WHERE INNOVATION AND SOLUTIONS ARE JOINED TOGETHER

Regulatory Compliance

Victaulic piping system products are tested and certified for a wide range of applications. Victaulic engages with many certifying authorities, approval bodies, and standards organizations globally, and maintains product certifications and test compliance to applicable codes, standards, and directives, relevant to specific industries and markets.

PRODUCT CERTIFICATIONS:

Fire Protection

ACTYPEF® – Active Fire Register of Fire Protection Equipment (Australia)
CCCF – China Certification Center for Fire Protection Products (China)
CFPSC – Chinese Fire Protection Safety Center (Taiwan)
CNBOP – Centrum Naukowo-Badawcze Ochrony Pompowo-Alarmowej (Poland)
CNP – Centre National de Prévention et de Protection (France)
CPTC – Consult Technique Permanent Pournti Constructi (Romania)
(U)lus – Underwriter’s Laboratories, LLC (USA)
EMI – Entites Messingtechniker Innovativ (Hungary)
FDNY – City of New York Fire Department (USA)
FM – FM Approvals (USA)
HDB – Singapore Housing Development Board (Singapore)
KFI – Korea Fire Industry Technology Institute (Korea)
LPCB – Loss Prevention Certification Board (UK)
SBC – Swedish Brand & Standards Gtechnik (UK)
TRF – Tarjan Fire Research Institute of Ministry of Public Security (China)
TSI – Technisk Skudobor Udar Pritjary, s.p. (Slovakia)
TSUS – Technisk Skudobor Udar Svekobj, in.s. (Slovakia)
TUS – Technisch Zonder Uzoek en Zonder Preventie, v.o.f. (Netherlands)
UKFRCERT – State Certification Center (Ukraine)
UL – Underwriter’s Laboratories, LLC (USA)
ULC – Underwriter’s Laboratories of Canada (Canada)

VIII – Verband der Schienenverbindung GmbH (Germany)
XKV – Vereinigung Kantonaler Feuerwehrvereinigungen (Switzerland)
Zahninspect (Croatia)

Potable Water

ANTIZ – Ajuntament de Tarragona (Spain)
Eni Tiszteletbeli Szolgálat (Hungary)
ARRA – Agenzia Regionale per la Protezione dell’Ambiente (Italy)
DVOW – Deutscher Verein des Gas- und Wasserfaches e.V. (Germany)
Euris – ACS : Attestation de Conformité Sanitaire (France)
HJZC – Croatian National Institute of Public Health (Croatia)
KWWA – Korea Water and Wastewater Works Association
NSF – NSF International (USA)
ÖVGW – Österreichische Vereinigung für das Gas- und Wasserfach (Austria)
FZIH – Państwowy Zakład Higieny (Poland)
RUVZPP – Regionaly úrad vešeho zbrodňového zejména v Pripadě (Slovakia)
SAI – SAI Global (Australia)
SPN – Suruhanjaya Perkhidmatan Air Negara (Malaysia)
SWGV – Schweizerischer Verein des Gas- und Wasserfaches (Switzerland)
UL – Underwriter’s Laboratories, LLC (USA)
WRA – Water Regulations Advisory Scheme (UK)
ZDS – Združenje USTV (s aždihom v Ostrovnj (Czech Republic))

Maritime

ABS – American Bureau of Shipping (USA)
BV – Bureau Veritas (France)
CCG – Canadian Coast Guard (Canada)
CRS – Croatian Register of Shipping (Croatia)
CCS – China Classification Society (China)
DNV GL (Global)
KRS – Korean Registry of Shipping (Korea)

LR – Lloyd’s Register of Shipping (UK)
RNA – Registro Italiano Navale (Italy)
USCG – US Coast Guard (USA)

HVAC

CSTB – Centre Scientifique et Technique du Bâtiment (France)
ITB – Institute Technikum Budowling (Poland)
Centro Europeo EUR (Russia)

Plumbing

IAPMO – International Association of Plumbing & Mechanical Officials (USA)
ICE-ES – International Code Council-Evaluation Service (USA)
NSF – NSF International (USA)
WaterMark (Australia)

COSTB – Southam Building Code Congress International (USA)
UPC – Uniform Plumbing Code (USA)

Pressure Equipment Safety

BSI – British Pressure Vessels Code (UK)
ISO – International Standards Organization (Global)
NACE – National Association of Corrosion Engineers (USA)
NFPAA – National Fire Protection Association (USA)

Building Services

(IEG)20121011 FIRE – Construction Products Regulation - Fire safety products (Europe)
NRC – National Building Code (Canada)

Chemical Safety / Recycling

(EU)2005/55 – REACH – Registration, Evaluation, Authorization, and Restriction of Chemicals (Europe)
(GO)2009/92 – RoHS – Restriction of Hazardous Substances Directive (Europe)

Explosive Environments

(1999/92/EC) ATEX – Equipment and protective systems for potentially explosive atmospheres (Europe)

Seismic

GOSHHP – Office of Statewide Health Planning and Development (USA)

Tools and Machinery

(GO)2006/42/EC MD – Machinery Directive (Europe)

© Copyright 2015, Victaulic® Company. All rights reserved.
No part of this Victaulic catalog may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopy, recording or otherwise, without the prior written permission of Victaulic Company.
Since the first patent in 1919, Victaulic has delivered innovative pipe joining solutions that help customers succeed worldwide. Look inside many of the world’s most recognizable landmarks and industrial facilities, and you’ll find Victaulic solutions at work making bold design innovations possible, speeding time to completion, allowing for unpredictable seismic movements and setting the stage for scalability.

Today, Victaulic supports its customers with manufacturing facilities and branches located around the globe including our world headquarters location in Easton, Pennsylvania, USA. Our international presence ensures that our worldwide customers are served with speed and efficiency.

As the world’s leading producer of grooved mechanical pipe joining systems, Victaulic has been delivering global innovative solutions across diverse business lines including building services, fire protection, mining, oil, gas and chemical, industrial construction, power generation, maritime and custom casting.

From concept to commissioning, Victaulic provides the technologies and services necessary to simplify your next project.

**TABLE OF CONTENTS**

- ii The Victaulic Difference
- 1 Original Groove System (OGS)
- 25 Advanced Groove System (AGS)
- 33 Victaulic Bolted Split-Sleeve Products (VBSP)
- 37 Hole Cut System
- 39 Expansion Joints
- 45 Plain End System for Carbon Steel
- 47 Stainless Steel System
- 59 Copper System
- 63 AWWA System
- 68 Steam System
- 69 Hydronic Balancing Solutions
- 83 Refuse-to-Fuse™ HDPE System
- 85 Aquamine™ PVC System
- 89 Grooved PVC System
- 90 FRP System
- 91 Pipe Preparation Tools
- 123 Gaskets/Seals/O-Rings
- 129 Design Data
- 131 Index
GROOVED PIPE JOINING TECHNOLOGY

How does it work?
The groove is cold formed or machined into the pipe end using a grooving tool. The coupling housings, fully surrounding a gasket, is assembled around two grooved pipe ends, and the key sections of the housings engage into the grooves. The bolts and nuts are tightened with a socket wrench or impact wrench.

Types of grooved couplings
• Flexible coupling – allows for controlled linear and angular movement, which accommodates pipeline deflection as well as thermal expansion and contraction.
• Rigid coupling – does not allow for movement, similar to a flanged or welded joint.
At the core of all the benefits that Victaulic® solutions bring to a project—such as productivity, safety, design flexibility and quality—are the unique features of our products.

**Victaulic® Grooved End Piping Systems Provide:**

- **Easy system maintenance and expansion**—through simple coupling disassembly that allows for easy access.
- **Alignment ease**—through a design that allows for full rotation of the pipe and system components before tightening.
- **Flexibility**—with the inherent axial movement and deflection properties of flexible couplings in a groove system. May be used to accommodate pipeline thermal expansion and contraction, misalignment and settlement, and seismic stress absorption.
- **Noise and vibration attenuation**—by isolating the transference of vibration at each joint.
- **Self restrained pipe joints**—Couplings engage the pipe grooves to hold the pipes against full pressure thrust loads without the need of supplemental restraints.
- **Rigidity**—with an angled pad design that provides positive clamping of the pipe to resist torsional and flexural loads.
Original Groove System (OGS)

The Victaulic® grooved piping system is the most versatile, economical, and reliable piping system available. It is up to three times faster to install than welding, easier and more reliable than threading or flanging, resulting in lower total installed cost. The system is designed for roll grooved or cut grooved standard pipe or roll grooved light wall pipe. Also, pipe end preparation is fast and easy. It can be done on the job site or in the shop with a variety of Victaulic grooving tools.

