PRECESS VACUUM®
普瑞赛思 · Company

真空零配件

Vacuum Components

Company Introduction

Founded in 2019 Years – Located Beijing city, the capital of China. Global footprint China, Korea and America, PRECESS is a developer of high-performance vacuum valve, weld bellow and vacuum components. With the innovation and engineering excellence is the driving force of PRECESS' technology solutions and services. Customization on PRECESS product signifies our strong focus to provide customers solutions without compromise.

普瑞赛思 ® brand provides full portfolio of vacuum products in China.

Semiconductor BU – Control valve, transfer valve, ATM door, gate valve, pendulum valve, angle valve.

Solar & Display BU – Control valve, large transfer valve, ATM Door, pendulum valve, gate valve.

GVA and R&D BU – UHV gate valve and angle valve.

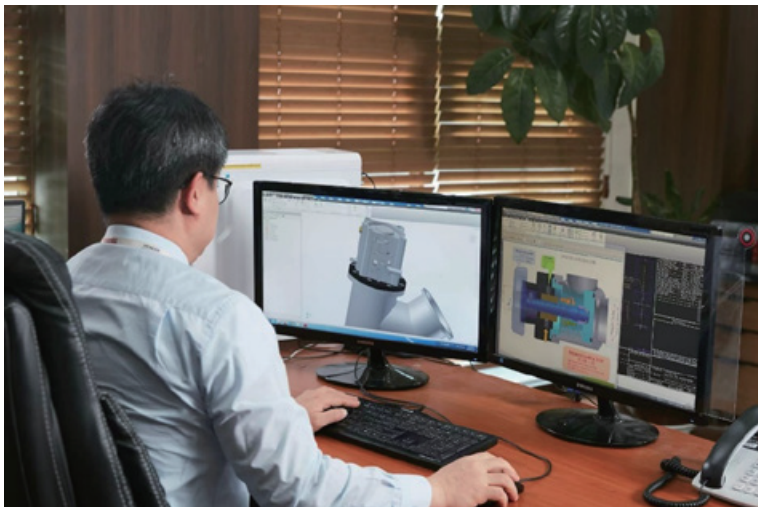
Our strength is the wide range of our product portfolio which comprises approximately 100 vales series with more than 1,500 customized and 1,000 standard products, high steady quality, short lead time, high experienced team. We have solutions for all vacuum levels from sub-atmospheric to extremely high vacuum (XHV).

Aim to be the world best, full portfolio of vacuum valve solution – Control valve, transfer valve, ATM door, gate valve, protection gate valve, pendulum valve, angle valve.

We focus on vacuum technology as our key competence. From the beginning, our approach was to work very closely with our customers. We have a deep knowledge of their industries, needs and expectations and develop new products accordingly. This is our passion for technology innovation.

Applications of our valve are semiconductor process, solar & display, industrial and R&D. Custom options include heating, water cooling, specialty coatings and seals.

After-sales service. Our service team is highly experienced and utilized well-established, proven process.



Product Portfolio – Valve Manufacturing

Manufacturing of vacuum valve

Manufacturing Environment

Form-die & Zig

We pride in our metal mold design, but also various types and sizes of metal molds. Among metal molds and ZIGs, welded metal bellows' sheet pressing metal molds require precise design, manufacture and management.

We are able to predict quality decline by recording and managing the number and time period of production according to the metal mold's serial number.

By taking proactive measures against these predictions, we are further able to preventquality problems. Because this is directly linked to the product's quality, price and competitiveness, only our experts are delegated the task of design and management.

Purity of Cleaning

Quality management regarding cleaning is treated equally with leakage as a critical quality point (CQP).

The aftertreatment processing of electrolytic polishing perfects, the purification of points not visible or touchable.

We have installed 2 systems (total 6 tanks) and D.I watering facilities as ultrasonic cleaners.

Purity of D.I. Water

We use hot D.I. water and ultrasonic cleaning system to block possibility of contamination-related defects.

Cleaning processing is applied to all the products we manufacture. For ultrasonic cleaning, products are separated by level of contamination into 6 different cleaning tanks.

We offer solution to various outgassing problems. Electrolytic polishing solution that has remained in gaps over time leaks or corrodes the interior, causing contamination and defects.

Type	Basis	Toc	UF	Absolute
0.22um	Standard	Standard	Standard	Standard
254/185nm UV Lamp	—	Standard	—	Standard
MW 5000 UF filter	—	—	Standard	Standard
Water Quality	—	—	—	—
Resistivity (at 25C)	18.2	18.2	18.2	18.2
TOC	5-10ppb	1-5ppb	5-10ppb	1-5ppb
Edotoxin(Progens)	—	—	—	—
Bacteria	<1cfu/mm	<1cfu/mm	<1cfu/mm	<1cfu/mm
Particles(0.2um)	<1/mm	<1/mm	<1/mm	<1/mm

Product Portfolio – Valve Manufacturing

Manufacturing of vacuum valve

Accuracy of Machining

Vacuum valve is our core product. We create, we machine process them with accuracy and precision as our principle. Our product parts meet the promised standard of excellence with our clients.

Management of Material

We have the quality of raw material, ratio of constituents and purity inspection. Especially, for the most important material of the welded bellows AM350, hastelloy-C, inconel and other special alloys, in case of durability and corrosion resistance, components ratios, purity we manufactured. It has a decisive influence on the quality of the finished product. We are responsible for quality control through periodic material. By doing this, to guarantee the quality of products, corrosion resistance, service life and reliability.

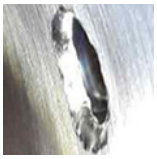
Accuracy of Welding

To minimize deformation from welding, we use optimal ZIG. Products requiring high precision are processed a secondary machining to correct for any deviation from the target measurement. In UHV and HV environment, we use the back bead welding process to manufacture vacuum pipes.

To prevent oxidation and minimize outgassing, we weld only after nitrogen charging.

Condition of Inside Welding

We check the interior welding status, which is the most important part of vacuum pipe quality control. We focus not only on the exterior condition of our products but also the interior, which directly affect product performance.



Back bead

Autogenous

Fillet

Contents

Classify	Specification	SIZE														
		10	16 (1.33")	20	25 (2.11")	40 (2.75")	50 (3.375")	63/65 (4.5")	80	100 (6")	125	160/150 (8")	200 (10")	250	320/350 (12")	400 (16")
FLANGE (BORED)	KF P.19	-	BBON016	-	BBON025	BBON040	BBON050	BBON063	BBON080	BBON100	BBON125	BBON160	-	-	-	-
	KF[SCH] P.19	-	BBON016F	-	BBON025F	BBON040F	BBON050F	BBON063F	BBON080F	BBON100F	BBON125F	BBON160F	-	-	-	-
	ISO-K(MF) P.20	-	-	-	-	-	-	BBOK063	BBOK080	BBOK100	BBOK125	BBOK160	BBOK200	BBOK250	BBOK320	BBOK400
	ISO-K(MF)[SCH] P.20	-	-	-	-	-	-	BBOK063F	BBOK080F	BBOK100F	BBOK125F	BBOK160F	BBOK200F	BBOK250F	BBOK320F	-
	ISO-F P.21	-	-	-	-	-	-	BBOF063	BBOF080	BBOF100	-	BBOF160	BBOF200	BBOF250	BBOF320	BBOF400
	ISO-F[SCH] P.21	-	-	-	-	-	-	BBOF063F	BBOF080F	BBOF100F	-	BBOF160F	BBOF200F	BBOF250F	BBOF320F	BBOF400F
	JIS-VF P.22	-	-	BBOJ020F	BBOJ025F	BBOJ040F	BBOJ050F	BBOJ065F	BBOJ080F	BBOJ100F	-	BBOJ150F	BBOJ200F	BBOJ250F	-	-
	JIS-VG P.23	-	-	BBOJ020G	BBOJ025G	BBOJ040G	BBOJ050G	BBOJ065G	BBOJ080G	BBOJ100G	-	BBOJ150G	BBOJ200G	BBOJ250G	-	-
	CF(Hole/Rot) P.25	-	BBOC13HR	-	BBOC21HR	BBOC27HR	BBOC33HR	BBOC45HR	-	BBOC06HR	-	BBOC08HR	BBOC10HR	-	BBOC12HR	BBOC14HR
	CF(Hole/Fix) P.24	-	BBOC13HF	-	BBOC21HF	BBOC27HF	BBOC33HF	BBOC45HF	-	BBOC06HF	-	BBOC08HF	BBOC10HF	-	BBOC12HF	BBOC14HF
	CF(Tap/Rot) P.25	-	BBOC13TR	-	BBOC21TR	BBOC27TR	BBOC33TR	BBOC45TR	-	BBOC06TR	-	BBOC08TR	BBOC10TR	-	BBOC12TR	BBOC14TR
	CF(Tap/Fix) P.24	-	BBOC13TF	-	BBOC21TF	BBOC27TF	BBOC33TF	BBOC45TF	-	BBOC06TF	-	BBOC08TF	BBOC10TF	-	BBOC12TF	BBOC14TF
	OFEC (oxygen-free electrolytic copper) P.26	-	BGAC13	-	-	BGAC27	BGAC33	BGAC45	-	BGAC06	-	BGAC08	BGAC10	-	BGAC12	BGAC14

Classify	Specification	SIZE														
		16 (1.33)	25 (2.11")	40 (2.75")	50 (3.375")	63 (4.5")	80	100 (6")	125	160	200	250	-	-	-	-
HALF NIPPLE [20L]	KF P.27	BHAN16	BHAN25	BHAN40	BHAN50	-	-	-	-	-	-	-	-	-	-	-
	KF[SCH] P.27	BHAN16F	BHAN25F	BHAN40F	BHAN50F	-	-	-	-	-	-	-	-	-	-	-
	ISO-K(MF) P.27	-	-	-	-	BHAK063	BHAK080	BHAK100	BHAK125	BHAK160	BHAK200	BHAK250	-	-	-	-
	ISO-K(MF)[SCH] P.27	-	-	-	-	BHAK063F	BHAK080F	BHAK100F	BHAK125F	BHAK160F	BHAK200F	BHAK250F	-	-	-	-
HALF NIPPLE [40L]	CF(Hole/Fix) P.28	CHAC13HF	CHAC21HF	CHAC27HF	CHAC33HF	CHAC45HF	-	CHAC06HF	-	CHAC08HF	CHAC10HF	-	-	-	-	-
	CF(Hole/Rota) P.28	CHAC13HR	CHAC21HR	CHAC27HR	CHAC33HR	CHAC45HR	-	CHAC06HR	-	CHAC08HR	CHAC10HR	-	-	-	-	-
	CF(Tap/Fix) P.28	CHAC13TF	CHAC21TF	CHAC27TF	CHAC33TF	CHAC45TF	-	CHAC06TF	-	CHAC08TF	CHAC10TF	-	-	-	-	-
	CF(Tap/Rota) P.28	CHAC13TR	CHAC21TR	CHAC27TR	CHAC33TR	CHAC45TR	-	CHAC06TR	-	CHAC08TR	CHAC10TR	-	-	-	-	-

Classify	Specification	SIZE														
		16 (1.33)	25 (2.11")	40 (2.75")	50 (3.375")	63 (4.5")	80	100 (6")	125	160 (8")	200 (10")	250	320/350 (12")	-	-	-
HALF NIPPLE[50L]	KF P.27	CHAN16	CHAN25	CHAN40	CHAN50	-	-	-	-	-	-	-	-	-	-	-
	KF[SCH] P.27	CHAN16F	CHAN25F	CHAN40F	CHAN50F	-	-	-	-	-	-	-	-	-	-	-
	ISO-K(MF) P.27	-	-	-	-	CHAK063	CHAK080	CHAK100	CHAK125	CHAK160	CHAK200	CHAK250	-	-	-	-
	ISO-K(MF)[SCH] P.27	-	-	-	-	CHAK063F	CHAK080F	CHAK100F	CHAK125F	CHAK160F	CHAK200F	CHAK250F	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Classify	Specification	SIZE														
		16(1.33)	40(2.75")	-	-	-	16	25	40	50	-	-	-	-	-	-
VCR/CF HALF NIPPLE [HOLE/FIX]	1/2-Female P.31	CHC13HF12F	CHC27HF12F	VCR/NW HALF NIPPLE		1/2-Female	CHAN1612F	CHAN2512F	CHAN4012F	CHAN5012F	-	-	-	-	-	-
	1/2-Male P.31	CHC13HF12M	CHC27HF12M			1/2-Male	CHAN1612M	CHAN2512M	CHAN4012M	CHAN5012M	-	-	-	-	-	-
	1/4-Female P.31	CHC13HF14F	CHC27HF14F			1/4-Female	CHAN1614F	CHAN2514F	CHAN4014F	CHAN5014F	-	-	-	-	-	-
	1/4-Male P.31	CHC13HF14M	CHC27HF14M			1/4-Male	CHAN1614M	CHAN2514M	CHAN4014M	CHAN5014M	-	-	-	-	-	-

Classify	Specification	SIZE															
		16 (1.33)	40 (2.75")	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VCR/CF HALF NIPPLE [TAP/FIX]	1/2-Female P.31	CHC13TF12F	CHC27TF12F	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/2-Male P.31	CHC13TF12M	CHC27TF12M	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/4-Female P.31	CHC13TF14F	CHC27TF14F	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/4-Male P.31	CHC13TF14M	CHC27TF14M	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Classify	Specification	SIZE															
		16 (1.33")	20	25 (2.11")	40 (2.75")	50 (3.375")	63/65 (4.5")	80	100 (6")	125	160/150 (8")	200 (10")	250	320/350 (12")	400 (16")	-	
ELBOW [90°C]	KF P.32	DELN016	-	DELN025	DELN040	DELN050	DELN063	DELN080	DELN100	-	-	-	-	-	-	-	
	ISO-K(MF) P.32	-	-	-	-	-	DELK063	DELK080	DELK100	DELK125	DELK160	DELK200	DELK250	-	-	-	
	ISO-F P.33	-	-	-	-	-	DELF063	DELF080	DELF100		DELF160	DELF200	DELF250	-	-	-	
	ISO-F(MITER) P.33	-	-	-	-	-	DELF063M	DELF080M	DELF100M		DELF160M	DELF200M	DELF250M	-	-	-	
	JIS-VF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	JIS-VG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	CF(2Hole/2Fix) P.33.34	DEL13HF	-	DEL21HF	DEL27HF	DEL33HF	DEL45HF	-	DEL06HF	-	-	-	-	-	-	-	
	CF(2Hole/2Rot) P.33.34	DEL13HR	-	DEL21HR	DEL27HR	DEL33HR	DEL45HR	-	DEL06HR	-	-	-	-	-	-	-	
	CF(2Hole/1Rot) P.33.34	DEL13HRX	-	DEL21HRX	DEL27HRX	DEL33HRX	DEL45HRX	-	DEL06HRX								
	CF(2Tap/2Fix) P.33.34	DEL13TF	-	DEL21TF	DEL27TF	DEL33TF	DEL45TF	-	DEL06TF	-	-	-	-	-	-	-	
	CF(2Tap/2Rot) P.33.34	DEL13TR	-	DEL21TR	DEL27TR	DEL33TR	DEL45TR	-	DEL06TR	-	-	-	-	-	-	-	
	CF(2Tap/1Rot) P.33.34	DEL13TRX	-	DEL21TRX	DEL27TRX	DEL33TRX	DEL45TRX	-	DEL06TRX	-	-	-	-	-	-	-	
	CF(1Tap/1Hole/1Rot) P.33.34	DEL13TRZ	-	DEL21TRZ	DEL27TRZ	DEL33TRZ	DEL45TRZ	-	DEL06TRZ	-	-	-	-	-	-	-	

Classify	Specification	SIZE															
		16 (1.33")	20	25 (2.11")	40 (2.75")	50 (3.375")	63/65 (4.5")	80	100 (6")	125	160/150 (8")	200 (10")	250	320/350 (12")	400 (16")	-	
ELBOW [45°C]	KF P.32	DELN016F	-	DELN025F	DELN040F	DELN050F	DELN063F	DELN080F	DELN100F	-	-	-	-	-	-	-	
	ISO-K(MF) P.32	-	-	-	-	-	DELK063F	DELK080F	DELK100F	DELK125F	DELK160F	DELK200F	DELK250F			-	
	ISO-F P.33	-	-				DELF063F	DELF080F	DELF100F	-	DELF160F	DELF200F	DELF250F	-	-	-	
	ISO-F(MITER)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	JIS-VF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	JIS-VG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	CF(2Hole/2Fix) P.35	DEL13HFF	-	DEL21HFF	DEL27HFF	DEL33HFF	DEL45HFF	-	DEL06HFF	-	-	-	-	-	-	-	
	CF(2Hole/2Rot) P.35	DEL13HRF	-	DEL21HRF	DEL27HRF	DEL33HRF	DEL45HRF	-	DEL06HRF	-	-	-	-	-	-	-	
	CF(2Hole/1Rot) P.35	DEL13HRFX	-	DEL21HRFX	DEL27HRFX	DEL33HRFX	DEL45HRFX	-	DEL06HRFX								
	CF(2Tap/2Fix) P.35	DEL13TFF	-	DEL21TFF	DEL27TFF	DEL33TFF	DEL45TFF	-	DEL06TFF	-	-	-	-	-	-	-	
	CF(2Tap/2Rot) P.35	DEL13TRF	-	DEL21TRF	DEL27TRF	DEL33TRF	DEL45TRF	-	DEL06TRF	-	-	-	-	-	-	-	
	CF(2Tap/1Rot) P.35	DEL13TRFX	-	DEL21TRFX	DEL27TRFX	DEL33TRFX	DEL45TRFX	-	DEL06TRFX	-	-	-	-	-	-	-	
	CF(1Tap/1Hole/1Rot) P.35	DEL13TRFZ	-	DEL21TRFZ	DEL27TRFZ	DEL33TRFZ	DEL45TRFZ	-	DEL06TRFZ	-	-	-	-	-	-	-	

Classify	Specification	SIZE														
		16	25	40	50	-	-	-	-	-	-	-	-	-	-	-
ELBOW [180°C]	KF P.36	DUEN16	DUEN25	DUEN40	DUEN50	-	-	-	-	-	-	-	-	-	-	-

Classify	Specification	SIZE														
		16 (1.33")	20	25 (2.11")	40 (2.75")	50 (3.375")	63/65 (4.5")	80	100 (6")	125	160/150 (8")	200 (10")	250	320/350 (12")	400 (16")	-
FULL NIPPLE	KF P.29	CFUN16	-	CFUN25	CFUN40	CFUN50	-	-	-	-	-	-	-	-	-	-
	ISO-K(MF) P.29	-	-	-	-	-	CFUK063	CFUK080	CFUK100	CFUK125	CFUK160	CFUK200	CFUK250	CFUK320	-	-
	ISO-F P.29	-	-	-			CFUF063	CFUF080	CFUF100		CFUF160	CFUF200	CFUF250	CFUF320	-	-
	JIS-VF P.29	-	CFUJ020	CFUJ025	CFUJ040	CFUJ050	CFUJ065	CFUJ080	CFUJ100	-	-	-	-	-	-	-
	JIS-VG P.30	-	CFUG020	CFUG025	CFUG040	CFUG050	CFUG065	CFUG080	CFUG100	-	-	-	-	-	-	-
	CF(2Hole/2Fix) P.30	CFUC13HF	-	CFUC21HF	CFUC27HF	CFUC33HF	CFUC45HF	-	CFUC06HF	-	-	-	-	-	-	-
	CF(2Hole/2Rot) P.30	CFUC13HR	-	CFUC21HR	CFUC27HR	CFUC33HR	CFUC45HR	-	CFUC06HR	-	-	-	-	-	-	-
	CF(2Hole/1Rot) P.30	CFUC13HRX	-	CFUC21HRX	CFUC27HRX	CFUC33HRX	CFUC45HRX	-	CFUC06HRX							
	CF(2Tap/2Fix) P.30	CFUC13TF	-	CFUC21TF	CFUC27TF	CFUC33TF	CFUC45TF	-	CFUC06TF	-	-	-	-	-	-	-
	CF(2Tap/2Rot) P.30	CFUC13TR	-	CFUC21TR	CFUC27TR	CFUC33TR	CFUC45TR	-	CFUC06TR	-	-	-	-	-	-	-
	CF(2Tap/1Rot) P.30	CFUC13TRX	-	CFUC21TRX	CFUC27TRX	CFUC33TRX	CFUC45TRX	-	CFUC06TRX	-	-	-	-	-	-	-
	CF(1Tap/1Hole/1Rot) P.30	CFUC13TRZ	-	CFUC21TRZ	CFUC27TRZ	CFUC33TRZ	CFUC45TRZ	-	CFUC06TRZ	-	-	-	-	-	-	-

Classify	Specification	SIZE														
		16/25(1.33/2.11)		40/50(2.75/3.375)		63(65)/80(4.5)		100/125(6")		160(150)/200(8")		250(10")			320/300(12")	-
CONICAL REDUCER	KF P.37	CCRN1625	CCRN2540	CCRN4050	-	CCRN6380	-	CCRN50100	CCRN80100	-	-	CCRN1650	CCRN2563	CCRN4063	-	-
		CCRN1640	CCRN2550		CCRN5063	-	-	CCRN63100	-	-	-	CCRN4080	CCRN5080		-	-
	ISO-K(MF) P.37	-	-	-	-	CCRK6380	CCRK63100	CCRK80100	CCRK80160	CCRK100160		CCRK63160	-	-	-	-
	ISO-F P.37	-	-	-	-	CCRF6380	CCRF63100	CCRF80100	CCRF80160	CCRF100160		CCRF63160	-	-	-	-
	JIS-VF P.38	CCRJ2040	CCRJ2540	CCRJ4050	CCRJ5065	CCRJ6580	-	CCRJ80100				-	-	-	-	-
	JIS-VG P.38	CCRG2040	CCRG2540	CCRG4050	CCRG5065	CCRG6580	-	CCRG80100				-	-	-	-	-
	CF(2Hole/2Fix) P.38	CCRC1321HF	CCRC2127HF	CCRC1327HF	CCRC2733HF	CCRC3345HF	CCRC2745HF	CCRC4506HF	-		-	CCRC1333HF	CCRC2133HF	CCRC2145HF	CCRC3306HF	-
	CF(2Hole/2Rot) P.38	CCRC1321HR	CCRC2127HR	CCRC1327HR	CCRC2733HR	CCRC3345HR	CCRC2745HR	CCRC4506HR	-		-	CCRC1333HR	CCRC2133HR	CCRC2145HR	CCRC3306HR	-
	CF(2Tap/2Fix) P.38	CCRC1321TF	CCRC2127TF	CCRC1327TF	CCRC2733TF	CCRC3345TF	CCRC2745TF	CCRC4506TF	-		-	CCRC1333TF	CCRC2133TF	CCRC2145TF	CCRC3306TF	-
	CF(2Tap/2Rot) P.38	CCRC1321TR	CCRC2127TR	CCRC1327TR	CCRC2733TR	CCRC3345TR	CCRC2745TR	CCRC4506TR	-		-	CCRC1333TR	CCRC2133TR	CCRC2145TR	CCRC3306TR	-

