

Victaulic® Vic-Flange Adapters

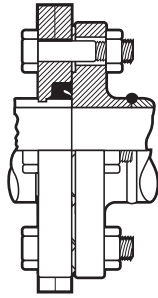
Styles 741 and 743



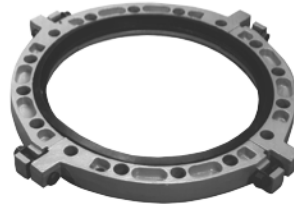
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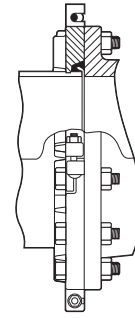
Style 741
2 – 12"/DN50 – DN300



Exaggerated for clarity



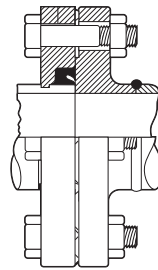
Style 741
14 – 24"/DN350 – DN600



Exaggerated for clarity



Style 743
2 – 12"/DN50 – DN300



Exaggerated for clarity

1.0 PRODUCT DESCRIPTION

Available Sizes

- **Style 741:** 2 – 24"/DN50 – DN600
- **Style 743:** 2 – 12"/DN50 – DN300

Maximum Working Pressure

- **Style 741:** Up to 300 psi/2068 kPa/20 Bar
- **Style 743:** Up to 720 psi/4964 kPa/49 Bar

Application

- Designed to transition from flanged to grooved piping systems

Pipe Material

- Carbon steel
- For use with stainless steel pipe, refer to Victaulic [publication 17.09](#) for pressure ratings and end loads.
- For use with PVC pipe, refer to Victaulic [publication 32.01](#) for pressure ratings.
- For use with aluminum pipe, refer to Victaulic [publication 21.04](#) for pressure ratings and end loads.

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	



2.0 CERTIFICATION/LISTINGS



NOTE

- See Victaulic [publication 02.06](#): Victaulic Potable Water Approvals ANSI/NSF for potable water approvals if applicable.

3.0 SPECIFICATIONS - MATERIAL

Housing: Ductile iron conforming to ASTM A536, Grade 65-45-12. Ductile iron conforming to ASTM A395, Grade 65-45-15, is available upon special request.

Housing Coating: (specify choice)

- Standard: Black enamel.
- Optional: Hot dipped galvanized.
- Optional: Contact Victaulic with your requirements for other coatings.

Gasket: (specify choice¹)

- Victaulic Grade “E” EPDM**
EPDM (Green stripe color code). Temperature range –30°F to +230°F/–34°C to +110°C. May be specified for hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. UL Classified in accordance with ANSI/NSF 61 for cold +73°F/+23°C and hot +180°F/+82°C potable water service and ANSI/NSF 372. **NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES OR STEAM SERVICES.**
- Victaulic Grade “T” Nitrile**
Nitrile (Orange stripe color code). Temperature range 20°F to +180°F/29°C to +82°C. May be specified for oil related services, including air with oil vapor, this gasket may be specified for temperatures rated up to +180°F/+82°C. For water related services, this gasket may be specified for temperatures rated up to +150°F/+66°C. For oil free, dry air services, this gasket may be specified for temperatures rated up to +140°F/+60°C. **NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OR STEAM SERVICES.**
- Others**
For alternate gasket selection, reference [publication 05.01](#): Victaulic Seal Selection Guide.

¹ Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to the latest [Victaulic Seal Selection Guide](#) for specific gasket service guidelines and for a listing of services which are not compatible.

