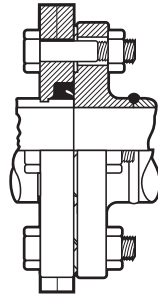


Victaulic® Vic-Flange Adapters

Styles 741 and 743



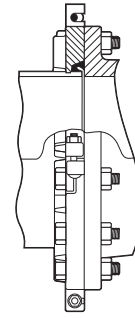
Style 741
2 – 12"/DN50 – DN300



Exaggerated for clarity



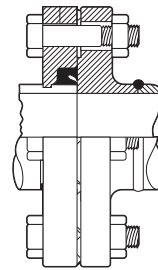
Style 741
14 – 24"/DN350 – DN600



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.
- For exceptions reference section 6.0 Notifications

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):

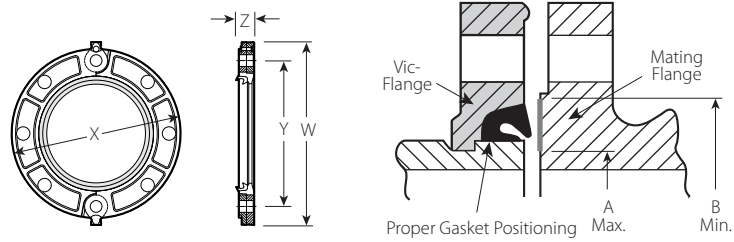
Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449 (imperial) and ISO 898-1 Class 9.8 (metric). Carbon steel hex flange nuts meeting the mechanical property requirements of ASTM A563 Grade B (imperial - heavy hex nuts) and ASTM A563M Class 9 (metric - hex nuts). 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.

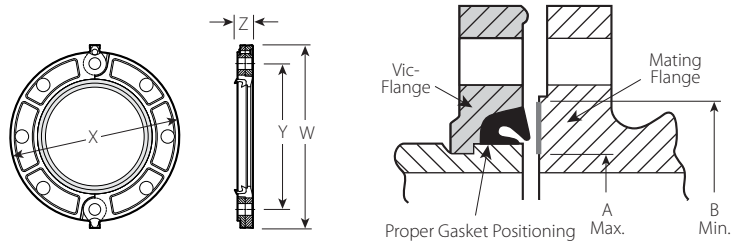
NOTE

- 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

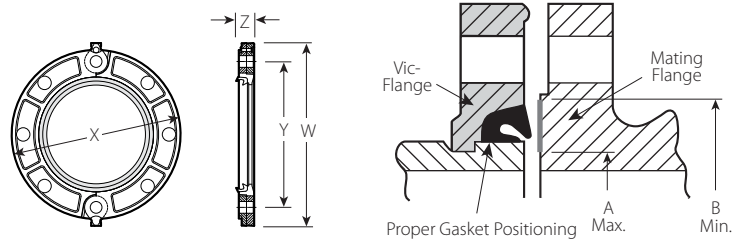
- Longer bolts required when flange utilized with wafer-type valves.
- IMPORTANT: Style 741 Vic-Flange adapters provide rigid joints when used on pipe with standard cut or roll groove dimensions and consequently allow no linear or angular movement at the joint. When used with Victaulic Series 700 butterfly 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.

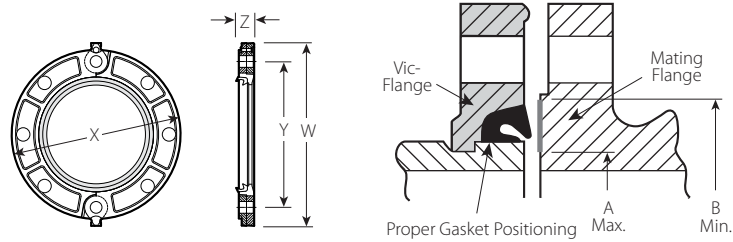
⁶ Contact Victaulic for details.