Classify	Specification	SIZE														
		16/25(1.33/2.11)		40/50(2.75/3.375)		63(65)/80(4.5)		100/125(6")		160(150)/200(8")		250(10")		320/300(12")		-
STRAIGHT REDUCER	KF P.39	CSCN1625	CSCN1650	CSCN2550	-		-		-	-	-	-	-	-	-	-
		CSCN1640	CSCN2540	CSCN4050		-	-	-	-	-	-	-	-	-	-	-
	ISO-K(MF) P.39	-	-	-	-	CSCK6380	CSCK63100	CSCK63160	CSCK80100	CSCK100160	CSCK160200	CSCK160250	CSCK200250			-
	ISO-F P.39	-	-	-	-	CSCF6380	CSCF63100	CSCF63160	CSCF80100	CSCF100160	CSCF160200	CSCF160250	CSCF200250		-	-
	JIS-VF P.39	CSCJ2040	CSCJ2540	CSCJ4050	CSCJ5065	CSCJ6580	-	CSCJ80100		CSCJ100150		CSCJ150200	CSCJ200250	CSCJ250300	-	-
	JIS-VG P.40	CSCG2040	CSCG2540	CSCG4050	CSCG5065	CSCG6580	-	CSCG80100		CSCG100150		CSCG150200	CSCG200250	CSCG250300	-	-
	CF(2Hole/2Fix) P.40	CSCC1321HF	CSCC2127HF	CSCC1327HF	CSCC2733HF	CSCC3345HF	CSCC2745HF	CSCC4506HF	-	CSCC0608HF	-	CSCC0810HF	-	CSCC1012HF	-	-
	CF(2Hole/2Rot) P.40	CSCC1321HR	CSCC2127HR	CSCC1327HR	CSCC2733HR	CSCC3345HR	CSCC2745HR	CSCC4506HR	-	CSCC0608HR	-	CSCC0810HR	-	CSCC1012HR	-	-
	CF(2Tap/2Fix) P.41	CSCC1321TF	CSCC2127TF	CSCC1327TF	CSCC2733TF	CSCC3345TF	CSCC2745TF	CSCC4506TF	-	CSCC0608TF	-	CSCC0810TF	-	CSCC1012TF	-	-
	CF(2Tap/2Rot) P.41	CSCC1321TR	CSCC2127TR	CSCC1327TR	CSCC2733TR	CSCC3345TR	CSCC2745TR	CSCC4506TR	-	CSCC0608TR	-	CSCC0810TR	-	CSCC1012TR	-	-

Classify	Specification	SIZE														
		16 (1.33")	20	25 (2.11")	40 (2.75")	50 (3.375")	63/65 (4.5")	80	100 (6")	125	160/150 (8")	200 (10")	250	320/350 (12")	400 (16")	-
TEE	KF P.42	CTEN016	-	CTEN025	CTEN040	CTEN050	CTEN063	CTEN080	CTEN100	-	-	-	-	-	-	-
	ISO-K(MF) P.42	-	-	-	-	-	CTEK063	CTEK080	CTEK100	CTEK125	CTEK160	CTEK200	CTEK250	-	-	-
	ISO-F P.42	-	-	-	-	-	CTEF063	CTEF080	CTEF100	-	CTEF160	CTEF200	CTEF250	-	-	-
	JIS-VF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	JIS-VG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CF(3Hole/3Fix) P.43	CTEC13HF	-	CTEC21HF	CTEC27HF	CTEC33HF	CTEC45HF	-	CTEC06HF	-	-	-	-	-	-	-
	CF(3Hole/3Rot) P.43	CTEC13HR	-	CTEC21HR	CTEC27HR	CTEC33HR	CTEC45HR	-	CTEC06HR	-	-	-	-	-	-	-
	CF(3Tap/3Fix) P.43	CTEC13TF	-	CTEC21TF	CTEC27TF	CTEC33TF	CTEC45TF	-	CTEC06TF	-	-	-	-	-	-	-
	CF(3Tap/3Rot) P.43	CTEC13TR	-	CTEC21TR	CTEC27TR	CTEC33TR	CTEC45TR	-	CTEC06TR	-	-	-	-	-	-	-

Classify	Specification	SIZE														
		16/25(1.33/2.11)		40/50(2.75/3.375)		63(4.5)/80		100(6")/125		160/200(8")		250(10")		320/300(12")		-
REDUCING TEE	KF P.44	CTEN2540	CTEN2550	CTEN4050	CTEN4063	CTEN5080	CTEN6380	CTEN50100	CTEN63100	-	-	-	-	-	-	-
		CTEN2563	-	CTEN4080	CTEN5063		-	CTEN80100	-	-	-	-	-	-	-	-
	ISO-K(MF) P.44	-	-	-	-	CTEK6380	-	CTEK63100	CTEK80100	-	-	-	-	-	-	-
	CF(3Hole/3Fix) P.45	CTEC2127HF	CTEC2133HF	CTEC2145HF	CTEC2733HF	CTEC2745HF	CTEC3345HF	CTEC3306HF	CTEC4506HF	-	-	-	-	-	-	-
	CF(3Hole/3Rot) P.45	CTEC2127HR	CTEC2133HR	CTEC2145HR	CTEC2733HR	CTEC2745HR	CTEC3345HR	CTEC3306HR	CTEC4506HR	-	-	-	-	-	-	-
	CF(3Tap/3Fix) P.45	CTEC2127TF	CTEC2133TF	CTEC2145TF	CTEC2733TF	CTEC2745TF	CTEC3345TF	CTEC3306TF	CTEC4506TF	-	-	-	-	-	-	-
	CF(3Tap/3Rot) P.45	CTEC2127TR	CTEC2133TR	CTEC2145TR	CTEC2733TR	CTEC2745TR	CTEC3345TR	CTEC3306TR	CTEC4506TR	-	-	-	-	-	-	-

Classify	Specification	SIZE														
		16 (1.33")	20	25 (2.11")	40 (2.75")	50 (3.375")	63/65 (4.5")	80	100 (6")	125	160/150 (8")	200 (10")	250	320/350 (12")	400 (16")	-
CROSS (4WAY)	KF P.46	CRON016	-	CRON025	CRON040	CRON050	CRON063	CRON080	CRON100	-	-	-	-	-	-	-
	ISO-K(MF) P.46	-	-	-	-	-	CROK063	CROK080	CROK100	-	-	-	-	-	-	-
	ISO-F P.46	-	-	-	-	-	CROF063	CROF080	CROF100	-	-	-	-	-	-	-
	JIS-VF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	JIS-VG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CF(4Hole/4Fix) P.47	CROC13HF	-	CROC21HF	CROC27HF	CROC33HF	CROC45HF	-	CROC06HF	-	-	-	-	-	-	-
	CF(4Hole/4Rot) P.47	CROC13HR	-	CROC21HR	CROC27HR	CROC33HR	CROC45HR	-	CROC06HR	-	-	-	-	-	-	-
	CF(4Tap/4Fix) P.48	CROC13TF	-	CROC21TF	CROC27TF	CROC33TF	CROC45TF	-	CROC06TF	-	-	-	-	-	-	-
	CF(4Tap/4Rot) P.48	CROC13TR	-	CROC21TR	CROC27TR	CROC33TR	CROC45TR	-	CROC06TR	-	-	-	-	-	-	-

Classify	Specification	SIZE														
		16 (1.33")	20	25 (2.11")	40 (2.75")	50 (3.375")	63/65 (4.5")	80	100 (6")	125	160/150 (8")	200 (10")	250	320/350 (12")	400 (16")	-
CROSS (5WAY)	KF P.46	CRO5N016	-	CRO5N025	CRO5N040	CRO5N050	CRO5N063	CRO5N080	CRO5N100	-	-	-	-	-	-	-
	ISO-K(MF) P.46	-	-	-	-	-	CRO5K063	CRO5K080	CRO5K100	-	-	-	-	-	-	-
	ISO-F P.46	-	-	-	-	-	CRO5F063	CRO5F080	CRO5F100	-	-	-	-	-	-	-
	JIS-VF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	JIS-VG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CF(5Hole/5Fix) P.47	CRO5C13HF	-	CRO5C21HF	CRO5C27HF	CRO5C33HF	CRO5C45HF	-	CRO5C06HF	-	-	-	-	-	-	-
	CF(5Hole/5Rot) P.47	CRO5C13HR	-	CRO5C21HR	CRO5C27HR	CRO5C33HR	CRO5C45HR	-	CRO5C06HR	-	-	-	-	-	-	-
	CF(5Tap/5Fix) P.48	CRO5C13TF	-	CRO5C21TF	CRO5C27TF	CRO5C33TF	CRO5C45TF	-	CRO5C06TF	-	-	-	-	-	-	-
	CF(5Tap/5Rot) P.48	CRO5C13TR	-	CRO5C21TR	CRO5C27TR	CRO5C33TR	CRO5C45TR	-	CRO5C06TR	-	-	-	-	-	-	-

Classify	Specification	SIZE														
		16 (1.33")	20	25 (2.11")	40 (2.75")	50 (3.375")	63/65 (4.5")	80	100 (6")	125	160/150 (8")	200 (10")	250	320/350 (12")	400 (16")	-
CROSS (6WAY)	KF P.46	CRO6N016	-	CRO6N025	CRO6N040	CRO6N050	CRO6N063	CRO6N080	CRO6N100	-	-	-	-	-	-	-
	ISO-K(MF) P.46	-	-	-	-	-	CRO6K063	CRO6K080	CRO6K100	-	-	-	-	-	-	-
	ISO-F P.46	-	-	-	-	-	CRO6F063	CRO6F080	CRO6F100	-	-	-	-	-	-	-
	JIS-VF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	JIS-VG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CF(6Hole/6Fix) P.47	CRO6C13HF	-	CRO6C21HF	CRO6C27HF	CRO6C33HF	CRO6C45HF	-	CRO6C06HF	-	-	-	-	-	-	-
	CF(6Hole/6Rot) P.47	CRO6C13HR	-	CRO6C21HR	CRO6C27HR	CRO6C33HR	CRO6C45HR	-	CRO6C06HR	-	-	-	-	-	-	-
	CF(6Tap/6Fix) P.48	CRO6C13TF	-	CRO6C21TF	CRO6C27TF	CRO6C33TF	CRO6C45TF	-	CRO6C06TF	-	-	-	-	-	-	-
	CF(6Tap/6Rot) P.48	CRO6C13TR	-	CRO6C21TR	CRO6C27TR	CRO6C33TR	CRO6C45TR	-	CRO6C06TR	-	-	-	-	-	-	-

Classify	Specification	SIZE[KF]														
		16	20	25	40	50	63	80	100	125	160/150 (8")	200(10")	250	320/350 (12")	400 (16")	-
ADAPTOR (NW to CF)	CF1.33 P.49	CANC1613	-	CANC2513	CANC4013	CANC5013	-	-	-	-	-	-	-	-	-	-
	CF2.75 P.49	CANC1627	-	CANC2527	CANC4027	CANC5027	-	-	-	-	-	-	-	-	-	-
	CF4.5 P.49	-	-	CANC2545	CANC4045	CANC5045	-	-	-	-	-	-	-	-	-	-
	CF6.0 P.49	CANC1606	-	CANC2506	CANC4006	CANC5006	-	-	-	-	-	-	-	-	-	-
	CF8.0 P.49	-	-	CANC2508	CANC4008	CANC5008	-	-	-	-	-	-	-	-	-	-

Classify	Specification	SIZE[KF]														
		16	20	25	40	50	63	80	100	125	160/150 (8")	200(10")	250	320/350 (12")	400 (16")	-
ADAPTOR (ISO-K to CF)	CF4.5 P.49	-	-	-	-	-	CAKC6345	-	-	-	-	-	-	-	-	-
	CF6.0 P.49	-	-	-	-	-	-	CAKC8006	CAKC10006	-	-	-	-	-	-	-
	CF8.0 P.49	-	-	-	-	-	-	-	-	-	CAKC16008	-	-	-	-	-
	CF10.0 P.49	-	-	-	-	-	-	-	-	-	-	CAKC20010	-	-	-	-

Classify	Specification	SIZE[KF]														
		16	20	25	40	50	63	80	100	125	160/150 (8")	200 (10")	250	320/350 (12")	400 (16")	-
ADAPTOR (NW to ISO-K)	63[ISO-K] P.50	CANK1663	-	CANK2563	CANK4063	CANK5063	-	-	-	-	-	-	-	-	-	-
	80[ISO-K] P.50	CANK1680	-	CANK2580	CANK4080	CANK5080	-	-	-	-	-	-	-	-	-	-
	100[ISO-K] P.50	CANK16100	-	CANK25100	CANK40100	CANK50100	-	-	-	-	-	-	-	-	-	-

Classify	Specification	SIZE[KF]														
		16	20	25	40	50	63	80	100	125	160/150 (8")	200(10")	250	320/350 (12")	400 (16")	-
ADAPTOR (NW to ISO-F)	63[ISO-F] P.50	CANF1663	-	CANF2563	CANF4063	CANF5063	-	-	-	-	-	-	-	-	-	-
	80[ISO-F] P.50	CANF1680	-	CANF2580	CANF4080	CANF5080	-	-	-	-	-	-	-	-	-	-
	100[ISO-F] P.50	CANF16100	-	CANF25100	CANF40100	CANF50100	-	-	-	-	-	-	-	-	-	-

Classify	Specification	SIZE[ISO-F]														
		16	20	25	40	50	63	80	100	125	160/150 (8")	200(10")	250	320/350 (12")	400 (16")	-
ADAPTOR (ISO-F to CF)	CF4.5[Rotatable] P.49	-	-	-	-	-	CAFC6345	-	-	-	-	-	-	-	-	-
	CF6.0[Rotatable] P.49	-	-	-	-	-	-	CAFC8006	CAFC10006	-	-	-	-	-	-	-
	CF8.0[Rotatable] P.49	-	-	-	-	-	-	-	-	-	CAFC16008	-	-	-	-	-
	CF10.0[Rotatable] P.49	-	-	-	-	-	-	-	-	-	-	CAFC20010	-	-	-	-

Classify	Specification	SIZE[JIS-VF]														
		16	20	25	40	50	65	80	100	125	160/150 (8")	200 (10")	250	320/350 (12")	400 (16")	-
ADAPTOR [JIS-VF to VG]	20[JIS-VG] P.51	-	CAJG2020	CAJG2520	CAJG4020	CAJG5020	CAJG6520	CAJG8020	CAJG10020	-	CAJG15020	-	-	-	-	-
	25[JIS-VG] P.51	-	CAJG2025	CAJG2525	CAJG4025	CAJG5025	CAJG6525	CAJG8025	CAJG10025	-	CAJG15025	-	-	-	-	-
	40[JIS-VG] P.51	-	CAJG2040	CAJG2540	CAJG4040	CAJG5040	CAJG6540	CAJG8040	CAJG10040	-	CAJG15040	-	-	-	-	-
	50[JIS-VG] P.51	-	CAJG2050	CAJG2550	CAJG4050	CAJG5050	CAJG6550	CAJG8050	CAJG10050	-	CAJG15050	-	-	-	-	-
	65[JIS-VG] P.51	-	CAJG2065	CAJG2565	CAJG4065	CAJG5065	CAJG6565	CAJG8065	CAJG10065	-	CAJG15065	-	-	-	-	-
	80[JIS-VG] P.51	-	CAJG2080	CAJG2580	CAJG4080	CAJG5080	CAJG6580	CAJG8080	CAJG10080	-	CAJG15080	-	-	-	-	-
	100[JIS-VG] P.51	-	CAJG20100	CAJG25100	CAJG40100	CAJG50100	CAJG65100	CAJG80100	CAJG100100	-	CAJG150100	-	-	-	-	-
	150[JIS-VG] P.51	-	CAJG20150	CAJG25150	CAJG40150	CAJG50150	CAJG65150	CAJG80150	CAJG100150	-	CAJG150150	-	-	-	-	-

Classify	Specification	SIZE[CF/Rotatable]														
		16 (1.33")	20	25 (2.11")	40 (2.75")	50 (3.375")	63/65 (4.5")	80	100 (6")	125	160/150 (8")	200 (10")	250	320/350 (12")	400 (16")	-
ADAPTOR [JIS-VF to CF]	20[JIS-VF] P.52	CACJ1320	-	-	CACJ2720	-	CACJ4520	-	CACJ0620	-	CACJ0820	-	-	-	-	-
	25[JIS-VF] P.52	CACJ1325	-	-	CACJ2725	-	CACJ4525	-	CACJ0625	-	CACJ0825	-	-	-	-	-
	40[JIS-VF] P.52	CACJ1340	-	-	CACJ2740	-	CACJ4540	-	CACJ0640	-	CACJ0840	-	-	-	-	-
	50[JIS-VF] P.52	CACJ1350	-	-	CACJ2750	-	CACJ4550	-	CACJ0650	-	CACJ0850	-	-	-	-	-
	65[JIS-VF] P.52	CACJ1365	-	-	CACJ2765	-	CACJ4565	-	CACJ0665	-	CACJ0865	-	-	-	-	-
	80[JIS-VF] P.52	CACJ1380	-	-	CACJ2780	-	CACJ4580	-	CACJ0680	-	CACJ0880	-	-	-	-	-
	100[JIS-VF] P.52	CACJ13100	-	-	CACJ27100	-	CACJ45100	-	CACJ06100	-	CACJ08100	-	-	-	-	-
	150[JIS-VF] P.52	CACJ13150	-	-	CACJ27150	-	CACJ45150	-	CACJ06150	-	CACJ08150	-	-	-	-	-

Classify	Specification	SIZE[JIS-VF]														
		16	20	25	40	50	65	80	100	125	160/150 (8")	200 (10")	250	320/350 (12")	400 (16")	-
ADAPTOR [JIS-VF to NW]	16[NW] P.53	-	CAJN2016	CAJN2516	CAJN4016	CAJN5016	CAJN5016	CAJN8016	CAJN10016	-	CAJN15016	-	-	-	-	-
	25[NW] P.53	-	CAJN2025	CAJN2525	CAJN4025	CAJN5025	CAJN5025	CAJN8025	CAJN10025	-	CAJN15025	-	-	-	-	-
	40[NW] P.53	-	CAJN2040	CAJN2540	CAJN4040	CAJN5040	CAJN5040	CAJN8040	CAJN10040	-	CAJN15040	-	-	-	-	-
	50[NW] P.53	-	CAJN2050	CAJN2550	CAJN4050	CAJN5050	CAJN5050	CAJN8050	CAJN10050	-	CAJN15050	-	-	-	-	-

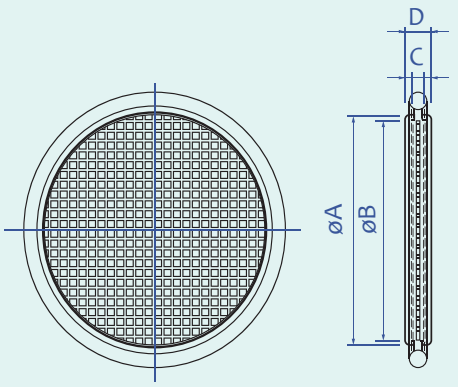
Classify	Specification	SIZE														
		16	25	40	50	-	-	-	-	-	-	-	-	-	-	-
HOSE NIPPLE	KF P.54	CHNN16	CHNN25	CHNN040	CHNN50	-	-	-	-	-	-	-	-	-	-	-

Classify	Specification	SIZE														
		16	25	40	50	-	-	-	-	-	-	-	-	-	-	-
TEST PORT	KF P.55	CTPN16	CTPN25	CTPN40	CTPN50	-	-	-	-	-	-	-	-	-	-	-

CENTER-RING

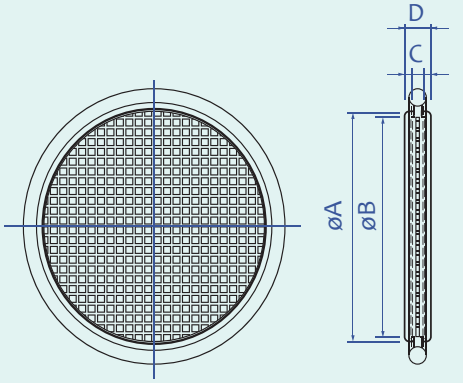
■ CENTER-RING, MESH 60#

P/N	SIZE	ØA	ØB	C	D	#60
ACRM016T	NW16	17	15	3.8	8	
ACRM025T	NW25	26	23.5	3.8	8	
ACRM040T	NW40	41	38.5	3.8	8	
ACRM050T	NW50	52	50	3.8	8	
ACRM063T	ISO63	69.9	68	3.8	8	
ACRM080T	ISO80	82.8	81.2	4	8	
ACRM100T	ISO100	101.7	99.7	3.9	8	
ACRM125T	ISO125	126.9	123	3.9	8	
ACRM160T	ISO160	152.5	150	3.9	8	
ACRM200T	ISO200	212.5	210	3.9	8	
ACRM250T	ISO250	261	258	3.9	8	
ACRM320T	ISO320	316	311	5	13	



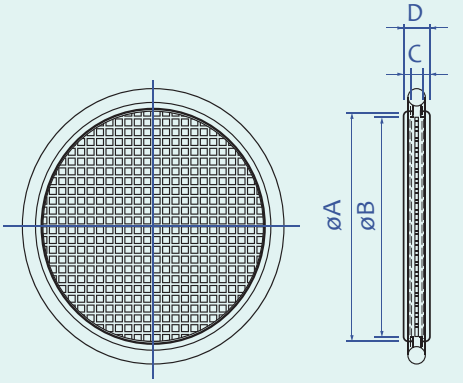
■ CENTER-RING, MESH 40#

P/N	SIZE	ØA	ØB	C	D	#40
ACRM016S	NW16	17	15	3.8	8	
ACRM025S	NW25	26	23.5	3.8	8	
ACRM040S	NW40	41	38.5	3.8	8	
ACRM050S	NW50	52	50	3.8	8	
ACRM063S	ISO63	69.9	68	3.8	8	
ACRM080S	ISO80	82.8	81.2	4	8	
ACRM100S	ISO100	101.7	99.7	3.9	8	
ACRM125S	ISO125	126.9	123	3.9	8	
ACRM160S	ISO160	152.5	150	3.9	8	
ACRM200S	ISO200	212.5	210	3.9	8	
ACRM250S	ISO250	261	258	3.9	8	
ACRM320S	ISO320	316	311	5	13	



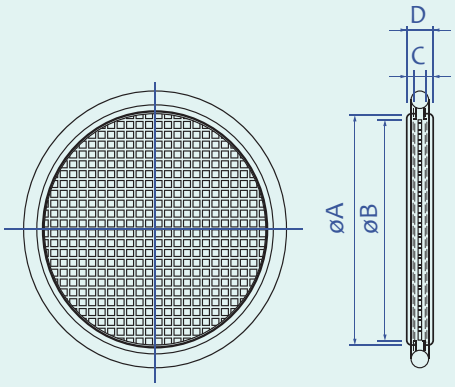
■ CENTER-RING, MESH 24#

P/N	SIZE	ØA	ØB	C	D	#24
ACRM016	NW16	17	15	3.8	8	
ACRM025	NW25	26	23.5	3.8	8	
ACRM040	NW40	41	38.5	3.8	8	
ACRM050	NW50	52	50	3.8	8	
ACRM063	ISO63	69.9	68	3.8	8	
ACRM080	ISO80	82.8	81.2	4	8	
ACRM100	ISO100	101.7	99.7	3.9	8	
ACRM125	ISO125	126.9	123	3.9	8	
ACRM160	ISO160	152.5	150	3.9	8	
ACRM200	ISO200	212.5	210	3.9	8	
ACRM250	ISO250	261	258	3.9	8	
ACRM320	ISO320	316	311	5	13	