Draw Bolts/Nuts (14 – 24"/DN350 – DN600 only):

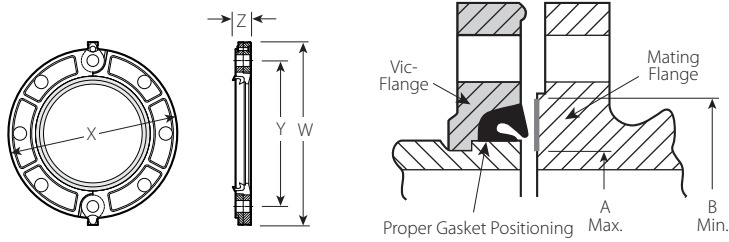
- Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449 (imperial) and ISO 898-1 Class 9.8 (metric). Carbon steel hex flange nuts meeting the mechanical property requirements of ASTM A563 Grade B (imperial - heavy hex nuts) and ASTM A563M Class 9 (metric - hex nuts). Track bolts and hex flange nuts are zinc electroplated per ASTM B633 ZN/FE5, finish Type III (imperial) or Type II (metric).

4.0 DIMENSIONS

Style 741

2 – 12"/DN50 – DN300

ANSI Class 125 and 150 Flanges



Shaded area of mating face must be free from gouges, undulations or deformities of any type for effective sealing.

Exaggerated for clarity

Size		Assembly Bolt/Nut ²		Sealing Surface		Dimensions				Weight
Nominal inches DN	Actual Outside Diameter inches mm	Qty.	Size inches	"A" Max. inches mm	"B" Min. inches mm	W inches mm	X inches mm	Y inches mm	Z inches mm	Approximate (Each) lb kg
2 DN50	2.375 60.3	4	5/8 x 2 3/4	2.38 60	3.41 87	6.75 172	6.00 152	4.75 121	0.75 19	3.1 1.4
2 1/2	2.875 73.0	4	5/8 x 3	2.88 73	3.91 99	7.88 200	7.00 178	5.50 140	0.88 22	4.8 2.1
3 DN80	3.500 88.9	4	5/8 x 3	3.50 89	4.53 115	8.50 216	7.50 191	6.00 152	1.00 25	5.3 2.4
4 DN100	4.500 114.3	8	5/8 x 3	4.50 114	5.53 141	10.00 254	9.00 229	7.50 191	1.00 25	7.4 3.4
5	5.563 141.3	8	3/4 x 3 1/2	5.56 141	6.71 171	11.00 279	10.00 254	8.50 216	1.00 25	8.6 3.9
6 DN150	6.625 168.3	8	3/4 x 3 1/2	6.63 168	7.78 198	12.00 305	11.00 279	9.50 241	1.00 25	9.9 4.5
8 DN200	8.625 219.1	8	3/4 x 3 1/2	8.63 219	9.94 252	14.75 375	13.50 343	11.75 298	1.13 29	16.6 7.5
10 DN250	10.750 273.0	12	7/8 x 4	10.75 273	12.31 313	17.25 438	16.00 406	14.25 362	1.25 32	24.2 11.0
12 DN300	12.750 323.9	12	7/8 x 4	12.75 324	14.31 364	20.25 514	19.00 483	17.00 432	1.25 32	46.8 21.2

² Total assembly bolts required to be supplied by installer.

NOTE

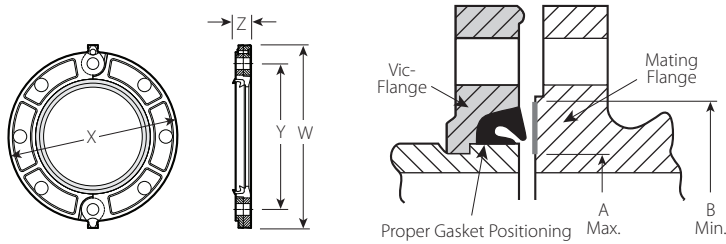
- IMPORTANT: Style 741 Vic-Flange adapters provide rigid joints when used on pipe with standard cut or roll groove dimensions and consequently allow no linear or angular movement at the joint. When used with Victaulic Series 700 butterfly valves, plastic pipe or light wall metallic pipe, small teeth in I.D. of key section should be removed and may be used on one side of the valve. Contact Victaulic for information on ISO 2084 (PN10); DIN 2532 (PN10) and JIS B-2210 (10K) flanges.

4.1 DIMENSIONS

Style 741

DN50 – DN300/2 – 12"

PN10 and PN16 Flanges



Shaded area of mating face must be free from gouges, undulations or deformities of any type for effective sealing.

