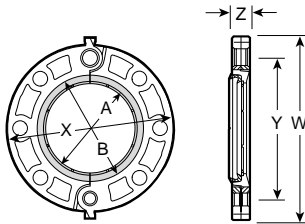


# Style 741 (Metric) Vic-Flange® Adapter PN10 and PN16

## PRODUCT DESCRIPTION



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

Style 741 PN10/16 Vic-Flange adapters are designed for directly incorporating flanged components with PN10 or PN16. Bolt hole patterns into a grooved pipe system. Sizes 50 - 300 mm are hinged for easy handling with integral end tabs which facilitate assembly.

The design incorporates small teeth inside the key shoulder I.D. to prevent rotation. These teeth should be removed when Vic-Flange adapter is utilized with a Victaulic Series 700 grooved end butterfly valve, Schedule 5 pipe or plastic pipe.

Vic-Flange adapter Style 741 may only be used on one side of Victaulic Series 700 butterfly valves, sizes 50 - 100 mm fitted with standard or lever-lock handles. Vic-Flange adapter must be assembled so it does not interfere with handle operation.

Vic-Flange adapters may only be used on Vic-300 butterfly valves on one side in 2 - 8" (50 - 200 mm) sizes. They are not recommended for 10 and 12" sizes.

Because of the outside flange dimension, Vic-Flange 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., require the use of a Vic-Flange washer.

Vic-Flange gaskets must always be assembled with the color coded lip on the pipe and the other lip facing the mating flange.

## DIMENSIONS

06.07-1A

| Pipe<br>mm/inches |                | Max. Work Pres. Bars*<br>PSI | Max. End Load N*<br>lbs. | Bolts†     |         | Max. Work Pres. Bars*<br>PSI | Max. End Load N*<br>lbs. | Bolts†     |         | Sealing Surface<br>mm/inches |              | Flange Dimensions<br>Millimeters/inches |                |                |              | Aprx. Wgt. Ea. kg lbs. |
|-------------------|----------------|------------------------------|--------------------------|------------|---------|------------------------------|--------------------------|------------|---------|------------------------------|--------------|---|----------------|----------------|--------------|------------------------|
| Nom. Size         | Actual Size    |                              |                          | No. Req'd. | Size mm |                              |                          | No. Req'd. | Size mm | "A" Max.                     | "B" Min.     | W                                       | X              | Y              | Z            |                        |
| 50<br>2           | 60.3<br>2.38   | 10<br>145                    | 2850<br>640              | 4          | 16      | 16<br>230                    | 4561<br>1025             | 4          | 16      | 60<br>2.38                   | 87<br>3.41   | 185<br>7.28                             | 165<br>6.50    | 125<br>4.92    | 20<br>0.79   | 1.4<br>3.1             |
| 65<br>2½          | 76.1<br>3.00   | 10<br>145                    | 4540<br>1020             | 4          | 16      | 16<br>230                    | 7275<br>1635             | 4          | 16      | 76<br>3.00                   | 103<br>4.05  | 207<br>8.15                             | 185<br>7.28    | 145<br>5.71    | 20<br>0.79   | 2.1<br>4.7             |
| 80<br>3           | 88.9<br>3.50   | 10<br>145                    | 6210<br>1395             | 8          | 16      | 16<br>230                    | 9925<br>2230             | 8          | 16      | 89<br>3.50                   | 115<br>4.53  | 216<br>8.50                             | 200<br>7.87    | 160<br>6.30    | 22<br>0.87   | 2.4<br>5.4             |
| 100<br>4          | 114.3<br>4.50  | 10<br>145                    | 10260<br>2305            | 8          | 16      | 16<br>230                    | 16420<br>3690            | 8          | 16      | 114<br>4.50                  | 141<br>5.55  | 252<br>9.94                             | 229<br>9.00    | 180<br>7.09    | 24<br>0.94   | 3.5<br>7.7             |
| 150<br>6          | 168.3<br>6.63  | 10<br>145                    | 22250<br>5000            | 8          | 20      | 16<br>230                    | 35600<br>8000            | 8          | 20      | 168<br>6.63                  | 198<br>7.78  | 303<br>11.93                            | 278<br>10.94   | 240<br>9.45    | 25<br>100    | 4.5<br>10.0            |
| 165.1             | 165.1<br>6.50  | 10<br>145                    | 21400<br>4811            | 8          | 20      | 16<br>230                    | 34236<br>7632            | 8          | 20      | 165<br>6.50                  | 195<br>7.68  | 303<br>11.93                            | 280<br>11.00   | 240<br>9.45    | 25<br>100    | 4.5<br>10.0            |
| 200<br>8          | 219.1<br>8.63  | 10<br>145                    | 37690<br>8470            | 8          | 20      | 16<br>230                    | 60320<br>13555           | 12         | 20      | 219<br>8.63                  | 252<br>9.94  | 369#<br>14.53                           | 344#<br>13.54  | 296#<br>11.65  | 30#<br>1.19  | 7.5<br>16.6            |
| 250<br>10         | 273.0<br>10.75 | 10<br>145                    | 58560<br>13160           | 12         | 20      | 16<br>230                    | 93695<br>21055           | 12         | 24      | 273<br>10.75                 | 313<br>12.31 | 402\$<br>15.83                          | 382\$<br>15.04 | 350\$<br>13.78 | 30\$<br>1.19 | 11.0<br>24.2           |
| 300<br>12         | 323.9<br>12.75 | 10<br>145                    | 82370<br>18510           | 12         | 20      | 16<br>230                    | 131810<br>29620          | 12         | 24      | 324<br>12.75                 | 365<br>14.31 | 461<br>18.15                            | 444<br>17.48   | 410<br>15.75   | 32<br>1.26   | 17.4<br>38.4           |

