# Style 41 Vic-Ring® Coupling

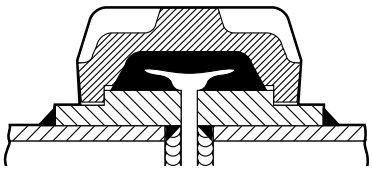
## PRODUCT DESCRIPTION

Style 41 couplings are commonly used with Type “E” Vic-Ring adapters and are designed to provide a strong component for use on steel pipe with applied Vic-Ring adapters. Many sizes may be used on pipe with cast shoulders.

Style 41 sizes 30 - 38" (750 - 950 mm) are cast in six segments; 42 - 54" (1050 - 1375 mm) sizes in eight segments; 60" (15.. mm) in 10 segments and 66" (1675 mm) in 12 segments, to assure concentricity and ease of handling.

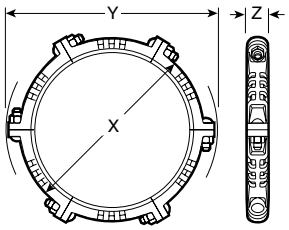
Style 41 Vic-Ring couplings are supplied with “E” or “T” gaskets. FlushSeal® gaskets are available upon request.

All sizes are supplied painted with alkyd phenolic primer and with plated nuts and bolts.



*Exaggerated for clarity*

## DIMENSIONS




**30 - 38" sizes**

| Pipe Size | | Coupling Dimensions Inches/millimeters | | | Bolt Dimensions Inches/millimeters | | Approx. Weight Each Lbs. kg |
|---|---|---|---|---|---|---|---|
| Nominal Diameter In./mm | Actual Outside Diameter In./mm | Height X | Width Y | Depth Z | No. | Diameter X Length | |
| 30<br>750 | 30.000<br>762,0 | 36.25<br>921 | 41.38<br>1051 | 5.00<br>127 | 6 | 1 1/8 X 5 1/2 | 178.0<br>80,7 |
| 36<br>900 | 36.000<br>914,0 | 42.50<br>1080 | 47.13<br>1197 | 5.13<br>130 | 6 | 1 1/8 X 5 1/2 | 205.0<br>93,0 |
| 38<br>950 | 38.000<br>965,2 | 44.25<br>1124 | 49.25<br>1251 | 5.13<br>130 | 6 | 1 1/4 X 5 1/2 | 220.0<br>99,8 |
| 42<br>1050 | 42.000<br>1067,0 | 49.13<br>1248 | 55.50<br>1409 | 5.13<br>130 | 8 | 1 3/8 X 5 3/4 | 270.0<br>122,5 |
| 46<br>1150 | 46.000<br>1168,4 | 52.25<br>1327 | 59.13<br>1502 | 5.38<br>137 | 8 | 1 1/2 X 5 3/4 | 330.0<br>149,7 |
| 48<br>1200 | 48.000<br>1219,2 | 55.75<br>1416 | 62.75<br>1594 | 5.25<br>133 | 8 | 1 5/8 X 6 | 390.0<br>176,9 |
| 54<br>1375 | 54.000<br>1371,6 | 62.25<br>1581 | 70.00<br>1778 | 5.38<br>137 | 8 | 1 3/4 X 6 | 470.0<br>213,2 |
| 60<br>1500 | 60.000<br>1524,0 | 68.63<br>1743 | 76.50<br>1943 | 5.50<br>140 | 10 | 1 7/8 X 6 | 570.0<br>258,6 |
| 66<br>1675 | 66.000<br>1676,4 | 74.83<br>1901 | 81.25<br>2064 | 5.63<br>143 | 24 | 1 1/2 X 5 3/4 | 750.0<br>340,2 |





United States • Phone: 1-800-PICK-VIC (1-800-742-5842) • Fax: 610-250-8817 • e-mail: pickvic@victaulic.com
Canada • Phone: 905-884-7444 • Fax: 905-884-9774 • e-mail: viccanada@victaulic.com
Europe • Phone: 32-9-381-1500 • Fax: 32-9-380-4438 • e-mail: viceuro@victaulic.be
UK • Phone: 44(0)1438741100 • Fax: 44(0)1438313883 • e-mail: viceuro@victaulic.be
Central and South America • Phone: 610-559-3300 • Fax: 610-559-3608 • e-mail: vical@victaulic.com
Australasia • Phone: 86-21-58855151 • Fax: 86-21-58851298 • e-mail: vicap@victaulic.com

