

# Style 234S Restrained Flexible Single-Gasket Coupling

Victaulic Bolted Split-Sleeve Products (VBSP) Style 234S stainless steel couplings (formerly Depend-O-Lok Air/FluidMaster) are single-arch couplings that are commonly used in buried or exposed pipe applications for field joint connections where joint flexibility and thrust restraint is required. This style of coupling is ideally suited for applications that require a narrow restrained coupling or where contact of the medium flowing through the pipe with the interior of the coupling body is undesirable.

Typical applications include water and wastewater treatment piping, ethanol and other chemical plant piping, pulp and paper industry piping, and other piping applications where corrosion resistant flexible, restrained joints are required.

The single-arch mechanical coupling body houses a "C" shaped gasket that provides the radial seal around the circumference of the pipe. Style 234S couplings incorporate a restraint ring welded to each pipe end (furnished with the coupling) allowing the coupling housing to straddle the restraint rings and confining the rings under the coupling body in order to prevent joint separation. The coupling housing and restraint ring welds are designed to accommodate hoop stress and end loads to meet system pressure requirements. Style 234S system couplings also perform at negative pipe pressures up to full vacuum. The gasket is not pressure responsive and therefore does not require internal pipe pressure to assist with the seal. The arched cross-sectional design provides stiffness to resist forces encountered during negative pressure (submerged) or vacuum service.

Style 234S couplings are available in standard nominal sizes from 8 – 60"/200 – 1500 mm, with larger sizes available based on design and application requirements. Style 234S couplings can accommodate operating pressures up to 200 psi/1375 kPa depending on the actual pipe diameter. For pressures and sizes not shown in the dimensions and performance tables contact Victaulic for information on our engineered products.

Victaulic restrained split-sleeve couplings provide a flexible pipe connection and are not designed or intended to transfer significant shear or bending loads across the pipe joint. Therefore, a single coupling will not allow for differential settlement to occur at the joint. However, a minimum of two flexible couplings designed to allow dynamic (in-service) deflection and installed in combination can be used to accommodate differential settlement at a pipe joint or between a pipeline and a structure. Victaulic recommends Style 233/233S couplings for this purpose as they are specifically designed to allow for dynamic deflection and provide thrust restraint at the joint. Refer to submittal publications 60.07 and 60.08 for product details and 26.20 for guidelines regarding the use of these couplings in a differential settlement application.

All flexible mechanical couplings should be properly supported to minimize or eliminate undesirable loads at the joint. Pipe support requirements are also defined within the Victaulic Application Guidelines publication 26.20.



