

Victaulic® *Vic-Flange* Adapter for Potable Water Applications

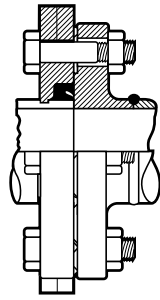
Style 841



06.32



2 – 12"/DN50 – DN300



Exaggerated for clarity

1.0 PRODUCT DESCRIPTION

Available Sizes

- 2 – 12"/DN50 – DN300

Pipe Material

- Schedules 10S and 40S stainless steel pipe
- Schedules 10 and 40 galvanized carbon steel pipe

Maximum Working Pressure

- Accommodates pressures ranging from full vacuum (29.9 in Hg/760 mm Hg) up to 300 psi/2068 kPa
- Working pressure dependent on pipe material, wall thickness and size of pipe

Operating Temperature

- +0°F to +180°F/-18°C to +82°C

Function

- Intended for use in potable water systems
- Designed to transition from flanged to grooved potable water piping systems

NOTE

- For non-potable water systems, refer to [publication 06.06](#): Victaulic *Vic-Flange* Adapters Styles 741 and 743.

2.0 CERTIFICATION/LISTINGS



The Victaulic Grade P gasket supplied with the Style 841 *Vic-Flange* Adapter is UL Classified in accordance with NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372 as noted in section 3.0 Specifications – Material.

The Style 841 *Vic-Flange* Adapter is UPC Listed in accordance with PS-53 with Schedule 10S stainless steel pipe in sizes 2 – 6"/DN50 – DN150.

The Style 841 *Vic-Flange* Adapter is UPC Listed in accordance with PS-53 with Schedule 40S stainless steel pipe in sizes 2 – 12"/DN50 – DN300.

The Style 841 *Vic-Flange* Adapter is UPC Listed in accordance with PS-53 with Schedules 10 and 40 carbon steel pipe in sizes 2 – 12"/DN50 – DN300.

NOTE

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

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



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: Blue coating.

Optional: Hot dipped galvanized conforming to ASTM A123.

Gasket¹: Grade "P" Fluoroelastomer Blend

P (Double blue stripe color code). Temperature range +0°F to +180°F/-18°C to +82°C. Specifically formulated for compatibility with potable water systems. Optimized for improved resistance to chlorine, chloramine and other typical potable water disinfectants. UL Classified in accordance with NSF/ANSI/CAN 61 for cold +73°F/+23°C and hot +180°F/+82°C potable water service and NSF/ANSI/CAN 372.

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.

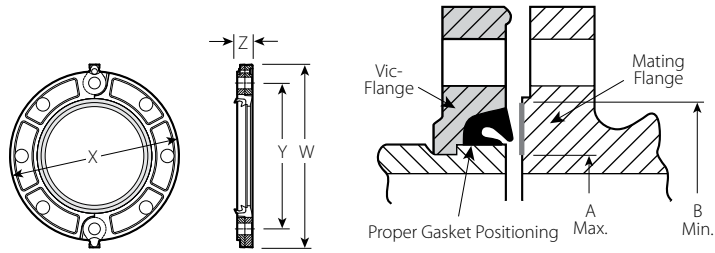
NOTE

- Victaulic reserves the right to substitute equivalent and/or higher grade elastomer products.

4.0 DIMENSIONS

Style 841 Vic-Flange Adapter for Potable Water Applications

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
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 841 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.

5.0 PERFORMANCE

Style 841 Vic-Flange Adapter for Potable Water Applications

ANSI Class 125 and 150 Flanges

Schedules 10S and 40S Stainless Steel Pipe

Size		Pipe Wall Thickness inches mm	Pipe Schedule	Groove Type	Maximum Working Pressure ³ psi kPa	Maximum End Load ³ lb N
Nominal inches DN	Actual Outside Diameter inches mm					
2 DN50	2.375 60.3	0.154 3.9	40S	Std/C	275 1896	1218 5419
		0.110 2.8	10S	RX	275 1896	1218 5419
2½	2.875 73.0	0.203 5.2	40S	Std/C	275 1896	1785 7941
		0.120 3.1	10S	RX	275 1896	1785 7941
3 DN80	3.500 88.9	0.216 5.5	40S	Std/C	275 1896	2646 11769
		0.120 3.1	10S	RX	275 1896	2646 11769
4 DN100	4.500 114.3	0.237 6.0	40S	Std/C	275 1896	4374 19454
		0.120 3.1	10S	RX	275 1896	4374 19454
6 DN150	6.625 168.3	0.280 7.11	40S	C	250 1724	8618 38334
		0.280 7.11	40S	Std	150 1034	5170 22996
		0.134 3.4	10S	RX	125 862	4310 19171
8 DN200	8.625 219.1	0.322 8.18	40S	C	200 1379	11685 51978
		0.322 8.18	40S	Std	125 862	7305 32492
10 DN250	10.750 273.0	0.365 9.3	40S	C	200 1379	18153 80746
		0.365 9.3	40S	Std	125 862	11347 50475
12 DN300	12.750 323.9	0.365 9.3	40S	C	200 1379	25535 113586
		0.365 9.3	40S	Std	125 862	15962 71004

³ Working Pressure and End Load are total, from all internal and external loads, based on ANSI Types 304/304L and 316/316L stainless steel pipe, grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

NOTES

- Std = Standard roll set marked with the prefix "R"
- C = Cut groove
- RX = Roll Set for light wall stainless steel pipe marked with the prefix "RX"