## PERFORMANCE

| 1 | | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| Pipe Size | | Cast Shoulder O.D. Inches mm | Applied Vic-Ring Adapter O.D. Inches mm | Max. Joint Work. Press. PSI kPa | Max. Permiss. End Load Lbf/N | Pipe End Sep. § ‡ Min. - Max. Inches mm | Max. Allow. Pipe End Move. § ‡ Inches mm | Max. Deflect. from Center Line § ‡ | |
| Nominal Dia. In./mm | Actual Outside Dia. | | | | | | | Degrees Per Cplg. | Foot/meter of Pipe |
| 30<br>750 | 30.000<br>762,0 | 33.000<br>838,2 | 33.000<br>838,2 | 90<br>620 | 77,000<br>342500 | 0- 1/2<br>0 - 12,7 | 1/2<br>12,7 | 0° - 52′ | 0.18<br>0,05 |
| 36<br>900 | 36.000<br>914,0 | 39.156<br>994,6 | 39.156<br>994,6 | 90<br>620 | 108,400<br>482150 | 0- 1/2<br>0 - 12,7 | 1/2<br>12,7 | 0° - 44′ | 0.16<br>0,05 |
| 38<br>950 | 38.000<br>965,2 | 40.938<br>1039,8 | 40.938<br>1039,8 | 90<br>620 | 118,400<br>526650 | 0- 1/2<br>0 - 12,7 | 1/2<br>12,7 | 0° - 42′ | 0.14<br>0,04 |
| 42<br>1050 | 42.000<br>1067,0 | 45.562<br>1157,3 | 45.562<br>1157,3 | 90<br>620 | 146,700<br>652550 | 0- 1/2<br>0 - 12,7 | 1/2<br>12,7 | 0° - 38′ | 0.13<br>0,04 |
| 46<br>1150 | 46.000<br>1168,4 | 48.750<br>1238,3 | 48.750<br>1238,3 | 90<br>620 | 168,000<br>747300 | 0- 1/2<br>0 - 12,7 | 1/2<br>12,7 | 0° - 35′ | 0.12<br>0,04 |
| 48<br>1200 | 48.000<br>1219,2 | 52.000<br>1320,8 | 52.000<br>1320,8 | 90<br>620 | 191,000<br>849600 | 0- 1/2<br>0 - 12,7 | 1/2<br>12,7 | 0° - 33′ | 0.11<br>0,03 |
| 54<br>1375 | 54.000<br>1371,6 | 58.500<br>1485,9 | 58.500<br>1485,9 | 90<br>620 | 242,000<br>1076450 | 0- 1/2<br>0 - 12,7 | 1/2<br>12,7 | 0° - 30′ | 0.10<br>0,03 |
| 60<br>1500 | 60.000<br>1524,0 | 64.687<br>1643,0 | 64.687<br>1643,0 | 90<br>620 | 295,700<br>1315300 | 0- 1/2<br>0 - 12,7 | 1/2<br>12,7 | 0° - 27′ | 0.09<br>0,03 |
| 66<br>1675 | 66.000<br>1676,4 | 70.750<br>1797,1 | 70.750<br>1797,1 | 90<br>620 | 353,900<br>1574200 | 0- 1/2<br>0 - 12,7 | 1/2<br>12,7 | 0° - 24′ | 0.08<br>0,02 |

COLUMN 1 - Victaulic couplings are identified by nominal pipe size.

COLUMN 2 - Nominal cast shoulder diameter on pipe of AWWA diameter (as per Fed. Spec. WW-P 421b and ASA A21.6 and A21.8).

COLUMN 3 - Nominal Vic-Ring adapter outside diameter.

COLUMN 4 - Maximum line pressure, including surge, to which the joint may be subjected, depending upon steel pipe wall thickness and properly applied Vic-Ring adapter.

COLUMN 5 - Maximum end load from all internal and/or external forces to which the joint should be subjected under working conditions.

COLUMN 6 - Range of pipe end separation normally available with above couplings.

COLUMN 7 - Maximum linear movement available at joints made with the above couplings, subject to tolerances (Request 26.01). Movement is the difference between minimum and maximum pipe end separation (Request 26.01 and refer to Linear Movement Tolerance on page 2).

COLUMNS 8 & 9 - Maximum allowable deflection of pipe from centerline, subject to tolerances (Request 26.01 and refer to Angular Movement Tolerance on page 2).

† FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure (COLUMN 4) may be increased to 1 1/2 times the figures shown.

§ Maximum Pipe (COLUMN 7) will be reduced by Deflection (COLUMNS 8 & 9) and vice versa.

‡ Refer to Design Data for information on tolerances and pipe gap settings.

## 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.

**Housing Coating:** Alkyd phenolic primer

- **Optional:** Hot dipped galvanized and others

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

- **Grade “E” EPDM**
  EPDM (Green color code). Temperature range –30°F to +230°F (–34°C to +110°C). Recommended for cold and 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 +86°F (+30°C) and hot +180°F (+82°C) potable water service. NOT RECOMMENDED FOR PETROLEUM SERVICES.
- **Grade “T” nitrile**
  Nitrile (Orange color code). Temperature range –20°F to +180°F (–29°C to +82°C). Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not recommended for hot water services over +150°F (+66°C) or for hot dry air over +140°F (+60°C).

*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.

**Bolts/Nuts:** Heat-treated plated carbon steel, trackhead meeting the physical and chemical requirements of ASTM A-449 and physical requirements of ASTM A-183.

- **Optional:** Type 316 stainless steel, Grade B-8M, Class 2.