With the introduction of Victaulic Installation-Ready™ technology, the original groove system has evolved to a new level. Grooved couplings featuring this patented Victaulic technology install ten times faster than other pipe joining methods. Why is it different? Prior to Victaulic Installation-Ready technology, grooved coupling assembly consisted of disassembling the coupling by removing the bolts and nuts, removing the gasket, fitting the gasket over the gap between two grooved pipe ends, wrapping the housings around the gasket and then tightening down the bolts and nuts. Couplings featuring Installation-Ready technology come pre-assembled and are simply pushed onto a grooved pipe end, joined by a second grooved pipe end, and then bolts and nuts are tightened down. What previously required minutes, now takes only seconds.

Couplings

<table>
<thead>
<tr>
<th>Couplings</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>QuickVic™ Rigid Coupling (Style 107)</td>
<td>3</td>
</tr>
<tr>
<td>QuickVic Flexible Coupling (Style 177N)</td>
<td>3</td>
</tr>
<tr>
<td>Composite Flexible Coupling (Style 171)</td>
<td>3</td>
</tr>
<tr>
<td>Zero-Flex™ Rigid Coupling (Style 07)</td>
<td>4</td>
</tr>
<tr>
<td>Flexible Coupling (Style 77)</td>
<td>4</td>
</tr>
<tr>
<td>Flexible Coupling (Style 75)</td>
<td>4</td>
</tr>
<tr>
<td>Reducing Coupling (Style 750)</td>
<td>5</td>
</tr>
<tr>
<td>Snap-Joint™ Coupling (Style 78)</td>
<td>5</td>
</tr>
<tr>
<td>Outlet Coupling (Style 72)</td>
<td>5</td>
</tr>
<tr>
<td>Vic-Boltless Coupling and Tool (Styles 791 and 792)</td>
<td>6</td>
</tr>
<tr>
<td>High Pressure Rigid Coupling (Style HP-70)</td>
<td>6</td>
</tr>
<tr>
<td>XL Couplings for use with XL Fittings (Style XL77 and XL79)</td>
<td>6</td>
</tr>
</tbody>
</table>

Adapters

<table>
<thead>
<tr>
<th>Adapters</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vic-Flange Adapter (Style 741)</td>
<td>8</td>
</tr>
<tr>
<td>Vic-Flange Adapter (Style 743)</td>
<td>8</td>
</tr>
</tbody>
</table>

Fittings

<table>
<thead>
<tr>
<th>Fittings</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elbows</td>
<td>9</td>
</tr>
<tr>
<td>Tees, Crosses, Wyes and Laterals</td>
<td>10</td>
</tr>
<tr>
<td>Adapters, Nipples, Caps and Plugs</td>
<td>11</td>
</tr>
<tr>
<td>Reducers</td>
<td>12</td>
</tr>
<tr>
<td>XL Fittings for use with XL Couplings</td>
<td>12</td>
</tr>
</tbody>
</table>

Expansion Joints

<table>
<thead>
<tr>
<th>Expansion Joints</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mover Expansion Joint (Style 150)</td>
<td>13</td>
</tr>
<tr>
<td>Expansion Joint (Style 155)</td>
<td>13</td>
</tr>
</tbody>
</table>

For information on product compliance with NSF 61 and 372 please visit victaulic.com/low-lead
Valves

- Vic™-300 MasterSeal™ Butterfly Valve (Series 761) 14
- Butterfly Valve (Series 700) 14
- Vic-Check Valve (Series 716H and 716) 15
- Venturi Check Valve (Series 779) 15
- Swing Check Valve (Series 712 and 713) 16
- Double Disc Check Valve (Series 415) 54
- Diverter Valve (Series 725) 16
- Vic-Ball Valve (Series 721 and 726) 17
- Ball Valve (Series 727) 17
- Brass-body Ball Valve, Threaded (Series 722) 18
- Three Port Diverter (Series 723) 18
- Vic-Plug Valve (Series 377) 18
- Plug Valve (Series 465 and 466) 56
- Triple Service (Duty) Assemblies (Butterfly/Check) 19
- Delta-Y Assembly (Style DLY) 19
- Triple Service (Duty) Assemblies (Plug/Check) 19

Strainers and Diffusers

- Suction Diffuser (Series 731-D) 20
- Vic-Strainer Tee Type (Series 730) 20
- Vic-Strainer Wye Type (Series 732) 20

Specialty Products

- EndSeal™ System 21
- High Pressure Double Grooved Coupling (Style 808) 22
- High Pressure Ring Coupling (Style 809) 22
- XL (Extended Life) System for Rubber-lined Abrasive Services 23
- Mechanical-T Spigot Assemblies (Style 926) 23

victaulic.com
QuickVic™ Rigid Coupling
STYLE 107

Download submittal 06.23 for complete information

- Angled bolt pad provides rigidity
- Sizes from 2 – 12” | 50 – 300 mm
- Pressures up to 750 psi | 5171 kPa | 52 bar
- For coating options, download product submittal

QuickVic™ Flexible Coupling
STYLE 177N

Download submittal 06.24 for complete information

- Sizes from 2 – 8” | 50 – 200 mm
- Pressures up to 1000 psi | 6895 kPa | 69 bar
- For coating options, download product submittal

Composite Flexible Coupling
STYLE 171

Download submittal 06.22 for complete information

- For use where corrosive conditions exist
- Designed for use on reverse osmosis systems
- For use on roll/cut grooved PVC
- Sizes from 1½ – 4” | 40 – 100 mm
- Pressures up to 150 psi | 1034 kPa | 10 bar
- For stainless steel and FRP applications, contact Victaulic®
Original Groove System (OGS)

Zero-Flex™ Rigid Coupling
STYLE 07

Download submittal 06.02 for complete information

- Angled bolt pad provides rigidity
- Sizes from 1 – 12” | 25 – 300 mm
- Pressures up to 500 psi | 5171 kPa | 52 bar
- For coating options, download product submittal
- For sizes 14 – 50” | 350 – 1250 mm, download submittal 20.02 for information on AGS Style W07

Flexible Coupling
STYLE 77

Download submittal 06.04 for complete information

- Cross-ribbed, two piece housing construction
- Sizes from ¾ – 24” | 20 – 600 mm
- Pressures up to 1000 psi | 6895 kPa | 69 bar
- For coating options, download product submittal
- For sizes 14 – 72” | 350 – 1825 mm, download submittal 20.03 for information on AGS Style W77

Flexible Coupling
STYLE 75

Download submittal 06.05 for complete information

- Lightweight coupling for moderate pressures
- Sizes from 1 – 8” | 25 – 200 mm
- Pressures up to 500 psi | 3447 kPa | 34 bar
- For coating options, download product submittal
Outlet Coupling

STYLE 72

Joining device to provide an integral reducing outlet
Sizes from 1½–6” | 40–150 mm
Pressures up to 500 psi | 3447 kPa | 34 bar
For coating options, download product submittal

Certifications/Listings:

ULUS
FM
VdS
LPCB
104.1a/05

Download publication 10.01 for complete information

Reducing Coupling

STYLE 750

Download submittal 06.08 for complete information

• Replaces two couplings and a reducing fitting
• Sizes from 2–10” | 50–250 mm
• Pressures up to 500 psi | 3447 kPa | 34 bar
• For coating options, download product submittal

Certifications/Listings:

ULUS
FM
VdS
LPCB
104.1a/05

Download publication 10.01 for complete information

Snap-Joint™ Coupling

STYLE 78

Download submittal 06.09 for complete information

• Designed for quick disconnect service
• Sizes from 1–8” | 25–200 mm
• Pressures up to 300 psi | 2068 kPa | 21 bar
• For coating options, download product submittal

Outlet Coupling

STYLE 72

Joining device to provide an integral reducing outlet
Sizes from 1½–6” | 40–150 mm
Pressures up to 500 psi | 3447 kPa | 34 bar
For coating options, download product submittal

Certifications/Listings:

ULUS
FM
VdS
LPCB
104.1a/05

Download publication 10.01 for complete information
**Vic-Boltless Coupling and Tool**

**STYLE 791 COUPLING AND 792 TOOL**

- Provides a secure, tamper resistant, low profile joint
- Installed only with Victaulic® Style 792 tool
- Sizes from 2” – 8” | 50 – 200 mm
- Pressures up to 700 psi | 4826 kPa | 48 bar
- For coating options, download product submittal

**High Pressure Rigid Coupling**

**STYLE HP-70**

- Heavy housing for high pressure service
- Sizes from 2 – 16" | 50 – 400 mm
- Pressures up to 1000 psi | 6895 kPa | 69 bar
- For coating options, download product submittal

**XL Couplings for use with XL Fittings**

**STYLE XL77 AND XL79**

- For use with XL (extended life) fittings
- Style XL77 for pipe-to-fitting connections
- Style XL79 for fitting-to-fitting connections
- Sizes from 3 – 12” | 80 – 300 mm
- For pressures up to 1000 psi | 6895 kPa | 69 bar
Original Groove System (OGS)