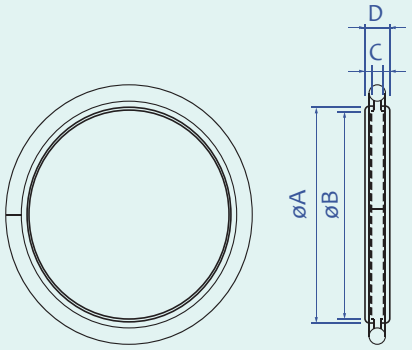
■ CENTER-RING, MESH 10#

P/N	SIZE	ØA	ØB	C	D	#10
ACRM016F	NW16	17	15	3.8	8	
ACRM025F	NW25	26	23.5	3.8	8	
ACRM040F	NW40	41	38.5	3.8	8	
ACRM050F	NW50	52	50	3.8	8	
ACRM063F	ISO63	69.9	68	3.8	8	
ACRM080F	ISO80	82.8	81.2	4	8	
ACRM100F	ISO100	101.7	99.7	3.9	8	
ACRM125F	ISO125	126.9	123	3.9	8	
ACRM160F	ISO160	152.5	150	3.9	8	
ACRM200F	ISO200	212.5	210	3.9	8	
ACRM250F	ISO250	261	258	3.9	8	
ACRM320F	ISO320	316	311	5	13	



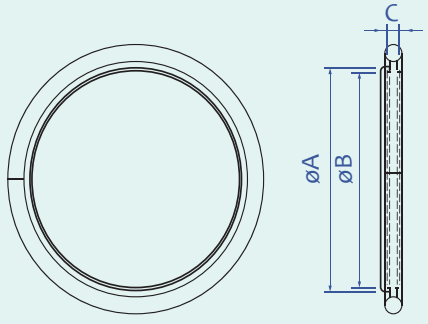
■ CENTER-RING, ALUMINUM

P/N	SIZE	ØA	ØB	C	D	Dimension
ACRM016C	NW16	17	15	3.8	8	
ACRM025C	NW25	26	23.5	3.8	8	
ACRM040C	NW40	41	38.5	3.8	8	
ACRM050C	NW50	52	50	3.8	8	
ACRM063C	ISO63	69.9	68	3.8	8	
ACRM080C	ISO80	82.8	81.2	4	8	
ACRM100C	ISO100	101.7	99.7	3.9	8	
ACRM125C	ISO125	126.9	123	3.9	8	
ACRM160C	ISO160	152.5	150	3.9	8	
ACRM200C	ISO200	212.5	210	3.9	8	
ACRM250C	ISO250	261	258	3.9	8	
ACRM320C	ISO320	316	311	5	13	

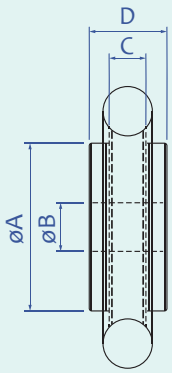


■ HALF CENTER-RING, SUS304

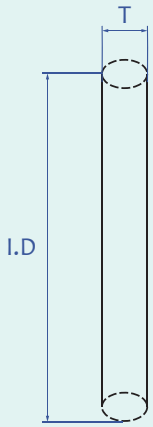
P/N	SIZE	ØA	ØB	C	Dimension
ACRH016	NW16	17	15	3.8	
ACRH025	NW25	26	23.5	3.8	
ACRH040	NW40	41	38.5	3.8	
ACRH050	NW50	52	50	3.8	
ACRH063	ISO63	69.9	68	3.8	
ACRH080	ISO80	82.8	81.2	4	
ACRH100	ISO100	101.7	99.7	3.9	
ACRH125	ISO125	126.9	123	3.9	
ACRH160	ISO160	152.5	150	3.9	
ACRH200	ISO200	212.5	210	3.9	
ACRH250	ISO250	261	258	3.9	
ACRH320	ISO320	316	311	5	



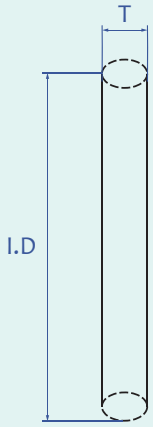
■ CENTER-RING, ORIFICE

P/N	SIZE	ØA	ØB	C	D	Dimension
ACRN016F	NW16-Ø5	17	5	3.8	8	
ACRN025F	NW25-Ø5	26	5	3.8	8	
ACRN040F	NW40-Ø5	41	5	3.8	8	
ACRN050F	NW50-Ø5	52	5	3.8	8	
ACRN025	NW25-Ø15	26	15	3.8	8	
ACRN040	NW40-Ø15	41	15	3.8	8	
ACRN050	NW50-Ø15	52	15	3.8	8	
ACRN040S	NW40-Ø25	41	25	3.8	8	
ACRN050S	NW50-Ø25	52	25	3.8	8	

■ O-RING(FKM)

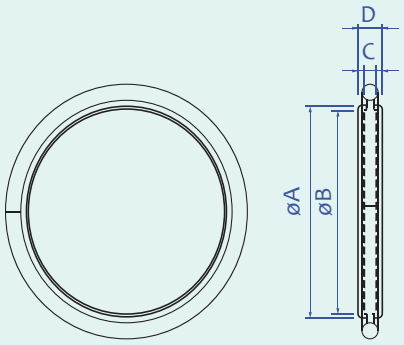
P/N	SIZE	I.D	T	ORING-NO.	Dimension
ACRF016	NW16	18.42±0.15	5.33±0.12	AS314	
ACRF025	NW25	27.94±0.15	5.33±0.12	AS320	
ACRF040	NW40	40.64±0.25	5.33±0.12	AS326	
ACRF050	NW50	53.34±0.25	5.33±0.12	AS330	
ACRF063	ISO63	72.39±0.38	5.33±0.12	AS336	
ACRF080	ISO80	88.25±0.38	5.33±0.12	AS341	
ACRF100	ISO100	107.32±0.38	5.33±0.12	AS347	
ACRF125	ISO125	135.89±0.58	5.33±0.12	AS356	
ACRF160	ISO160	158.12±0.58	5.33±0.12	AS362	
ACRF200	ISO200	215.26±0.76	5.33±0.12	AS371	
ACRF250	ISO250	266.07±0.76	5.33±0.12	AS378	
ACRF320	ISO320	316.86±0.76	6.98±0.15	AS454	

■ O-RING(EPDM)

P/N	SIZE	I.D	T	ORING-NO.	Dimension
ACRE016	NW16	18.42±0.15	5.33±0.12	AS314	
ACRE025	NW25	27.94±0.15	5.33±0.12	AS320	
ACRE040	NW40	40.64±0.25	5.33±0.12	AS326	
ACRE050	NW50	53.34±0.25	5.33±0.12	AS330	
ACRE063	ISO63	72.39±0.38	5.33±0.12	AS336	
ACRE080	ISO80	88.25±0.38	5.33±0.12	AS341	
ACRE100	ISO100	107.32±0.38	5.33±0.12	AS347	
ACRE125	ISO125	135.89±0.58	5.33±0.12	AS356	
ACRE160	ISO160	158.12±0.58	5.33±0.12	AS362	
ACRE200	ISO200	215.26±0.76	5.33±0.12	AS371	
ACRE250	ISO250	266.07±0.76	5.33±0.12	AS378	
ACRE320	ISO320	316.86±0.76	6.98±0.15	AS454	

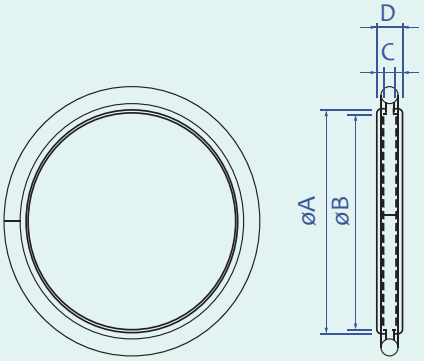
■ CENTER-RING, AND O-RING(FKM)

P/N	SIZE	ØA	ØB	C	D	Dimension
ACR016	NW16	17	15	3.8	8	
ACR025	NW25	26	23.5	3.8	8	
ACR040	NW40	41	38.5	3.8	8	
ACR050	NW50	52	50	3.8	8	
ACR063	ISO63	69.9	68	3.8	8	
ACR080	ISO80	82.8	81.2	4	8	
ACR100	ISO100	101.7	99.7	3.9	8	
ACR125	ISO125	126.9	123	3.9	8	
ACR160	ISO160	152.5	150	3.9	8	
ACR200	ISO200	212.5	210	3.9	8	
ACR250	ISO250	261	258	3.9	8	
ACR320	ISO320	316	311	5	13	



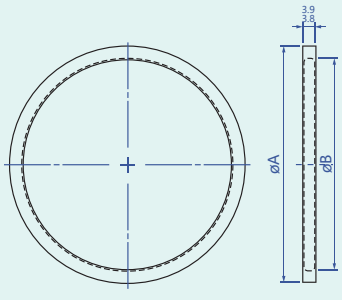
■ CENTER-RING, AND O-RING(EPDM)

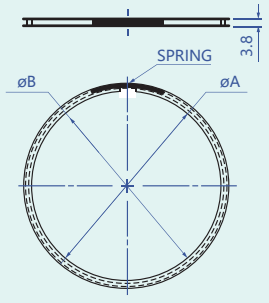
P/N	SIZE	ØA	ØB	C	D	Dimension
ACE016	NW16	17	15	3.8	8	
ACE025	NW25	26	23.5	3.8	8	
ACE040	NW40	41	38.5	3.8	8	
ACE050	NW50	52	50	3.8	8	
ACE063	ISO63	69.9	68	3.8	8	
ACE080	ISO80	82.8	81.2	4	8	
ACE100	ISO100	101.7	99.7	3.9	8	
ACE125	ISO125	126.9	123	3.9	8	
ACE160	ISO160	152.5	150	3.9	8	
ACE200	ISO200	212.5	210	3.9	8	
ACE250	ISO250	261	258	3.9	8	
ACE320	ISO320	316	311	5	13	



■ OUTER-RING

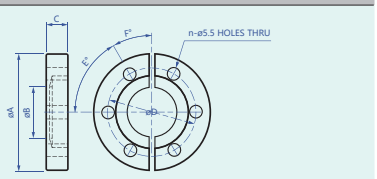
P/N	SIZE	ØA	ØB	16-50	63-200
ACRO016	NW16	31	28.3		
ACRO025	NW25	42	38.3		
ACRO040	NW40	56	52.7		
ACRO050	NW50	74	65.3		
ACRO063	ISO63	90.2	82.6		
ACRO080	ISO80	107.6	100		
ACRO100	ISO100	126.6	119		
ACRO125	ISO125	154.6	147.1		
ACRO160	ISO160	177	169.4		
ACRO200	ISO200	237	229.5		



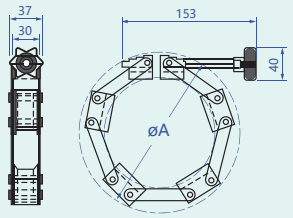


CLAMP

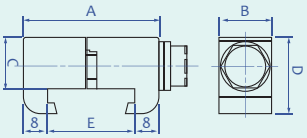
■ BULK HEAD CLAMP

P/N	SIZE	ØA	ØB	C	ØD	E	F	n	Dimension
ACLB16	NW16	51	22	9	38	60	30	6	
ACLB25	NW25	60	32	10	48	60	30	6	
ACLB40	NW40	75	47	9.4	62	60	30	6	
ACLB50	NW50	95	67	10.2	83	45	22.5	8	

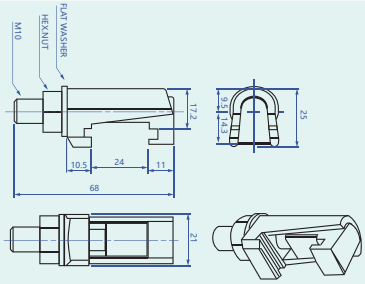
■ CHAIN CLAMP

P/N	SIZE	ØA	Dimension
ACLC063	ISO63	140	
ACLC080	ISO80	158	
ACLC100	ISO100	180	
ACLC160	ISO160	234	

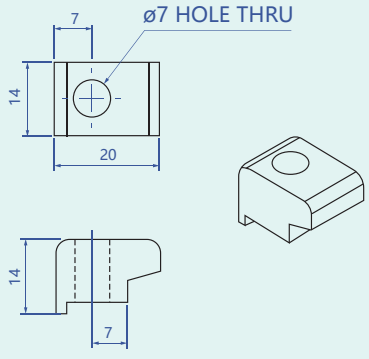
■ DOUBLE WALL CLAMP

P/N	SIZE	A	B	C	D	E	Dimension
ACLD08	M8	44	17	16.5	24.2	28	
ACLD10	M10	44	19	20	27.8	28	
ACLD12	M12	56	21	26	34	40	

■ DOUBLE WALL CLAMP(SUS)

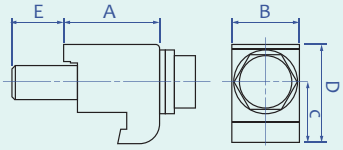
P/N	SIZE	Dimension
ACLD10F	M10	

■ NAIL CLAMP M6

P/N	SIZE	Dimension
ACLN06	M6	

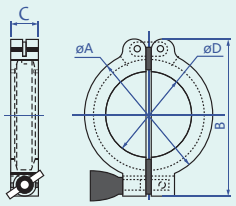
■ SINGLE WALL CLAMP

P/N	SIZE	A	B	C	D	E	
ACLS08	M8	23.5	17	15.5	24.5	14	Dimension
ACLS10	M10	23.5	19	17.5	28.5	14	
ACLS12	M12	30	21	19.5	34	20	



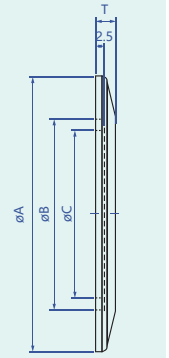
■ WING NUT CLAMP

P/N	SIZE	ØA	B	C	ØD	CLAMP NUT	
ACLW016	NW16	41.5	62.5	16	23	M5	Dimension
ACLW025	NW25	54	72	16	33.5	M5	
ACLW040	NW40	69.5	89.5	16	48	M5	
ACLW050	NW50	92.5	113	20	62	M6	

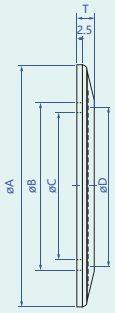


FLANGES

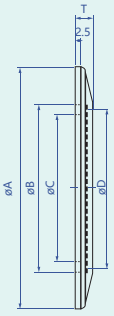
■ BLANK FLANGE / KF

P/N	SIZE	ØA	ØB	ØC	T	Dimension
BBLN016	NW16	30	17.2	10.7	5	
BBLN025	NW25	40	26.2	19.8	5	
BBLN040	NW40	55	41.2	34.8	5	
BBLN050	NW50	75	52.2	45.8	6	
BBLN063	NW63	95	70.2	0	12	
BBLN080	NW80	114	83.2	0	12	
BBLN100	NW100	134	102.2	0	12	
BBLN125	NW125	161	127.3	0	12	
BBLN160	NW160	190	153.3	0	12	

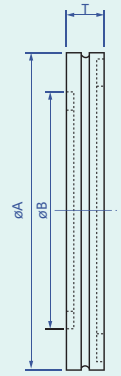
■ BORED FLANGE / KF

P/N	SIZE	ØA	ØB	ØC	ØD	T	Dimension
BBON016	NW16	30	17.2	16.5	19.05	4.5	
BBON025	NW25	40	26.2	24	25.4	5	
BBON040	NW40	55	41.2	36.7	38.1	5	
BBON050	NW50	75	52.2	49	50.8	6	
BBON063	NW63	95	70.2	60.5	63.5	12	
BBON080	NW80	114	83.2	72.3	76.3	12	
BBON100	NW100	134	102.2	97.6	101.6	12	
BBON125	NW125	161	127.3	123.2	127.4	12	
BBON160	NW160	190	153.3	148.6	153	12	

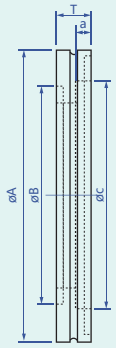
■ BORED FLANGE / KF(SCH)

P/N	SIZE	ØA	ØB	ØC	ØD	T	Dimension
BBON016F	NW16	30	17.2	16.5	21.7	4.1	
BBON025F	NW25	40	26.2	24	27.2	4.7	
BBON040F	NW40	55	41.2	36.7	42.7	4.6	
BBON050F	NW50	75	52.2	49	60.5	4.9	
BBON063F	NW63	95	70.2	60.5	76.3	11.4	
BBON080F	NW80	114	83.2	72.3	89.1	12	
BBON100F	NW100	134	102.2	97.6	114.3	11.6	
BBON125F	NW125	161	127.3	123.2	139.8	11.9	
BBON160F	NW160	190	153.3	148.6	165.2	12	

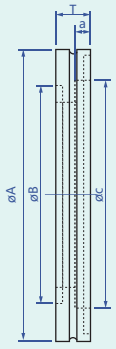
■ BLANK FLANGE / ISO-K

P/N	SIZE	ØA	ØB	T	Dimension
BBLK063	ISO63	95	70.2	12	
BBLK080	ISO80	110	83.2	12	
BBLK100	ISO100	130	102.2	12	
BBLK125	ISO125	155	127.2	12	
BBLK160	ISO160	180	153.2	12	
BBLK200	ISO200	240	213.2	12	
BBLK250	ISO250	290	261.2	12	
BBLK320	ISO320	370	318.2	17	
BBLK400	ISO400	450	400.2	17	

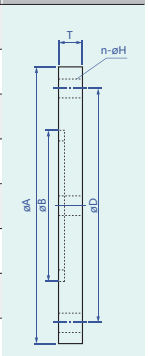
■ BORED FLANGE / ISO-K

P/N	SIZE	ØA	ØB	ØC	a	T	Dimension
BBOK063	ISO63	95	70.2	63.5	5	12	
BBOK080	ISO80	110	83.2	76.3	5	12	
BBOK100	ISO100	130	102.2	101.6	5	12	
BBOK125	ISO125	155	127.2	127.4	5	12	
BBOK160	ISO160	180	153	152.4	5	12	
BBOK200	ISO200	240	213	216.3	5	12	
BBOK250	ISO250	290	261.2	267.4	5	12	
BBOK320	ISO320	370	318.2	318.5	7	17	
BBOK400	ISO400	450	400.2	406.4	7	17	

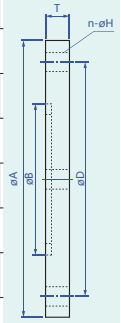
■ BORED FLANGE / ISO-K(SCH)

P/N	SIZE	ØA	ØB	ØC	a	T	Dimension
BBOK063F	ISO63	95	70.2	76.3	5	12	
BBOK080F	ISO80	110	83.2	89.1	5	12	
BBOK100F	ISO100	130	102.2	114.3	5	12	
BBOK125F	ISO125	155	127.2	139.8	5	12	
BBOK160F	ISO160	180	153	165.2	5	12	
BBOK200F	ISO200	240	213	216.3	5	12	
BBOK250F	ISO250	290	261.2	267.4	5	12	
BBOK320F	ISO320	370	318.2	318.5	7	17	

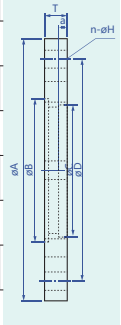
■ BLANK FLANGE / ISO-F

P/N	SIZE	ØA	ØB	ØD	n	H	T	Dimension
BBLF063	ISO63	130	70.2	110	4	9	12	
BBLF080	ISO80	145	83.2	125	8	9	12	
BBLF100	ISO100	165	102.2	145	8	9	12	
BBLF160	ISO160	225	153.2	200	8	11	16	
BBLF200	ISO200	285	213.2	260	12	11	16	
BBLF250	ISO250	335	261.2	310	12	11	16	
BBLF320	ISO320	425	318.2	395	12	14	20	
BBLF400	ISO400	510	400.2	480	16	14	20	

■ BORED FLANGE / ISO-F

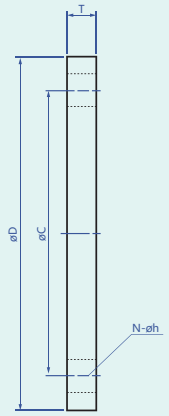
P/N	SIZE	ØA	ØB	ØC	ØD	n	H	a	T	Dimension
BBOF063	ISO63	130	70.2	63.5	110	4	9	5	12	
BBOF080	ISO80	145	83.2	76.3	125	8	9	5	12	
BBOF100	ISO100	165	102.2	101.6	145	8	9	5	12	
BBOF160	ISO160	225	153.2	152.4	200	8	11	9	16	
BBOF200	ISO200	285	213.2	216.3	260	12	11	9	16	
BBOF250	ISO250	335	261.2	267.4	310	12	11	9	16	
BBOF320	ISO320	425	318.2	318.5	395	12	14	10	20	
BBOF400	ISO400	510	400.2	406.4	480	16	14	10	20	

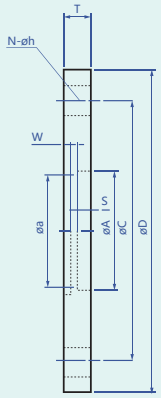
■ BORED FLANGE / ISO-F(SCH)

P/N	SIZE	ØA	ØB	ØC	ØD	n	H	a	T	Dimension
BBOF063F	ISO63	130	70.2	76.3	110	4	9	5	12	
BBOF080F	ISO80	145	83.2	89.1	125	8	9	5	12	
BBOF100F	ISO100	165	102.2	114.3	145	8	9	5	12	
BBOF160F	ISO160	225	153.2	165.2	200	8	11	9	16	
BBOF200F	ISO200	285	213.2	216.3	260	12	11	9	16	
BBOF250F	ISO250	335	261.2	267.4	310	12	11	9	16	
BBOF320F	ISO320	425	318.2	318.5	395	12	14	10	20	
BBOF400F	ISO400	510	400.2	406.4	480	16	14	10	20	

■ BLANK & BORED FLANGE / JIS-VF

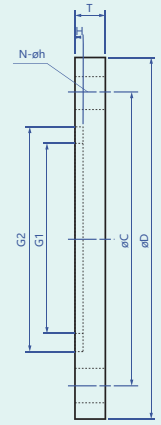
P/N	SIZE	SPECIFICATIONS						BOLT HOLES			BLANK
		ØA	ØD	T	S	Øa	w	ØC	N	h	
BBLJ010F	VF10-BLANK		70	8				50	4	10	
	VF10-BORED		70	8				50	4	10	
BBLJ020F	VF20-BLANK		80	8				60	4	10	
BBOJ020F	VF20-BORED	25.6	80	8	3	24	2.5	60	4	10	
BBLJ025F	VF25-BLANK		90	8				70	4	10	
BBOJ025F	VF25-BORED	25.6	90	8	3	24	2.5	70	4	10	
BBLJ040F	VF40-BLANK		105	10				85	4	10	
BBOJ040F	VF40-BORED	38.5	105	10	5	36	2.5	85	4	10	
BBLJ050F	VF50-BLANK		120	10				100	4	10	
BBOJ050F	VF50-BORED	51	120	10	5	48	2.5	100	4	10	
BBLJ065F	VF65-BLANK		145	10				120	4	12	
BBOJ065F	VF65-BORED	63.9	145	10	5	60.5	2.5	120	4	12	
BBLJ080F	VF80-BLANK		160	12				135	4	12	
BBOJ080F	VF80-BORED	76.8	160	12	6	72.4	3.5	135	4	12	
BBLJ100F	VF100-BLANK		185	12				160	8	12	BORED
BBOJ100F	VF100-BORED	102	185	12	6	97.8	3.5	160	8	12	
BBLJ125F	VF125-BLANK		210	12				185	8	12	
	VF125-BORED		210	12				185	8	12	
BBLJ150F	VF150-BLANK		235	12				210	8	12	
BBOJ150F	VF150-BORED	152.8	235	12	6	148.6	3.5	210	8	12	
BBLJ200F	VF200-BLANK		300	16				270	8	15	
BBOJ200F	VF200-BORED	216.8	300	16	9	209	4	270	8	15	
BBLJ250F	VF250-BLANK		350	16				320	12	15	
BBOJ250F	VF250-BORED	268	350	16	9	261.5	7	320	12	15	
BBLJ300F	VF300-BLANK		400	16				370	12	15	
	VF300-BORED		400	16				370	12	15	
BBLJ350F	VF350-BLANK		450	20				420	12	15	
	VF350-BORED		450	20				420	12	15	
BBLJ400F	VF400-BLANK		520	20				480	12	19	
	VF400-BORED		520	20				480	12	19	

