176 |
| CF Spacer Flange .....                | 179 |
| CF Spacer Flange with Bore Holes..... | 180 |
| CF Reducer Flange.....                | 181 |
| CF Flange Caps .....                  | 183 |
| CF Viewports .....                    | 185 |
| CF Elastomer Gasket .....             | 187 |
| CF Metal Gasket.....                  | 188 |
| CF Straight Reducer .....             | 191 |
| CF Tee .....                          | 192 |
| CF Reducer Tee .....                  | 193 |
| CF Elbow, 90 .....                    | 194 |
| CF 4 Way Cross .....                  | 195 |
| CF 4 Way Reducer Cross .....          | 196 |
| CF 5 Way Cross .....                  | 197 |
| CF 6 Way Cross .....                  | 198 |
| CF Swagelok® Adapter .....            | 200 |
| CF Swagelok® VCR Adapter, Male.....   | 202 |
| CF Swagelok® VCR Adapter, Female..... | 203 |

## **Vacuum Chambers**

|                                         |     |
|-----------------------------------------|-----|
| Customized Vacuum Chamber .....         | 210 |
| High Vacuum Chamber, Cubical .....      | 213 |
| High Vacuum Chamber, Horizontal.....    | 214 |
| High Vacuum Chamber, Vertical .....     | 215 |
| Medium Vacuum Chamber, Vertical .....   | 217 |
| Modular Vacuum Chamber, Bell.....       | 219 |
| Modular Vacuum Chamber, Extension ..... | 220 |
| Modular Vacuum Chamber, Base Plate..... | 221 |
| Modular Vacuum Chamber, Cover .....     | 222 |



**© ANADOLU VACUUM  
TECHNOLOGIES**

2025

Digital Publication Number  
#201025

All rights reserved.



## Contact Us

We are looking forward to starting our partnership through this Anadolu Vacuum product catalog.

**Get in touch today.**

# Anadolu

VACUUM TECHNOLOGIES



[www.anadoluvacuum.com](http://www.anadoluvacuum.com)