

Style 341 Vic-Flange® Adapter

PRODUCT DESCRIPTION

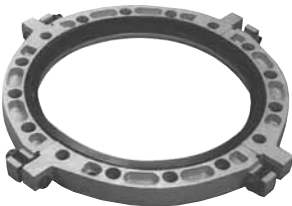
Style 341 Vic-Flange adapters are designed for direct connection of flanged components into a radius grooved (to AWWA C-606 standards) cast or ductile iron pipe system. Sizes 3 - 12" (80 - 300 mm) are hinged for easy handling with integral tabs which facilitate assembly. Sizes 14 - 24" (350 - 600 mm) are cast in four identical segments which are interconnected as assembly is completed.

Style 341 Vic-Flange adapters provide a rigid joint on rigid radius grooved ductile pipe and allow limited movement on flexible radius grooved ductile iron pipe.

Style 341 Vic-Flange adapters are designed for directly incorporating flanged components with ANSI B16.1 (CL.125) bolt hole patterns into a grooved piping system.



3 - 12" Sizes

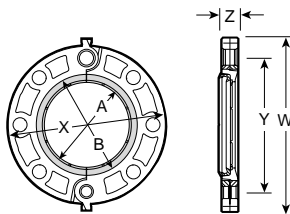


14 - 24" Sizes



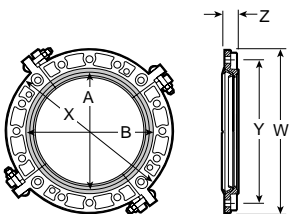
See Victaulic publication 10.01 for details.

DIMENSIONS



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

3 - 12" Sizes



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14 - 24" Sizes

Pipe Size		Max. Wk. Press. § PSI kPa	Max. End Load § Lbs. N	Assembly Bolts †		Draw Bolts #		Dimensions Inches/millimeters				Aprx. Wgt. Ea. Lbs. kg
Nom. Dia. In./mm	Actual Outside Dia. In./mm			† No. Bolts Reqd.	Size Inches	# No. Bolts Reqd.	Size Inches	W	X	Y	Z	
3 80	3.960 100.6	250 1725	3100 13795	4	5/8 X 3	-	-	8.44 214	7.50 191	6.00 152	0.94 24	5.4 2.4
4 100	4.800 121.9	250 1725	4500 20025	8	5/8 X 3	-	-	9.94 252	9.00 229	7.50 191	0.94 24	8.2 3.7
6 150	6.900 175.3	250 1725	9300 41385	8	3/4 X 3 1/2	-	-	12.00 305	11.00 279	9.50 241	1.00 25	12.0 5.4
8 200	9.050 229.9	250 1725	16000 71200	8	3/4 X 3 1/2	-	-	14.63 372	13.50 343	11.75 298	1.13 29	17.4 7.9
10 250	11.100 281.9	250 1725	23700 105465	12	7/8 X 4	-	-	17.13 435	16.00 406	14.25 362	1.19 30	24.6 11.2
12 300	13.200 335.3	250 1725	34000 151300	12	7/8 X 4	-	-	20.13 511	19.00 483	17.00 432	1.25 32	34.4 15.6
14 350	15.300 388.6	200 1375	36700 163315	12	1 X 4 1/4	4	5/8 X 3 1/2	24.63 626	21.00 533	18.75 476	1.50 38	55.0 25.0
16 400	17.400 442.0	150 1035	35600 158420	16	1 X 4 3/4	4	5/8 X 3 1/2	27.25 692	23.50 597	21.25 540	1.88 48	80.0 36.3
18 450	19.500 495.3	150 1035	44700 198915	16	1 1/8 X 5 1/2	4	3/4 X 4 1/4	29.13 740	25.00 635	22.75 578	2.25 57	95.0 43.1
20 500	21.600 548.6	150 1035	54900 244305	20	1 1/8 X 5 3/4	4	3/4 X 4 1/4	31.63 803	27.50 699	25.00 635	2.38 61	115.0 52.2
24 600	25.800 655.3	150 1035	78400 348880	20	1 1/4 X 6 1/4	4	3/4 X 5	36.13 918	32.00 813	29.50 749	2.50 64	150.0 68.0

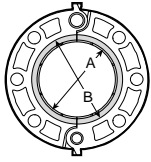
§ Refer to notes on page 3.

Style 341 requires sufficient clearance behind groove to permit proper assembly.

† Total bolts required are to be supplied by the installer. Bolt sizes are for conventional flange-to-flange connections. Longer bolts are required when Vic-Flange Adapters are used with wafer-type valves.

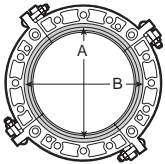
Supplied with Vic-Flange Adapter.

REQUIRED SEALING SURFACE



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

3 - 12" Sizes



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

14 - 24" Sizes

Required Sealing Surface

Vic-Flange gasket requires sufficient flat face area on the mating flange for proper gasket sealing. See chart for dimensions.