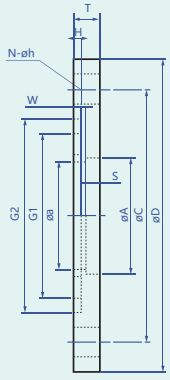




■ BLANK & BORED FLANGE / JIS-VG

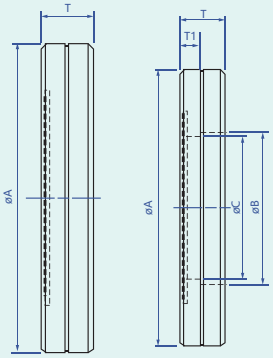
P/N	SIZE	SPECIFICATIONS						BOLT HOLES			O-RING			BLANK
		ØA	ØD	T	S	Øa	w	ØC	N	h	G1	G2	H	
BBLJ010G	VG10-BLANK		70	8				50	4	10	24	34	3	
	VG10-BORED		70	8				50	4	10	24	34	3	
BBLJ020G	VG20-BLANK		80	8				60	4	10	34	44	3	
BBOJ020G	VG20-BORED	25.6	80	8	3	24	2.5	60	4	10	34	44	3	
BBLJ025G	VG25-BLANK		90	8				70	4	10	40	50	3	
BBOJ025G	VG25-BORED	25.6	90	8	3	24	2.5	70	4	10	40	50	3	
BBLJ040G	VG40-BLANK		105	10				85	4	10	55	65	3	
BBOJ040G	VG40-BORED	38.5	105	10	5	36	2.5	85	4	10	55	65	3	
BBLJ050G	VG50-BLANK		120	10				100	4	10	70	80	3	
BBOJ050G	VG50-BORED	51	120	10	5	48	2.5	100	4	10	70	80	3	
BBLJ065G	VG65-BLANK		145	10				120	4	12	85	95	3	
BBOJ065G	VG65-BORED	63.9	145	10	5	60.5	2.5	120	4	12	85	95	3	
BBLJ080G	VG80-BLANK		160	12				135	4	12	100	110	3	
BBOJ080G	VG80-BORED	76.8	160	12	6	72.4	3.5	135	4	12	100	110	3	
BBLJ100G	VG100-BLANK		185	12				160	8	12	120	130	3	BORED
BBOJ100G	VG100-BORED	102	185	12	6	97.8	3.5	160	8	12	120	130	3	
BBLJ125G	VG125-BLANK		210	12				185	8	12	150	160	3	
	VG125-BORED		210	12				185	8	12	150	160	3	
BBLJ150G	VG150-BLANK		235	12				210	8	12	175	185	3	
BBOJ150G	VG150-BORED	152.8	235	12	6	148.6	3.5	210	8	12	175	185	3	
BBLJ200G	VG200-BLANK		300	16				270	8	15	225	241	4.5	
BBOJ200G	VG200-BORED	216.8	300	16	9	209	4	270	8	15	225	241	4.5	
BBLJ250G	VG250-BLANK		350	16				320	12	15	275	291	4.5	
BBOJ250G	VG250-BORED	268	350	16	9	261.5	7	320	12	15	275	291	4.5	
BBLJ300G	VG300-BLANK		400	16				370	12	15	325	341	4.5	
	VG300-BORED		400	16				370	12	15	325	341	4.5	
BBLJ350G	VG350-BLANK		450	20				420	12	15	380	396	4.5	
	VG350-BORED		450	20				420	12	15	380	396	4.5	
BBLJ400G	VG400-BLANK		520	20				480	12	19	430	446	4.5	
	VG400-BORED		520	20				480	12	19	430	446	4.5	

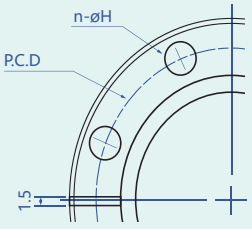




■ BLANK & BORED FLANGE / CF-FIX

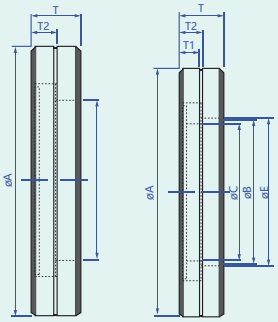
P/N	SIZE	ØA	ØB	ØC	T	T1	H	n	P.C.D	BLANK	BORED
BBLC13HF	CF1.33-BLANK-H	34			7.3		4.5	6	27		
BBLC13TF	CF1.33-BLANK-T	34			7.3		M4	6	27		
BBOC13HF	CF1.33-BORED-H	34	19.05	16.6	7.3	4.3	4.5	6	27		
BBOC13TF	CF1.33-BORED-T	34	19.05	16.6	7.3	4.3	M4	6	27		
BBLC21HF	CF2.125-BLANK-H	53.8			11.9		6.6	4	41.2		
BBLC21TF	CF2.125-BLANK-T	53.8			11.9		M6	4	41.2		
BBOC21HF	CF2.125-BORED-H	53.8	25.6	23.8	11.9	8.9	6.6	4	41.2		
BBOC21TF	CF2.125-BORED-T	53.8	25.6	23.8	11.9	8.9	M6	4	41.2		
BBLC27HF	CF2.75-BLANK-H	69.5			12.7		6.6	6	58.7		
BBLC27TF	CF2.75-BLANK-T	69.5			12.7		M6	6	58.7		
BBOC27HF	CF2.75-BORED-H	69.5	38.1	35.7	12.7	5.7	6.6	6	58.7		
BBOC27TF	CF2.75-BORED-T	69.5	38.1	35.7	12.7	5.7	M6	6	58.7		
BBLC33HF	CF3.375-BLANK-H	86			16		8.6	8	72.4		
BBLC33TF	CF3.375-BLANK-T	86			16		M8	8	72.4		
BBOC33HF	CF3.375-BORED-H	86	50.8	47.8	16	8	8.6	8	72.4		
BBOC33TF	CF3.375-BORED-T	86	50.8	47.8	16	8	M8	8	72.4		
BBLC45HF	CF4.5-BLANK-H	113.5			17.5		8.6	8	92.1		
BBLC45TF	CF4.5-BLANK-T	113.5			17.5		M8	8	92.1		
BBOC45HF	CF4.5-BORED-H	113.5	63.5	60.5	17.5	9.5	8.6	8	92.1		
BBOC45TF	CF4.5-BORED-T	113.5	63.5	60.5	17.5	9.5	M8	8	92.1		
BBLC06HF	CF6-BLANK-H	152			20		8.6	16	130.2		
BBLC06TF	CF6-BLANK-T	152			20		M8	16	130.2		
BBOC06HF	CF6-BORED-H	152	101.6	97.6	20	10	8.6	16	130.2		
BBOC06TF	CF6-BORED-T	152	101.6	97.6	20	10	M8	16	130.2		
BBLC08HF	CF8-BLANK-H	203			22		8.6	20	181		
BBLC08TF	CF8-BLANK-T	203			22		M8	20	181		
BBOC08HF	CF8-BORED-H	203	152.4	148.4	22	12	8.6	20	181		
BBOC08TF	CF8-BORED-T	203	152.4	148.4	22	12	M8	20	181		
BBLC10HF	CF10-BLANK-H	254			25		8.6	24	231.8		
BBLC10TF	CF10-BLANK-T	254			25		M8	24	231.8		
BBOC10HF	CF10-BORED-H	254	203.2	199	25	13	8.6	24	231.8		
BBOC10TF	CF10-BORED-T	254	203.2	199	25	13	M8	24	231.8		
BBLC12HF	CF12-BLANK-H	304			28.6		8.6	32	284		
BBLC12TF	CF12-BLANK-T	304			28.6		M8	32	284		
BBOC12HF	CF12-BORED-H	304	254.6	250.8	28.6	12.8	8.6	32	284		
BBOC12TF	CF12-BORED-T	304	254.6	250.8	28.6	12.8	M8	32	284		
BBLC14HF	CF14-BLANK-H	355.6			28.5		10	30	325.4		
BBLC14TF	CF14-BLANK-T	355.6			28.5		M10	30	325.4		
BBOC14HF	CF14-BORED-H	355.6	267.8	263.8	28.5	12.5	10	30	325.4		
BBOC14TF	CF14-BORED-T	355.6	267.6	263.8	28.5	12.5	M10	30	325.4		

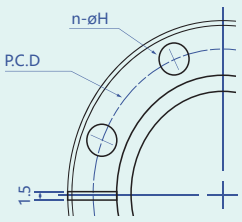




■ BLANK & BORED FLANGE / CF-ROTATABLE

P/N	SIZE	ØA	ØE	ØB	ØC	T	T1	T2	H	n	P.C.D	BLANK	BORED
BBLC13HR	CF1.33-BLANK-H	34	19.4			7.3		5.8	4.5	6	27		
BBLC13TR	CF1.33-BLANK-T	34	19.4			7.3		5.8	M4	6	27		
BBOC13HR	CF1.33-BORED-H	34	19.4	19.05	16.6	7.3	4.3	5.8	4.5	6	27		
BBOC13TR	CF1.33-BORED-T	34	19.4	19.05	16.6	7.3	4.3	5.8	M4	6	27		
BBLC21HR	CF2.125-BLANK-H	53.8	26.4			11.9		7.4	6.6	4	41.2		
BBLC21TR	CF2.125-BLANK-T	53.8	26.4			11.9		7.4	M6	4	41.2		
BBOC21HR	CF2.125-BORED-H	53.8	26.4	25.6	23.8	11.9	5.9	7.4	6.6	4	41.2		
BBOC21TR	CF2.125-BORED-T	53.8	26.4	25.6	23.8	11.9	5.9	7.4	M6	4	41.2		
BBLC27HR	CF2.75-BLANK-H	69.5	39			12.7		7.2	6.6	6	58.7		
BBLC27TR	CF2.75-BLANK-T	69.5	39			12.7		7.2	M6	6	58.7		
BBOC27HR	CF2.75-BORED-H	69.5	39	38.1	35.7	12.7	5.7	7.2	6.6	6	58.7		
BBOC27TR	CF2.75-BORED-T	69.5	39	38.1	35.7	12.7	5.7	7.2	M6	6	58.7		
BBLC33HR	CF3.375-BLANK-H	86	51.5			17.5		9.5	8.6	8	72.4		
BBLC33TR	CF3.375-BLANK-T	86	51.5			17.5		9.5	M8	8	72.4		
BBOC33HR	CF3.375-BORED-H	86	51.5	50.8	47.8	17.5	7.5	9.5	8.6	8	72.4		
BBOC33TR	CF3.375-BORED-T	86	51.5	50.8	47.8	17.5	7.5	9.5	M8	8	72.4		
BBLC45HR	CF4.5-BLANK-H	113.5	64.5			19		12.7	8.6	8	92.1		
BBLC45TR	CF4.5-BLANK-T	113.5	64.5			19		12.7	M8	8	92.1		
BBOC45HR	CF4.5-BORED-H	113.5	64.5	63.5	60.5	19	10.7	12.7	8.6	8	92.1		
BBOC45TR	CF4.5-BORED-T	113.5	64.5	63.5	60.5	19	10.7	12.7	M8	8	92.1		
BBLC06HR	CF6-BLANK-H	152	103			21.5		14.3	8.6	16	130.2		
BBLC06TR	CF6-BLANK-T	152	103			21.5		14.3	M8	16	130.2		
BBOC06HR	CF6-BORED-H	152	103	101.6	97.6	21.5	11.3	14.3	8.6	16	130.2		
BBOC06TR	CF6-BORED-T	152	103	101.6	97.6	21.5	11.3	14.3	M8	16	130.2		
BBLC08HR	CF8-BLANK-H	203	154			24		15.8	8.6	20	181		
BBLC08TR	CF8-BLANK-T	203	154			24		15.8	M8	20	181		
BBOC08HR	CF8-BORED-H	203	154	152.4	148.4	24	12.8	15.8	8.6	20	181		
BBOC08TR	CF8-BORED-T	203	154	152.4	148.4	24	12.8	15.8	M8	20	181		
BBLC10HR	CF10-BLANK-H	254	206			25		17.2	8.6	24	231.8		
BBLC10TR	CF10-BLANK-T	254	206			25		17.2	M8	24	231.8		
BBOC10HR	CF10-BORED-H	254	206	203.2	199	25	12.2	17.2	8.6	24	231.8		
BBOC10TR	CF10-BORED-T	254	206	203.2	199	25	12.2	17.2	M8	24	231.8		
BBLC12HR	CF12-BLANK-H	304	256			28.6			8.6	32	284		
BBLC12TR	CF12-BLANK-T	304	256			28.6			M8	32	284		
BBOC12HR	CF12-BORED-H	304	256	254.6	250.8	28.6	15.6	20.6	8.6	32	284		
BBOC12TR	CF12-BORED-T	304	256	254.6	250.8	28.6	15.6	20.6	M8	32	284		
BBLC14HR	CF14-BLANK-H	355.6	270			28.5			10	30	325.4		
BBLC14TR	CF14-BLANK-T	355.6	270			28.5			M10	30	325.4		
BBOC14HR	CF14-BORED-H	355.6	270	267.8	263.8	28.5	12.6	19.6	10	30	325.4		
BBOC14TR	CF14-BORED-T	355.6	270	267.6	263.8	28.5	12.6	19.6	M10	30	325.4		





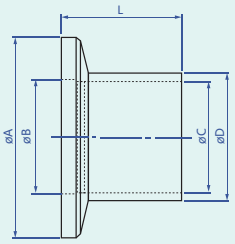
■ COPPER GASKET(OFHC)

P/N	SIZE	ØO.D	ØI.O	Dimension
BGAC13	1.33	21.3	15	
BGAC27	2.75	48.2	37	
BGAC33	3.375	61.6	51	
BGAC45	4.5	82.3	68.4	
BGAC06	6	120.5	106.5	
BGAC08	8	171.3	157.3	
BGAC10	10	222.1	208.1	
BGAC12	12	273	258	
BGAC14	14	313	300	

HALF NIPPLE

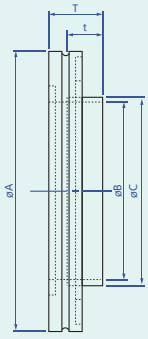
■ HALF NIPPLE / KF

P/N	SIZE	ØA	ØB	ØC	ØD	L	Dimension
BHAN16	NW16-20L	30	17.2	16.65	19.05	20	
BHAN16F	NW16(SCH)-20L	30	17.2	17.5	21.7	20	
CHAN16	NW16-50L	30	17.2	16.65	19.05	50	
CHAN16F	NW16(SCH)-50L	30	17.2	17.5	21.7	50	
BHAN25	NW25-20L	40	26.2	23	25.4	20	
BHAN25F	NW25(SCH)-20L	40	26.2	23	27.2	20	
CHAN25	NW25-50L	40	26.2	23	25.4	50	
CHAN25F	NW25(SCH)-50L	40	26.2	23	27.2	50	
BHAN40	NW40-20L	55	41.2	35.7	38.1	20	
BHAN40F	NW40(SCH)-20L	55	41.2	37.1	42.7	20	
CHAN40	NW40-50L	55	41.2	35.7	38.1	50	
CHAN40F	NW40(SCH)-50L	55	41.2	37.1	42.7	50	
BHAN50	NW50-20L	75	52.2	47.8	50.8	20	
BHAN50F	NW50(SCH)-20L	75	52.2	54.9	60.5	20	
CHAN50	NW50-50L	75	52.2	47.8	50.8	50	
CHAN50F	NW50(SCH)-50L	75	52.2	54.9	60.5	50	



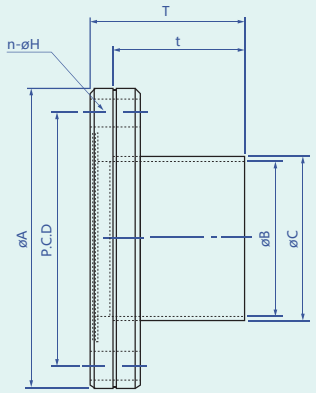
■ HALF NIPPLE / ISO-K

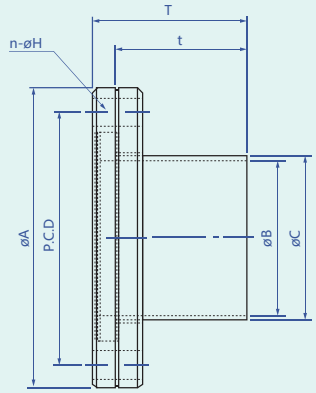
P/N	SIZE	ØA	ØB	ØC	T	t	P/N	SIZE	ØA	ØB	ØC	T	t
BHAK063	ISO63-20L	95	60.5	63.5	20	13	CHAK160	ISO160-50L	180	148.4	152.4	50	43
BHAK063F	ISO63(SCH)-20L	95	70.3	76.3	20	13	CHAK160F	ISO160(SCH)-50L	180	158.4	165.2	50	43
CHAK063	ISO63-50L	95	60.5	63.5	50	43	BHAK200	ISO200-20L	240	208.3	216.3	20	13
CHAK063F	ISO63(SCH)-50L	95	70.3	76.3	50	43	BHAK200F	ISO200(SCH)-20L	240	208.3	216.3	20	13
BHAK080	ISO80-20L	110	72.3	76.3	20	13	CHAK200	ISO200-50L	240	208.3	216.3	50	43
BHAK080F	ISO80(SCH)-20L	110	83.1	89.1	20	13	CHAK200F	ISO200(SCH)-50L	240	208.3	216.3	50	43
CHAK080	ISO80-50L	110	72.3	76.3	50	43	BHAK250	ISO250-20L	290	259.4	267.4	20	13
CHAK080F	ISO80(SCH)-50L	110	83.1	89.1	50	43	BHAK250F	ISO250(SCH)-20L	290	259.4	267.6	20	13
BHAK100	ISO100-20L	130	97.6	101.6	20	13	CHAK250	ISO250-50L	290	259.4	267.4	50	43
BHAK100F	ISO100(SCH)-20L	130	108.3	114.3	20	13	CHAK250F	ISO250(SCH)-50L	290	259.4	267.4	50	43
CHAK100	ISO100-50L	130	97.6	101.6	50	43							
CHAK100F	ISO100(SCH)-50L	130	108.3	114.6	50	43							
BHAK125	ISO125-20L	155	123.4	127.4	20	13							
BHAK125F	ISO125(SCH)-20L	155	133	139.8	20	13							
CHAK125	ISO125-50L	155	123.4	127.4	50	43							
CHAK125F	ISO125(SCH)-50L	155	133	139.8	50	43							
BHAK160	ISO160-20L	180	148.4	152.4	20	13							
BHAK160F	ISO160(SCH)-20L	180	158.4	165.2	20	13							



■ HALF NIPPLE / CF

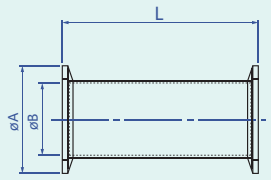
P/N	SIZE	ØA	ØB	ØC	T	t	n	H	P.C.D	FIX
CHAC13HF	CF1.33-FIX-HOLE	34	16.65	19.05	40	35.7	6	4.5	27	
CHAC13TF	CF1.33-FIX-TAB	34	16.65	19.05	40	35.7	6	M4	27	
CHAC13HR	CF1.33-ROTA-HOLE	34	16.65	19.05	40	35.7	6	4.5	27	
CHAC13TR	CF1.33-ROTA-TAB	34	16.65	19.05	40	35.7	6	M4	27	
CHAC21HF	CF2.125-FIX-HOLE	53.8	23	25.4	40	31.1	4	6.6	41.2	
CHAC21TF	CF2.125-FIX-TAB	53.8	23	25.4	40	31.1	4	M6	41.2	
CHAC21HR	CF2.125-ROTA-HOLE	53.8	23	25.4	40	34.1	4	6.6	41.2	
CHAC21TR	CF2.125-ROTA-TAB	53.8	23	25.4	40	34.1	4	M6	41.2	
CHAC27HF	CF2.75-FIX-HOLE	69.5	35.7	38.1	40	34.3	6	6.6	58.7	
CHAC27TF	CF2.75-FIX-TAB	69.5	35.7	38.1	40	34.3	6	M6	58.7	
CHAC27HR	CF2.75-ROTA-HOLE	69.5	35.7	38.1	40	34.3	6	6.6	58.7	
CHAC27TR	CF2.75-ROTA-TAB	69.5	35.7	38.1	40	34.3	6	M6	58.7	
CHAC33HF	CF3.375-FIX-HOLE	86	47.8	50.8	40	32	8	8.6	72.4	
CHAC33TF	CF3.375-FIX-TAB	86	47.8	50.8	40	32	8	M8	72.4	
CHAC33HR	CF3.375-ROTA-HOLE	86	47.8	50.8	40	32.5	8	8.6	72.4	
CHAC33TR	CF3.375-ROTA-TAB	86	47.8	50.8	40	32.5	8	M8	72.4	
CHAC45HF	CF4.5-FIX-HOLE	113.5	60.5	63.5	40	30.5	8	8.6	92.1	ROTA
CHAC45TF	CF4.5-FIX-TAB	113.5	60.5	63.5	40	30.5	8	M8	92.1	
CHAC45HR	CF4.5-ROTA-HOLE	113.5	60.5	63.5	40	29.3	8	8.6	92.1	
CHAC45TR	CF4.5-ROTA-TAB	113.5	60.5	63.5	40	29.3	8	M8	92.1	
CHAC06HF	CF6-FIX-HOLE	152	97.6	101.6	40	30	16	8.6	130.2	
CHAC06TF	CF6-FIX-TAB	152	97.6	101.6	40	30	16	M8	130.2	
CHAC06HR	CF6-ROTA-HOLE	152	97.6	101.6	40	28.7	16	8.6	130.2	
CHAC06TR	CF6-ROTA-TAB	152	97.6	101.6	40	28.7	16	M8	130.2	
CHAC08HF	CF8-FIX-HOLE	203	148.4	152.4	40	28	20	8.6	181	
CHAC08TF	CF8-FIX-TAB	203	148.4	152.4	40	28	20	M8	181	
CHAC08HR	CF8-ROTA-HOLE	203	148.4	152.4	40	27.2	20	8.6	181	
CHAC08TR	CF8-ROTA-TAB	203	148.4	152.4	40	27.2	20	M8	181	
CHAC10HF	CF10-FIX-HOLE	254	196.4	203.2	40	27	24	8.6	231.8	
CHAC10TF	CF10-FIX-TAB	254	196.4	203.2	40	27	24	M8	231.8	
CHAC10HR	CF10-ROTA-HOLE	254	196.4	203.2	40	27.8	24	8.6	231.8	
CHAC10TR	CF10-ROTA-TAB	254	196.4	203.2	40	27.8	24	M8	231.8	



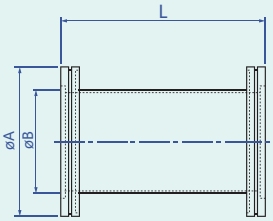


FULL NIPPLE

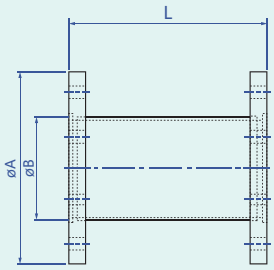
■ FULL NIPPLE / KF

P/N	SIZE	ØA	ØB	L	Dimension
CFUN16	NW16	30	19.05	100	
CFUN25	NW25	40	25.4	100	
CFUN40	NW40	55	38.1	100	
CFUN50	NW50	75	50.8	100	