8 – 60"/200 – 1500mm

**JOB/OWNER**

System No. \_\_\_\_\_

Location \_\_\_\_\_

**CONTRACTOR**

Submitted By \_\_\_\_\_

Date \_\_\_\_\_

**ENGINEER**

Spec Sect \_\_\_\_\_ Para \_\_\_\_\_

Approved \_\_\_\_\_

Date \_\_\_\_\_



# Style 234S Restrained Flexible Single-Gasket Coupling

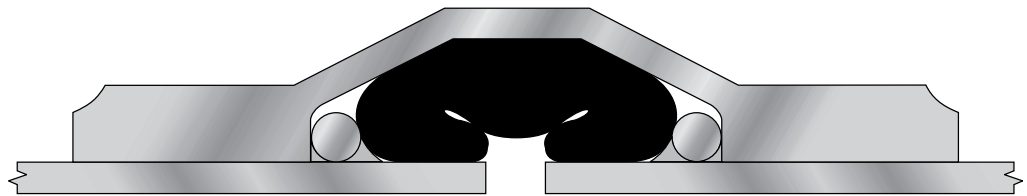
**PRODUCT GUIDE**

| Product Style Guide |              |                        |  |
|---------------------|--------------|------------------------|--|
| Submittal Number    | Style Number | Coupling/Body Material | Application                                      |
| 60.01               | 230          | Carbon Steel           | Non-Restrained Coupling                          |
| 60.02               | 230S         | Stainless Steel        | Non-Restrained Coupling                          |
| 60.03               | 231          | Carbon Steel           | Expansion Coupling                               |
| 60.04               | 231S         | Stainless Steel        | Expansion Coupling                               |
| 60.05               | 232          | Carbon Steel           | Restrained Coupling                              |
| 60.06               | 232S         | Stainless Steel        | Restrained Coupling                              |
| 60.07               | 233          | Carbon Steel           | Restrained Coupling For Dynamic Joint Deflection |
| 60.08               | 233S         | Stainless Steel        | Restrained Coupling For Dynamic Joint Deflection |
| 60.09               | 234          | Carbon Steel           | Restrained Single-Gasket Coupling                |
| 60.10               | 234S         | Stainless Steel        | Restrained Single-Gasket Coupling                |

**BODY TYPE**

**Cross-Section**

NOTE: Body type is not optional and will be determined by system requirements.

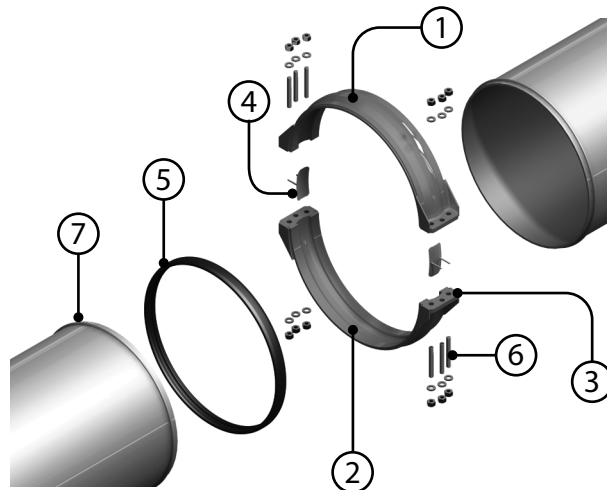


**Type 2** coupling is a shouldered coupling. The shoulders welded to the edge of the coupling body provide a vertical bearing surface for the restraint rings and provide additional cross-section stiffness.

## Style 234S Restrained Flexible Single-Gasket Coupling

### COUPLING COMPONENTS

1. **Body** – Arched cross-section.
  2. **Shoulders** – Provide additional stiffness and vertical bearing surface for restraint rings.
  3. **Closure Plates** – Low profile bolt pads for installation and tightening of coupling; gap between plates of installed coupling allows for field flexibility.
  4. **Sealing Plates** – Provide gasket support at the closures.
  5. **Gasket** – Provides circumferential seal.
- . Fasteners**
- Studs – High Strength Threaded Rod
  - Nuts – Heavy Hex Nuts
  - Washers – SAE small pattern flat washers
7. **Restraint Rings** – Attached to pipe ends to create a restrained joint.



## Style 234S Restrained Flexible Single-Gasket Coupling

### MATERIAL SPECIFICATIONS

#### Body

Stainless Steel conforming to ASTM A240 316/316L

#### Shoulders

Stainless Steel conforming to ASTM A240 316L

#### Closure Plates

Stainless Steel conforming to 316L

#### Sealing Plate

Stainless Steel conforming to ASTM A240 316L

#### Gasket

Standard (Specify choice on order):

- **EPDM** -30°F to +230°F/-34°C to +110°C  
Cold and hot water within allowable temperature range; dilute acids; excellent resistance to the deteriorative effects of ozone, oxygen, heat and most chemicals not involving hydrocarbons. NOT RECOMMENDED FOR PETROLEUM SERVICES.
- **Silicone** -30°F to +350°F/-34°C to +177°C  
Dry, hot air applications; excellent resistance to many chemicals. NOT RECOMMENDED FOR HOT WATER OR STEAM APPLICATIONS.

Optional Gasket (specify choice on order):

- **Nitrile** -20°F to +180°F/-28°C to +82°C  
Water; petroleum products, vegetable and mineral oils; air with oil vapors within allowable temperature range; good resistance to hydrocarbons; acids and bases.