SEALING SURFACE Inches/millimeters				SEALING SURFACE Inches/millimeters			
Flange Size		A Max.	B Min.	Flange Size		A Max.	B Min.
Nom. Dia. In./mm	Actual Out. Dia. In./mm			Nom. Dia. In./mm	Actual Out. Dia. In./mm		
3 80	3.960 100.6	3.96 101	4.94 125	14 350	15.300 388.6	15.30 389	16.38 416
4 100	4.800 121.9	4.80 122	5.88 149	16 400	17.400 442.0	17.40 442	18.38 467
6 150	6.900 175.3	6.90 175	8.00 203	18 450	19.500 495.3	19.50 495	20.00 508
8 200	9.050 229.9	9.05 230	10.13 257	20 500	21.600 548.6	21.60 549	22.50 572
10 250	11.100 281.9	11.10 282	12.50 318	24 600	25.800 655.3	25.80 655	27.75 705
12 300	13.200 335.3	13.20 335	14.75 375				

IMPORTANT INSTALLATION CONSIDERATIONS

- The gasket seating surfaces on the pipe and on the face of the mating flange must be free from gouges, undulations, and deformities of any type for proper sealing. Refer to the installation instructions for complete information.
- Vic-Flange Adapters must be assembled so there is no interference with mating components.
- When wafer or lug-type valves are used adjoining a Victaulic fitting, check disc dimensions to ensure proper clearance.
- Vic-Flange Adapters must not be used as anchor points for tie rods across non-restrained joints.
- Mating Vic-Flange Adapters to rubber faced flanges, valves, etc. requires the use of a Vic-Flange Washer. Refer to the "Vic-Flange Washer Notes" section below.
- The lettering on the outside of the gasket must face the gasket pocket of the Vic-Flange Adapter. When installed correctly, the lettering on the gasket will not be visible.
- When mating two Vic-Flange Adapters, the hinge points/ draw bolt locations must be staggered, and a flange washer (3" – 12") or transition ring (14" – 24") must be used between the two Vic-Flange Adapters.

Vic-Flange Adapters require a smooth, hard surface at the mating flange face for proper sealing. Some applications, for which the Vic-Flange Adapter is otherwise well suited, do not provide an adequate mating surface. In such cases, a metal Vic-Flange Washer is recommended for insertion between the Vic-Flange Adapter and the mating flange to provide the necessary sealing surface. To ensure the proper Vic-Flange Washer is supplied, always specify the product style and size when ordering.

- When mating to a serrated flange – a flange gasket should be used against the serrated flange. The Vic-Flange Washer should then be inserted between the Vic-Flange Adapter and the flange gasket.
- When mating to a wafer-type valve that is rubber lined and partially rubber-faced (smooth or not) – the Vic-Flange Washer should be placed between the valve and the Vic-Flange Adapter.
- When mating to a rubber-faced flange, valve, etc. – the Vic-Flange Washer must be placed between the Vic-Flange Adapter and the rubber-faced flange.
- When mating to components (valves, strainers, etc.) where the component flange face has an insert – follow the same arrangement as if the Vic-Flange Adapter was being mated to a serrated flange. Refer to application "A" above.
- When mating AWWA cast flanges to IPS flanges – the Vic-Flange Transition Ring is placed between the two Vic-Flange Adapters with the draw bolt locations staggered. If one flange is not a Vic-Flange Adapter (i.e. flanged valve), a flange gasket must be placed against that flange. The Vic-Flange Washer must then be inserted between the flange gasket and the Vic-Flange gasket. NOTE: Transition rings, rather than Vic-Flange Washers, must be used when mating Style 741 Vic-Flange Adapters to Style 341 Vic-Flange Adapters in sizes 14 – 24" (350 – 600 mm).

TORQUE REQUIREMENTS

Vic-Flange adapters should be installed using the bolt torque listed below:

- 14 - 16" Sizes: 250 - 300 ft. lbs.
(339 - 407 N•m)
- 18 - 20" Sizes: 300 - 350 ft. lbs.
(407 - 475 N•m)
- 24" Size: 350 - 400 ft. lbs.
(475 - 542 N•m)

Exceeding these values may create leakage. Additional levels of torque will not enhance gasket sealing.

MATERIAL SPECIFICATIONS

Housing: Ductile iron conforming to ASTM A-536, grade 65-45-12. Ductile iron conforming to ASTM A-395, grade 65-45-15, is available upon special request.

Flange Coating: Alkyd-phenolic primer

- **Optional:** Orange enamel
- **Optional:** Coal tar epoxy coating (3 mils)
- **Optional:** Organic zinc primer (3 mils)
- **Optional:** Bituminous coating
- Others available, contact Victaulic

Gasket (specify choice*):

- **Grade "M" Halogenated Butyl**
Halogenated butyl (Brown color code). Temperature range -20°F to $+200^{\circ}\text{F}$ (-29°C to $+93^{\circ}\text{C}$). Specially compounded to conform to ductile pipe surfaces. Recommended for 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 $+86^{\circ}\text{F}$ ($+30^{\circ}\text{C}$) potable water service. NOT RECOMMENDED FOR PETROLEUM SERVICES.
- **Grade "S" nitrile**
Nitrile (Red color code). Temperature range -20°F to $+180^{\circ}\text{F}$ (-29°C to $+82^{\circ}\text{C}$). Specially compounded to conform to ductile pipe surfaces. Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range; except hot dry air over $+140^{\circ}\text{F}$ ($+60^{\circ}\text{C}$) and water over $+150^{\circ}\text{F}$ ($+66^{\circ}\text{C}$). NOT RECOMMENDED FOR HOT WATER SERVICES.

*Services listed are General Service Recommendations only. It should be noted that there are services for which these gaskets are not recommended. Reference should always be made to the latest Victaulic Gasket Selection guide for specific gasket service recommendations and for a listing of services which are not recommended.

NOTES

§ Working Pressure and End Load are total, from all internal and external loads, based on AWWA class 53 ductile iron pipe radius cut grooved in accordance with ANSI/AWWA C-606 specifications. Contact Victaulic for performance on other pipe.

WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1½ times the figures shown.

Metric thread size bolts are available (color coded gold) for all coupling sizes upon request. Contact Victaulic for details.

WARNING: Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.