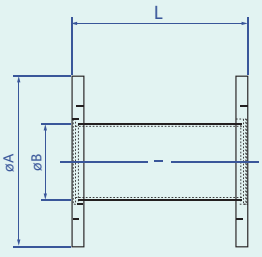
■ FULL NIPPLE / ISO-K

P/N	SIZE	ØA	ØB	L	Dimension
CFUK063	ISOK63	95	63.5	150	
CFUK080	ISOK80	110	76.3	150	
CFUK100	ISOK100	130	101.6	150	
CFUK125	ISOK125	155	139.8	150	
CFUK160	ISOK160	180	152.4	150	
CFUK200	ISOK200	240	216.3	200	
CFUK250	ISOK250	290	267.4	200	
CFUK320	ISOK320	370	318.5	200	

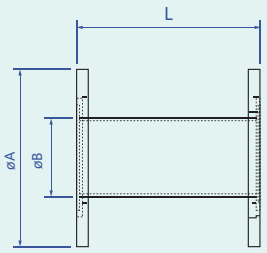
■ FULL NIPPLE / ISO-F

P/N	SIZE	ØA	ØB	L	Dimension
CFUF063	ISOF63	130	63.5	150	
CFUF080	ISOF80	145	76.3	150	
CFUF100	ISOF100	165	101.6	150	
CFUF160	ISOF160	225	152.4	150	
CFUF200	ISOF200	285	216.3	200	
CFUF250	ISOF250	335	267.4	200	
CFUF320	ISOF320	425	318.5	200	

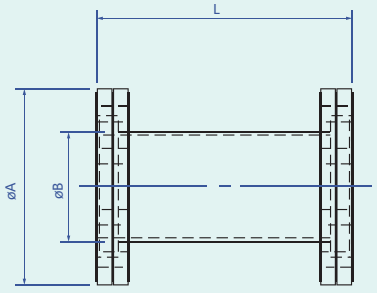
■ FULL NIPPLE / JIS-VF

P/N	SIZE	ØA	ØB	L	Dimension
CFUJ020	VF20	80	19.05	100	
CFUJ025	VF25	90	25.4	100	
CFUJ040	VF40	105	38.1	100	
CFUJ050	VF50	120	50.8	100	
CFUJ065	VF65	145	63.5	150	
CFUJ080	VF80	160	76.3	150	
CFUJ100	VF100	185	101.6	150	

■ FULL NIPPLE / JIS-VG

P/N	SIZE	ØA	ØB	L	Dimension
CFUG020	VG20	80	19.05	100	
CFUG025	VG25	90	25.4	100	
CFUG040	VG40	105	38.1	100	
CFUG050	VG50	120	50.8	100	
CFUG065	VG65	145	63.5	150	
CFUG080	VG80	160	76.3	150	
CFUG100	VG100	185	101.6	150	

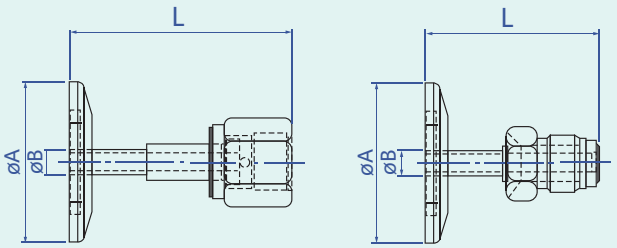
■ FULL NIPPLE / CF

P/N	SIZE	ØA	ØB	L					
CFUC13HF	CF1.33(2H-2F)	34	19.05	100	CFUC33TRX	CF3.375(2T-1R)	86	50.8	100
CFUC13HR	CF1.33(2H-2R)	34	19.05	100	CFUC33TRZ	CF3.375(1T-1H-1R)	86	50.8	100
CFUC13HRX	CF1.33(2H-1R)	34	19.05	100	CFUC45HF	CF4.5(2H-2F)	113.5	63.5	150
CFUC13TF	CF1.33(2T-2F)	34	19.05	100	CFUC45HR	CF4.5(2H-2R)	113.5	63.5	150
CFUC13TR	CF1.33(2T-2R)	34	19.05	100	CFUC45HRX	CF4.5(2H-1R)	113.5	63.5	150
CFUC13TRX	CF1.33(2T-1R)	34	19.05	100	CFUC45TF	CF4.5(2T-2F)	113.5	63.5	150
CFUC13TRZ	CF1.33(1T-1H-1R)	34	19.05	100	CFUC45TR	CF4.5(2T-2R)	113.5	63.5	150
CFUC21HF	CF2.125(2H-2F)	53.8	25.4	100	CFUC45TRX	CF4.5(2T-1R)	113.5	63.5	150
CFUC21HR	CF2.125(2H-2R)	53.8	25.4	100	CFUC45TRZ	CF4.5(1T-1H-1R)	113.5	63.5	150
CFUC21HRX	CF2.125(2H-1R)	53.8	25.4	100	CFUC06HF	CF6(2H-2F)	152	101.6	150
CFUC21TF	CF2.125(2T-2F)	53.8	25.4	100	CFUC06HR	CF6(2H-2R)	152	101.6	150
CFUC21TR	CF2.125(2T-2R)	53.8	25.4	100	CFUC06HRX	CF6(2H-1R)	152	101.6	150
CFUC21TRX	CF2.125(2T-1R)	53.8	25.4	100	CFUC06TF	CF6(2T-2F)	152	101.6	150
CFUC21TRZ	CF2.125(1T-1H-1R)	53.8	25.4	100	CFUC06TR	CF6(2T-2R)	152	101.6	150
CFUC27HF	CF2.75(2H-2F)	69.5	38.1	100	CFUC06TRX	CF6(2T-1R)	152	101.6	150
CFUC27HR	CF2.75(2H-2R)	69.5	38.1	100	CFUC06TRZ	CF6(1T-1H-1R)	152	101.6	150
CFUC27HRX	CF2.75(2H-1R)	69.5	38.1	100	Dimension				
CFUC27TF	CF2.75(2T-2F)	69.5	38.1	100					
CFUC27TR	CF2.75(2T-2R)	69.5	38.1	100					
CFUC27TRX	CF2.75(2T-1R)	69.5	38.1	100					
CFUC27TRZ	CF2.75(1T-1H-1R)	69.5	38.1	100					
CFUC33HF	CF3.375(2H-2F)	86	50.8	100					
CFUC33HR	CF3.375(2H-2R)	86	50.8	100					
CFUC33HRX	CF3.375(2H-1R)	86	50.8	100					
CFUC33TF	CF3.375(2T-2F)	86	50.8	100					
CFUC33TR	CF3.375(2T-2R)	86	50.8	100					

HALF NIPPLE.VCR

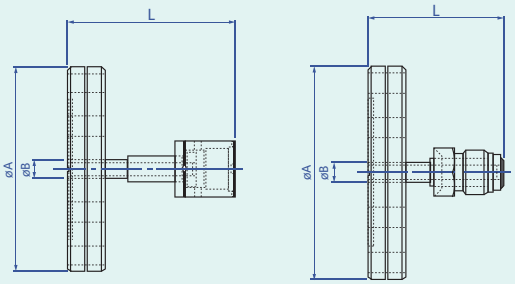
■ HALF NIPPLE / VCR-KF

P/N	SIZE	ØA	ØB	L	FEMALE	MALE
CHAN1612F	NW16-1/2-F	30	12.7	60.16		
CHAN1612M	NW16-1/2-M	30	12.7	45.5		
CHAN1614F	NW16-1/4-F	30	6.35	55.85		
CHAN1614M	NW16-1/4-M	30	6.35	43.2		
CHAN2512F	NW25-1/2-F	40	12.7	60.16		
CHAN2512M	NW25-1/2-M	40	12.7	45.5		
CHAN2514F	NW25-1/4-F	40	6.35	55.85		
CHAN2514M	NW25-1/-M	40	6.35	43.2		
CHAN4012F	NW40-1/2-F	55	12.7	60.16		
CHAN4012M	NW40-1/2-M	55	12.7	45.5		
CHAN4014F	NW40-1/4-F	55	6.35	55.85		
CHAN4014M	NW40-1/4-M	55	6.35	43.2		
CHAN5012F	NW50-1/2-F	75	12.7	60.16		
CHAN5012M	NW50-1/2-M	75	12.7	45.5		
CHAN5014F	NW50-1/4-F	75	6.35	55.85		
CHAN5014M	NW50-1/4-M	75	6.35	43.2		



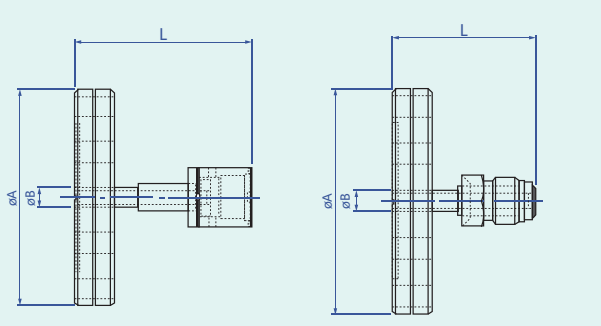
■ HALF NIPPLE / VCR-CF(HOLE)

P/N	SIZE	ØA	ØB	L	FEMALE	MALE
CHC13HF12F	CF1.33-1/2-F	34	12.7	61.41		
CHC13HF12M	CF1.33-1/2-M	34	12.7	46.8		
CHC13HF14F	CF1.33-1/4-F	34	6.35	57.1		
CHC13HF14M	CF1.33-1/4-M	34	6.35	44.5		
CHC27HF12F	CF2.75-1/2-F	69.5	12.7	61.36		
CHC27HF12M	CF2.75-1/2-M	69.5	12.7	46.7		
CHC27HF14F	CF2.75-1/4-F	69.5	6.35	57.05		
CHC27HF14M	CF2.75-1/4-M	69.5	6.35	44.4		



■ HALF NIPPLE / VCR-CF(TAP)

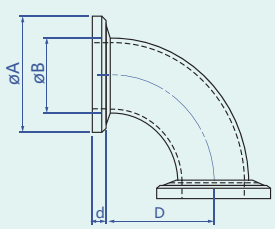
P/N	SIZE	ØA	ØB	L	FEMALE	MALE
CHC13TF12F	CF1.33-1/2-F	34	12.7	61.41		
CHC13TF12M	CF1.33-1/2-M	34	12.7	46.8		
CHC13TF14F	CF1.33-1/4-F	34	6.35	57.1		
CHC13TF14M	CF1.33-1/4-M	34	6.35	44.5		
CHC27TF12F	CF2.75-1/2-F	69.5	12.7	61.36		
CHC27TF12M	CF2.75-1/2-M	69.5	12.7	46.7		
CHC27TF14F	CF2.75-1/4-F	69.5	6.35	57.05		
CHC27TF14M	CF2.75-1/4-M	69.5	6.35	44.4		

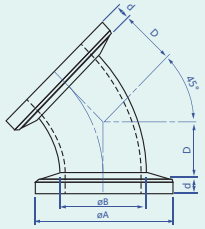


ELBOW

■ ELBOW / KF

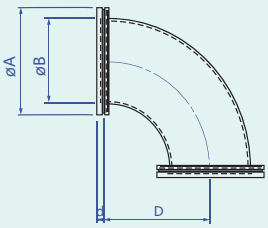
P/N	SIZE	ØA	ØB	D	d	90°	45°
DELN016	NW16	30	19.05	28.5	3.5		
DELN016F	NW16-45°	30	19.05	11.8	3.5		
DELN025	NW25	40	25.4	35	3.5		
DELN025F	NW25-45°	40	25.4	14.5	3.5		
DELN040	NW40	55	38.1	50	3.5		
DELN040F	NW40-45°	55	38.1	20.7	3.5		
DELN050	NW50	75	50.8	60	3.5		
DELN050F	NW50-45°	75	50.8	24.9	3.5		
DELN063	NW63	95	63.5	79	7		
DELN063F	NW63-45°	95	63.5	32.7	7		
DELN080	NW80	114	76.3	82	7		
DELN080F	NW80-45°	114	76.3	34	7		
DELN100	NW100	134	101.6	130	7		
DELN100F	NW100-45°	134	101.6	53.8	7		

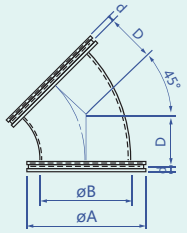




■ ELBOW / ISO-K

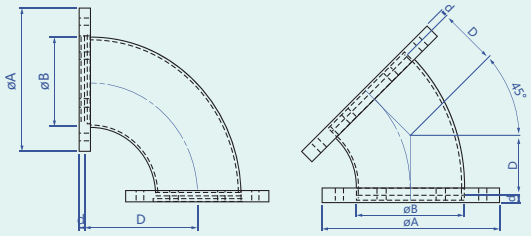
P/N	SIZE	ØA	ØB	D	d	90°	45°
DELK063	ISOK63	95	63.5	79	7		
DELK063F	ISOK63-45°	95	63.5	32.7	7		
DELK080	ISOK80	110	76.3	82	7		
DELK080F	ISOK80-45°	110	76.3	34	7		
DELK100	ISOK100	130	101.6	130	7		
DELK100F	ISOK100-45°	130	101.6	53.9	7		
DELK125	ISOK125	155	139.8	127	7		
DELK125F	ISOK125-45°	155	139.8	78.9	7		
DELK160	ISOK160	180	165.2	152.4	7		
DELK160F	ISOK160-45°	180	165.2	94.7	7		
DELK200	ISOK200	240	216.3	203.2	7		
DELK200F	ISOK200-45°	240	216.3	126.3	7		
DELK250	ISOK250	290	267.4	254	7		
DELK250F	ISOK250-45°	290	267.4	157.8	7		





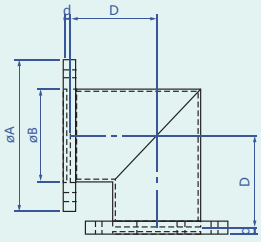
■ ELBOW / ISO-F

P/N	SIZE	ØA	ØB	D	d	90°	45°
DELF063	ISOF63	130	63.5	79	7		
DELF063F	ISOF63-45°	130	63.5	32.7	7		
DELF080	ISOF80	145	76.3	82	7		
DELF080F	ISOF80-45°	145	76.3	34	7		
DELF100	ISOF100	165	101.6	130	7		
DELF100F	ISOF100-45°	165	101.6	53.9	7		
DELF160	ISOF160	225	165.2	152.4	7		
DELF160F	ISOF160-45°	225	165.2	94.7	7		
DELF200	ISOF200	285	216.3	203.2	7		
DELF200F	ISOF200-45°	285	216.3	126.3	7		
DELF250	ISOF250	335	267.4	254	7		
DELF250F	ISOF250-45°	335	267.4	157.8	7		



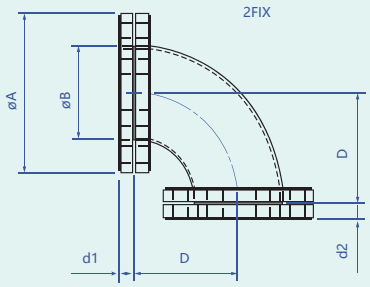
■ ELBOW / ISO-F(MITER)

P/N	SIZE	ØA	ØB	D	d	DIMENSION
DELF063M	ISOF63	130	63.5	78	7	
DELF080M	ISOF80	145	76.3	85	7	
DELF100M	ISOF100	165	101.6	100	7	
DELF160M	ISOF160	225	152.4	150	7	
DELF200M	ISOF200	285	216.3	200	7	
DELF250M	ISOF250	332	267.4	250	7	

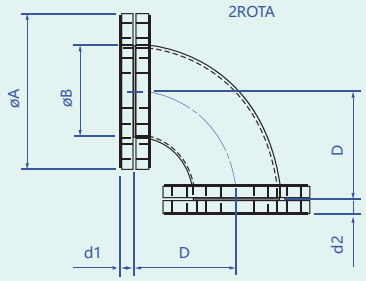


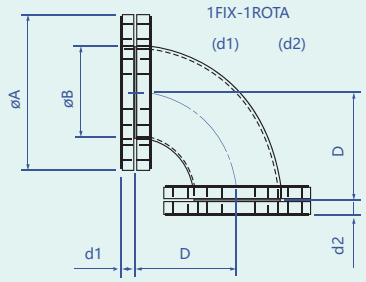
■ ELBOW / CF(90Degree)

P/N	SIZE	ØA	ØB	D	d1	d2	DIMENSION
DEL13HF	CF1.33(2H-2F)	34	19.05	28.5	4.3	4.3	
DEL13HR	CF1.33(2H-2R)	34	19.05	28.5	4.3	4.3	
DEL13HRX	CF1.33(2H-1R)	34	19.05	28.5	4.3	4.3	
DEL13TF	CF1.33(2T-2F)	34	19.05	28.5	4.3	4.3	
DEL13TR	CF1.33(2T-2R)	34	19.05	28.5	4.3	4.3	
DEL13TRX	CF1.33(2T-1R)	34	19.05	28.5	4.3	4.3	
DEL13TRZ	CF1.33(1T-1H-1R)	34	19.05	28.5	4.3	4.3	
DEL21HF	CF2.125(2H-2F)	53.8	25.4	35	8.9	8.9	
DEL21HR	CF2.125(2H-2R)	53.8	25.4	35	5.9	5.9	
DEL21HRX	CF2.125(2H-1R)	53.8	25.4	35	8.9	5.9	
DEL21TF	CF2.125(2T-2F)	53.8	25.4	35	8.9	8.9	
DEL21TR	CF2.125(2T-2R)	53.8	25.4	35	5.9	5.9	
DEL21TRX	CF2.125(2T-1R)	53.8	25.4	35	8.9	5.9	
DEL21TRZ	CF2.125(1T-1H-1R)	53.8	25.4	35	8.9	5.9	



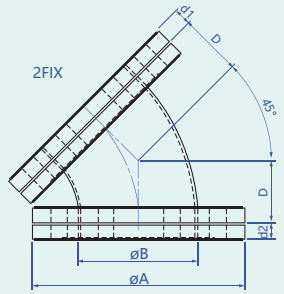
DEL27HF	CF2.75(2H-2F)	69.5	38.1	50	5.7	5.7
DEL27HR	CF2.75(2H-2R)	69.5	38.1	50	5.7	5.7
DEL27HRX	CF2.75(2H-1R)	69.5	38.1	50	5.7	5.7
DEL27TF	CF2.75(2T-2F)	69.5	38.1	50	5.7	5.7
DEL27TR	CF2.75(2T-2R)	69.5	38.1	50	5.7	5.7
DEL27TRX	CF2.75(2T-1R)	69.5	38.1	50	5.7	5.7
DEL27TRZ	CF2.75(1T-1H-1R)	69.5	38.1	50	5.7	5.7
DEL33HF	CF3.375(2H-2F)	86	50.8	60	8	8
DEL33HR	CF3.375(2H-2R)	86	50.8	60	7.5	7.5
DEL33HRX	CF3.375(2H-1R)	86	50.8	60	8	7.5
DEL33TF	CF3.375(2T-2F)	86	50.8	60	8	8
DEL33TR	CF3.375(2T-2R)	86	50.8	60	7.5	7.5
DEL33TRX	CF3.375(2T-1R)	86	50.8	60	8	7.5
DEL33TRZ	CF3.375(1T-1H-1R)	86	50.8	60	8	7.5
DEL45HF	CF4.5(2H-2F)	113.5	63.5	79	9.5	9.5
DEL45HR	CF4.5(2H-2R)	113.5	63.5	79	10.7	10.7
DEL45HRX	CF4.5(2H-1R)	113.5	63.5	79	9.5	10.7
DEL45TF	CF4.5(2T-2F)	113.5	63.5	79	9.5	9.5
DEL45TR	CF4.5(2T-2R)	113.5	63.5	79	10.7	10.7
DEL45TRX	CF4.5(2T-1R)	113.5	63.5	79	9.5	10.7
DEL45TRZ	CF4.5(1T-1H-1R)	113.5	63.5	79	9.5	10.7
DEL06HF	CF6(2H-2F)	152	101.6	130	10	10
DEL06HR	CF6(2H-2R)	152	101.6	130	11.3	11.3
DEL06HRX	CF6(2H-1R)	152	101.6	130	10	11.3
DEL06TF	CF6(2T-2F)	152	101.6	130	10	10
DEL06TR	CF6(2T-2R)	152	101.6	130	11.3	11.3
DEL06TRX	CF6(2T-1R)	152	101.6	130	10	11.3
DEL06TRZ	CF6(1T-1H-1R)	152	101.6	130	10	11.3

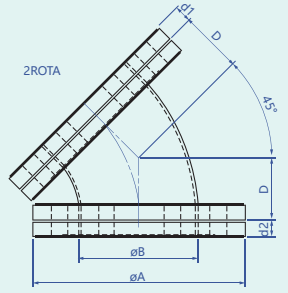


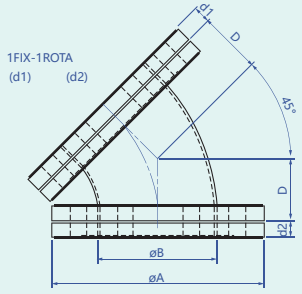


■ ELBOW / CF(45Degree)

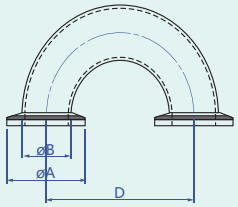
P/N	SIZE	ØA	ØB	D	d1	d2	DIMENSION
DEL13HFF	CF1.33(2H-2F)	34	19.05	11.8	4.3	4.3	
DEL13HRF	CF1.33(2H-2R)	34	19.05	11.8	4.3	4.3	
DEL13HRFX	CF1.33(2H-1R)	34	19.05	11.8	4.3	4.3	
DEL13TFF	CF1.33(2T-2F)	34	19.05	11.8	4.3	4.3	
DEL13TRF	CF1.33(2T-2R)	34	19.05	11.8	4.3	4.3	
DEL13TRFX	CF1.33(2T-1R)	34	19.05	11.8	4.3	4.3	
DEL13TRFZ	CF1.33(1T-1H-1R)	34	19.05	11.8	4.3	4.3	
DEL21HFF	CF2.125(2H-2F)	53.8	25.4	14.5	8.9	8.9	
DEL21HRF	CF2.125(2H-2R)	53.8	25.4	14.5	5.9	5.9	
DEL21HRFX	CF2.125(2H-1R)	53.8	25.4	14.5	8.9	5.9	
DEL21TFF	CF2.125(2T-2F)	53.8	25.4	14.5	8.9	8.9	
DEL21TRF	CF2.125(2T-2R)	53.8	25.4	14.5	5.9	5.9	
DEL21TRFX	CF2.125(2T-1R)	53.8	25.4	14.5	8.9	5.9	
DEL21TRFZ	CF2.125(1T-1H-1R)	53.8	25.4	14.5	8.9	5.9	
DEL27HFF	CF2.75(2H-2F)	69.5	38.1	20.7	5.7	5.7	
DEL27HRF	CF2.75(2H-2R)	69.5	38.1	20.7	5.7	5.7	
DEL27HRFX	CF2.75(2H-1R)	69.5	38.1	20.7	5.7	5.7	
DEL27TFF	CF2.75(2T-2F)	69.5	38.1	20.7	5.7	5.7	
DEL27TRF	CF2.75(2T-2R)	69.5	38.1	20.7	5.7	5.7	
DEL27TRFX	CF2.75(2T-1R)	69.5	38.1	20.7	5.7	5.7	
DEL27TRFZ	CF2.75(1T-1H-1R)	69.5	38.1	20.7	5.7	5.7	
DEL33HFF	CF3.375(2H-2F)	86	50.8	24.9	8	8	
DEL33HRF	CF3.375(2H-2R)	86	50.8	24.9	7.5	7.5	
DEL33HRFX	CF3.375(2H-1R)	86	50.8	24.9	8	7.5	
DEL33TFF	CF3.375(2T-2F)	86	50.8	24.9	8	8	
DEL33TRF	CF3.375(2T-2R)	86	50.8	24.9	7.5	7.5	
DEL33TRFX	CF3.375(2T-1R)	86	50.8	24.9	8	7.5	
DEL33TRFZ	CF3.375(1T-1H-1R)	86	50.8	24.9	8	7.5	
DEL45HFF	CF4.5(2H-2F)	113.5	63.5	32.7	9.5	9.5	
DEL45HRF	CF4.5(2H-2R)	113.5	63.5	32.7	10.7	10.7	
DEL45HRFX	CF4.5(2H-1R)	113.5	63.5	32.7	9.5	10.7	
DEL45TFF	CF4.5(2T-2F)	113.5	63.5	32.7	9.5	9.5	
DEL45TRF	CF4.5(2T-2R)	113.5	63.5	32.7	10.7	10.7	
DEL45TRFX	CF4.5(2T-1R)	113.5	63.5	32.7	9.5	10.7	
DEL45TRFZ	CF4.5(1T-1H-1R)	113.5	63.5	32.7	9.5	10.7	
DEL06HFF	CF6(2H-2F)	152	101.6	53.8	10	10	
DEL06HRF	CF6(2H-2R)	152	101.6	53.8	11.3	11.3	
DEL06HRFX	CF6(2H-1R)	152	101.6	53.8	10	11.3	
DEL06TFF	CF6(2T-2F)	152	101.6	53.8	10	10	
DEL06TRF	CF6(2T-2R)	152	101.6	53.8	11.3	11.3	
DEL06TRFX	CF6(2T-1R)	152	101.6	53.8	10	11.3	
DEL06TRFZ	CF6(1T-1H-1R)	152	101.6	53.8	10	11.3	







