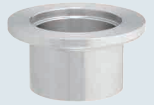
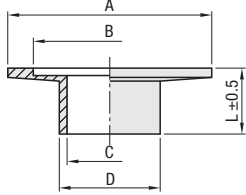

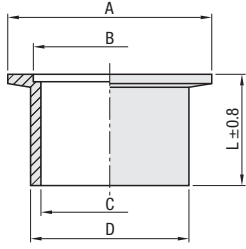

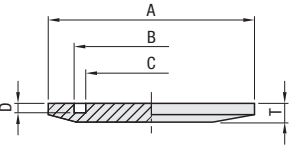

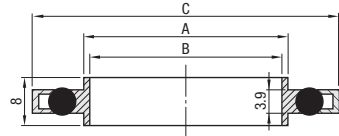

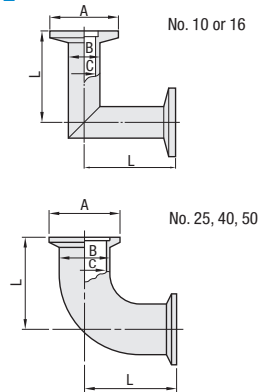


# Fittings for Vacuum Pipes

## NW (KF) Flanged

<p><b>NW Flanged</b></p>  <p>RoHS10</p>	<p><b>FRNWF</b></p>  <p>Max Operation Temperature: 200°C Material: 304 Stainless Steel</p>
<p><b>NW Long Flanged</b></p>  <p>RoHS10</p>	<p><b>FRNWLF</b></p>  <p>Max Operation Temperature: 200°C Material: 304 Stainless Steel</p>
<p><b>NW Blind Flanged</b></p>  <p>RoHS10</p>	<p><b>FRNWBFB</b></p>  <p>Max Operation Temperature: 200°C Material: 304 Stainless Steel</p>
<p><b>Center Rings with Outer Ring</b></p>  <p>RoHS10</p>	<p><b>FRNWR</b></p>  <p>Max Operation Temperature: 150°C Material: Ring: 316 Stainless Steel O-Ring: Fluorine-Rubber</p>
<p><b>Elbow</b></p>  <p>RoHS10</p>	<p><b>FRNWE</b></p>  <p>Max Operation Temperature: 200°C Material: 304 Stainless Steel</p>

Part Number		A	B	C	D	L
Type	No.					
FRNWF	10	30	12.2	10.0	13.8	20
	16	30	17.2	17.5	21.7	
	25	40	26.2	23.0	27.2	
	40	55	41.2	37.1	42.7	
	50	75	52.2	54.9	60.5	

For some sizes of NW Flanged type, the actual groove shape may be different from that shown on the drawing.  
For orders larger than indicated quantity, please check with WOS.

Part Number		A	B	C	D	L
Type	No.					
FRNWLF	10	30	12.2	10.0	13.8	50
	16	30	17.2	17.5	21.7	
	25	40	26.2	23.0	27.2	
	40	55	41.2	37.1	42.7	
	50	75	52.2	54.9	60.5	

For some sizes of NW Flanged type, the actual groove shape may be different from that shown on the drawing.  
For orders larger than indicated quantity, please check with WOS.

Part Number		A	B	C	D	T
Type	No.					
FRNWBFB	10	30	12.2	6.0	2.5	5
	16	30	17.2	11.0		
	25	40	26.2	20.0		
	40	55	41.2	35.0		
	50	75	52.2	46.0		

Part Number Example: FRNWC25

Part Number		A	B	C
Type	No.			
FRNWR	16	17	16	32.4
	25	26	24	42
	40	41	39	56.4
	50	52	50	70.2

Commonly used for No.10 and 16.