#### Restraint Rings

Stainless Steel conforming to ASTM A276 316L

#### Permanent Fasteners

**Studs** - Stainless Steel conforming to ASTM A193 Grade B8M 316 Class 2

**Nuts** - Heavy hex nuts

Stainless Steel conforming to ASTM A194 Grade 8M 316

**Washers** - Stainless Steel Type 316 SAE pattern

#### Installation Fasteners (for installation purposes only)

**Studs** - Carbon Steel conforming to ASTM A193 Grade B7 zinc plated

**Nuts** - Heavy hex nuts

Carbon Steel conforming to ASTM A194 Grade 2H zinc plated

**Washers** - Carbon Steel SAE small pattern flat washers conforming to ASTM F436 SAE pattern zinc plated

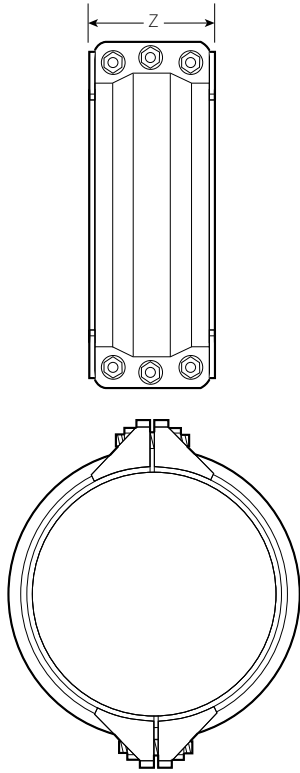
### PIPE END DIMENSIONAL TOLERANCE AND OVALITY

For specific pipe diameter tolerances, pipe ovality (roundness) requirements and minimum/maximum pipe diameter allowance, refer to the tables included in the Installation Manual (below) and 26.20 Application Guidelines.