Vic-Ring Coupling

STYLE 41

Download submittal 16.04 for complete information

• Provided with a variety of ring options to maintain full pipe wall thickness for abrasive systems
• Sizes from 30–66” | 750–1675 mm
• Pressures up to 90 psi | 621 kPa | 6 bar
• For coating options, download product submittal
• For AGS Vic-Ring products, see pg. 28

Vic-Ring Coupling

STYLE 44

Download submittal 16.05 for complete information

• Provided with a variety of ring options to maintain full pipe wall thickness for abrasive systems
• Sizes from 4–60” | 100–1500 mm
• Pressures up to 175 psi | 1207 kPa | 12 bar
• For coating options, download product submittal
• For AGS Vic-Ring products, see pg. 28
Original Groove System (OGS)

**Vic-Flange Adapter**

**STYLE 741**

**Download submittal 06.06 for complete information**

- ANSI Class 125 and 150, Australian Standard Table E, PN10/16, and JIS 10K
- Sizes from 2 – 24" | 50 – 600 mm
- Pressures up to 720 psi | 4964 kPa | 50 bar
- For coating options, download product submittal

For AGS sizes 14 – 24" | 350 – 600 mm, **download submittal 20.04** for information on AGS Style W741

Certifications/Listings:

- [UL Listed](#)
- [FM](#)
- [VCS](#)
- [LPCB](#)
- [DVGW](#)

**Download publication 10.01** for complete information

**Vic-Flange Adapter**

**STYLE 743**

**Download submittal 06.06 for complete information**

- ANSI Class 300 flanges
- Sizes from 2 – 12" | 50 – 300 mm
- Pressures up to 720 psi | 4964 kPa | 50 bar
- For coating options, download product submittal

Certifications/Listings:

- [UL Listed](#)
- [FM](#)
- [VCS](#)

**Download publication 10.01** for complete information
Original Groove System (OGS)

Fittings — Elbows

Download submittal 07.01 for complete information on original grooved end fittings for carbon steel pipe

- Standard fitting pressure ratings conform to ratings of installed coupling
- All fittings supplied with grooves or shoulders for fast installation
- Fittings available from ¾ – 24” | 20 – 600 mm
- Download product submittal for the following: coating options; standard thread options; flange bolt hole pattern options
- For AGS sizes 14 – 60” | 350 – 1500 mm, download submittal 20.05 for complete information

Certifications/Listings:

Download publication 10.01 for complete information

Elbows

No. 10 90° Elbow
No. 100 90° Long Radius Elbow
No. 100-1½D 90° 1½ D Long Radius Elbow
No. 100-3D 90° 3 D Long Radius Elbow
No. 100-5D 90° 5 D Long Radius Elbow
No. 100-6D 90° 6 D Long Radius Elbow
No. 11 45° Elbow
No. 110 45° Long Radius Elbow
No. 110-1½D 45° 1½ D Long Radius Elbow
No. 110-3D 45° 3 D Long Radius Elbow
No. 110-5D 45° 5 D Long Radius Elbow
No. 110-6D 45° 6 D Long Radius Elbow
No. 12 22½° Elbow
No. 13 11¼° Elbow
No. 18 90° Adapter Elbows
No. 19 45° Adapter Elbows
No. 10-DR Drain Elbow
No. R-10G Reducing Base Support Elbows (OGS Groove × OGS Groove)
No. R-10F Reducing Base Support Elbows (OGS Groove × Flange)

For 3D, 5D and 6D long radius bends, download submittal 07.02

For coating options, download product submittal
Fittings — Tees, Crosses, Wyes and Laterals

Download submittal 07.01 for complete information on original grooved end fittings for carbon steel pipe

- Standard fitting pressure ratings conform to ratings of installed coupling
- All fittings supplied with grooves or shoulders for fast installation
- Fittings available from ¾ – 24” | 20 – 600 mm
- Download product submittal for the following: coating options; standard thread options
- For AGS sizes 14 – 60” | 350 – 1500 mm, download submittal 20.05 for complete information

Tees, Crosses, Wyes, and Laterals

- No. 20 Tee
- No. 35 Cross
- No. 33 True Wye
- No. 29M Tee with Threaded Branch
- No. 25 Grooved Branch Reducing Tee
- No. 29T Threaded Branch Reducing Tee
- No. 21 Bullhead Tee
- No. 30 45° Lateral
- No. 30-R 45° Reducing Lateral
- No. 32 Tee Wye
- No. 32-R Reducing Tee Wye

Certifications/Listings:

Download publication 10.01 for complete information

victaulic.com
Fittings — Adapters, Nipples, Caps and Plugs

Download submittal 07.01 for complete information on original grooved end fittings for carbon steel pipe

- Standard fitting pressure ratings conform to ratings of installed coupling
- All fittings supplied with grooves or shoulders for fast installation
- Fittings available from ¾ – 24” | 20 – 600 mm
- Download product submittal for the following: coating options; standard thread options; flange bolt hole pattern options
- For AGS sizes 14 – 60” | 350 – 1500 mm, download submittal 20.05 for complete information

Adapters, Nipples, Caps and Plugs

No. 40 Adapter Nipple (OGS Groove x Thread)
No. 42 Adapter Nipple (OGS Groove x Bevel)
No. 43 Adapter Nipple (OGS Groove x OGS Groove)
No. 80 Female Threaded Adapter
No. 53 Swaged Nipple (OGS Groove x OGS Groove)
No. 54 Swaged Nipple (OGS Groove x Thread)
No. 55 Swaged Nipple (Thread x OGS Groove)
No. 60 Cap
No. 61 Bull Plug
No. 48 Hose Nipple
No. 41 ANSI Class 125 Flanged Adapter Nipple
No. 45F ANSI Class 150 Flat Face Flanged Adapter Nipple
No. 45R ANSI Class 150 Raised Face Flanged Adapter Nipple
No. 46F ANSI Class 300 Flat Face Flanged Adapter Nipple
No. 46R ANSI Class 300 Raised Face Flanged Adapter Nipple
Original Groove System (OGS)

Fittings — Reducers

Download submittal 07.01 for complete information on original grooved end fittings for carbon steel pipe

- Standard fitting pressure ratings conform to ratings of installed coupling
- All fittings supplied with grooves or shoulders for fast installation
- Fittings available from \( \frac{3}{4} - 24" \) | 20 – 600 mm
- Download product submittal for the following: coating options; standard thread options
- For AGS sizes 14 – 60" | 350 – 1500 mm, download submittal 20.05 for complete information

Other Fitting Systems

Download submittal 07.02 for long radius steel elbows (3D, 5D, and 6D)

Download submittal 07.03 for EndSeal™ Extra Heavy (ES) fittings

Download submittal 07.04 for fabricated steel fittings (segmentally welded and full flow)

Download submittal 07.07 for XL fittings

Download submittal 14.04 for plain end fittings

Download submittal 17.16 for stainless steel fittings

Download submittal 18.11 for Type 316 Vic-Press™ fittings

Download submittal 18.12 for Type 304 Vic-Press fittings

Download submittal 20.05 for ACG® fittings

Download submittal 21.03 for aluminum fittings

Download submittal 22.04 for CTS copper fittings, 22.10 for Australian Standard copper fittings, 22.11 for EN1057 standard copper fittings

Download submittal 23.05 for AWWA fittings

Download submittal 25.03 for alternate style fittings machined for rubber or urethane lining

Download submittal 50.01 for Aquamine™ fittings

victaulic.com
**Original Groove System (OGS)**

**Mover Expansion Joint**

**STYLE 150**

**Download submittal 09.04 for complete information**

- Slip-type expansion joint providing up to 3” | 80 mm axial end movement
- Sizes from 2 – 6” | 50 – 150 mm
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For additional types of expansion joints, see pg. 39

---

**Expansion Joint**

**STYLE 155**

**Download submittal 09.05 for complete information**

- Combination of couplings and short nipples, joined in tandem to provide increased expansion
- Style 155 grooved expansion joints are rated to the working pressure of the coupling used
- Sizes from ¾ – 12” | 20 – 300 mm
- For coating options, download product submittal
- For AGS sizes 14 – 24” | 350 – 600 mm, download submittal 20.12 for information on Style W155
- For additional types of expansion joints, see pg. 39
Original Groove System (OGS)

Vic™-300 MasterSeal™
Butterfly Valve
SERIES 761

Download submittal 08.20 for complete information

- Designed for bi-directional, dead end services to full working pressure
- Available without handle, with gear operator, with lever lock handle and memory stop or with 10-position handle and memory stop
- Sizes from 2 – 12” | 50 – 300 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For AGS sizes 14 – 24” | 350 – 600 mm, download submittal 20.06 for information on Series W761
- For AGS sizes 26 – 48” | 650 – 1200 mm, download submittal 20.07 for information on Series W709