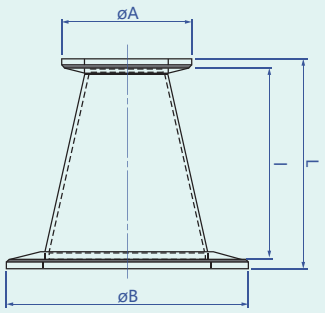
■ ELBOW / KF(180Degree)

P/N	SIZE	ØA	ØB	D	Dimension
DUEN16	NW16	30	19.05	57	
DUEN25	NW25	40	25.4	70	
DUEN40	NW40	55	38.1	100	
DUEN50	NW50	75	50.8	120	

REDUCER-CONICAL

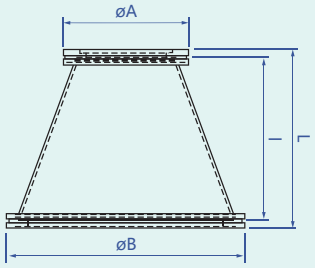
■ REDUCER(CONICAL) / KF

P/N	SIZE	ØA	ØB	L	l	Dimension
CCRN1625	NW16,25	30	40	57	50	
CCRN1640	NW16,40	30	55	57	50	
CCRN1650	NW16,50	30	75	57	50	
CCRN2540	NW25,40	40	55	74	67	
CCRN2550	NW25,50	40	75	74	67	
CCRN2563	NW25,63	40	95	77.5	67	
CCRN4050	NW40,50	55	75	74	67	
CCRN4063	NW40,63	55	95	77.5	67	
CCRN4080	NW40,80	55	114	77.5	67	
CCRN5063	NW50,63	75	95	77.5	67	
CCRN5080	NW50,80	75	114	77.5	67	
CCRN6380	NW63,80	95	114	81	67	
CCRN50100	NW50,100	75	134	113.5	103	
CCRN63100	NW63,100	95	134	117	103	
CCRN80100	NW80,100	114	134	117	103	



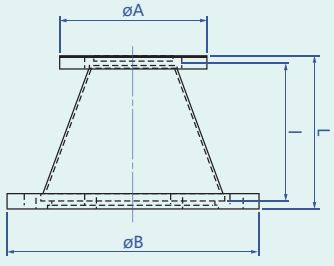
■ REDUCER(CONICAL) / ISO-K

P/N	SIZE	ØA	ØB	L	l	Dimension
CCRK6380	ISOK63,80	95	110	81	67	
CCRK63100	ISOK63,100	95	130	117	103	
CCRK63160	ISOK63,160	95	180	153.7	139.7	
CCRK80100	ISOK80,100	110	130	117	103	
CCRK80160	ISOK80,160	110	180	153.7	139.7	
CCRK100160	ISOK100,160	130	180	153.7	139.7	

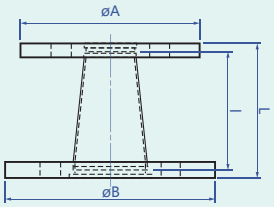


■ REDUCER(CONICAL) / ISO-F

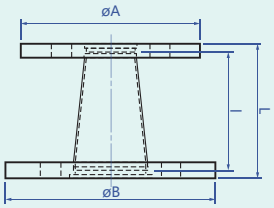
P/N	SIZE	ØA	ØB	L	l	Dimension
CCRF6380	ISOF63,80	130	145	81	67	
CCRF63100	ISOF63,100	130	165	117	103	
CCRF63160	ISOF63,160	130	225	153.7	139.7	
CCRF80100	ISOF80,100	145	165	117	103	
CCRF80160	ISOF80,160	145	225	153.7	139.7	
CCRF100160	ISOF100,160	165	225	153.7	139.7	



■ REDUCER(CONICAL) / JIS-VF

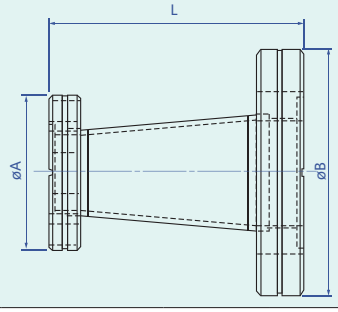
P/N	SIZE	ØA	ØB	L	l	Dimension
CCRJ2040	VF20,40	80	105	77	67	
CCRJ2540	VF25,40	90	105	77	67	
CCRJ4050	VF40,50	105	120	77	67	
CCRJ5065	VF50,65	120	145	77	67	
CCRJ6580	VF65,80	145	160	78	67	
CCRJ80100	VF80,100	160	185	115	103	

■ REDUCER(CONICAL) / JIS-VG

P/N	SIZE	ØA	ØB	L	l	Dimension
CCRG2040	VG20,40	80	105	77	67	
CCRG2540	VG25,40	90	105	77	67	
CCRG4050	VG40,50	105	120	77	67	
CCRG5065	VG50,65	120	145	77	67	
CCRG6580	VG65,80	145	160	78	67	
CCRG80100	VG80,100	160	185	115	103	

■ REDUCER(CONICAL) / CF

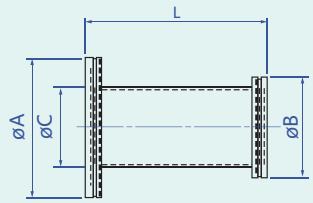
P/N	SIZE	ØA	ØB	L	P/N	SIZE	ØA	ØB	L
CCRC1321HF	CF13,21(2H-2F)	34	53.8	63.2	CCRC2733TF	CF27,33(2T-2F)	69.5	86	80.7
CCRC1321HR	CF13,21(2H-2R)	34	53.8	60.2	CCRC2733TR	CF27,33(2T-2R)	69.5	86	80.2
CCRC1321TF	CF13,21(2T-2F)	34	53.8	63.5	CCRC2745HF	CF27,45(2H-2F)	69.5	113.5	82.2
CCRC1321TR	CF13,21(2T-2R)	34	53.8	60.2	CCRC2745HR	CF27,45(2H-2R)	69.5	113.5	83.4
CCRC1327HF	CF13,27(2H-2F)	34	69.5	60	CCRC2745TF	CF27,45(2T-2F)	69.5	113.5	82.2
CCRC1327HR	CF13,27(2H-2R)	34	69.5	60	CCRC2745TR	CF27,45(2T-2R)	69.5	113.5	83.4
CCRC1327TF	CF13,27(2T-2F)	34	69.5	60	CCRC3345HF	CF33,45(2H-2F)	86	113.5	84.5
CCRC1327TR	CF13,27(2T-2R)	34	69.5	60	CCRC3345HR	CF33,45(2H-2R)	86	113.5	85.2
CCRC1333HF	CF13,33(2H-2F)	34	86	62.3	CCRC3345TF	CF33,45(2T-2F)	86	113.5	84.5
CCRC1333HR	CF13,33(2H-2R)	34	86	61.8	CCRC3345TR	CF33,45(2T-2R)	86	113.5	85.2
CCRC1333TF	CF13,33(2T-2F)	34	86	62.3	CCRC3306HF	CF33,06(2H-2F)	86	152	121
CCRC1333TR	CF13,33(2T-2R)	34	86	61.8	CCRC3306HR	CF33,06(2H-2R)	86	152	121.8
CCRC2127HF	CF21,27(2H-2F)	53.8	69.5	81.6	CCRC3306TF	CF33,06(2T-2F)	86	152	121
CCRC2127HR	CF21,27(2H-2R)	53.8	69.5	78.6	CCRC3306TR	CF33,06(2T-2R)	86	152	121.8
CCRC2127TF	CF21,27(2T-2F)	53.8	69.5	81.6	CCRC4506HF	CF45,06(2H-2F)	113.5	152	122.5
CCRC2127TR	CF21,27(2T-2R)	53.8	69.5	78.6	CCRC4506HR	CF45,06(2H-2R)	113.5	152	125
CCRC2133HF	CF21,33(2H-2F)	53.8	86	83.9	CCRC4506TF	CF45,06(2T-2F)	113.5	152	122.5
CCRC2133HR	CF21,33(2H-2R)	53.8	86	80.4	CCRC4506TR	CF45,06(2T-2R)	113.5	152	125
CCRC2133TF	CF21,33(2T-2F)	53.8	86	83.9					
CCRC2133TR	CF21,33(2T-2R)	53.8	86	80.4					
CCRC2145HF	CF21,45(2H-2F)	53.8	113.5	85.4					
CCRC2145HR	CF21,45(2H-2R)	53.8	113.5	83.6					
CCRC2145TF	CF21,45(2T-2F)	53.8	113.5	85.4					
CCRC2145TR	CF21,45(2T-2R)	53.8	113.5	83.6					
CCRC2733HF	CF27,33(2H-2F)	69.5	86	80.7					
CCRC2733HR	CF27,33(2H-2R)	69.5	86	80.2					



REDUCER-STRAIGHT

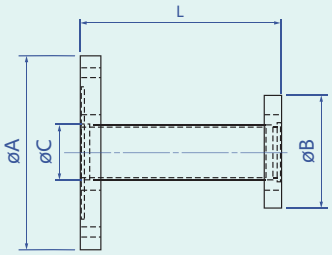
■ REDUCER(STRAIGHT) / ISO-K

P/N	SIZE	ØA	ØB	ØC	L	Dimension
CSCK6380	ISOK63,80	110	95	63.5	150	
CSCK63100	ISOK63,100	130	95	63.5	150	
CSCK63160	ISOK63,160	180	95	63.5	150	
CSCK80100	ISOK80,100	130	110	76.3	150	
CSCK100160	ISOK100,160	180	130	101.6	150	
CSCK160200	ISOK160,200	240	180	165.2	200	
CSCK160250	ISOK160,250	290	180	165.2	200	
CSCK200250	ISOK200,250	290	240	216.3	200	



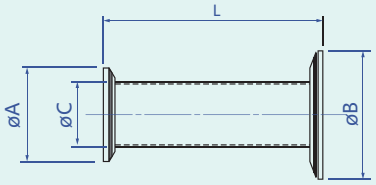
■ REDUCER(STRAIGHT) / ISO-F

P/N	SIZE	ØA	ØB	ØC	L	Dimension
CSCF6380	ISOF63,80	145	130	63.5	150	
CSCF63100	ISOF63,100	165	130	63.5	150	
CSCF63160	ISOF63,160	225	130	63.5	150	
CSCF80100	ISOF80,100	165	145	76.3	150	
CSCF100160	ISOF100,160	225	165	101.6	150	
CSCF160200	ISOF160,200	285	225	165.2	200	
CSCF160250	ISOF160,250	335	225	165.2	200	
CSCF200250	ISOF200,250	335	285	216.3	200	



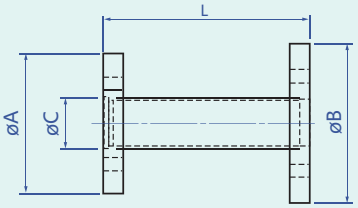
■ REDUCER(STRAIGHT) / KF

P/N	SIZE	ØA	ØB	ØC	L	Dimension
CSCN1625	NW16,25	30	40	19.05	100	
CSCN1640	NW16,40	30	55	19.05	100	
CSCN1650	NW16,50	30	75	19.05	100	
CSCN2540	NW25,40	40	55	25.4	100	
CSCN2550	NW25,50	40	75	25.4	100	
CSCN4050	NW40,50	55	75	38.1	100	



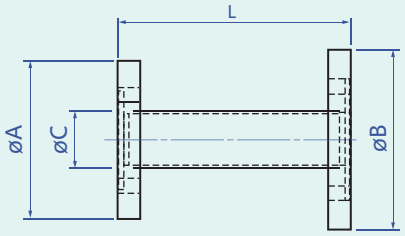
■ REDUCER(STRAIGHT) / JIS-VF

P/N	SIZE	ØA	ØB	ØC	L	Dimension
CSCJ2040	VF20,40	80	105	25.4	100	
CSCJ2540	VF25,40	90	105	25.4	100	
CSCJ4050	VF40,50	105	120	38.1	100	
CSCJ5065	VF50,65	120	145	50.8	150	
CSCJ6580	VF65,80	145	160	63.5	150	
CSCJ80100	VF80,100	160	185	76.3	150	
CSCJ100150	VF100,150	185	235	101.6	150	
CSCJ150200	VF150,200	235	300	152.4	200	
CSCJ200250	VF200,250	300	350	216.3	200	
CSCJ250300	VF250,300	350	400	267.4	200	



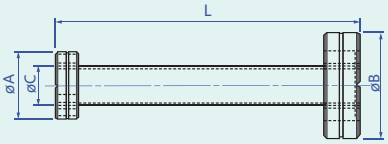
■ REDUCER(STRAIGHT) / JIS-VG

P/N	SIZE	ØA	ØB	ØC	L	Dimension
CSCG2040	VG20,40	80	105	25.4	100	
CSCG2540	VG25,40	90	105	25.4	100	
CSCG4050	VG40,50	105	120	38.1	100	
CSCG5065	VG50,65	120	145	50.8	150	
CSCG6580	VG65,80	145	160	63.5	150	
CSCG80100	VG80,100	160	185	76.3	150	
CSCG100150	VG100,150	185	235	101.6	150	
CSCG150200	VG150,200	235	300	152.4	200	
CSCG200250	VG200,250	300	350	216.3	200	
CSCG250300	VG250,300	350	400	267.4	200	



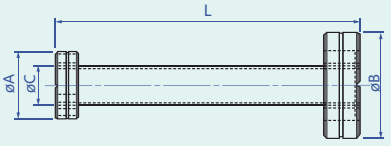
■ REDUCER(STRAIGHT) / CF(2HOLE,2FIX)

P/N	SIZE	ØA	ØB	ØC	L	Dimension
CSCC1321HF	CF1.33,2.125	34	53.8	19.05	100	
CSCC1327HF	CF1.33,2.75	34	69.5	19.05	100	
CSCC2127HF	CF2.125,2.75	53.8	69.5	25.4	100	
CSCC2733HF	CF2.75,3.375	69.5	86	38.1	100	
CSCC2745HF	CF2.75,4.5	69.5	113.5	38.1	150	
CSCC3345HF	CF3.375,4.5	86	113.5	50.8	150	
CSCC4506HF	CF4.5,6	113.5	152	63.5	150	
CSCC0608HF	CF6,8	152	203	101.6	150	
CSCC0810HF	CF8,10	203	254	152.4	200	
CSCC1012HF	CF10,12	254	304	216.3	200	



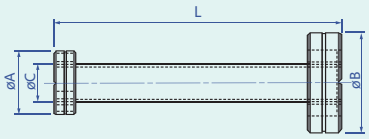
■ REDUCER(STRAIGHT) / CF(2HOLE,2ROT)

P/N	SIZE	ØA	ØB	ØC	L	Dimension
CSCC1321HR	CF1.33,2.125	34	53.8	19.05	100	
CSCC1327HR	CF1.33,2.75	34	69.5	19.05	100	
CSCC2127HR	CF2.125,2.75	53.8	69.5	25.4	100	
CSCC2733HR	CF2.75,3.375	69.5	86	38.1	100	
CSCC2745HR	CF2.75,4.5	69.5	113.5	38.1	150	
CSCC3345HR	CF3.375,4.5	86	113.5	50.8	150	
CSCC4506HR	CF4.5,6	113.5	152	63.5	150	
CSCC0608HR	CF6,8	152	203	101.6	150	
CSCC0810HR	CF8,10	203	254	152.4	200	
CSCC1012HR	CF10,12	254	304	216.3	200	



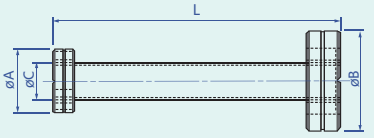
■ REDUCER(STRAIGHT) / CF(2TAP,2FIX)

P/N	SIZE	ØA	ØB	ØC	L	Dimension
CSCC1321TF	CF1.33,2.125	34	53.8	19.05	100	
CSCC1327TF	CF1.33,2.75	34	69.5	19.05	100	
CSCC2127TF	CF2.125,2.75	53.8	69.5	25.4	100	
CSCC2733TF	CF2.75,3.375	69.5	86	38.1	100	
CSCC2745TF	CF2.75,4.5	69.5	113.5	38.1	150	
CSCC3345TF	CF3.375,4.5	86	113.5	50.8	150	
CSCC4506TF	CF4.5,6	113.5	152	63.5	150	
CSCC0608TF	CF6,8	152	203	101.6	150	
CSCC0810TF	CF8,10	203	254	152.4	200	
CSCC1012TF	CF10,12	254	304	216.3	200	



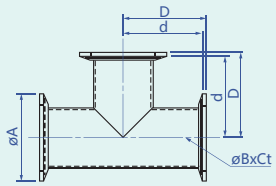
■ REDUCER(STRAIGHT) / CF(2TAP,2ROT)

P/N	SIZE	ØA	ØB	ØC	L	Dimension
CSCC1321TR	CF1.33,2.125	34	53.8	19.05	100	
CSCC1327TR	CF1.33,2.75	34	69.5	19.05	100	
CSCC2127TR	CF2.125,2.75	53.8	69.5	25.4	100	
CSCC2733TR	CF2.75,3.375	69.5	86	38.1	100	
CSCC2745TR	CF2.75,4.5	69.5	113.5	38.1	150	
CSCC3345TR	CF3.375,4.5	86	113.5	50.8	150	
CSCC4506TR	CF4.5,6	113.5	152	63.5	150	
CSCC0608TR	CF6,8	152	203	101.6	150	
CSCC0810TR	CF8,10	203	254	152.4	200	
CSCC1012TR	CF10,12	254	304	216.3	200	

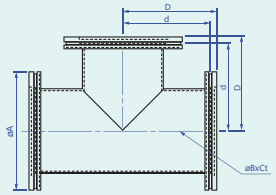


TEE

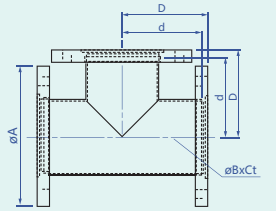
■ TEE / KF

P/N	SIZE	ØA	ØB	C	D	d	Dimension
CTEN016	NW16	30	19.05	1.2	32	28.5	
CTEN025	NW25	40	25.4	1.2	38.5	35	
CTEN040	NW40	55	38.1	1.2	53.5	50	
CTEN050	NW50	75	50.8	1.5	63.5	60	
CTEN063	NW63	95	63.5	1.5	86	79	
CTEN080	NW80	114	76.3	2	89	82	
CTEN100	NW100	134	101.6	2	137	130	

■ TEE / ISO-K

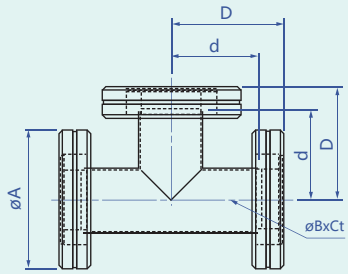
P/N	SIZE	ØA	ØB	C	D	d	Dimension
CTEK063	ISOK63	95	63.5	1.5	86	79	
CTEK080	ISOK80	110	76.3	2	89	82	
CTEK100	ISOK100	130	101.6	2	137	130	
CTEK125	ISOK125	155	139.8	3.4	130.8	123.8	
CTEK160	ISOK160	180	165.2	3.4	149.9	142.9	
CTEK200	ISOK200	240	216.3	4	184.8	177.8	
CTEK250	ISOK250	290	267.4	4	222.9	215.9	

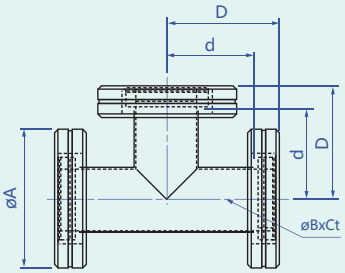
■ TEE / ISO-F

P/N	SIZE	ØA	ØB	C	D	d	Dimension
CTEF063	ISOF63	130	63.5	1.5	86	79	
CTEF080	ISOF80	145	76.3	2	89	82	
CTEF100	ISOF100	165	101.6	2	137	130	
CTEF160	ISOF160	225	165.2	3.4	149.9	142.9	
CTEF200	ISOF200	285	216.3	4	184.8	177.8	
CTEF250	ISOF250	335	267.4	4	222.9	215.9	

■ TEE / CF

P/N	SIZE	ØA	ØB	C	D	d	FIX
CTEC13HF	CF1.33(3H-3F)	34	19.05	1.2	32.8	28.5	
CTEC13HR	CF1.33(3H-3R)	34	19.05	1.2	32.8	28.5	
CTEC13TF	CF1.33(3T-3F)	34	19.05	1.2	32.8	28.5	
CTEC13TR	CF1.33(3T-3R)	34	19.05	1.2	32.8	28.5	
CTEC21HF	CF2.125(3H-3F)	53.8	25.4	1.2	43.9	35	
CTEC21HR	CF2.125(3H-3R)	53.8	25.4	1.2	40.9	35	
CTEC21TF	CF2.125(3T-3F)	53.8	25.4	1.2	43.9	35	
CTEC21TR	CF2.125(3T-3R)	53.8	25.4	1.2	40.9	35	
CTEC27HF	CF2.75(3H-3F)	69.5	38.1	1.2	55.7	50	
CTEC27HR	CF2.75(3H-3R)	69.5	38.1	1.2	55.7	50	
CTEC27TF	CF2.75(3T-3F)	69.5	38.1	1.2	55.7	50	
CTEC27TR	CF2.75(3T-3R)	69.5	38.1	1.2	55.7	50	
CTEC33HF	CF3.375(3H-3F)	86	50.8	1.5	68	60	ROTA
CTEC33HR	CF3.375(3H-3R)	86	50.8	1.5	67.5	60	
CTEC33TF	CF3.375(3T-3F)	86	50.8	1.5	68	60	
CTEC33TR	CF3.375(3T-3R)	86	50.8	1.5	67.5	60	
CTEC45HF	CF4.5(3H-3F)	113.5	63.5	1.5	88.5	79	
CTEC45HR	CF4.5(3H-3R)	113.5	63.5	1.5	89.7	79	
CTEC45TF	CF4.5(3T-3F)	113.5	63.5	1.5	88.5	79	
CTEC45TR	CF4.5(3T-3R)	113.5	63.5	1.5	89.7	79	
CTEC06HF	CF6(3H-3F)	152	101.6	2	140	130	
CTEC06HR	CF6(3H-3R)	152	101.6	2	141.3	130	
CTEC06TF	CF6(3T-3F)	152	101.6	2	140	130	
CTEC06TR	CF6(3T-3R)	152	101.6	2	141.3	130	

