

# Viking Grooved Hinged Flange Adapters



## Approvals



ANSI Flange - Model 321A									
Nominal size		Pipe OD		Approvals				Weight approx.	
DN	Inch	mm (Inch)		VdS	LPCB	FM	UL	kg (lbs)	
50	2	60.3 (2.38)		-	-	D	D	1.41 (3.11)	
65	2-1/2	73.0 (2.88)		-	-	D	D	1.89 (4.17)	
80	3	88.9 (3.50)		-	-	D	D	1.99 (4.39)	
100	4	114.3 (4.50)		-	-	D	D	2.66 (5.86)	
125	5	141.3 (5.56)		-	-	D	-	3.51 (7.74)	
150	6	168.3 (6.63)		-	-	D	-	4.60 (10.10)	
200	8	219.1 (8.63)		-	-	D	A	5.71 (12.60)	
250	10	273.0 (10.75)				D	A	7.82 (17.20)	
PN Flange - Model 321									
50	2	60.3 (2.38)		C	C	D	D	1.61 (3.55)	
65	3 OD	76.1 (3.00)		C	C	D	D	1.90 (4.19)	
80	3	88.9 (3.50)		C	C	D	D	2.16 (4.76)	
100	4	114.3 (4.50)		C	C	D	D	2.61 (5.75)	
125	5-1/2 OD	139.7 (5.50)		C	C	D	B	3.98 (8.77)	
150	6-1/2 OD	165.1 (6.50)		-	C	D	D	3.97 (8.75)	
	6	168.3 (6.63)		C	C	D	D	4.60 (10.10)	
200	8	219.1 (8.63)		C	C	D	D	8.10 (17.90)	
250	10	273.0 (10.75)		C	-	D	B	10.70 (23.60)	
300	12	323.9 (12.750)		-	-	D	B	9.50 (21.00)	

OD = Outside Diameter

Working pressure: **A** = max. 12.1 bar (175 psi) / **B** = max. 15.5 bar (225 psi) / **C** = max. 16 bar (232 psi) / **D** = max. 20.7 bar (300 psi) / **E** = max. 25 bar (363 psi) / **F** = max. 34.5 bar (500 psi) / - = no approvals

## Technical data

Ambient temperature .....-34 °C to 110 °C (-30 °F to 230 °F)

### Tightening torque of lateral bolts/nuts:

- DN50 - DN80 / DN200 - DN250 ..... 40 - 60 Nm (30 - 45 lb-ft)
- DN100 - DN150 ..... 110 - 135 Nm (80 - 100 lb-ft)

## Material / surface

Split flange ..... ductile cast iron  
 - Red paint ..... liquid painting similar RAL 3000  
 - Galvanized ..... hot dip galvanized  
 Gasket ..... EPDM  
 Bolts and nuts ..... heat-treated carbon steel,  
 ..... zinc electroplated with yellow chromate

## Application

Water based fire-suppression systems

## Note

EPDM gaskets must never be brought into contact with lubricants or oils containing mineral oils, as well as other materials containing mineral oils (e.g. fuels or cleaning agents).

## Lubricant for assembly

Use suitable lubricants for the EPDM sealing only;

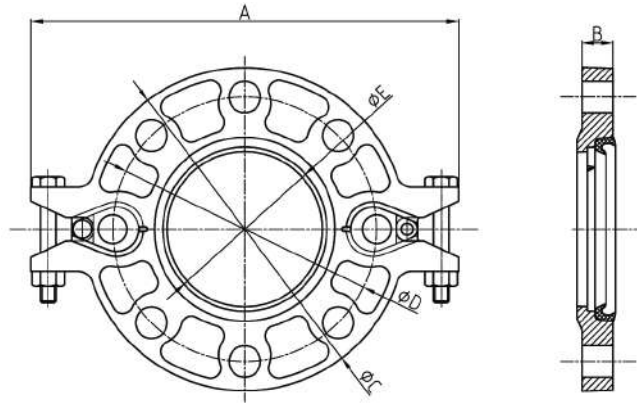
## Installation

Refer to "Grooved Products Installation Guide"

## Maintenance

Visual check

**Dimensional drawing**  
Dimensions in mm (inch)



ANSI Flange - Model 321A								
DN	Inch	A	B	$\phi C$	$\phi D$	$\phi E$	Bolts / Nuts	Flange bolts
50 / 60.3	2	206 (8.11)	19 (0.75)	152 (5.98)	121 (4.76)	57.5 (2.26)	M10x50	4-5/8
65 / 73.0	2-1/2	230 (9.05)	19 (0.75)	178 (7.00)	140 (5.51)	69.8 (2.74)	M10x50	4-5/8
80 / 88.9	3	246 (9.68)	19 (0.75)	191 (7.52)	152 (5.98)	85.5 (3.37)	M10x50	4-5/8
100 / 114.3	4	280 (11.02)	19 (0.75)	229 (9.00)	191 (7.52)	110.5 (4.35)	M12x55	8-5/8
125 / 141.3	5	320 (12.60)	22 (0.87)	254 (10.00)	216 (8.50)	137.4 (5.41)	M12x65	8-3/4
150 / 168.3	6	346 (13.62)	22 (0.87)	280 (11.00)	241.3 (9.50)	164.3 (6.47)	M12x65	8-3/4
200 / 219.1	8	414.3 (16.31)	30 (1.18)	341.4 (13.44)	298.5 (11.75)	214.9 (8.46)	M10x70	8-3/4
250 / 273.0	10	481.2 (18.94)	30 (1.19)	405.6 (15.97)	361.95 (14.25)	268.9 (10.59)	M10x70	12-7/8

PN Flange - Model 321									
DN	Inch	A	B	$\phi C$	$\phi D$	$\phi E$	Bolts / Nuts	SW	Flange bolts
50 / 60.3	2	220 (8.66)	18.5 (0.73)	165 (6.50)	125 (4.92)	57.5 (2.26)	M10x50	16	4-M16
65 / 76.1	3 OD	235 (9.25)	18.5 (0.73)	185 (7.28)	145 (5.71)	72.7 (2.86)	M10x50	16	4-M16
80 / 88.9	3	255 (10.04)	18.5 (0.73)	195 (7.68)	160 (6.30)	85.5 (3.37)	M10x50	16	8-M16
100 / 114.3	4	279 (10.98)	18.5 (0.73)	224 (8.82)	180 (7.09)	110.5 (4.35)	M10x50	16	8-M16
125 / 139.7	5-1/2 OD	320 (12.60)	23.0 (0.91)	250 (9.84)	210 (8.27)	135.5 (5.33)	M12x65	22	8-M16
150 / 165.1	6-1/2 OD	346 (13.62)	21.5 (0.85)	280 (11.00)	240 (9.45)	160.8 (6.33)	M12x65	22	8-M20
150 / 168.3	6	346 (13.62)	24.0 (0.94)	280 (11.00)	240 (9.45)	164.3 (6.47)	M12x65	22	8-M20
200 / 219.1	8	414.3 (16.31)	30.0 (1.18)	340 (13.39)	295 (11.61)	214.9 (8.46)	M10x70	16	12-M20
250 / 273.0	10	480 (18.90)	25.5 (1.00)	405 (15.94)	355 (13.98)	268.9 (10.59)	M10x70	16	12-M24
300 / 323.9	12	530.5 (20.88)	25.5 (1.00)	460 (18.11)	410 (16.14)	318.9 (12.56)	M10x70	16	12-M24