Certifications/Listings:
Download publication 02.06 for potable water approvals

Butterfly Valve
SERIES 700

Download submittal 08.05 for complete information

- Two piece stem permits narrow disc design for low pressure drop performance
- Supplied standard with aluminum bronze disc, 316 stainless steel optional
- Sizes from 1½ – 6” | 40 – 150 mm
- Pressures up to 200 psi | 1379 kPa | 14 bar

victaulic.com
**Vic-Check Valve**

**SERIES 716H**

*Download submittal 08.08 for complete information*

- Features a stainless steel disc which seats against the o-ring seal, when mounted on the electroless nickel plated face
- Sizes from 2 – 3" | 50 – 80 mm
- Pressures up to 365 psi | 2517 kPa | 25 bar
- For AGS sizes 14 – 24" | 350 – 600 mm, [download submittal 20.08](#) for information on Series W715

---

**Vic-Check Valve**

**SERIES 716**

*Download submittal 08.08 for complete information*

- Features an elastomer encapsulated disc and a welded in nickel seat
- Sizes from 4 – 12" | 100 – 300 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For AGS sizes 14 – 24" | 350 – 600 mm, [download submittal 20.08](#) for information on Series W715

---

**Venturi Check Valve**

**SERIES 779**

*Download submittal 08.10 for complete information*

- Provides a variety of functions unlike any other measuring device
- Sizes from 4 – 12" | 100 – 300 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
Original Groove System (OGS)

Swing Check Valve
SERIES 712

Download submittal 08.11 for complete information
- Designed for use with Victaulic® grooved fittings and couplings for fast installation on inlet and outlet ports
- Sizes from 2 – 4” | 50 – 100 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For more information on swing check valves for stainless steel, see pg. 54

Swing Check Valve
SERIES 713

Download submittal 08.54 for complete information
- High pressure Check valve designed for use with Victaulic grooved fittings and couplings for fast installation on inlet and outlet ports.
- Sizes from 2 – 4” | 50 – 100 mm
- Pressures up to 1000 psi | 6895 kPa | 69 bar for 2” | 50 mm and 750 psi | 5171 kPa | 52 bar for 2½ – 4” | 63 – 100 mm

Diverter Valve
SERIES 725

Download submittal 08.40 for complete information
- Provides 180° service on sand and backfill paste lines for increased efficiency and reduced downtime
- Available in 6” | 150 mm
- Pressures up to 1000 psi | 6895 kPa | 69 bar

victaulic.com
Original Groove System (OGS)

**Vic-Ball Valve**

**SERIES 721**

*Download submittal 08.14 for complete information*

- Floating ball reduces torque requirements
- Sizes from 4 – 6” | 100 – 150 mm
- Pressures up to 1500 psi | 10342 kPa | 103 bar

---

**Vic-Ball Valve**

**SERIES 726**

*Download submittal 08.23 for complete information*

- High pressure standard port ball valve with grooved ends
- Available without handle, with a lever operator or a gear operator
- Sizes from 1½ – 6” | 40 – 150 mm
- Pressures up to 1000 psi | 6895 kPa | 69 bar

---

**Ball Valve**

**SERIES 727**

*Download submittal 08.42 for complete information*

- High pressure enhanced port NACE-compliant ball valve
- Up to 1/3 better flow than competitive standard port ball valves
- Floating ball reduces torque requirements
- Sizes from 2 – 6” | 50 – 150 mm
- Pressure up to 1500 psi | 10342 kPa | 103 bar
Brass Body Valve — Threaded
SERIES 722

Download submittal 08.15 for complete information

- Standard port, female threaded end valve constructed from forged brass
- Sizes from ¼” – 2” | 8 – 50 mm
- Pressures up to 600 psi | 4137 kPa | 41 bar

Three Port Diverter
SERIES 723

Download submittal 08.13 for complete information

- NACE MR-01-75 compliant, three-port ball valve with common bottom inlet for diverting flow 90° left or right
- Available without handle, with lever operator or gear operator
- Available in 2” | 50 mm size
- Pressures up to 600 psi | 4137 kPa | 41 bar

Vic-Plug Valve
SERIES 377

Download submittal 08.12 for complete information

- Only eccentric grooved end plug valve made specifically for throttling services
- Available without handle, with lever operator or gear operator
- Sizes from 3” – 12” | 80 – 300 mm
- Pressures up to 175 psi | 1207 kPa | 12 bar
**Triple Service (Duty) Assemblies**

**BUTTERFLY/CHECK VALVE**

*Download submittal 08.09 for complete information*

- Assembles with Style 107 rigid couplings or Style 177N flexible couplings
- Sizes from $2\frac{1}{2} – 12” \mid 65 – 300 \text{mm}$
- Pressures up to 300 psi \mid 2068 kPa \mid 21 bar
- For AGS sizes $14–24” \mid 350 – 600 \text{mm}$, *download submittal 20.18* for more information

**Certifications/Listings:**

Download publication 10.01 for complete information

**Delta-Y Assembly**

**STYLE DLY**

*Download submittal 07.08 for complete information*

- Assembles with Style 107 rigid couplings, Series 761 Vic™-300 MasterSeal™ butterfly valve and cast fittings
- Ideal for bulk cement/barite systems commonly found on offshore drilling platforms
- Sizes from $5–6” \mid 125 – 150 \text{mm}$
- Pressures up to 300 psi \mid 2068 kPa \mid 21 bar

**Triplet Service (Duty) Assemblies**

**PLUG/CHECK VALVE**

*Download submittal 08.09 for complete information*

- Provides shut-off, throttling with positive mechanical memory and non-slam check service in one unit
- Sizes from $3–12” \mid 80 – 300 \text{mm}$
- Pressures up to 175 psi \mid 1207 kPa \mid 12 bar

**Certifications/Listings:**

Download publication 10.01 for complete information
Original Groove System (OGS)

**Suction Diffuser**
SERIES 731-D

*Download submittal 09.20 for complete information*
- Allows building up at a 90° angle from the pump, saving valuable space in the mechanical room while still protecting the pump against cavitation
- ANSI Class 150, Australian Standard Table E, PN10/16, GB, and JIS 10K
- Sizes from 3 – 12" | 80 – 300 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For AGS sizes 14 – 24" | 350 – 600 mm, *download submittal 20.20* for information on Series W731-D

**Vic-Strainer Tee Type**
SERIES 730

*Download submittal 09.02 for complete information*
- Lighter than flanged Y-type strainers and provides straight-through flow for lower pressure drop
- Sizes from 1½ – 12" | 40 – 300 mm
- Pressures up to 750 psi | 5171 kPa | 52 bar
- For coating options, download product submittal
- For AGS sizes 14 – 24" | 350 – 600 mm, *download submittal 20.11* for information on Series W730

**Vic-Strainer Wye Type**
SERIES 732

*Download submittal 09.03 for complete information*
- Provides straight-through flow for lower pressure drop
- Sizes from 2 – 12" | 50 – 300 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For coating options, download product submittal
- Available in limited sizes for air handling units
- For AGS sizes 14 – 24" | 350 – 600 mm, *download submittal 20.19* for information on Series W732
EndSeal™ System

Download submittal 06.13 for the Style HP-70ES coupling
Download submittal 07.03 for the ES fittings

• For plastic coated pipe or high pressure rigid systems
• Schedule 80 wall thickness for use with HP-70ES couplings
• Coupling sizes from 2–12” | 50–300 mm and Fitting sizes from 2–6” | 50–150 mm
• Pressures up to 2500 psi | 17237 kPa | 172 bar
• For coating options, download product submittal
Original Groove System (OGS)

High Pressure Double Grooved Coupling
STYLE 808

Download submittal 15.01 for complete information
- Double-bolted coupling for use with Schedule 80 or heavier steel pipe
- Sizes from 6 – 12" | 150 – 300 mm
- Pressures up to 4000 psi | 27579 kPa | 275 bar
- For coating options, download product submittal

High Pressure Ring Coupling
STYLE 809

Download submittal 15.02 for complete information
- Double-bolted coupling for use with Schedule 80 or heavier steel pipe
- Coupling engages directly onto restraint rings (supplied with coupling) welded to the O.D. of the pipe
- Sizes from 6 – 10" | 150 – 250 mm
- Pressures up to 3000 psi | 20684 kPa | 206 bar
Original Groove System (OGS)

**XL (Extended Life) System for Rubber-lined Abrasive Services**

*Download submittal 07.07 for complete information*

- 1½D and 3D elbows designed for ¼” | 6 mm extra lining resulting in up to three times the service life when compared to standard rubber lined fittings
- Sizes from 3 – 12” | 80 – 300 mm
- Comes with Style XL77 flexible couplings for pipe-to-fitting and Style XL79 flexible couplings for fitting-to-fitting connections

---

**Mechanical-T Spigot Assembly**

**STYLE 926**

*Download submittal 11.07 for complete information*

- Mining tailings spigot assemblies for 22 – 26” | 550 – 650 mm tailings lines
- Features stainless steel strap and 7” | 178 mm outlet saddle
- Utilizes existing Victaulic® product to complete assembly
- Outlets compatible with steel or HDPE piping systems
- Pressure up to 170 psi | 1172 kPa | 12 bar
Victaulic offers a comprehensive portfolio of Advanced Groove System (AGS) couplings for systems 14–72" | 350–1825 mm and a full range of 14–60" | 350–1500 mm AGS fittings, valves and accessories. Our large diameter piping solutions provide strength and dependability in addition to speed, making them an excellent choice over welding. Other advantages AGS joints provide over welded joints include no flame installation, superior seismic-shock resistance and a union at every joint for easy adjustment, system maintenance or system expansion.