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

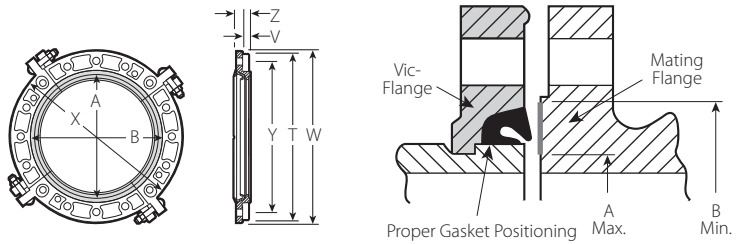
- IMPORTANT NOTE: Style 741 Vic-Flange adapters provide rigid joints when used on pipe with standard cut or roll groove dimensions and consequently allow no linear or angular movement at the joint. When used with Victaulic Series 700 butterfly valves, plastic pipe or light wall metallic pipe, small teeth 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.

5.0 PERFORMANCE

Style 741

2 – 12"/DN50 – DN300

ANSI Class 125 and 150 Flanges

| Size | | Performance | | |
|-------------------------|--|--|---|--|
| Nominal inches DN | Actual Outside Diameter inches mm | Maximum Working Pressure ⁹ psi kPa | Maximum End Load ⁹ lb N | |
| 2 DN50 | 2.375 60.3 | 300 2068 | 1330 5920 | |
| 2 ½ | 2.875 73.0 | 300 2068 | 1950 8680 | |
| 3 DN80 | 3.500 88.9 | 300 2068 | 2885 12840 | |
| 4 DN100 | 4.500 114.3 | 300 2068 | 4770 21225 | |
| 5 | 5.563 141.3 | 300 2068 | 7290 32440 | |
| 6 DN150 | 6.625 168.3 | 300 2068 | 10350 46060 | |
| 8 DN200 | 8.625 219.1 | 300 2068 | 17500 77875 | |
| 10 DN250 | 10.750 273.0 | 300 2068 | 27215 121110 | |
| 12 DN300 | 12.750 323.9 | 300 2068 | 38285 170270 | |

⁹ Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, standard roll or cut grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

NOTE

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

Style 741

DN50 – DN300/2 – 12"

PN10 and PN16 Flanges

| Size | | PN10 Flanges | | PN16 Flanges | |
|-------------------------|--|--|---|--|---|
| Nominal DN inches | Actual Outside Diameter mm inches | Maximum Working Pressure ⁹ Bar psi | Maximum End Load ⁹ N lb | Maximum Working Pressure ⁹ Bar psi | Maximum End Load ⁹ N lb |
| DN50 2 | 60.3 2.375 | 10 145 | 2850 640 | 16 230 | 4561 1025 |
| DN65 | 76.1 3.000 | 10 145 | 4540 1020 | 16 230 | 7275 1635 |
| DN80 3 | 88.9 3.500 | 10 145 | 6210 1395 | 16 230 | 9925 2230 |
| DN100 4 | 114.3 4.500 | 10 145 | 10260 2305 | 16 230 | 16420 3690 |
| DN125 | 139.7 5.500 | 10 145 | 15330 3446 | 16 230 | 24520 5512 |
| | 159.0 6.250 | 10 145 | 19800 4450 | 16 230 | 31400 7056 |
| DN150 6 | 168.3 6.625 | 10 145 | 22250 5000 | 16 230 | 35600 8000 |
| DN200 8 | 219.1 8.625 | 10 145 | 37690 8470 | 16 230 | 60320 13555 |
| DN250 10 | 273.0 10.750 | 10 145 | 58560 13160 | 16 230 | 93695 21055 |
| DN300 12 | 323.9 12.750 | 10 145 | 82370 18510 | 16 230 | 131810 29620 |

⁹ Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, standard roll or cut grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

NOTE

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

5.0 PERFORMANCE (Continued)

Style 741

DN50 – DN200/2 – 8"

Australian Standard Table "E" Flanges

| Size | | Performance | |
|-------------------------|---|---|--|
| Nominal DN inches | Actual Outside Diameter mm inches | Maximum Working Pressure ⁹ kPa psi | Maximum End Load ⁹ N lb |
| DN50 ¹⁰ 2 | 60.3 2.375 | 1400 203 | 3996 900 |
| DN80 3 | 88.9 3.500 | 1400 203 | 8700 1955 |
| DN100 4 | 114.3 4.500 | 1400 203 | 14374 3220 |
| DN150 6 | 168.3 6.625 | 1400 203 | 31150 7000 |
| DN200 8 | 219.1 8.625 | 1400 203 | 52777 11860 |

⁹ Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, standard roll or cut grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

¹⁰ Contact Victaulic for details.