I-234 - Style 234/234S Restrained Single-Gasket Coupling

# Style 234S Restrained Flexible Single-Gasket Coupling

## DIMENSIONS



| (1)<br>Nominal<br>Pipe Size<br>In./mm | (2)<br>Actual<br>Pipe<br>O.D.<br>Range<br>In./mm | (3)<br>Maximum<br>Working<br>Pressure<br>psi/kPa | Coupling Dimensions      |                        |                                     | No. of Fasteners -<br>Fastener Dimensions<br>Dia. x Length<br>In. x In. | (4)<br>Approximate<br>Weight Each<br>Lbs/Kg. |
|---------------------------------------|--|--|--------------------------|------------------------|-------------------------------------|---|--|
|                                       |  |  | Body<br>Thickness<br>In. | Width<br>(Z)<br>In./mm | Min. No. of<br>Coupling<br>Segments |   |  |
| 8<br>200                              | 8.00 - 8.88<br>203.2 - 225.6                     | 200<br>1375                                      | 11 ga.                   | 4.50<br>114.3          | 2                                   | 4 - 3/4 x 6   | 21.0<br>9.5                                  |
| 10<br>250                             | 9.00 - 10.88<br>228.6 - 276.4                    | 200<br>1375                                      | 10 ga.                   | 4.50<br>114.3          | 2                                   | 4 - 3/4 x 6   | 23.0<br>10.4                                 |
| 12<br>300                             | 11.00 - 12.88<br>279.4 - 327.2                   | 200<br>1375                                      | 10 ga.                   | 4.50<br>114.3          | 2                                   | 4 - 3/4 x 6   | 26.0<br>11.8                                 |
| 14<br>350                             | 13.00 - 14.88<br>330.2 - 378                     | 200<br>1375                                      | 10 ga.                   | 4.50<br>114.3          | 2                                   | 4 - 3/4 x 6   | 28.0<br>12.7                                 |
| 16<br>400                             | 15.00 - 16.88<br>381.0 - 428.8                   | 200<br>1375                                      | 3/16                     | 4.50<br>114.3          | 2                                   | 4 - 3/4 x 6   | 33.0<br>15.0                                 |
| 18<br>450                             | 17.00 - 18.88<br>431.8 - 479.6                   | 200<br>1375                                      | 3/16                     | 4.50<br>114.3          | 2                                   | 4 - 3/4 x 6   | 36.0<br>16.3                                 |
| 20<br>500                             | 19.00 - 21.88<br>482.6 - 555.8                   | 200<br>1375                                      | 3/16                     | 4.50<br>114.3          | 2                                   | 4 - 3/4 x 6   | 38.0<br>17.2                                 |
| 24<br>600                             | 22.00 - 26.88<br>558.8 - 682.8                   | 100<br>700                                       | 3/16                     | 4.50<br>114.3          | 2                                   | 4 - 3/4 x 6   | 43.0<br>19.5                                 |
|                                       |  | 200<br>1375                                      | 1/4                      | 6.50<br>165.1          | 2                                   | 6 - 3/4 x 6   | 90.0<br>40.8                                 |
| 30<br>750                             | 27.00 - 32.88<br>685.8 - 835.2                   | 100<br>700                                       | 3/16                     | 4.50<br>114.3          | 2                                   | 4 - 3/4 x 6   | 51.0<br>23.1                                 |
|                                       |  | 150<br>1050                                      | 1/4                      | 6.50<br>165.1          | 2                                   | 6 - 3/4 x 6   | 109.0<br>49.4                                |
|                                       |  | 200<br>1375                                      | 3/8                      | 6.50<br>165.1          | 2                                   | 6 - 3/4 x 8   | 130.0<br>59.0                                |
| 36<br>900                             | 33.00 - 38.88<br>838.2 - 987.6                   | 50<br>345  | 3/16                     | 4.50<br>114.3          | 2                                   | 4 - 3/4 x 6   | 59.0<br>26.8                                 |
|                                       |  | 100<br>700                                       | 1/4                      | 6.50<br>165.1          | 2                                   | 6 - 3/4 x 6   | 128.0<br>58.1                                |
|                                       |  | 200<br>1375                                      | 3/8                      | 6.50<br>165.1          | 2                                   | 6 - 3/4 x 6   | 153.0<br>69.4                                |
| 42<br>1050                            | 39.00 - 44.88<br>990.6 - 1140.0                  | 100<br>700                                       | 1/4                      | 6.50<br>165.1          | 2                                   | 4 - 3/4 x 6   | 147.0<br>66.7                                |
|                                       |  | 150<br>1050                                      | 3/8                      | 6.50<br>165.1          | 2                                   | 6 - 3/4 x 6   | 176.0<br>79.8                                |
|                                       |  | 200<br>1375                                      | 1/2                      | 6.63<br>168.3          | 2                                   | 6 - 3/4 x 6   | 234.0<br>106.1                               |
| 48<br>1200                            | 45.00 - 50.88<br>1143.0 - 1292.4                 | 50<br>345  | 1/4                      | 6.50<br>165.1          | 2                                   | 6 - 7/8 x 8   | 166.0<br>75.3                                |
|                                       |  | 100<br>700                                       | 3/8                      | 6.50<br>165.1          | 2                                   | 6 - 7/8 x 8   | 211.0<br>95.7                                |
|                                       |  | 150<br>1050                                      | 1/2                      | 6.63<br>168.3          | 2                                   | 6 - 7/8 x 8   | 263.0<br>119.3                               |
| 54<br>1350                            | 51.00 - 56.88<br>1295.4 - 1444.8                 | 50<br>350  | 1/4                      | 6.50<br>165.1          | 2                                   | 6 - 3/4 x 6   | 185.0<br>83.9                                |
|                                       |  | 100<br>700                                       | 3/8                      | 6.50<br>165.1          | 2                                   | 6 - 7/8 x 8   | 234.0<br>106.1                               |
|                                       |  | 150<br>1050                                      | 1/2                      | 6.63<br>168.3          | 2                                   | 6 - 7/8 x 8   | 293.0<br>132.9                               |
| 60<br>1500                            | 57.00 - 63.00<br>1447.8 - 1600.2                 | 50<br>345  | 1/4                      | 6.50<br>165.1          | 2                                   | 6 - 3/4 x 6   | 203.0<br>92.1                                |
|                                       |  | 100<br>700                                       | 3/8                      | 6.50<br>165.1          | 2                                   | 6 - 7/8 x 8   | 257.0<br>116.6                               |
|                                       |  | 150<br>1050                                      | 1/2                      | 6.63<br>168.3          | 2                                   | 6 - 7/8 x 8   | 323.0<br>146.5                               |