### Couplings

<table>
<thead>
<tr>
<th>Couplings</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGS Rigid Coupling (Style W07)</td>
<td>27</td>
</tr>
<tr>
<td>AGS Flexible Coupling (Style W77)</td>
<td>27</td>
</tr>
<tr>
<td>AGS Stainless Steel Rigid Coupling (Style W89)</td>
<td>27</td>
</tr>
</tbody>
</table>

### Vic-Ring Couplings

<table>
<thead>
<tr>
<th>Couplings</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGS Vic-Ring Rigid Coupling System (Style W07)</td>
<td>28</td>
</tr>
<tr>
<td>AGS Vic-Ring Flexible Coupling System (Style W77)</td>
<td>28</td>
</tr>
</tbody>
</table>

### Adapters

<table>
<thead>
<tr>
<th>Couplings</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGS Vic-Flange Adapter (Style W741)</td>
<td>28</td>
</tr>
</tbody>
</table>

### Fittings

<table>
<thead>
<tr>
<th>Fittings</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGS Fittings</td>
<td>29</td>
</tr>
<tr>
<td>AGS Stainless Steel Fittings</td>
<td>30</td>
</tr>
</tbody>
</table>

### Expansion Joints

<table>
<thead>
<tr>
<th>Expansion Joints</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGS Expansion Joint (Style W155)</td>
<td>30</td>
</tr>
</tbody>
</table>

### Valves

<table>
<thead>
<tr>
<th>Valves</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGS Vic™-300 Butterfly Valve (Series W761)</td>
<td>30</td>
</tr>
<tr>
<td>AGS Butterfly Valve (Series W709)</td>
<td>31</td>
</tr>
<tr>
<td>AGS Vic-Check Dual Disc Valve (Style W715)</td>
<td>31</td>
</tr>
<tr>
<td>AGS Triple Service Valve Assemblies</td>
<td>31</td>
</tr>
</tbody>
</table>

### Strainers and Diffusers

<table>
<thead>
<tr>
<th>Strainers and Diffusers</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGS Suction Diffuser (Series W731-D)</td>
<td>32</td>
</tr>
<tr>
<td>AGS Vic-Strainer Tee Type (Series W730)</td>
<td>32</td>
</tr>
<tr>
<td>AGS Vic-Strainer Wye Type (Series W732)</td>
<td>32</td>
</tr>
</tbody>
</table>
Advanced Groove System \textsuperscript{AGS}

2-piece design up to 48" | 1200 mm for faster installation

First flat-pad rigid coupling design that installs metal-to-metal for visual inspection.

**GASKET**

The Flush-Seal™ gasket delivers more contact area for superior sealing.

**GROOVE**

Patented coupling locks into a deeper, wider, wedge shaped groove for extremely strong, dependable joints.

**HOUSING**

Wider housing profile for greater end load capability.

---

Original Groove System

**GASKET**

**GROOVE**
AGS Stainless Steel Rigid Coupling
STYLE W89

Download submittal 20.15 for complete information

- Wedge shaped coupling housing keys fully engage the AGS grooves to provide a rigid joint
- Sizes from 14–24" | 350–600 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For coating options, download product submittal
- For original groove sizes 2–12" | 50–300 mm, download submittal 17.24 for information on Style 89

AGS Flexible Coupling
STYLE W77

Download submittal 20.03 for complete information

- Unique wedge shaped key profile increases allowable pipe end separation
- Sizes from 14–72" | 350–1800 mm
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For coating options, download product submittal
- For original groove sizes ¾–24" | 20–600 mm (Style 77), download submittal 06.04;
  For original groove couplings featuring Installation-Ready™ technology sizes 2–6" | 50–150 mm (Style 177N), download submittal 06.20

AGS Rigid Coupling
STYLE W07

Download submittal 20.02 for complete information

- First flat pad, metal-to-metal, rigid coupling to be offered in this size range
- Sizes from 14–50" | 350–1200 mm
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For coating options, download product submittal
- For original groove sizes 1–12" | 25–300 mm (Style 07), download submittal 06.02;
  For original groove featuring Installation-Ready™ technology sizes 2–12" | 50–300 mm (Style 107), download submittal 06.21
AGS Vic-Flange Adapter
STYLE W741

Download submittal 20.04 for complete information

- Designed for directly incorporating flanged components with ANSI Class 125-150 or PN10/16 bolt hole patterns
- Sizes from 14 – 24" | 350 – 600 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For coating options, download product submittal
- For original groove sizes 2 – 12" | 50 – 300 mm, download submittal 06.06 for information on Style 741
AGS Fittings

**Download submittal 20.05 for complete information**

- Sizes from 14” – 60” | 350 – 1500 mm
- Pressures up to 350 psi | 2413 kPa | 24 bar
- Download product submittal for the following: coating options; flange bolt hole pattern options
- For original groove fittings, download submittal 07.01 for more information

---

**AGS Fittings**

- **No. W10** 90° Elbow
- **No. W11** 45° Elbow
- **No. W12** 22½° Elbow
- **No. W13** 11¼° Elbow
- **No. W100** 90° 1½ D Long Radius Elbow
- **No. W110** 45° 1½ D Long Radius Elbow
- **No. W20** Tee
- **No. W35** Cross
- **No. W33** True Wye
- **No. W25** Reducing Tee
- **No. W30** 45° Lateral
- **No. W30-R** 45° Reducing Lateral
- **No. W42** Adapter Nipple (AGS Groove × Bevel)
- **No. W43** Adapter Nipple (AGS Groove × AGS Groove)
- **No. W49** Adapter Nipple (AGS Groove × OGS Groove)
- **No. W60** Cap
- **No. W50** Concentric Reducer
- **No. W51** Eccentric Reducer
- **No. W41** Flanged Adapter Nipple
- **No. W45R** Flanged Adapter Nipple

---

*Advanced Groove System AGS*
AGS Stainless Steel Fittings

Download submittal 17.05 for complete information

• Grooved ends eliminate pipe end preparation for the fittings
• Sizes from 14 – 24” | 350 – 600 mm
• Fitting pressure ratings are equivalent to the Victaulic AGS coupling used to install them
• Offering includes elbows, tees, adapter nipples, caps, eccentric and concentric reducers

AGS Expansion Joint

STYLE W155

Download submittal 20.12 for complete information

• Combination of Style W77 couplings and short nipples, joined in tandem to provide increased expansion
• Sizes from 14 – 24” | 350 – 600 mm
• For coating options, download product submittal
• For original groove sizes ¾ – 12” | 20 – 300 mm, download submittal 09.05 for information on Style 155

AGS Vic™-300 Butterfly Valve

SERIES W761

Download submittal 20.06 for complete information

• Offers an easily installed choice to cumbersome, multi-bolt wafer or lug-type flanged valves
• Sizes from 14 – 24” | 350 – 600 mm
• Pressures up to 300 psi | 2068 kPa | 21 bar
• For original groove sizes 2 – 12” | 50 – 300 mm, download submittal 08.20 for information on Series 761
AGS Butterfly Valve
SERIES W709

**Download submittal 20.07 for complete information**

- Offers an easily installed choice to cumbersome, multi-bolt wafer or lug-type flanged valves
- Sizes from 26–48" | 650–1200 mm
- Pressures up to 150 psi | 1034 kPa | 10 bar

AGS Vic-Check Dual Disc Valve
STYLE W715

**Download submittal 20.08 for complete information**

- Utilizes a spring-assisted, dual disc design that achieves drop tight sealing
- Can be installed in both horizontal or vertical flow up positions
- Sizes from 14–24" | 350–600 mm
- Pressures up to 230 psi | 1586 kPa | 16 bar
- For original groove sizes 2–12" | 50–300 mm, download submittal 08.08 for information on Series 716H/716 or download submittal 08.10 for information on Series 779

AGS Triple Service Valve Assemblies

**Download submittal 20.18 for complete information**

- Provides shut-off and throttling with positive mechanical memory
- Comprised of a Series W761 AGS butterfly valve and a Series W715 Vic-Check valve
- Sizes from 14–24" | 350–600 mm
- Pressures up to 232 psi | 1600 kPa | 16 bar
- For original groove sizes 3–12" | 80–300 mm, download submittal 08.09
AGS Suction Diffuser
SERIES W731-D

Download submittal 20.20 for complete information

- Allows building up at a 90° angle from the pump saving valuable space in the mechanical room while still protecting the pump against cavitation
- Flanges may be machined to match most global (ANSI, DIN, GB, JIS, and AS-E) flange bolt hole patterns within the diffuser pressure rating
- Sizes from 14 – 24" | 350 – 600 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For original groove sizes 3 – 12" | 80 – 300 mm, download submittal 09.20 for information on Series 731-D

AGS Vic-Strainer Tee Type
SERIES W730

Download submittal 20.11 for complete information

- Lighter than flanged Y-type strainers and provides straight-through flow for lower pressure drop
- Sizes from 14 – 24" | 350 – 600 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For coating options, download product submittal
- For original groove sizes 1½ – 12" | 40 – 300 mm, download submittal 09.02 for information on Series 730

AGS Vic-Strainer Wye Type
SERIES W732

Download submittal 20.19 for complete information

- Provides straight-through flow for lower pressure drop
- Sizes from 14 – 18" | 350 – 450 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For original groove sizes 2 – 12" | 50 – 300 mm, download submittal 09.03 for information on Series 732
Victaulic offers a variety of large diameter pipe joining solutions specifically designed to meet the needs of your system.