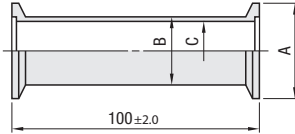

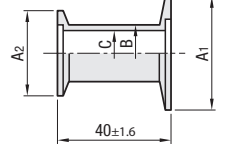

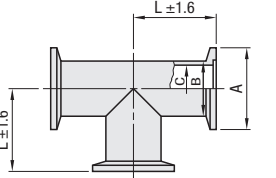

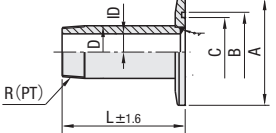

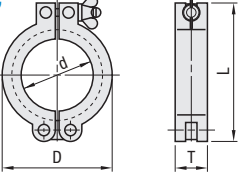
Part Number Example: FRNWC25

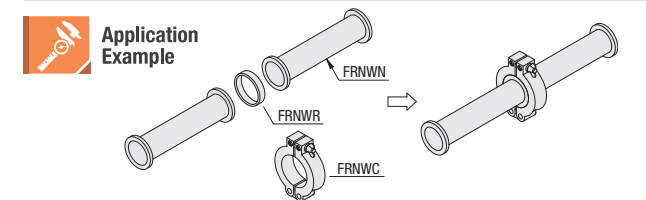
Part Number		A	B	C	L ±2.0
Type	No.				
FRNWE	10	30	13.8	10	40
	16	30	21.7	16	40
	25	40	27.2	23	50
	40	55	42.7	37.1	65
	50	75	60.5	54.9	80

Part Number Example: FRNWF16

# Fittings for Vacuum Pipes

## NW (KF) Flanged

<p><b>Nipple</b></p>  <p>RoHS10</p>	<p><b>FRNWN</b></p>  <p>Max Operation Temperature: 200°C Material: 304 Stainless Steel</p>
<p><b>Reducer</b></p>  <p>RoHS10</p>	<p><b>FRNWJ</b></p>  <p>Max Operation Temperature: 200°C Material: 304 Stainless Steel</p>
<p><b>Tees</b></p>  <p>RoHS10</p>	<p><b>FRNWT</b></p>  <p>Max Operation Temperature: 200°C Material: 304 Stainless Steel</p>
<p><b>Threaded Adapter</b></p>  <p>RoHS10</p>	<p><b>FRNFA</b></p>  <p>Max Operation Temperature: 200°C Material: 304 Stainless Steel</p>
<p><b>Clamp</b></p>  <p>RoHS10</p>	<p><b>FRNWC</b></p>  <p>Max Operation Temperature: 200°C Material Main Body: Aluminum Thread : 304 Stainless Steel</p>



Part Number		A	B	C
Type	No.			
FRNWN	10	30	13.8	10
	16	30	21.7	17.5
	25	40	27.2	23
	40	55	42.7	37.1
	50	75	60.5	54.9

Part Number Example: FRNWF16

Part Number		A <sub>1</sub>	A <sub>2</sub>	B	C
Type	No.				
FRNWJ	25-10	40	30	13.8	10.0
	25-16	40	30	21.7	17.5
	40-16	55	30	21.7	17.5
	40-25	55	40	27.2	23.0
	50-25	75	40	27.2	23.0

Part Number		A	B	C	L
Type	No.				
FRNWT	10	30	13.8	10	40
	16	30	21.7	16	40
	25	40	27.2	23	50
	40	55	42.7	37.1	65
	50	75	60.5	54.9	80

Part Number Example: FRNWF16

Part Number		Nominal	R (PT)	A	D	ID	L
Type	No.						
FRNFA	16	1	1/8	30	10.5	7.5	50
		2	1/4				
		3	3/8				
	25	2	1/4	40	13.8	9.8	
		3	3/8				
		4	1/2				
40	3	3/8	55	17.3	13.3		
	6	3/4				21.7	15.7

Part Number Example: FRNWGP25 - 18, FRNFM25 - 3

Part Number		d	D	L	T
Type	No.				
FRNWC	16	22	56.5	61	17
	25	32	60	72	17.5
	40	47	68	90	19
	50	63	91	123	26

Commonly used for No.10 and 16.

Part Number Example: FRNWC25

### Features

These vacuum pipes are for auxiliary exhaust system of High Vacuum System or rough vacuum fitting of an Ultrahigh Vacuum System.

The plumbing parts of NW (KF) Flanged Type enables frequent detachment without tools compliant with ISO or KF.

### Specifications

Dimensions and shapes are compliant with ISO2861/1-1974 - JISB8365: 1988.