NOTE

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

Style 741

DN50 – DN200/2 – 8"

Chinese Standard Table "E" Flanges

| Size | | Performance | |
|-------------------------|---|---|--|
| Nominal DN inches | Actual Outside Diameter mm inches | Maximum Working Pressure ⁹ kPa psi | Maximum End Load ⁹ N lb |
| DN50 2 | 60.3 2.375 | 1400 203 | 3996 900 |
| DN65 | 76.1 3.000 | 1400 203 | 6365 1431 |
| DN80 3 | 88.9 3.500 | 1400 203 | 8700 1955 |
| | 108.0 4.250 | 1400 203 | 12819 2882 |
| DN100 4 | 114.3 4.500 | 1400 203 | 14374 4370 |
| | 133.0 5.250 | 1400 203 | 19440 4822 |
| DN125 | 139.7 5.500 | 1400 203 | 21448 4822 |
| | 159.0 6.250 | 1400 203 | 27784 6246 |
| | 165.1 6.500 | 1400 203 | 29920 6726 |
| DN200 8 | 219.1 8.625 | 1400 203 | 52777 11860 |

⁹ Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, standard roll or cut grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

5.0 PERFORMANCE (Continued)

Style 741

14 – 24"/DN350 – DN600

ANSI Class 125 and 150 Flanges

| Size | | Performance | | |
|-------------------------|---|---|--|--|
| Nominal inches DN | Actual Outside Diameter inches mm | Maximum Working Pressure ⁹ | | Maximum End Load ⁹ lb N |
| | | psi kPa | | |
| 14 DN350 | 14.000 355.6 | 300 2068 | | 46180 205500 |
| 16 DN400 | 16.000 406.4 | 300 2068 | | 60300 268335 |
| 18 DN450 | 18.000 457.0 | 300 2068 | | 76340 339700 |
| 20 DN500 | 20.000 508.0 | 300 2068 | | 94250 419400 |
| 24 DN600 | 24.000 610.0 | 300 2068 | | 135700 603865 |

⁹ Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, standard roll or cut grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

NOTE

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

Style 743

Grooved pipe adapter to ANSI Class 300 flanges

| Size | | Performance | | |
|-------------------------|---|---|--|--|
| Nominal inches DN | Actual Outside Diameter inches mm | Maximum Working Pressure ⁹ | | Maximum End Load ⁹ lb N |
| | | psi kPa | | |
| 2 DN50 | 2.375 60.3 | 720 4964 | | 3190 14200 |
| 2½ | 2.875 73.0 | 720 4964 | | 4670 20780 |
| 3 DN80 | 3.500 88.9 | 720 4964 | | 6925 30815 |
| 4 DN100 | 4.500 114.3 | 720 4964 | | 11445 50930 |
| 5 | 5.563 141.3 | 720 4964 | | 17500 77875 |
| 6 DN150 | 6.625 168.3 | 720 4964 | | 24805 110380 |
| 8 DN200 | 8.625 219.1 | 720 4964 | | 42045 187100 |
| 10 DN250 | 10.750 273.0 | 720 4964 | | 65315 290650 |
| 12 DN300 | 12.750 323.9 | 720 4964 | | 91880 408870 |

⁹ Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, standard roll or cut grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

NOTE

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

6.0 NOTIFICATIONS

- The Style 741 (2 – 12"/DN50 – DN300) 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 valve, sizes 2 – 4"/DN50 – DN100 fitted with standard or latch-lock handles.
- *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 above drawing 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 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° 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"/DN350 – DN600.
 - 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.

NOTE

- Style 741 is compatible with ANSI CL 125 or CL150, PN10/16 and Australian Standard Table E bolt hole patterns.

6.0 NOTIFICATIONS (Continued)

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.

NOTICE

- Victaulic does not recommend the use of any furnace butt-welded pipe with sizes NPS 2"/DN50 and smaller Victaulic gasketed joint products. This includes, but is not limited to, ASTM A53 Type F pipe.

7.0 REFERENCE MATERIALS

[02.06: Victaulic Potable Water Approvals](#)

[05.01: Victaulic Seal Selection Guide](#)

[10.01: Victaulic Regulatory Approval Reference Guide](#)

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

[17.09: Victaulic Pressure Ratings and End Loads for Victaulic Ductile Iron Grooved Couplings on Stainless Steel Pipe](#)

[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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