Exaggerated for clarity

Size		PN10 Flanges		PN16 Flanges		Sealing Surface		Dimensions				Weight
Nominal DN inches	Actual Outside Diameter mm inches	Assembly Bolt/Nut ²		Assembly Bolt/Nut ²		"A" Max. mm inches	"B" Min. mm inches	W mm inches	X mm inches	Y mm inches	Z mm inches	Approximate (Each) kg lb
		Qty.	Size mm	Qty.	Size mm							
DN50 2	60.3 2.375	4	16	4	16	60 2.38	87 3.41	178 7.00	165 6.50	127 5.00	22 0.88	1.4 3.1
DN65	76.1 3.000	4	16	4	16	76 3.00	103 4.05	210 8.25	187 7.38	146 5.75	22 0.88	2.1 4.7
DN80 3	88.9 3.500	8	16	8	16	89 3.50	115 4.53	219 8.63	200 7.88	162 6.38	22 0.88	2.4 5.4
DN100 4	114.3 4.500	8	16	8	16	114 4.50	141 5.55	251 9.88	229 9.00	181 7.13	25 1.00	3.5 7.7
DN125	139.7 5.500	8	16	8	16	141 5.55	171 6.73	276 10.88	251 9.88	213 8.38	29 1.13	4.2 9.3
	159.0 6.250	8	20	8	20	159 6.25	187 7.36	314 12.38	289 11.38	241 9.50	29 1.13	4.5 10.0
	165.1 6.500	8	¾ x 3 ½	8	¾ x 3 ½	165 6.50	192 7.56	305 12.00	279 11.00	241 9.50	25 1.00	5.0 11.0
DN150 6	168.3 6.625	8	20	8	20	168 6.63	198 7.78	302 11.88	279 11.00	241 9.50	25 1.00	4.5 10.0
DN200 8	219.1 8.625	8	20	12	20	219 8.63	252 9.94	368 ³ 14.50	343 ³ 13.50	295 ³ 11.63	29 ³ 1.13	7.5 16.6
DN250 10	273.0 10.750	12	20	12	24	273 10.75	313 12.31	438 ⁴ 17.25	397 ⁴ 15.63	352 ⁴ 13.88	29 ⁴ 1.13	11.0 24.2
DN300 12	323.9 12.750	12	20	12	24	324 12.75	365 14.31	479 ⁵ 18.88	460 ⁵ 18.13	400 ⁵ 15.75	32 ⁵ 1.25	17.4 38.4

² Total assembly bolts required to be supplied by installer.

³ PN16 dimensions (mm/inches): W = 360/14.17; X = 340/13.38; Y = 295/11.63; Z = 32/1.25.

⁴ PN16 dimensions (mm/inches): W = 438/17.24; X = 406/16.00; Y = 356/14.00; Z = 32/1.25.

⁵ PN16 dimensions (mm/inches): W = 478/18.82; X = 445/17.50; Y = 410/16.13; Z = 32/1.25.

NOTES

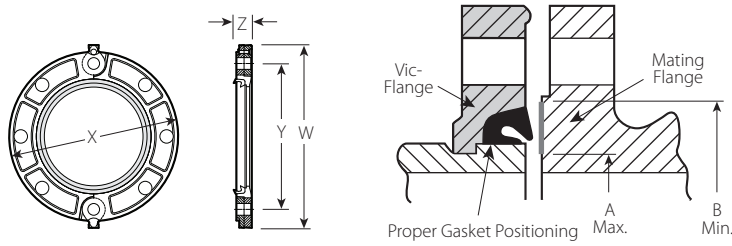
- Longer bolts required when flange utilized with wafer-type valves.
- IMPORTANT: Style 741 Vic-Flange adapters provide rigid joints when used on pipe with standard cut or roll groove dimensions and consequently allow no linear or angular movement at the joint. When used with Victaulic Series 700 butterfly valves, plastic pipe or light wall metallic pipe, small teeth in I.D. of key section should be removed and may be used on one side of the valve. Contact Victaulic for information on ISO 2084 (PN10); DIN 2532 (PN10) and JIS B-2210 (10K) flanges.