Conforming to AWWA C227, Victaulic Bolted Split-Sleeve couplings are available in a range of unrestrained and restrained flexible designs for use on carbon steel, stainless steel, HDPE and other pipe materials. Victaulic Bolted Split-Sleeve couplings are designed for use on water and wastewater transmission lines as well as hydroelectric penstock lines. VBSP couplings can also provide expansion and contraction capabilities when needed.

<table>
<thead>
<tr>
<th>Couplings</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Restrained Flexible Coupling for Fiberglass Reinforced Plastic Pipe (Style 229S)</td>
<td>90</td>
</tr>
<tr>
<td>Non-RestrainedFlexible Coupling for Carbon Steel Pipe (Style 230)</td>
<td>34</td>
</tr>
<tr>
<td>Non-Restrained Flexible Coupling for Stainless Steel Pipe (Style 230S)</td>
<td>34</td>
</tr>
<tr>
<td>Non-Restrained Flexible Expansion Coupling for Carbon Steel Pipe (Style 231)</td>
<td>41</td>
</tr>
<tr>
<td>Non-Restrained Flexible Expansion Coupling for Stainless Steel Pipe (Style 231S)</td>
<td>41</td>
</tr>
<tr>
<td>Restrained Coupling for Carbon Steel Pipe (Style 232)</td>
<td>34</td>
</tr>
<tr>
<td>Restrained Coupling for Stainless Steel Pipe (Style 232S)</td>
<td>35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Couplings</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrained Flexible Couplings for Dynamic Joint Deflection on Carbon Steel Pipe (Style 233)</td>
<td>35</td>
</tr>
<tr>
<td>Restrained Flexible Couplings for Dynamic Joint Deflection on Stainless Steel Pipe (Style 233S)</td>
<td>35</td>
</tr>
<tr>
<td>Restrained Flexible Single-Gasket Coupling for Carbon Steel Pipe (Style 234)</td>
<td>36</td>
</tr>
<tr>
<td>Restrained Flexible Single-Gasket Coupling for Stainless Steel Pipe (Style 234S)</td>
<td>36</td>
</tr>
</tbody>
</table>

Tools

- Manual and Hydraulic Closure Tools | 119
Non-Restrained Flexible Coupling for Carbon Steel Pipe
STYLE 230

Download submittal 60.01 for complete information

- Non-restrained flexible pipe joint for water and wastewater pipelines
- Sizes from 8–144" | 200–3600 mm
- Pressures up to 400 psi | 2758 kPa | 28 bar
- Up to ½" | 13 mm intermittent axial movement
- Satisfies the requirements of AWWA C227
- For coating options, download product submittal

Non-Restrained Flexible Coupling for Stainless Steel Pipe
STYLE 230S

Download submittal 60.02 for complete information

- Non-restrained flexible pipe joint used where corrosion resistance is required
- Sizes from 3–96" | 80–2400 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Up to ½" | 13 mm intermittent axial movement
- Satisfies the requirements of AWWA C227

Restrained Flexible Coupling for Carbon Steel Pipe
STYLE 232

Download submittal 60.05 for complete information

- Restrained flexible joint for use on water, wastewater, force main and penstock piping
- Sizes from 8–144" | 200–3600 mm
- Pressures up to 400 psi | 2758 kPa | 28 bar
- Satisfies the requirements of AWWA C227
Restrained Flexible Coupling for Stainless Steel Pipe
STYLE 232S

Download submittal 60.05 for complete information

- Restrained flexible joint for use where corrosion resistance is required
- Sizes from 3–96" | 80–2400 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Satisfies the requirements of AWWA C227

Restrained Flexible Coupling for Dynamic Joint Deflection on Carbon Steel Pipe
STYLE 233

Download submittal 60.07 for complete information

- Restrained flexible joint that allows for dynamic (in-service) deflection
- Allows for some pipe irregularities during field installations
- Sizes from 8–144" | 200–3600 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Satisfies the requirements of AWWA C227

Restrained Flexible Coupling for Dynamic Joint Deflection on Stainless Steel Pipe
STYLE 233S

Download submittal 60.07 for complete information

- Restrained flexible joint for use where corrosion resistance is required
- Designed to allow for dynamic (in-service) deflection and thrust restraint at the joint
- Sizes from 3–96" | 80–2400 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Satisfies the requirements of AWWA C227
Restrained Flexible Single-Gasket Coupling for Carbon Steel Pipe
STYLE 234

Download submittal 60.09 for complete information

- Sizes from 8” – 120” | 200 – 3000 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Designed for use on water transmission, force mains and penstock lines
- For coating options, download product submittal

Restrained Flexible Single-Gasket Coupling for Stainless Steel Pipe
STYLE 234S

Download submittal 60.10 for complete information

- Sizes from 8” – 60” | 200 – 1500 mm
- Pressures up to 200 psi | 1379 kPa | 14 bar
- Ideal for field joint connections requiring flexibility and thrust restraint
Hole Cut System

Victaulic developed the hole cut piping system concept to enable a fast and easy mid-pipe outlet solution that would not require welding. The system allows for a direct branch connection at any location where a hole can be cut in the pipe. Gaskets are molded to conform to the outer diameter of the pipe and are pressure responsive to provide a seal. Victaulic hole cut products are mounted to the pipe using either a locating collar (Style 920 and 920N) or a toe and heel (Style 923 and 924), and provide a smooth flow area.

Outlets and Couplings

<table>
<thead>
<tr>
<th>Outlet Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical-T Outlet (Style 920/920N)</td>
<td>37</td>
</tr>
<tr>
<td>Mechanical-T Outlet for Stainless Steel (Style 422)</td>
<td>51</td>
</tr>
<tr>
<td>Outlet Coupling (Style 72)</td>
<td>38</td>
</tr>
<tr>
<td>Vic-Let Strapless Outlet (Style 923)</td>
<td>38</td>
</tr>
<tr>
<td>Vic-O-Well Strapless Thermometer Outlet (Style 924)</td>
<td>38</td>
</tr>
</tbody>
</table>

Tools

<table>
<thead>
<tr>
<th>Tool Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vic-Tap Hole Cutting Tools</td>
<td>113</td>
</tr>
</tbody>
</table>

Certifications/Listings:

- UL, FM, VdS, LpC
- Listed
- LpC, 104-1a/11
- LpC, 104-1a/26
- G-103
- Rev Q

Download publication 10.01 for complete information
Download publication 02.06 for potable water approvals

Mechanical-T Outlet

STYLE 920/920N

Download submittal 11.02 for complete information

- Provides a direct branch connection at any location where a hole can be cut in the pipe
- Available as a tee or cross outlet with female threaded or grooved ends
- Sizes from 2–8" | 50–200 mm
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Download product submittal for the following: coating options; standard thread options
- For more information on Mechanical-T Outlet for stainless steel, see pg. 51
Outlet Coupling
STYLE 72

Download submittal 06.10 for complete information

- Joining device to provide an integral reducing outlet
- Sizes from 1½ – 6" | 40 – 150 mm
- Pressures up to 500 psi | 3447 kPa | 21 bar
- Download product submittal for the following: coating options; standard thread options

Certifications/Listings:

Vic-Let Strapless Outlet
STYLE 923

Download submittal 11.05 for complete information

- Provides a fast, easy pipe outlet without the need for a strap or lower housing
- Sizes from 4 – 10" | 100 – 250 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar

Certifications/Listings:

Vic-O-Well Strapless Thermometer Outlet
STYLE 924

Download submittal 11.06 for complete information

- Provides a fast, easy connection, combining the features of a thermowell and strapless mechanical outlet
- Sizes from 4 – 10" | 100 – 250 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
Expansion Joints

Victaulic offers a wide variety of expansion solutions to accommodate pipe movement in your system. Victaulic expansion joints can provide up to 42" | 1069 mm of movement in a piping system. Select expansion joints allow for deflection as well as expansion and contraction capabilities. Stainless steel expansion joints are available for air systems requiring expansion compensators. Victaulic expansion joints are available with Original Groove System (OGS), Advanced Groove System (AGS), bolted split-sleeve, and flanged ends.