- (1) Restrained Single-Gasket couplings must be used on pipe with a minimum wall thickness that meets the requirements of AWWA C220 for stainless steel pipe.
- (2) Actual pipe O.D. required at time of order. For actual pipe O.D. round down to the nearest 1/8" to determine proper coupling size required.
- (3) For allowable test or transient pressure, the maximum working pressure may be increased to 1 1/2 times the values shown.
- (4) Coupling weights are based on nominal pipe diameter and include all accessories. Weight may vary based on actual size of pipe.

Note: The data in this table only applies when stainless steel couplings are being used on stainless steel pipe.

# Style 234S Restrained Flexible Single-Gasket Coupling

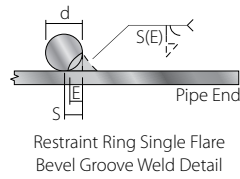
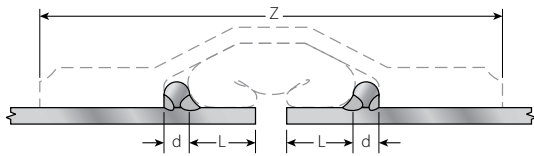
## PERFORMANCE

| Nominal Pipe Size<br>In./mm | (1)   |  |   | (2) (3)                                    | (3) (4)                                  | (5)                                |
|-----------------------------|---|--|---|--|--|------------------------------------|
|                             | Maximum Working Pressure<br>psi/kPa<br>Carbon Steel | Maximum Working Pressure<br>psi/kPa<br>Stainless Steel | Maximum Working Pressure<br>psi/kPa<br>Ductile Iron | Pipe End Separation<br>Min - Max<br>In./mm | Max. Allow. Static Deflection<br>Degrees | Max. Permissible End Load<br>lbf/N |
| 8<br>200                    | 200<br>1375   | 200<br>1375  | 200<br>1375   | 0.13 - 0.38<br>3.3 - 9.7                   | 1° 35'                                   | 10053<br>44718                     |
| 10<br>250                   | 200<br>1375   | 200<br>1375  | 200<br>1375   | 0.13 - 0.38<br>3.3 - 9.7                   | 1° 18'                                   | 15708<br>69873                     |
| 12<br>300                   | 200<br>1375   | 200<br>1375  | 200<br>1375   | 0.13 - 0.38<br>3.3 - 9.7                   | 1° 6'                                    | 28274<br>125769                    |
| 14<br>350                   | 200<br>1375   | 200<br>1375  | 200<br>1375   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 57'                                   | 22619<br>100616                    |
| 16<br>400                   | 200<br>1375   | 200<br>1375  | 200<br>1375   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 50'                                   | 30788<br>136950                    |
| 18<br>450                   | 200<br>1375   | 200<br>1375  | 175<br>1200   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 47'                                   | 50894<br>226387                    |
| 20<br>500                   | 200<br>1375   | 200<br>1375  | 150<br>1035   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 39'                                   | 62832<br>279490                    |
| 24<br>600                   | 100<br>690  | 100<br>690   | 100<br>690  | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 31'                                   | 45239<br>201233                    |
|                             | 200<br>1375   | 200<br>1375  | 200<br>1375   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 31'                                   | 90478<br>402466                    |
| 30<br>750                   | 100<br>690  | 100<br>690   | 100<br>690  | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 26'                                   | 70686<br>314426                    |
|                             | 150<br>1035   | 150<br>1035  | 150<br>1035   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 26'                                   | 106029<br>471639                   |
|                             | 200<br>1375   | 200<br>1375  | 150<br>1035   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 26'                                   | 141372<br>628853                   |