4.2 DIMENSIONS

Style 741

DN50 – DN200/2 – 8"

Australian Standard Table "E" Flanges



Shaded area of mating face must be free from gouges, undulations or deformities of any type for effective sealing.

Exaggerated for clarity

Size		Assembly Bolt/Nut ²		Sealing Surface		Dimensions				Weight
Nominal DN inches	Actual Outside Diameter mm inches	Qty.	Size inches	"A" Max. mm inches	"B" Min. mm inches	W mm inches	X mm inches	Y mm inches	Z mm inches	Approximate (Each) kg lb
DN50 ⁶ 2	60.3 2.375	4	5/8 x 2 3/4	60 2.38	84 3.31	165 6.50	152 6.00	114 4.50	19 0.75	1.9 4.1
DN80 3	88.9 3.500	4	5/8 x 3	89 3.50	113 4.44	200 7.88	191 7.50	146 5.75	25 1.00	2.4 5.4
DN100 4	114.3 4.500	8	5/8 x 3	114 4.50	131 5.16	251 9.88	229 9.00	178 7.00	25 1.00	3.3 7.2
DN150 6	168.3 6.625	8	3/4 x 3 1/2	168 6.63	192 7.56	286 11.25	279 11.00	235 9.25	25 1.00	4.5 9.9
DN200 8	219.1 8.625	8	3/4 x 3 1/2	219 8.63	247 9.72	368 14.50	343 13.50	292 11.50	29 1.13	5.7 12.5

² Total assembly bolts required to be supplied by installer.

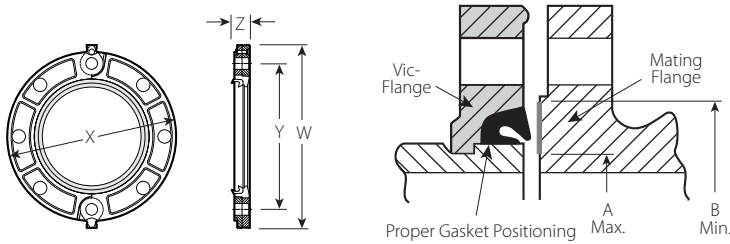
⁶ Contact Victaulic for details.

4.2 DIMENSIONS

Style 741

DN50 – DN200/2 – 8"

Chinese Standard Table "E" Flanges



Shaded area of mating face must be free from gouges, undulations or deformities of any type for effective sealing.

Exaggerated for clarity

Size		Assembly Bolt/Nut ²		Sealing Surface		Dimensions				Weight
Nominal DN inches	Actual Outside Diameter mm inches	Qty.	Size mm	"A" Max. mm inches	"B" Min. mm inches	W mm inches	X mm inches	Y mm inches	Z mm inches	Approximate (Each) kg lb
DN50 2	60.3 2.375	4	M16 X 70	60 2.38	87 3.41	172 6.75	152 6.00	121 4.75	19 0.75	1.4 3.1
DN65	76.1 3.000	4	M16 X 70	78 3.07	94 3.68	210 8.25	187 7.38	146 5.75	22 0.88	2.1 4.7
DN80 3	88.9 3.500	8	M16 X 76	89 3.50	115 4.53	213 8.38	191 7.50	152.4 6.00	25 1.00	2.4 5.4
	108.0 4.250	8	M16 X 76	110 4.33	126 4.97	248 9.75	222 8.75	181 7.13	25 1.00	3.5 7.7
DN100 4	114.3 4.500	8	M16 X 76	114 4.50	141 5.55	251 9.88	229 9.00	191 7.50	25 1.00	3.5 7.7
	133.0 5.250	8	M16 X 76	135 5.33	153 6.02	276 10.88	251 9.88	213 8.38	29 1.13	3.9 8.6
DN125	139.7 5.500	8	M16 X 76	142 5.59	160 6.28	276 10.88	251 9.88	213 8.38	29 1.13	3.9 8.6
	159.0 6.250	8	M20 X 89	159 6.25	187 7.36	314 12.38	289 11.38	241 9.50	29 1.13	4.5 10.0
	165.1 6.500	8	M20 X 89	165 6.50	195 7.68	305 12.00	280 11.00	241 9.50	29 1.13	4.5 10.0
DN200 8	219.1 8.625	12	M20 X 89	219 8.63	252 9.94	368 14.50	343 13.50	298 11.75	29 1.13	7.5 16.6