5.0 PERFORMANCE (CONTINUED)

Style 841 Vic-Flange Adapter for Potable Water Applications

ANSI Class 125 and 150 Flanges

Schedules 10 and 40 Galvanized Carbon Steel Pipe

Size		Pipe Wall Thickness inches mm	Pipe Schedule	Cut Grooved		Roll Grooved	
Nominal inches DN	Actual Outside Diameter inches mm			Maximum Working Pressure ⁴ psi kPa	Maximum End Load ⁴ lbs N	Maximum Working Pressure ⁴ psi kPa	Maximum End Load ⁴ lbs N
2 DN50	2.375 60.3	0.154 3.91	40	300 2068	1330 5920	300 2068	1330 5920
		0.109 2.77	10	–	–	250 1724	1105 4915
2½	2.875 73.0	0.203 5.16	40	300 2068	1950 8680	300 2068	1950 8680
		0.120 3.05	10	–	–	250 1724	1620 7210
3 DN80	3.500 88.9	0.216 5.49	40	300 2068	2885 12840	300 2068	2885 12840
		0.120 3.05	10	–	–	250 1724	2400 10680
4 DN100	4.500 114.3	0.237 6.02	40	300 2068	4770 21230	300 2068	4770 21230
		0.120 3.05	10	–	–	250 1724	3975 17690
6 DN150	6.625 168.3	0.280 7.11	40	300 2068	10350 46060	300 2068	10350 46060
		0.134 3.40	10	–	–	250 1724	8625 38380
8 DN200	8.625 219.1	0.277 7.04	40	300 2068	17500 77875	300 2068	17500 77875
		0.148 3.76	10	–	–	200 1379	11680 51975
10 DN250	10.750 273.0	0.307 7.80	40	300 2068	27200 121040	300 2068	27200 121040
		0.165 4.19	10	–	–	200 1379	18160 80810
12 DN300	12.750 323.9	0.330 8.38	40	300 2068	38300 170435	300 2068	38300 170435
		0.180 4.54	10	–	–	200 1379	25500 113475

⁴ Working Pressure and End Load are total, from all internal and external loads, based on ANSI B36.10 sized carbon steel pipe, grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

6.0 NOTIFICATIONS

- *Vic-Flange* adapter must be assembled so it does not interfere with handle operation. Because of the outside flange dimension, *Vic-Flange* adapter should not be used within 90° of one another on a standard fitting. When wafer or lug-type valves are used adjoining a Victaulic fitting, check disc dimensions to assure proper clearance.
- *Vic-Flange* adapters should not be used as anchor points for tie-rods across nonrestrained joints. Mating rubber faced flanges, valves, etc. requires the use of a *Vic-Flange* washer.
- Area A-B noted in the drawing on page 3 must be free from gouges, undulations or deformities of any type for effective sealing.
- *Vic-Flange* adapter gaskets must always be assembled with the color coded lip on the pipe and the other lip facing the mating flange.
- *Vic-Flange* hinge points must be oriented approximately 90° to each other when mated.
- Flange Washers: *Vic-Flange* adapters require a smooth hard surface at the mating flange face for effective sealing. Some applications for which the *Vic-Flange* adapter are otherwise well suited do not provide an adequate mating surface. In such cases, it is recommended that a Flange Washer be inserted between the *Vic-Flange* adapter and the mating flange to provide the necessary sealing surface. Victaulic recommends the use of the standard carbon steel Flange Washer for galvanized pipe applications, the stainless steel Flange Washer for stainless steel pipe applications, and the non-metallic Type F phenolic Flange Washer for copper pipe applications.
- Typical applications where a Flange Washer should be used are:
 - A. When mating to a serrated flange: a flange gasket should be used adjacent to the serrated flange and then the Flange Washer is inserted between the *Vic-Flange* adapter and the flange gasket.
 - B. When mating to a wafer valve: where typical valves are rubber lined and partially rubber faced (smooth or not), the Flange Washer is placed between the valve and the *Vic-Flange* adapter.
 - C. When mating a rubber faced flange: the Flange Washer is placed between the *Vic-flanges* and the rubber faced flange.
 - D. When mating to components (valves, strainers, etc.) where the component flange face has an insert: follow the same arrangement as in Application 1.
- When ordering Flange Washers, always specify product style (Style 841) and size to assure proper Flange Washer is supplied.

WARNING

- **Victaulic RX roll sets must be used when grooving light-wall/thin-wall stainless steel pipe for use with Victaulic Couplings.**
Failure to use Victaulic RX roll sets when grooving light-wall/thin-wall stainless steel pipe may cause joint failure, resulting in serious personal injury and/or property damage.

NOTICE

- **Victaulic RX grooving rolls must be ordered separately. They are identified by a silver color and the designation RX on the front of the roll sets.**

7.0 REFERENCE MATERIALS

[02.06: Victaulic Potable Water Approvals](#)

[05.01: Victaulic Seal Selection Guide](#)

[17.01: Victaulic Pipe Preparation for Use on Stainless Steel Pipe With Victaulic Products](#)

[25.01: Victaulic Standard Groove Specifications](#)

[26.01: Victaulic Design Data](#)

[29.01: Victaulic Terms and Conditions/Warranty](#)

[1-100: Victaulic Field Installation Handbook](#)

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

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Note

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.

Installation

Reference should always be made to the Victaulic installation handbook or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

Warranty

Refer to the Warranty section of the current Price List or contact Victaulic for details.

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