| 36<br>900                   | 50<br>345   | 50<br>345  | 50<br>345   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 22'                                   | 50894<br>226387                    |
|                             | 100<br>690  | 100<br>690   | 100<br>690  | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 22'                                   | 101788<br>452774                   |
|                             | 200<br>1375   | 200<br>1375  | 125<br>860  | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 22'                                   | 203575<br>905548                   |
| 42<br>1050                  | 100<br>690  | 100<br>690   | 100<br>690  | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 19'                                   | 138544<br>616276                   |
|                             | 150<br>1035   | 150<br>1035  | 125<br>860  | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 19'                                   | 207816<br>924413                   |
|                             | 200<br>1375   | 200<br>1375  | 150<br>1035   | 0.25 - 0.50<br>6.3 - 12.7                  | 0° 19'                                   | 277088<br>1232551                  |
| 48<br>1200                  | 50<br>345   | 50<br>345  | 50<br>345   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 17'                                   | 90478<br>402466                    |
|                             | 100<br>690  | 100<br>690   | 100<br>690  | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 17'                                   | 180956<br>804931                   |
|                             | 150<br>1035   | 150<br>1035  | 125<br>860  | 0.25 - 0.50<br>6.3 - 12.7                  | 0° 17'                                   | 271434<br>1207397                  |
| 54<br>1350                  | 50<br>345   | 50<br>345  | 50<br>345   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 15'                                   | 114511<br>509371                   |
|                             | 100<br>690  | 100<br>690   | 75<br>515   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 15'                                   | 229022<br>1018741                  |
|                             | 150<br>1035   | 150<br>1035  | 125<br>860  | 0.25 - 0.50<br>6.3 - 12.7                  | 0° 15'                                   | 343533<br>1528112                  |
| 60<br>1500                  | 50<br>345   | 50<br>345  | 50<br>345   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 13'                                   | 141372<br>628853                   |
|                             | 100<br>690  | 100<br>690   | 75<br>515   | 0.13 - 0.38<br>3.3 - 9.7                   | 0° 13'                                   | 282743<br>1257705                  |
|                             | 150<br>1035   | 150<br>1035  | 100<br>690  | 0.25 - 0.50<br>6.3 - 12.7                  | 0° 13'                                   | 424115<br>1886558                  |

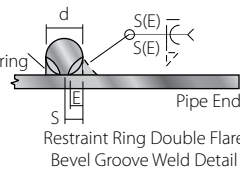
- (1) For allowable test or transient pressure, the maximum working pressure may be increased to 1½ times the values shown.
- (2) Pipe end separations shown in the table assume the pipe is in a non-deflected state. Maximum allowable axial pipe movement at the joint is the difference between the maximum and minimum pipe end separation. At maximum pipe end separation, axial movement can only occur via pipe expansion into the joint and vice versa.
- (3) Pipe end movement and deflection are non-concurrent.
- (4) Published static deflection values are intended for installation only. For allowable in-service or dynamic deflection, use 75% of the published static values. The coupling closure should be located 90 degrees from the direction of joint deflection.
- (5) The maximum permissible end loads listed in the table are calculated using the nominal pipe OD. The actual maximum permissible end load will be less or greater than the published figures depending on the actual pipe OD.