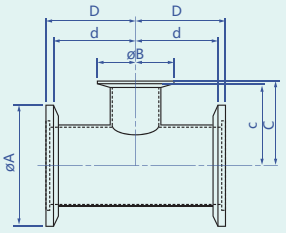




TEE-REDUCING

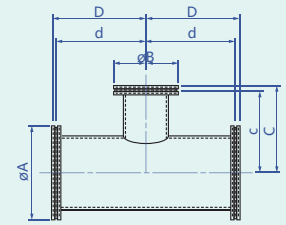
■ TEE(REDUCING) / KF

P/N	SIZE	ØA	ØB	C	c	D	d	Dimension
CTEN2540	NW25,40	55	40	43.5	40	53.5	50	
CTEN2550	NW25,50	75	40	51.1	47.6	63.5	60	
CTEN2563	NW25,63	95	40	55.8	52.3	86	79	
CTEN4050	NW40,50	75	55	62.1	58.6	63.5	60	
CTEN4063	NW40,63	95	55	66.8	63.3	86	79	
CTEN4080	NW40,80	114	55	73.5	70	89	82	
CTEN5063	NW50,63	95	75	72.8	69.3	86	79	
CTEN5080	NW50,80	114	75	79.5	76	89	82	
CTEN6380	NW63,80	114	95	97	90	89	82	
CTEN50100	NW50,100	134	75	100.5	97	137	130	
CTEN63100	NW63,100	134	95	120	113	137	130	
CTEN80100	NW80,100	134	114	123	116	137	130	



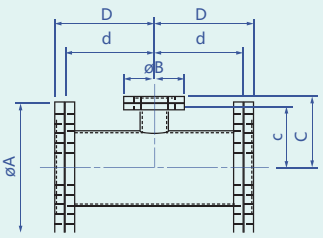
■ TEE(REDUCING) / ISO-K

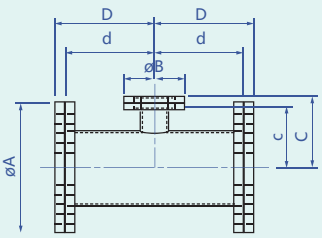
P/N	SIZE	ØA	ØB	C	c	D	d	Dimension
CTEK6380	ISOK63,80	110	95	97	90	89	82	
CTEK63100	ISOK63,100	130	95	120	113	137	130	
CTEK80100	ISOK80,100	130	110	123	116	137	130	



■ TEE(REDUCING) / CF

P/N	SIZE	ØA	ØB	C	c	D	d	FIX
CTEC2127HF	CF2.125,2.75(3H-3F)	69.5	53.8	48.9	40	55.7	50	
CTEC2127HR	CF2.125,2.75(3H-3R)	69.5	53.8	45.9	40	55.7	50	
CTEC2127TF	CF2.125,2.75(3T-3F)	69.5	53.8	48.9	40	55.7	50	
CTEC2127TR	CF2.125,2.75(3T-3R)	69.5	53.8	45.9	40	55.7	50	
CTEC2133HF	CF2.125,3.375(3H-3F)	86	53.8	56.5	47.6	68	60	
CTEC2133HR	CF2.125,3.375(3H-3R)	86	53.8	53.5	47.6	67.5	60	
CTEC2133TF	CF2.125,3.375(3T-3F)	86	53.8	56.5	47.6	68	60	
CTEC2133TR	CF2.125,3.375(3T-3R)	86	53.8	53.5	47.6	67.5	60	
CTEC2145HF	CF2.125,4.5(3H-3F)	113.5	53.8	61.2	52.3	88.5	79	
CTEC2145HR	CF2.125,4.5(3H-3R)	113.5	53.8	58.2	52.3	89.7	79	
CTEC2145TF	CF2.125,4.5(3T-3F)	113.5	53.8	61.2	52.3	88.5	79	
CTEC2145TR	CF2.125,4.5(3T-3R)	113.5	53.8	58.2	52.3	89.7	79	
CTEC2733HF	CF2.75,3.375(3H-3F)	86	69.5	64.3	58.6	68	60	
CTEC2733HR	CF2.75,3.375(3H-3R)	86	69.5	64.3	58.6	67.5	60	
CTEC2733TF	CF2.75,3.375(3T-3F)	86	69.5	64.3	58.6	68	60	
CTEC2733TR	CF2.75,3.375(3T-3R)	86	69.5	64.3	58.6	67.5	60	
CTEC2745HF	CF2.75,4.5(3H-3F)	113.5	69.5	69	63.3	88.5	79	ROTA
CTEC2745HR	CF2.75,4.5(3H-3R)	113.5	69.5	69	63.3	89.7	79	
CTEC2745TF	CF2.75,4.5(3T-3F)	113.5	69.5	69	63.3	88.5	79	
CTEC2745TR	CF2.75,4.5(3T-3R)	113.5	69.5	69	63.3	89.7	79	
CTEC3345HF	CF3.375,4.5(3H-3F)	113.5	86	77.3	69.3	88.5	79	
CTEC3345HR	CF3.375,4.5(3H-3R)	113.5	86	76.8	69.3	89.7	79	
CTEC3345TF	CF3.375,4.5(3T-3F)	113.5	86	77.3	69.3	88.5	79	
CTEC3345TR	CF3.375,4.5(3T-3R)	113.5	86	76.8	69.3	89.7	79	
CTEC3306HF	CF3.375,6(3H-3F)	152	86	105	97	140	130	
CTEC3306HR	CF3.375,6(3H-3R)	152	86	104.5	97	141.3	130	
CTEC3306TF	CF3.375,6(3T-3F)	152	86	105	97	140	130	
CTEC3306TR	CF3.375,6(3T-3R)	152	86	104.5	97	141.3	130	
CTEC4506HF	CF4.5,6(3H-3F)	152	113.5	122.5	113	140	130	
CTEC4506HR	CF4.5,6(3H-3R)	152	113.5	123.7	113	141.3	130	
CTEC4506TF	CF4.5,6(3T-3F)	152	113.5	122.5	113	140	130	
CTEC4506TR	CF4.5,6(3T-3R)	152	113.5	123.7	113	141.3	130	

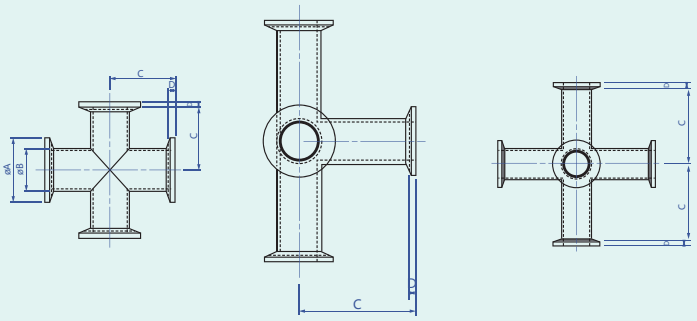




CROSS

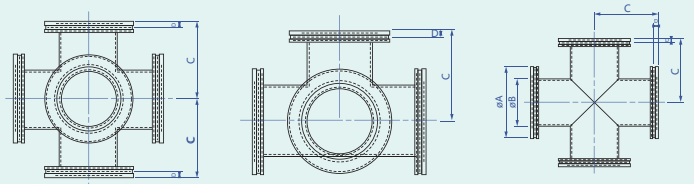
■ CROSS / KF

P/N	SIZE	ØA	ØB	C	D	4WAY	5WAY	6WAY
CRON016	NW16-4WAY	30	19.05	32	3.5			
CRO5N016	NW16-5WAY	30	19.05	51.1	3.5			
CRO6N016	NW16-6WAY	30	19.05	51.1	3.5			
CRON025	NW25-4WAY	40	25.4	38.5	3.5			
CRO5N025	NW25-5WAY	40	25.4	51.1	3.5			
CRO6N025	NW25-6WAY	40	25.4	51.1	3.5			
CRON040	NW40-4WAY	55	38.1	53.5	3.5			
CRO5N040	NW40-5WAY	55	38.1	60.7	3.5			
CRO6N040	NW40-6WAY	55	38.1	60.7	3.5			
CRON050	NW50-4WAY	75	50.8	63.5	3.5			
CRO5N050	NW50-5WAY	75	50.8	79.7	3.5			
CRO6N050	NW50-6WAY	75	50.8	79.7	3.5			
CRON063	NW63-4WAY	95	63.5	86	7			
CRO5N063	NW63-5WAY	95	63.5	83.2	7			
CRO6N063	NW63-6WAY	95	63.5	83.2	7			
CRON080	NW80-4WAY	114	76.3	89	7			
CRO5N080	NW80-5WAY	114	76.3	89.6	7			
CRO6N080	NW80-6WAY	114	76.3	89.6	7			
CRON100	NW100-4WAY	134	101.6	137	7			
CRO5N100	NW100-5WAY	134	101.6	105.4	7			
CRO6N100	NW100-6WAY	134	101.6	105.4	7			



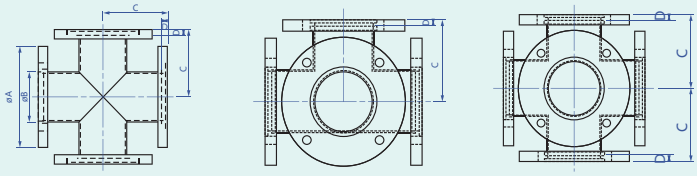
■ CROSS / ISO-K

P/N	SIZE	ØA	ØB	C	D	4WAY	5WAY	6WAY
CROK063	ISOK63-4WAY	95	63.5	86	7			
CRO5K063	ISOK63-5WAY	95	63.5	83.2	7			
CRO6K063	ISOK63-6WAY	95	63.5	83.2	7			
CROK080	ISOK80-4WAY	110	76.3	89	7			
CRO5K080	ISOK80-5WAY	110	76.3	89.6	7			
CRO6K080	ISOK80-6WAY	110	76.3	89.6	7			
CROK100	ISOK100-4WAY	130	101.6	137	7			
CRO5K100	ISOK100-5WAY	130	101.6	105.4	7			
CRO6K100	ISOK100-6WAY	130	101.6	105.4	7			



■ CROSS / ISO-F

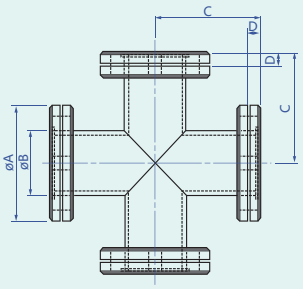
P/N	SIZE	ØA	ØB	C	D	4WAY	5WAY	6WAY
CROF063	ISOF63-4WAY	130	63.5	86	7			
CRO5F063	ISOF63-5WAY	130	63.5	83.2	7			
CRO6F063	ISOF63-6WAY	130	63.5	83.2	7			
CROF080	ISOF80-4WAY	145	76.3	89	7			
CRO5F080	ISOF80-5WAY	145	76.3	89.6	7			
CRO6F080	ISOF80-6WAY	145	76.3	89.6	7			
CROF100	ISOF100-4WAY	165	101.6	137	7			
CRO5F100	ISOF100-5WAY	165	101.6	105.4	7			
CRO6F100	ISOF100-6WAY	165	101.6	105.4	7			



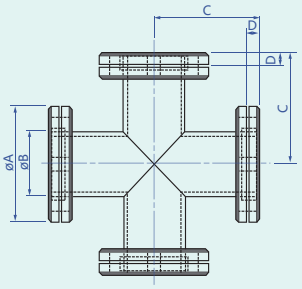
■ CROSS / CF(HOLE)

P/N	SIZE	ØA	ØB	C	D
CROC13HF	CF1.33-4WAY-FIX	34	19.05	32.8	4.3
CROC13HR	CF1.33-4WAY-ROTA	34	19.05	32.8	4.3
CRO5C13HF	CF1.33-5WAY-FIX	34	19.05	51.9	4.3
CRO5C13HR	CF1.33-5WAY-ROTA	34	19.05	51.9	4.3
CRO6C13HF	CF1.33-6WAY-FIX	34	19.05	51.9	4.3
CRO6C13HR	CF1.33-6WAY-ROTA	34	19.05	51.9	4.3
CROC21HF	CF2.125-4WAY-FIX	53.8	25.4	43.9	8.9
CROC21HR	CF2.125-4WAY-ROTA	53.8	25.4	40.9	5.9
CRO5C21HF	CF2.125-5WAY-FIX	53.8	25.4	56.5	8.9
CRO5C21HR	CF2.125-5WAY-ROTA	53.8	25.4	53.5	5.9
CRO6C21HF	CF2.125-6WAY-FIX	53.8	25.4	56.5	8.9
CRO6C21HR	CF2.125-6WAY-ROTA	53.8	25.4	53.5	5.9
CROC27HF	CF2.75-4WAY-FIX	69.5	38.1	55.7	5.7
CROC27HR	CF2.75-4WAY-ROTA	69.5	38.1	55.7	5.7
CRO5C27HF	CF2.75-5WAY-FIX	69.5	38.1	62.9	5.7
CRO5C27HR	CF2.75-5WAY-ROTA	69.5	38.1	62.9	5.7
CRO6C27HF	CF2.75-6WAY-FIX	69.5	38.1	62.9	5.7
CRO6C27HR	CF2.75-6WAY-ROTA	69.5	38.1	62.9	5.7
CROC33HF	CF3.375-4WAY-FIX	86	50.8	68	8
CROC33HR	CF3.375-4WAY-ROTA	86	50.8	67.5	7.5
CRO5C33HF	CF3.375-5WAY-FIX	86	50.8	84.2	8
CRO5C33HR	CF3.375-5WAY-ROTA	86	50.8	83.7	7.5
CRO6C33HF	CF3.375-6WAY-FIX	86	50.8	84.2	8
CRO6C33HR	CF3.375-6WAY-ROTA	86	50.8	83.7	7.5
CROC45HF	CF4.5-4WAY-FIX	113.5	63.5	88.5	9.5
CROC45HR	CF4.5-4WAY-ROTA	113.5	63.5	89.7	10.7
CRO5C45HF	CF4.5-5WAY-FIX	113.5	63.5	85.7	9.5
CRO5C45HR	CF4.5-5WAY-ROTA	113.5	63.5	86.9	10.7
CRO6C45HF	CF4.5-6WAY-FIX	113.5	63.5	85.7	9.5
CRO6C45HR	CF4.5-6WAY-ROTA	113.5	63.5	86.9	10.7
CROC06HF	CF6-4WAY-FIX	152	101.6	140	10
CROC06HR	CF6-4WAY-ROTA	152	101.6	141.3	11.3
CRO5C06HF	CF6-5WAY-FIX	152	101.6	108.4	10
CRO5C06HR	CF6-5WAY-ROTA	152	101.6	109.7	11.3
CRO6C06HF	CF6-6WAY-FIX	152	101.6	108.4	10
CRO6C06HR	CF6-6WAY-ROTA	152	101.6	109.7	11.3

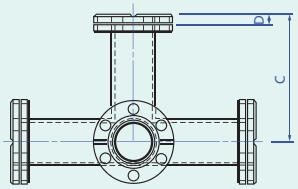
4WAY-FIX



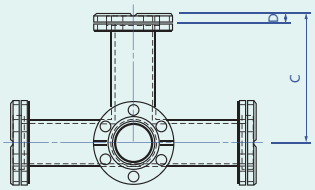
4WAY-ROTA



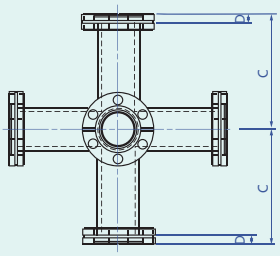
5WAY-FIX



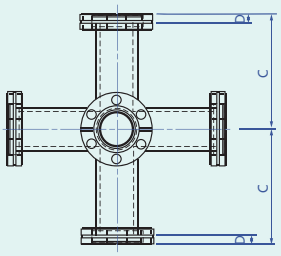
5WAY-ROTA



6WAY-FIX

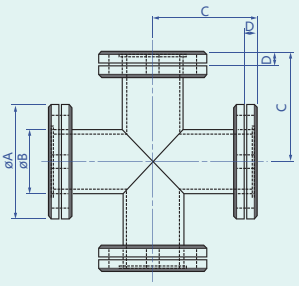


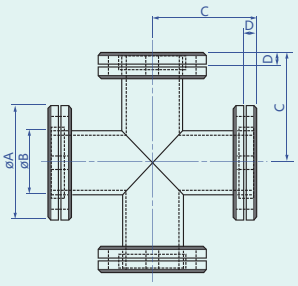
6WAY-ROTA

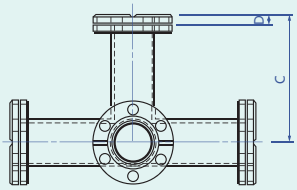


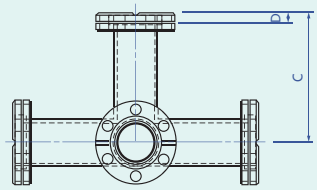
■ CROSS / CF(TAP)

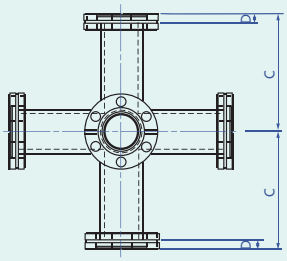
P/N	SIZE	ØA	ØB	C	D	4WAY-FIX	4WAY-ROTA
CROC13TF	CF1.33-4WAY-FIX	34	19.05	32.8	4.3		
CROC13TR	CF1.33-4WAY-ROTA	34	19.05	32.8	4.3		
CRO5C13TF	CF1.33-5WAY-FIX	34	19.05	51.9	4.3		
CRO5C13TR	CF1.33-5WAY-ROTA	34	19.05	51.9	4.3		
CRO6C13TF	CF1.33-6WAY-FIX	34	19.05	51.9	4.3		
CRO6C13TR	CF1.33-6WAY-ROTA	34	19.05	51.9	4.3		
CROC21TF	CF2.125-4WAY-FIX	53.8	25.4	43.9	8.9		
CROC21TR	CF2.125-4WAY-ROTA	53.8	25.4	40.9	5.9		
CRO5C21TF	CF2.125-5WAY-FIX	53.8	25.4	56.5	8.9		
CRO5C21TR	CF2.125-5WAY-ROTA	53.8	25.4	53.5	5.9		
CRO6C21TF	CF2.125-6WAY-FIX	53.8	25.4	56.5	8.9		
CRO6C21TR	CF2.125-6WAY-ROTA	53.8	25.4	53.5	5.9		
CROC27TF	CF2.75-4WAY-FIX	69.5	38.1	55.7	5.7	5WAY-FIX	5WAY-ROTA
CROC27TR	CF2.75-4WAY-ROTA	69.5	38.1	55.7	5.7		
CRO5C27TF	CF2.75-5WAY-FIX	69.5	38.1	62.9	5.7		
CRO5C27TR	CF2.75-5WAY-ROTA	69.5	38.1	62.9	5.7		
CRO6C27TF	CF2.75-6WAY-FIX	69.5	38.1	62.9	5.7		
CRO6C27TR	CF2.75-6WAY-ROTA	69.5	38.1	62.9	5.7		
CROC33TF	CF3.375-4WAY-FIX	86	50.8	68	8		
CROC33TR	CF3.375-4WAY-ROTA	86	50.8	67.5	7.5		
CRO5C33TF	CF3.375-5WAY-FIX	86	50.8	84.2	8		
CRO5C33TR	CF3.375-5WAY-ROTA	86	50.8	83.7	7.5		
CRO6C33TF	CF3.375-6WAY-FIX	86	50.8	84.2	8		
CRO6C33TR	CF3.375-6WAY-ROTA	86	50.8	83.7	7.5		
CROC45TF	CF4.5-4WAY-FIX	113.5	63.5	88.5	9.5	6WAY-FIX	6WAY-ROTA
CROC45TR	CF4.5-4WAY-ROTA	113.5	63.5	89.7	10.7		
CRO5C45TF	CF4.5-5WAY-FIX	113.5	63.5	85.7	9.5		
CRO5C45TR	CF4.5-5WAY-ROTA	113.5	63.5	86.9	10.7		
CRO6C45TF	CF4.5-6WAY-FIX	113.5	63.5	85.7	9.5		
CRO6C45TR	CF4.5-6WAY-ROTA	113.5	63.5	86.9	10.7		
CROC06TF	CF6-4WAY-FIX	152	101.6	140	10		
CROC06TR	CF6-4WAY-ROTA	152	101.6	141.3	11.3		
CRO5C06TF	CF6-5WAY-FIX	152	101.6	108.4	10		
CRO5C06TR	CF6-5WAY-ROTA	152	101.6	109.7	11.3		
CRO6C06TF	CF6-6WAY-FIX	152	101.6	108.4	10		
CRO6C06TR	CF6-6WAY-ROTA	152	101.6	109.7	11.3		

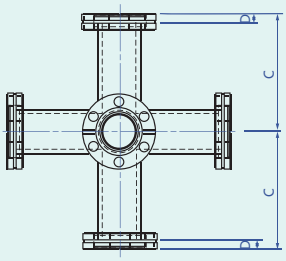








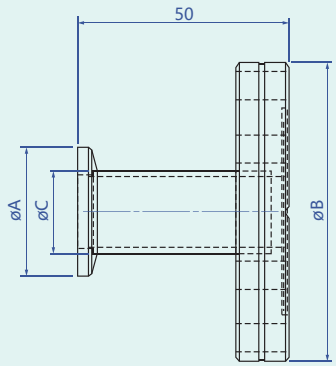




ADAPTOR

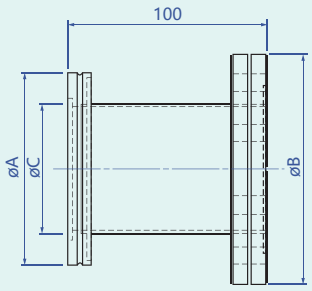
■ ADAPTOR / KF to CF

P/N	SIZE	ØA	ØB	ØC	Dimension
CANC1613	NW16, CF1.33	30	34	19.05	
CANC1627	NW16, CF2.75	30	69.5	19.05	
CANC1606	NW16, CF6	30	152	19.05	
CANC2513	NW25, CF1.33	40	34	19.05	
CANC2527	NW25, CF2.75	40	69.5	25.4	
CANC2545	NW25, CF4.5	40	113.5	25.4	
CANC2506	NW25, CF6	40	152	25.4	
CANC2508	NW25, CF8	40	203	25.4	
CANC4013	NW40, CF1.33	55	34	19.05	
CANC4027	NW40, CF2.75	55	69.5	38.1	
CANC4045	NW40, CF4.5	55	113.5	38.1	
CANC4006	NW40, CF6	55	152	38.1	
CANC4008	NW40, CF8	55	203	38.1	
CANC5013	NW50, CF1.33	75	34	19.05	
CANC5027	NW50, CF2.75	75	69.5	38.1	
CANC5045	NW50, CF4.5	75	113.5	50.8	
CANC5006	NW50, CF6	75	152	50.8	
CANC5008	NW50, CF8	75	203	50.8	