\* Refer to notes on Page 2.

# PN16 dimensions (mm): W = 360; X = 340; Y = 295; Z = 30.

‡ PN16 dimensions (mm): W = 432; X = 406; Y = 362; Z = 30.

† Total bolts required, to be supplied by installer. Bolt sizes for conventional flange-to-flange connection.

Longer bolts required when flange utilized with wafer-type valves.

IMPORTANT NOTES: 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 only be used on one side of the valve. Contact Victaulic for information on AS2129 - Table E; ISO 2084 (PN10); DIN 2532 (PN10) and JIS B-2210 (10k) flanges.

## MATERIAL SPECIFICATIONS

**Housing:** Ductile iron conforming to ASTM A-536.

**Housing Coating:** Black enamel

□ **Optional:** Hot dipped galvanized and others.

**Coupling Gasket:** (specify choice\*)

□ **Grade "E" EPDM**

EPDM (Green color code). Temperature range  $-34^{\circ}\text{C}$  to  $+110^{\circ}\text{C}$  ( $-30^{\circ}\text{F}$  to  $+230^{\circ}\text{F}$ ). Recommended 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 ( $30^{\circ}\text{C}$ ) and hot ( $82^{\circ}\text{C}$ ) potable water service. NOT RECOMMENDED FOR PETROLEUM SERVICES.

□ **Grade "T" nitrile**

Nitrile (Orange color code). Temperature range  $-29^{\circ}\text{C}$  to  $+82^{\circ}\text{C}$  ( $-20^{\circ}\text{F}$  to  $+180^{\circ}\text{F}$ ). Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range; except hot, dry air over  $+60^{\circ}\text{C}$  ( $+140^{\circ}\text{F}$ ) and water over  $+66^{\circ}\text{C}$  ( $+150^{\circ}\text{F}$ ). 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.

**Hinge Bushing:** 50 - 300 mm (2 - 12") only: Electroplated steel.

**Draw Bolts:** 350 - 600 mm (14 - 24") only: Heat treated oval neck track bolts conforming to ASTM A-183.

## Vic-Flange Adapter Notes

1. The Style 741 (2 - 12"/50 - 300 mm) design incorporates small teeth inside the key shoulder I.D. to prevent rotation. These teeth should be removed when Vic-Flange adapter is utilized with a Victaulic Series 700 grooved end butterfly valve, Schedule 5 pipe or plastic pipe. Vic-Flange adapter Style 741 may be used only on one side of Victaulic Series 700 butterfly valve, sizes 2 - 4" (50 - 100 mm) fitted with standard or latch-lock handles.

2. 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  $90^{\circ}$  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.

3. 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.

4. Area A-B noted in the above drawing must be free from gouges, undulations or deformities of any type for effective sealing.

5. Vic-Flange adapter gaskets must always be assembled with the color coded lip on the pipe and the other lip facing the mating flange.

6. Vic-Flange hinge points must be oriented approximately  $90^{\circ}$  to each other when mated.

7. 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 is otherwise well suited do not provide an adequate mating surface. In such cases, it is recommended that a metal (Type F phenolic for Style 641 with copper systems) Flange Washer be inserted between the Vic-Flange adapter and the mating flange to provide the necessary sealing surface.

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 AWWA cast flanges to IPS flanges: the Flange Washer or Transition Ring is placed between two Vic-Flange adapters with the hinge points oriented  $90^{\circ}$  to each other. If one flange is not a Vic-Flange adapter (e.g., flanged valve), then a flange gasket must be placed adjacent to that flange and the Flange Washer inserted between the flange gasket and the Vic-Flange adapter. Transition rings rather than Flange Washers must be used when mating Style 741 to Style 341 Flange Adapters in sizes 14 - 24" (350 - 600 mm).

E. 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 741, 743, 341, 641, 994) and size to assure proper Flange Washer is supplied.*

### NOTES

Style 741 Vic-Flange adapters provide rigid joints when used on pipe with standard **roll** or **cut** groove dimensions and consequently allow no linear or angular movement at the joint.

\* Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, standard roll or cut groove in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to  $1\frac{1}{2}$  times the figures shown.

WARNING: Piping systems must always be depressurized and drained before attempting disassembly and removal of any Victaulic piping products.

This product shall be manufactured by Victaulic Company. 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.