² Total assembly bolts required to be supplied by installer.

NOTES

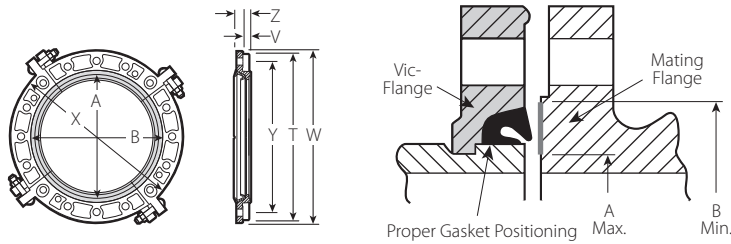
- IMPORTANT NOTE: Style 741 Vic-Flange adapters provide rigid joints when used on pipe with standard cut or roll groove dimensions and consequently allow no linear or angular movement at the joint. When used with Victaulic Series 700 butterfly valves, plastic pipe or light wall metallic pipe, small teeth in I.D. of key section should be removed and may be used on one side of the valve. Contact Victaulic for information on ISO 2084 (PN10); DIN 2532 (PN10) and JIS B-2210 (10K) flanges.

4.3 DIMENSIONS

Style 741

14 – 24"/DN350 – DN600⁷

ANSI Class 125 and 150 Flanges



Shaded area of mating face must be free from gouges, undulations or deformities of any type for effective sealing.

Exaggerated for clarity

Size		Bolt/Nut				Sealing Surface		Dimensions						Weight
Nominal inches DN	Actual Outside Diameter inches mm	Assembly ²		Draw ⁸		"A" Max. inches mm	"B" Min. inches mm	T inches mm	V inches mm	W inches mm	X inches mm	Y inches mm	Z inches mm	Approximate (Each) lb kg
		Qty.	Size inches	Qty.	Size inches									
14 DN350	14.000 355.6	12	1 x 4 1/2	4	5/8 x 3 1/2	14.00 356	16.39 416	19.38 492	1.00 25	24.50 622	21.00 533	18.75 476	2.50 64	62.0 28.1
16 DN400	16.000 406.4	16	1 x 4 1/2	4	5/8 x 3 1/2	16.00 406	18.39 467	21.50 546	1.00 25	27.13 689	23.50 597	21.25 540	2.50 64	79.0 35.8
18 DN450	18.000 457.0	16	1 1/8 x 4 3/4	4	3/4 x 4 1/4	18.00 457	20.00 508	22.25 565	1.00 25	29.00 737	25.50 648	22.75 578	2.75 70	82.3 37.3
20 DN500	20.000 508.0	20	1 1/8 x 5 1/4	4	3/4 x 4 1/4	20.00 508	22.50 572	25.00 635	1.00 25	31.50 800	27.50 699	25.00 635	2.75 70	103.3 46.9
24 DN600	24.000 610.0	20	1 1/4 x 5 3/4	4	3/4 x 4 1/4	24.00 610	27.75 705	29.00 737	1.00 25	36.00 914	32.00 813	29.50 749	3.00 76	142.0 64.4

² Total assembly bolts required to be supplied by installer.

⁷ For cut groove systems only. For 14 – 24"/DN350 – DN600 roll groove systems, AGS (Advanced Groove System) products are used. Style 741 is not compatible with the AGS system.

⁸ Draw bolts supplied with 14 – 24"/DN350 – DN600 Vic-Flange adapters.