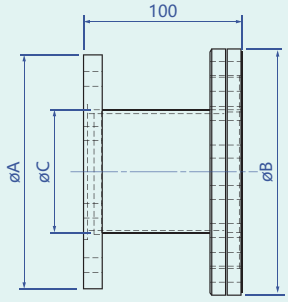
■ ADAPTOR / ISO-K to CF

P/N	SIZE	ØA	ØB	ØC	Dimension
CAKC6345	ISOK63, CF4.5	95	113.5	63.5	
CAKC8006	ISOK80, CF6	110	152	76.3	
CAKC10006	ISOK100, CF6	130	152	101.6	
CAKC16008	ISOK160, CF8	180	203	152.4	
CAKC20010	ISOK200, CF10	240	254	216.3	



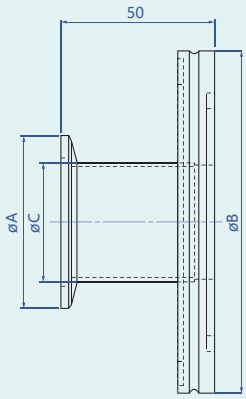
■ ADAPTOR / ISO-F to CF

P/N	SIZE	ØA	ØB	ØC	Dimension
CAFC6345	ISOF63, CF4.5	130	113.5	63.5	
CAFC8006	ISOF80, CF6	145	152	76.3	
CAFC10006	ISOF100, CF6	165	152	101.6	
CAFC16008	ISOF160, CF8	225	203	152.4	
CAFC20010	ISOF200, CF10	285	254	216.3	



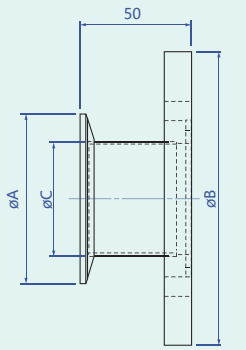
■ ADAPTOR / KF to ISO-K

P/N	SIZE	ØA	ØB	ØC	Dimension
CANK1663	NW16, ISOK63	30	95	19.05	
CANK1680	NW16, ISOK80	30	110	19.05	
CANK16100	NW16, ISOK100	30	130	19.05	
CANK2563	NW25, ISOK63	40	95	25.4	
CANK2580	NW25, ISOK80	40	110	25.4	
CANK25100	NW25, ISOK100	40	130	25.4	
CANK4063	NW40, ISOK63	55	95	38.1	
CANK4080	NW40, ISOK80	55	110	38.1	
CANK40100	NW40, ISOK100	55	130	38.1	
CANK5063	NW50, ISOK63	75	95	50.8	
CANK5080	NW50, ISOK80	75	110	50.8	
CANK50100	NW50, ISOK100	75	130	50.8	



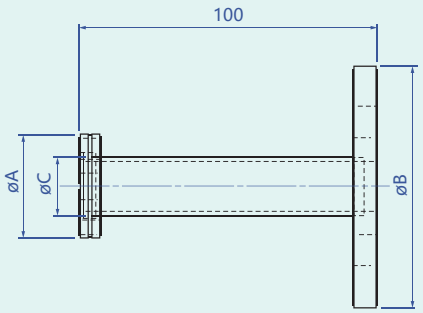
■ ADAPTOR / KF to ISO-F

P/N	SIZE	ØA	ØB	ØC	Dimension
CANF1663	NW16, ISOF63	30	130	19.05	
CANF1680	NW16, ISOF80	30	145	19.05	
CANF16100	NW16, ISOF100	30	165	19.05	
CANF2563	NW25, ISOF63	40	130	25.4	
CANF2580	NW25, ISOF80	40	145	25.4	
CANF25100	NW25, ISOF100	40	165	25.4	
CANF4063	NW40, ISOF63	55	130	38.1	
CANF4080	NW40, ISOF80	55	145	38.1	
CANF40100	NW40, ISOF100	55	165	38.1	
CANF5063	NW50, ISOF63	75	130	50.8	
CANF5080	NW50, ISOF80	75	145	50.8	
CANF50100	NW50, ISOF100	75	165	50.8	



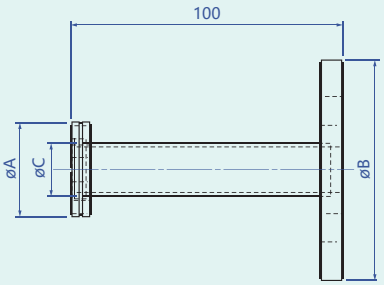
■ ADAPTOR / VG to VF

P/N	SIZE	ØA	ØB	ØC	P/N	SIZE	ØA	ØB	ØC
CAJG2020	VF20, VG20	80	80	25.4	CAJG6565	VF65, VG65	145	145	63.5
CAJG2025	VF20,VG25	80	90	25.4	CAJG6580	VF65, VG80	145	160	63.5
CAJG2040	VF20,VG40	80	105	25.4	CAJG65100	VF65, VG100	145	185	63.5
CAJG2050	VF20,VG50	80	120	25.4	CAJG65150	VF65, VG150	145	235	63.5
CAJG2065	VF20,VG65	80	145	25.4	CAJG8020	VF80, VG20	160	80	25.4
CAJG2080	VF20,VG80	80	160	25.4	CAJG8025	VF80, VG25	160	90	25.4
CAJG20100	VF20,VG100	80	185	25.4	CAJG8040	VF80, VG40	160	105	38.1
CAJG20150	VF20,VG150	80	235	25.4	CAJG8050	VF80, VG50	160	120	50.8
CAJG2520	VF25, VG20	90	80	25.4	CAJG8065	VF80, VG65	160	145	63.5
CAJG2525	VF25, VG25	90	90	25.4	CAJG8080	VF80, VG80	160	160	76.3
CAJG2540	VF25, VG40	90	105	25.4	CAJG80100	VF80, VG100	160	185	76.3
CAJG2550	VF25, VG50	90	120	25.4	CAJG80150	VF80, VG150	160	235	76.3
CAJG2565	VF25, VG65	90	145	25.4	CAJG10020	VF100, VG20	185	80	25.4
CAJG2580	VF25, VG80	90	160	25.4	CAJG10025	VF100, VG25	185	90	25.4
CAJG25100	VF25, VG100	90	185	25.4	CAJG10040	VF100, VG40	185	105	38.1
CAJG25150	VF25, VG150	90	235	25.4	CAJG10050	VF100, VG50	185	120	50.8
CAJG4020	VF40, VG20	105	80	25.4	CAJG10065	VF100, VG65	185	145	63.5
CAJG4025	VF40, VG25	105	90	25.4	CAJG10080	VF100, VG80	185	160	76.3
CAJG4040	VF40, VG40	105	105	38.1	CAJG100100	VF100, VG100	185	185	101.6
CAJG4050	VF40, VG50	105	120	38.1	CAJG100150	VF100, VG150	185	235	101.6
CAJG4065	VF40, VG65	105	145	38.1	CAJG15020	VF150, VG20	235	80	25.4
CAJG4080	VF40, VG80	105	160	38.1	CAJG15025	VF150, VG25	235	90	25.4
CAJG40100	VF40, VG100	105	185	38.1	CAJG15040	VF150, VG40	235	105	38.1
CAJG40150	VF40, VG150	105	235	38.1	CAJG15050	VF150, VG50	235	120	50.8
CAJG5020	VF50, VG20	120	80	25.4	CAJG15065	VF150, VG65	235	145	63.5
CAJG5025	VF50, VG25	120	90	25.4	CAJG15080	VF150, VG80	235	160	76.3
CAJG5040	VF50, VG40	120	105	38.1	CAJG150100	VF150, VG100	235	185	101.6
CAJG5050	VF50, VG50	120	120	50.8	CAJG150150	VF150, VG150	235	235	152.4
CAJG5065	VF50, VG65	120	145	50.8					
CAJG5080	VF50, VG80	120	160	50.8					
CAJG50100	VF50, VG100	120	185	50.8					
CAJG50150	VF50, VG150	120	235	50.8					
CAJG6520	VF65, VG20	145	80	25.4					
CAJG6525	VF65, VG25	145	90	25.4					
CAJG6540	VF65, VG40	145	105	38.1					
CAJG6550	VF65, VG50	145	120	50.8					



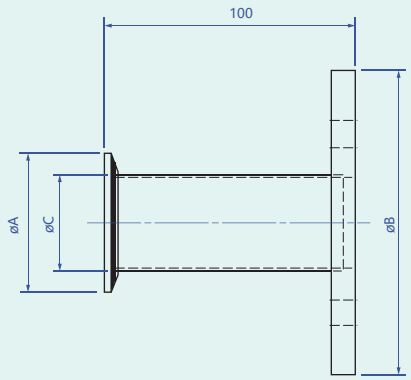
■ ADAPTOR / CF to VF

P/N	SIZE	ØA	ØB	ØC	Dimension
CACJ1320	CF1.33,VF20	34	80	19.05	
CACJ1325	CF1.33,VF25	34	90	19.05	
CACJ1340	CF1.33,VF40	34	105	19.05	
CACJ1350	CF1.33,VF50	34	120	19.05	
CACJ1365	CF1.33,VF65	34	145	19.05	
CACJ1380	CF1.33,VF80	34	160	19.05	
CACJ13100	CF1.33,VF100	34	185	19.05	
CACJ13150	CF1.33,VF150	34	235	19.05	
CACJ2720	CF2.75,VF20	69.5	80	25.4	
CACJ2725	CF2.75,VF25	69.5	90	25.4	
CACJ2740	CF2.75,VF40	69.5	105	38.1	
CACJ2750	CF2.75,VF50	69.5	120	38.1	
CACJ2765	CF2.75,VF65	69.5	145	38.1	
CACJ2780	CF2.75,VF80	69.5	160	38.1	
CACJ27100	CF2.75,VF100	69.5	185	38.1	
CACJ27150	CF2.75,VF150	69.5	235	38.1	
CACJ4520	CF4.5,VF20	113.5	80	25.4	
CACJ4525	CF4.5,VF25	113.5	90	25.4	
CACJ4540	CF4.5,VF40	113.5	105	38.1	
CACJ4550	CF4.5,VF50	113.5	120	50.8	
CACJ4565	CF4.5,VF65	113.5	145	63.5	
CACJ4580	CF4.5,VF80	113.5	160	63.5	
CACJ45100	CF4.5,VF100	113.5	185	63.5	
CACJ45150	CF4.5,VF150	113.5	235	63.5	
CACJ0620	CF6,VF20	152	80	25.4	
CACJ0625	CF6,VF25	152	90	25.4	
CACJ0640	CF6,VF40	152	105	38.1	
CACJ0650	CF6,VF50	152	120	50.8	
CACJ0665	CF6,VF65	152	145	63.5	
CACJ0680	CF6,VF80	152	160	76.3	
CACJ06100	CF6,VF100	152	185	101.6	
CACJ06150	CF6,VF150	152	235	101.6	
CACJ0820	CF8,VF20	203	80	25.4	
CACJ0825	CF8,VF25	203	90	25.4	
CACJ0840	CF8,VF40	203	105	38.1	
CACJ0850	CF8,VF50	203	120	50.8	
CACJ0865	CF8,VF65	203	145	63.5	
CACJ0880	CF8,VF80	203	160	76.3	
CACJ08100	CF8,VF100	203	185	101.6	
CACJ08150	CF8,VF150	203	235	152.4	



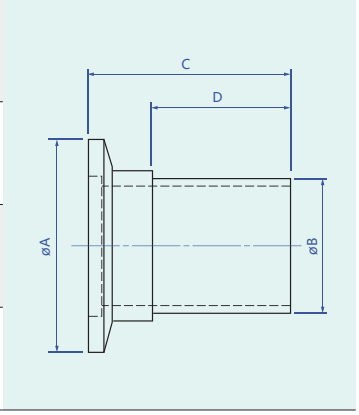
■ ADAPTOR / KF to VF

P/N	SIZE	ØA	ØB	ØC	Dimension
CAJN1620	NW16, VF20	30	80	19.05	
CAJN1625	NW16, VF25	30	90	19.05	
CAJN1640	NW16, VF40	30	105	19.05	
CAJN1650	NW16, VF50	30	120	19.05	
CAJN1665	NW16, VF65	30	145	19.05	
CAJN1680	NW16, VF80	30	160	19.05	
CAJN16100	NW16, VF100	30	185	19.05	
CAJN16150	NW16, VF150	30	235	19.05	
CAJN2520	NW25, VF20	40	80	25.4	
CAJN2525	NW25, VF25	40	90	25.4	
CAJN2540	NW25, VF40	40	105	25.4	
CAJN2550	NW25, VF50	40	120	25.4	
CAJN2565	NW25, VF65	40	145	25.4	
CAJN2580	NW25, VF80	40	160	25.4	
CAJN25100	NW25, VF100	40	185	25.4	
CAJN25150	NW25, VF150	40	235	25.4	
CAJN4020	NW40, VF20	55	80	25.4	
CAJN4025	NW40, VF25	55	90	25.4	
CAJN4040	NW40, VF40	55	105	38.1	
CAJN4050	NW40, VF50	55	120	38.1	
CAJN4065	NW40, VF65	55	145	38.1	
CAJN4080	NW40, VF80	55	160	38.1	
CAJN40100	NW40, VF100	55	185	38.1	
CAJN40150	NW40, VF150	55	235	38.1	
CAJN5020	NW50, VF20	75	80	25.4	
CAJN5025	NW50, VF25	75	90	25.4	
CAJN5040	NW50, VF40	75	105	38.1	
CAJN5050	NW50, VF50	75	120	50.8	
CAJN5065	NW50, VF65	75	145	50.8	
CAJN5080	NW50, VF80	75	160	50.8	
CAJN50100	NW50, VF100	75	185	50.8	
CAJN50150	NW50, VF150	75	235	50.8	



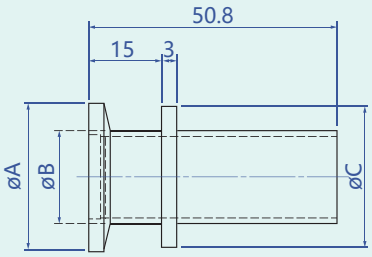
HOSE NIPPLE

■ HOSE NIPPLE / KF

P/N	SIZE	ØA	ØB	C	D	Dimension
CHNN16	NW16	30	19.05	32	20	
CHNN25	NW25	40	25.4	38	26	
CHNN40	NW40	55	38.1	50	38.2	
CHNN50	NW50	75	50.8	55	41	

TEST PORT

■ TEST PORT / KF

P/N	SIZE	ØA	ØB	ØC	Dimension
CTPN16	NW16	30	19.05	28	
CTPN25	NW25	40	25.4	38	
CTPN40	NW40	55	38.1	50	
CTPN50	NW50	75	50.8	70	

Manual and precaution

① Safety

①-① Be sure to read this manual.

①-② The precautions shown here are intended to prevent harm and damage to you and others by using the product safely and correctly. These items are divided into three categories: [Danger], [Warning], and [Caution] to specify the size and extent of damage or damage. All of them are important for safety, so please observe the international standard [ISO / IEC] and other safety regulations. This chapter should be read and understood by those who use this product at all stages of use of this product. Failure to read this manual may result in property damage. Be sure to read the manual.

	Danger	**Serious danger** Indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.
	Warning	**Moderate risk** Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Caution	**Low intensity hazard** Indicates that incorrect handling may result in minor or moderate injury.
	Notice	**Notice** Indicates if unavoidable, causing property loss

Warning

① The system designer will determine the suitability of our products.

Since this product has a variety of conditions used, the determination of suitability should be made by the system designer after technical analysis and, if necessary, testing. The performance and safety assurance of the system is the responsibility of the person who determines the suitability of the system.

② Please treat our products with a sufficient knowledge and experience.

- This product can not be guaranteed the safety when handling incorrectly.
- Those who have sufficient knowledge and experience in assembly and operation maintenance of machinery and equipment.

③ Please do not disassemble the machine-handling equipment or the machine until safety is confirmed.

- Inspection and maintenance of machinery and equipment should be carried out only after confirming measures to prevent falls or prevent runaway of driven objects.
- When disconnecting the product, check the above safety precautions and shut off the energy source and the power supply to the equipment.
- When restarting the machine, be sure to check the safety.

④ Do not use under the following conditions and environments. If unavoidable, please contact us after taking appropriate action to ensure safety.

- Used in conditions or circumstances other than those specified, outdoors or in areas where direct sunlight affects.
- Use is expected to have a significant impact on people or property, especially in applications where safety is required. property, especially in applications where safety is required.

② Personal Eligibility

Warnings for non-qualified personnel

- Improper handling may result in injury or property damage.
- Only persons with certain training qualifications may perform the tasks described in this manual.

③ Safety label indication

Label	Marking position on valve
	Protective film covering valve openings
	Valve body or actuation part

④ Common safety considerations

④-① Usage Precautions

④-①-① Common precautions

4-1-1-1 Valve body material is SUS304, bellows is SUS316L, seal material is FKM. For other materials, you can select optional items. Please check the materials used and use a gas-free gas.

4-1-1-2 The operating pressure, piping material, and fitting heat resistance temperature should be suitable for the operating temperature.

4-1-1-3 Keep the temperature of the auto switch at 60 ° C or less.

4-1-1-4 When using with heater attached, measures should be taken to prevent overheating.

4-1-1-5 When attaching a solenoid valve, keep the temperature of the solenoid valve at 50℃ or less.

④-①-② Precautions on valve selection

4-1-2-1 For large diameter valves, O-ring seal is recommended for improved durability for high vacuum valves used in the main exhaust line.

4-1-2-2 Consider the size, length and flow characteristics of the solenoid valves for operation when managing the responsiveness of the valves.

4-1-2-3 Observe the specified operating pressure.

4-1-2-4 The operating piston seal and bellows seal are in direct contact with the atmosphere. Please consult with us about the circumstances in which the particles are a problem because they may be introduced.

④-①-③ Installation notes

4-1-3-1 Please install this so that excessive vibration or impact is not applied. If the vibration continues, the durability may be reduced.

4-1-3-2 When attaching the heater, be careful not to damage the insulation of the leads and connections.

4-1-3-3 Be sure to secure the leadwire with sufficient curvature so that excessive force is not applied.

4-1-3-4 If the valve is heated, keep the body parts other than the bonnet.

4-1-3-5 When attaching the heater, do not touch the valve with bare hands during heater heating as the valve is hot. Causes burns.

4-1-3-6 If the environment is highly humid, keep the packaging until just before installation.

4-1-3-7 Do not install excessive force on the flange.

④-①-④ Installation Precautions

4-1-4-1 Please install after Flange Seal surface and O-ring should be cleaned with ethanol.

4-1-4-2 Please do not scratch the flange seal.

4-1-4-3 Exhaust direction : In some cases, the exhaust direction is free during operation, but the durability of exhaust flow is reduced. Install to vent to the bellows. This means that the bellows face towards the pump. Conversely, installation may cause sudden impact on the bellows, resulting in bellows damage and rapid degradation of life (except warranty).

④-①-⑤ Maintenance and inspection

4-1-5-1 When removing foreign matter inside, be careful not to damage each part.

4-1-5-2 Replace the bonnet unit when it is close to its service life.

4-1-5-3 If damage is expected even before the service life, please maintenance and inspection promptly.

4-1-5-4 Please use our standard parts for maintenance parts. Refer to the structural drawing, replacement parts, and maintenance parts list.

4-1-5-5 When attached valve, Install the O-ring so that it does not twist.

Warranty and Disclaimer

① The warranty period for our products is within one year from the commencement of use or within 1.5 years after delivery, whichever comes first.

② This product has an operation count, operating distance, and replacement parts so please contact us if needs.

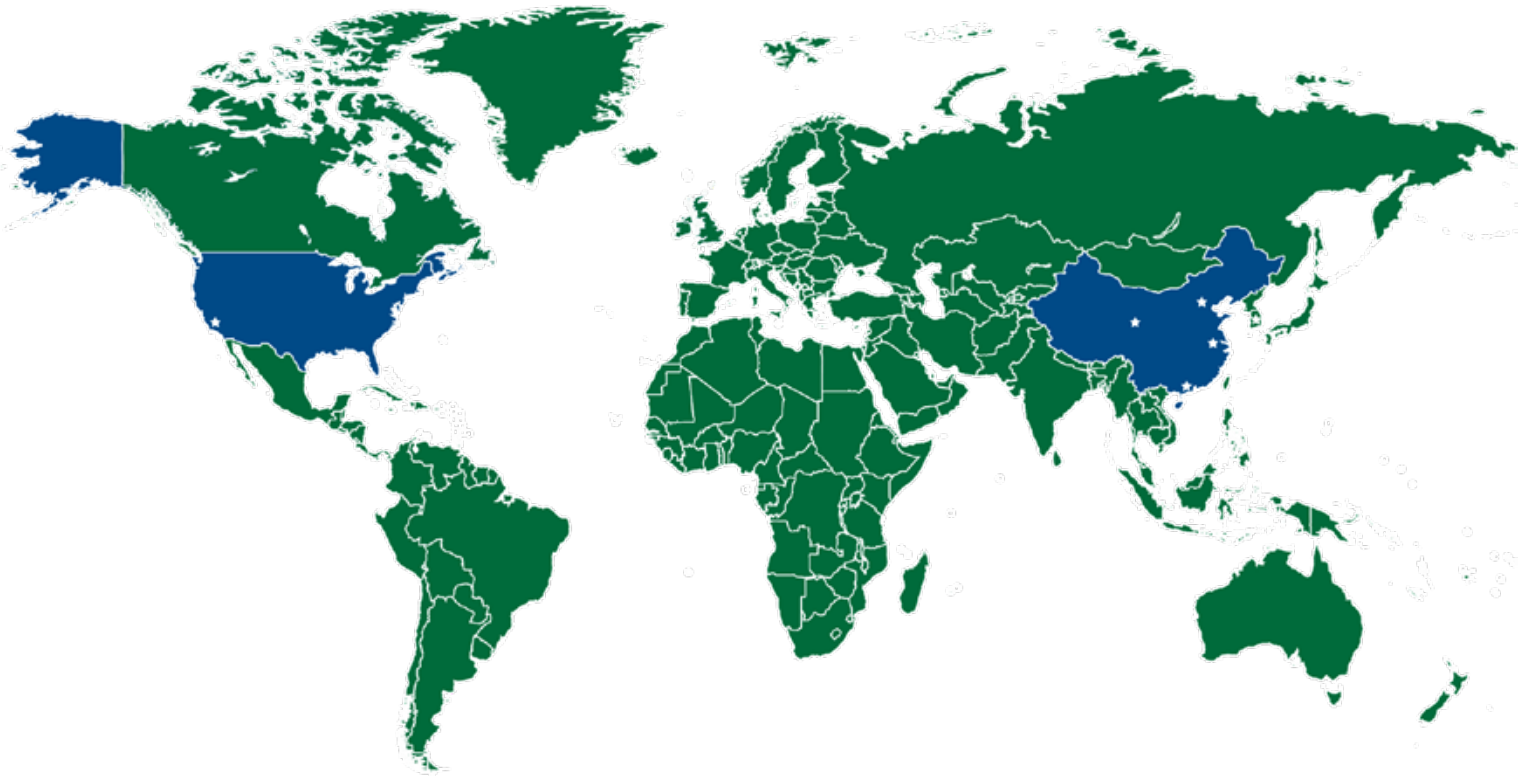
③ In case of failure or damage due to the responsibility of our company during the warranty period, we will provide only replacement parts or necessary parts, and we will not bear any additional loss.

④ Other damages caused by the failure of our products are not covered by the warranty.

⑤ The warranty period of the vacuum pads can not be applied within one year from the use start date.

⑥ Since the vacuum pad is a consumable item, the warranty period is one year after delivery.
However, if it is caused by wear or rubber material deterioration caused by using a vacuum pad even during the warranty period, it will not be covered by the product warranty.

PRECESS VACUUM®
普瑞赛思 · Company



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