# Style 234S Restrained Flexible Single-Gasket Coupling

## RESTRAINT RINGS



Back Weld - Must not extend past the back edge of the restraint ring



| Nominal Pipe Size<br>In./mm | (1)<br>Maximum Working Pressure<br>psi/kPa | Width (Z)<br>In./mm | Restrainer Rings (2) |                        |                      |
|-----------------------------|--|---------------------|----------------------|------------------------|----------------------|
|                             |  |                     | Diameter (d)<br>In.  | Location (L)<br>In./mm | Weld Size (E)<br>In. |
| 8<br>200                    | 200<br>1375                                | 4.50<br>114.3       | 1/4                  | 0.81<br>20.6           | 3/32                 |
| 10<br>250                   | 200<br>1375                                | 4.50<br>114.3       | 1/4                  | 0.81<br>20.6           | 3/32                 |
| 12<br>300                   | 200<br>1375                                | 4.50<br>114.3       | 1/4                  | 0.81<br>20.6           | 3/32                 |
| 14<br>350                   | 200<br>1375                                | 4.50<br>114.3       | 1/4                  | 0.81<br>20.6           | 3/32                 |
| 16<br>400                   | 200<br>1375                                | 4.50<br>114.3       | 1/4                  | 0.81<br>20.6           | 3/32                 |
| 18<br>450                   | 200<br>1375                                | 4.50<br>114.3       | 1/4                  | 0.81<br>20.6           | 3/32                 |
| 20<br>500                   | 200<br>1375                                | 4.50<br>114.3       | 1/4                  | 0.81<br>20.6           | 3/32                 |
| 24<br>600                   | 100<br>700                                 | 4.50<br>114.3       | 1/4                  | 0.81<br>20.6           | 3/32                 |
|                             | 200<br>1375                                | 6.50<br>165.1       | 3/8                  | 0.94<br>23.8           | 1/8                  |
| 30<br>750                   | 100<br>700                                 | 4.50<br>114.3       | 1/4                  | 0.81<br>20.6           | 3/32                 |
|                             | 150<br>1050                                | 6.50<br>165.1       | 3/8                  | 0.94<br>23.8           | 1/8                  |
|                             | 200<br>1375                                | 6.50<br>165.1       | 3/8                  | 0.94<br>23.8           | 1/8                  |
| 36<br>900                   | 50<br>345                                  | 4.50<br>114.3       | 1/4                  | 0.81<br>20.6           | 3/32                 |
|                             | 100<br>700                                 | 6.50<br>165.1       | 3/8                  | 0.94<br>23.8           | 1/8                  |
|                             | 200<br>1375                                | 6.63<br>168.3       | 3/8                  | 0.94<br>23.8           | 1/8                  |
| 42<br>1050                  | 100<br>700                                 | 6.50<br>165.1       | 3/8                  | 0.94<br>23.8           | 1/8                  |
|                             | 150<br>1050                                | 6.50<br>165.1       | 3/8                  | 0.94<br>23.8           | 1/8                  |
|                             | 200<br>1375                                | 6.63<br>168.3       | 1/2                  | 1.31<br>33.3           | 5/32                 |
| 48<br>1200                  | 50<br>345                                  | 6.50<br>165.1       | 3/8                  | 0.94<br>23.8           | 1/8                  |
|                             | 100<br>700                                 | 6.50<br>165.1       | 3/8                  | 0.94<br>23.8           | 1/8                  |
|                             | 150<br>1050                                | 6.63<br>168.3       | 1/2                  | 1.31<br>33.3           | 5/32                 |
| 54<br>1350                  | 50<br>345                                  | 6.50<br>165.1       | 3/8                  | 0.94<br>23.8           | 1/8                  |
|                             | 100<br>700                                 | 6.50<br>165.1       | 3/8                  | 0.94<br>23.8           | 1/8                  |
|                             | 150<br>1050                                | 6.63<br>168.3       | 1/2                  | 1.31<br>33.3           | 5/32                 |
|                             | 200<br>1375                                | 6.63<br>168.3       | 1/2                  | 1.31<br>33.3           | 5/32                 |
| 60<br>1500                  | 50<br>345                                  | 6.50<br>165.1       | 3/8                  | 0.94<br>23.8           | 1/8                  |
|                             | 100<br>700                                 | 6.50<br>165.1       | 3/8                  | 0.94<br>23.8           | 1/8                  |
|                             | 150<br>1050                                | 6.63<br>168.3       | 1/2                  | 1.31<br>33.3           | 5/32                 |
|                             | 200<br>1375                                | 6.63<br>168.3       | 1/2                  | 1.31<br>33.3           | 5/32                 |