### Expansion Joints

<table>
<thead>
<tr>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mover Expansion Joint (Style 150)</td>
<td>40</td>
</tr>
<tr>
<td>Expansion Joint (Style 155)</td>
<td>40</td>
</tr>
<tr>
<td>AGS Expansion Joint (Style W155)</td>
<td>40</td>
</tr>
<tr>
<td>Non-Restrained Flexible Expansion Coupling for Carbon Steel Pipe (Style 231)</td>
<td>41</td>
</tr>
<tr>
<td>Non-Restrained Flexible Expansion Coupling for Stainless Steel Pipe (Style 231S)</td>
<td>41</td>
</tr>
<tr>
<td>Expansion Joint Coupling (Style 152A)</td>
<td>42</td>
</tr>
<tr>
<td>Stainless Steel Bellow Expansion Joint (Style 240S)</td>
<td>43</td>
</tr>
<tr>
<td>Expansion Barrel (Style W256)</td>
<td>44</td>
</tr>
</tbody>
</table>
**Mover Expansion Joint**

**STYLE 150**

*Download submittal 09.04 for complete information*

- Slip-type expansion joint providing up to 3” | 76 mm axial end movement
- Sizes from 2 – 6” | 50 – 150 mm
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For coating options, download product submittal

---

**Expansion Joint**

**STYLE 155**

*Download submittal 09.05 for complete information*

- Combination of couplings and short nipples, joined in tandem to provide increased expansion
- Style 155 grooved expansion joints are rated to the working pressure of the coupling used
- Sizes from ¾ – 12” | 20 – 300 mm
- For coating options, download product submittal
- For AGS sizes 14 – 24” | 350 – 600 mm, *download submittal 20.12* for information on Style W155

---

**AGS Expansion Joint**

**STYLE W155**

*Download submittal 20.12 for complete information*

- Combination of Style W77 couplings and short nipples, joined in tandem to provide increased expansion
- Sizes from 14 – 24” | 350 – 600 mm
- For coating options, download product submittal
- For original groove sizes ¾ – 12” | 20 – 300 mm, *download submittal 09.05* for information on Style 155
Non-Restrained Flexible Expansion Coupling for Carbon Steel Pipe
STYLE 231

Download submittal 60.03 for complete information

- Non-restrained flexible expansion joint provides up to 4” | 102 mm of axial movement
- Sizes from 16 – 144” | 400 – 3600 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Satisfies the requirements of AWWA C227
- For coating options, download product submittal

Non-Restrained Flexible Expansion Coupling for Stainless Steel Pipe
STYLE 231S

Download submittal 60.04 for complete information

- Flexible non-restrained expansion joint for aeration systems
- Up to 4” | 102 mm axial movement
- Sizes from 3 – 96” | 80 – 2400 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Satisfies the requirements of AWWA C227
Expansion Joint Coupling
STYLE 152A

Download submittal 09.15 for complete information

- Large diameter pulverized coal/limestone coupling with 4° of deflection capability
- Sizes from 10 – 30" | 250 – 780 mm
- Pressures up to 50 psi | 345 kPa | 3 bar

HOUSING
Precision formed ductile iron, one-piece construction. Polyphenylene sulfide blend (PPS) heat fused coating allows for easy deflection with no transmission of reaction loads.

VIC-RINGS
Two carbon steel rings welded to hold gasket in place to expertly seal joint, resulting in zero leakage.

GASKET
Reliable silicone seals designed for dry heat. Rated from -30° to +350°F | -34° to +177°C.

BOLTS AND NUTS
Heat-treated plated and electroplated carbon steel. No special tools required for assembly and no exposed bolt threads to corrode, gather dirt, bend or damage.
Expansion Joints

Stainless Steel Bellow Expansion Joint
STYLE 240S

Download submittal 60.13 for complete information

- Concurrent axial, angular and/or lateral pipe movement possible
- Lateral offset at pipeline joints
- Designed to job-specific parameters
- Sizes from 3—96” | 80—2400 mm
Expansion Barrel
STYLE W256

Download submittal 09.16 for complete information

- For piping systems from 24 – 42” | 600 – 1050 mm
- Provides up to 42” | 1067 mm of in-line movement
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Designed for water and/or slurry services
Plain End System for Carbon Steel

The Victaulic® plain end piping method is ideal for maintenance and repairs as well as new systems such as roof drains, slurries, tailings and oil field services. Roust-A-Bout couplings and plain end fittings are cULus Listed for fire protection services.

Victaulic plain end couplings are primarily designed for use on standard weight steel pipe (Schedule 40), but may be used on light wall steel or other metallic pipe, such as aluminum or stainless steel. They are not intended for use on plastic pipe, plastic-coated pipe or brittle pipe, such as asbestos cement or cast iron. Nor are they intended for use on pipe with a surface hardness greater than 150 Brinell.

### Roust-A-Bout Plain End Coupling (Style 99)

**Download submittal 14.02 for complete information**

- Grips to provide a strong component for joining plain and beveled end pipe and fittings
- Not designed for use with plastic pipe
- Sizes from 1 – 18" | 25 – 450 mm
- Pressures up to 750 psi | 5171 kPa | 52 bar
- For coating options, download product submittal
Plain End System for Carbon Steel

Fittings

Download submittal 14.04 for complete information

- Provides change of direction to plain end piping systems
- Ready to install fitting
- Compatible with Style 99 Roust-A-Bout coupling
- For coating options, download product submittal

No. 10P 90° Elbow
No. 100P 90° Long Radius Elbow
No. 11P 45° Elbow
No. 110P 45° Long Radius Elbow
No. 20P Tee
No. 35P Cross

No. 33P True Wye
No. 61P Steel Bull Plug
No. 25P Reducing Tee
No. 30P 45° Lateral

No. 53P Swaged Nipple
No. 40P Adapter Nipple (Plain End × Thread)
No. 42P Adapter Nipple (Plain End × Bevel)
No. 43P Adapter Nipple (Plain End × Groove)
**Stainless Steel System**

The Victaulic® grooved system for stainless steel pipe offers a fast, easy and reliable method for joining ANSI and ISO wall thickness stainless steel pipe. For light wall and thin wall stainless steel pipe, specially designed RX rolls are used to create the proper groove profile required for installing Victaulic products ([download submittal 17.01](#) for more detail.)

The revolutionary Vic-Press™ for Schedule 10S system provides quick, easy and safe installation and maintenance. It has the integrity to stand up to the demands of industrial applications by providing a positive mechanical interlock between the pipe and the fitting. The Vic-Press for Schedule 10S press-to-connect system joins off-the-shelf ASTM A-312 stainless steel pipe.

In addition to the products listed below, the following Victaulic products may also be used on stainless steel pipe. Refer to the individual product submittals for additional information.

- **Style 07 Rigid Coupling**
- **Style HP-70 Rigid Coupling**
- **Style 75 Flexible Coupling**
- **Style 77 Flexible Coupling**
- **Style 171 Flexible Coupling**
- **Style 78 Snap-Joint™ Coupling**
- **Style 791 Vic-Boltless Coupling**
- **Style 741 Flange Adapter**
- **Style 743 Flange Adapter**

### Couplings

<table>
<thead>
<tr>
<th>Couplings</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 316 Rigid Coupling (Style 489)</td>
<td>48</td>
</tr>
<tr>
<td>Rigid Coupling (Style 89)</td>
<td>48</td>
</tr>
<tr>
<td>Duplex Rigid Coupling (Style 489DX)</td>
<td>49</td>
</tr>
<tr>
<td>Type 316 Flexible Coupling (Style 77S)</td>
<td>49</td>
</tr>
<tr>
<td>Type 316 Lightweight Flexible Coupling (Style 475)</td>
<td>49</td>
</tr>
<tr>
<td>Duplex Flexible Coupling (Style 77DX)</td>
<td>50</td>
</tr>
<tr>
<td>Duplex Flexible Coupling (Style 475DX)</td>
<td>50</td>
</tr>
<tr>
<td>StrengThin™ High Pressure Coupling (Style D08)</td>
<td>50</td>
</tr>
<tr>
<td>AGS Stainless Steel Rigid Coupling (Style W89)</td>
<td>27</td>
</tr>
</tbody>
</table>

### Adapters

<table>
<thead>
<tr>
<th>Adapters</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 316 Vic-Flange Adapter (Style 441)</td>
<td>51</td>
</tr>
</tbody>
</table>

### Hole Cut

<table>
<thead>
<tr>
<th>Hole Cut</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical-T Outlet for Stainless Steel (Style 422)</td>
<td>51</td>
</tr>
</tbody>
</table>