- (1) For allowable test or transient pressure, the maximum working pressure may be increased to 1½ times the values shown.
- (2) For applications other than air or gas, where a liquid or other medium is flowing through pipe, restraint ring weld requirements are as follows: Type 2 couplings require a full circumferential double flare bevel groove weld based on the weld sizes shown in the table.  
For low pressure air or gas applications, where the weight of the medium flowing through the pipe is not a consideration, a single flare bevel groove weld and/or less than a full circumference of weld may be allowed to attach the restraint rings. Contact Victaulic for specific details. Each restraint ring shipment includes restraint ring placement and welding data that is specific to application or project requirements.
- (3) Flare bevel groove weld size in table is the minimum requirement. Depth of preparation  $S = (d) \div 2$ ;  
Weld size  $E \approx S * 0.625$  per AWS D1.1. For a double flare bevel groove weld, the weld on the back side of the restraint ring must not extend beyond the outermost edge of the ring. The coupling shoulder must have unrestricted contact with the ring and the pipe O.D.
- (4) Restraint rings must be welded perpendicular to the pipe axis with a tolerance of  $L \pm 1/16 \approx 1.6$  mm.

Note: this data applies when stainless steel couplings are being used on stainless steel pipe.

# Style 234S Restrained Flexible Single-Gasket Coupling

**PRODUCT CONFIGURATOR**

**C 0234 0060 50 X 2 D L 0 X XO**

| Class | Style | Actual Pipe O.D. * |  | Body Type     | Segments | PSI/kPa Rating   | Rubber Compound                         | Paint    | Hardware      | Ring and Pipe Material  |
|-------|-------|--------------------|--|---------------|----------|--|---|----------|---------------|---|
|       |       | Inches^            | Fraction   |               |          |  |   |          |               |   |
| C     | 0234  | 0008 through 0063  | 00 - 0<br>13 - 1/8<br>25 - 1/4<br>38 - 3/8<br>50 - 1/2<br>63 - 5/8<br>75 - 3/4<br>88 - 7/8 | X - Stainless | 2 - Two  | B - 50/345<br>C - 75/515<br>D - 100/690<br>E - 125/860<br>F - 150/1035<br>G - 175/1200<br>H - 200/1375 | E - EPDM<br>L - Silicone<br>T - Nitrile | 0 - None | X - Stainless | XO - Stainless Steel Ring on Stainless Steel Pipe<br>SO - Carbon Steel Ring on Carbon Steel Pipe<br>DO - Carbon Steel Ring on Ductile Iron Pipe |

^ Couplings are available in a range of nominal sizes from 8 - 60".  
\* For actual pipe O.D. round down to the nearest 1/8" to determine proper coupling size required.

**ENGINEERED PRODUCTS OPTIONS**

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

**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.

**TESTING** Victaulic Style 234S couplings are designed to allow for a 50 percent increase over the published maximum working pressure for test and/or transient pressures. Due to the huge volume of air that can be involved in jobsite air testing and the nature of air or gas that is pressurized, jobsite air testing should be limited to 25 psi/175 kPa or less.

Victaulic offers a dished head assembly prepared with a restraint ring for the Style 234S coupling for field testing a section of pipeline or to end a pipeline and allow for future expansion. Contact Victaulic for details.

For complete contact information, visit [www.victaulic.com](http://www.victaulic.com)

60.10 3746 REV M UPDATED 06/2022  
VICTAULIC IS A REGISTERED TRADEMARK OF VICTAULIC COMPANY. © 2022 VICTAULIC COMPANY. ALL RIGHTS RESERVED.