### Fittings

<table>
<thead>
<tr>
<th>Fittings</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSI Schedule 10S Fittings</td>
<td>52</td>
</tr>
<tr>
<td>ANSI Schedule 40S Fittings</td>
<td>53</td>
</tr>
<tr>
<td>AGS Fittings</td>
<td>30</td>
</tr>
</tbody>
</table>

### Valves

<table>
<thead>
<tr>
<th>Valves</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vic™-300 MasterSeal™ Stainless Steel Butterfly Valve (Series 461)</td>
<td>54</td>
</tr>
<tr>
<td>Swing Check Valve (Series 712S)</td>
<td>54</td>
</tr>
<tr>
<td>Double Disc Check Valve (Series 415)</td>
<td>54</td>
</tr>
<tr>
<td>Vic-Ball Valve (Series 726S and 726D)</td>
<td>55</td>
</tr>
<tr>
<td>Three-Piece Vic-Press Ball Valve (Series P569 Groove x Groove)</td>
<td>55</td>
</tr>
<tr>
<td>Plug Valve (Series 465 and Series 466)</td>
<td>56</td>
</tr>
</tbody>
</table>

### Vic-Press

<table>
<thead>
<tr>
<th>Vic-Press</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Schedule 10 Stainless Steel 304</td>
<td>57</td>
</tr>
<tr>
<td>For Schedule 10 Stainless Steel 316</td>
<td>58</td>
</tr>
</tbody>
</table>

Regardless of the coupling selected to join stainless steel pipe, the Victaulic pressure responsive elastomeric gasket seals the joint. Stainless steel housings provide the highest level of protection against external corrosion, while ductile iron couplings can be used to join stainless steel pipe in non-corrosive environments. For pressure ratings and end loads for ductile iron couplings on stainless steel pipe, [download submittal 17.09](#).
Type 316 Rigid Coupling
STYLE 489

Download submittal 17.25 for complete information

- Greatly reduces linear or angular movement and is useful for valve connections where rigidity is required
- Sizes from 1½ – 12" | 40 – 300 mm
- Pressures up to 600 psi | 4137 kPa | 41 bar
- For the duplex stainless steel coupling, download submittal 17.33 for Style 489DX

Rigid Coupling
STYLE 89

Download submittal 17.24 for complete information

- Greatly reduces linear or angular movement and is useful for valve connections where rigidity is required
- Galvanized coated ductile iron coupling
- Sizes from 2 – 12" | 50 – 300 mm
- Pressures up to 1200 psi | 8274 kPa | 83 bar
- For the duplex stainless steel coupling, download submittal 17.33 for Style 489DX
**Type 316 Lightweight Flexible Coupling**

**STYLE 475**

Download submittal 17.14 for complete information

- Designed to provide a durable mechanical joint for grooved end stainless steel piping systems
- Sizes from 1–4" | 25–100 mm
- Pressures up to 500 psi | 3447 kPa | 34 bar
- For the duplex coupling, download submittal 17.34 for information on Style 475DX

---

**Duplex Rigid Coupling**

**STYLE 489DX**

- Greatly reduces linear or angular movement and is useful for valve connections where rigidity is required
- Sizes from 2–12" | 50–300 mm
- Pressures up to 1200 psi | 8274 kPa | 83 bar
- Optional super duplex stainless steel housing
- For the Type 316 stainless steel coupling, download submittal 17.25 for Style 489

---

**Type 316 Flexible Coupling**

**STYLE 77S**

Download submittal 17.03 for complete information

- Provides a rugged mechanical joint for grooved end stainless steel piping systems
- Sizes from 8–18" | 200–450 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For the duplex coupling in sizes ¾–6" | 20–150 mm, download submittal 17.20 for information on Style 77DX

---
StrengThin™ High Pressure Coupling
STYLE D08

Download submittal 17.30 for complete information
• Designed to accommodate high pressure weld-like load carrying capabilities on stainless steel systems
• High strength groove designed to provide increased performance on thin wall super austenitic, duplex and super duplex stainless steel pipe
• Sizes from 2–16” | 50–400 mm piping
• 2–6” | 50–150 mm designed for Schedule 10S pipe
• 8–16” | 200–400 mm designed for Schedule 20 pipe
• Pressures up to 1200 psi | 8274 kPa | 83 bar

Duplex Flexible Coupling
STYLE 77DX

Download submittal 17.20 for complete information
• Designed to provide a rugged mechanical joint for roll grooved stainless steel systems
• Sizes from ¾–6” | 20–150 mm
• Pressures up to 1200 psi | 8274 kPa | 83 bar
• Optional super duplex stainless steel housing
• For Type 316 stainless steel coupling in sizes DN200–DN450 | 8–18”, download submittal 17.03 for information on Style 77S

Duplex Lightweight Flexible Coupling
STYLE 475DX

Download submittal 17.34 for complete information
• Unique coupling design permits assembly by removing one nut/bolt and scissoring housing over gasket
• Sizes from 1–4” | 25–100 mm
• Pressures up to 500 psi | 3447 kPa | 34 bar
• Optional super duplex stainless steel housing
• For the Type 316 stainless steel coupling, download submittal 17.14 for Style 475
**Vic-Flange Adapter**

**STYLE 441**

*Download submittal 17.27 for complete information*

- ANSI Class 150 and ISO PN10/16
- Constructed from Grade CF8M stainless steel, making it ideal for externally corrosive environments
- Sizes from 2’–6’ | 50–150 mm
- Pressures up to 275 psi | 1896 kPa | 19 bar

**Mechanical-T Outlet**

**STYLE 422**

*Download submittal 17.02 for complete information*

- Provides a direct branch connection at any location where a hole can be cut in the pipe
- A pressure responsive gasket provides the seal
- Also available for use with HDPE pipe
- Sizes from 3’–8’ | 80–200 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Download product submittal for the following: housing material options, gasket options

Certifications/Listings:

*Download publication 02.06 for potable water approvals*
ANSI Schedule 10S Fittings

- Grooved ends eliminate pipe end preparation for the fittings
- Sizes from ¾–12" | 20–300 mm
- Available in Type 304L or 316L
- Download submittal 17.27 for flange bolt hole pattern options

Certifications/Listings:
Download publication 02.06 for potable water approvals

Stainless Steel System
Stainless Steel System

ANSI Schedule 40S Fittings

Download submittal 17.16 for complete information

- Grooved ends eliminate pipe end preparation for the fittings
- Sizes from ¾” – 12” | 20 – 300 mm
- Available in Type 304L or 316L
- Designed for higher pressure systems
- Download product submittal for standard thread options

Certifications/Listings:
Download publication 02.06 for potable water approvals
Swing Check Valve
SERIES 712S

**Download submittal 17.08** for complete information

- The large closure access bonnet permits easy access for in-line service
- Designed for use with standard Victaulic® grooved fittings and couplings for fast installation on inlet and outlet ports
- Available in size 2” | 50mm

**Vic™-300 MasterSeal™ Stainless Steel Butterfly Valve**
SERIES 461

**Download submittal 17.40** for complete information

- Designed for bi-directional, dead end services to full working pressure
- Available without handle, with gear operator, with lever lock handle and memory stop or with 10-position handle and memory stop
- Sizes from 2 – 8” | DN50 – DN200
- Pressures up to 300 psi | 2068 kPa | 21 bar

**Double Disc Check Valve**
SERIES 415

**Download submittal 17.37** for complete information

- Features grooved ends for installation in either StrengThin™ Systems or OGS
- Sizes from 2 – 18” | 50 – 450 mm
- Pressures up to 1200 psi | 8274 kPa | 83 bar

Certifications/Listings:
Download publication 02.06 for potable water approvals
Stainless Steel System

**Vic-Ball Valve**
SERIES 726S

*Download submittal 17.22 for complete information*

- High pressure Type 316 stainless steel standard port ball valve with grooved ends
- Sizes from 1½ – 6” | 40 – 150 mm
- Pressures up to 1000 psi | 6895 kPa | 69 bar

**Vic-Ball Valve**
SERIES 726D

*Download submittal 17.28 for complete information*

- High pressure super duplex stainless steel standard port ball valve with grooved ends
- Sizes from 2 – 6” | 50 – 150 mm
- Pressures up to 1200 psi | 8274 kPa | 83 bar

**Three-Piece Vic-Press™ Ball Valve**
SERIES P569

*Download submittal 18.14 for complete information*

- The three-piece swing-out design permits easy in-line maintenance.
- Sizes from ¼ – 2” | 15 – 50 mm
- Pressures up to 400 psi | 2758 kPa | 28 bar
- For the entire Vic-Press line of products, see pgs. 51 and 52

Certifications/Listings:
*Download publication 02.06 for potable water approvals*
Plug Valve
SERIES 465

Download submittal 17.36 for complete information

- Typically used in reverse osmosis desalination plants for on/off and control services
- Available without operator or with manual, pneumatic, hydraulic and electric actuators
- Features grooved ends for installation in either StrequTin™ Systems or OGS
- Sizes from 2 – 20” | 50 – 500 mm
- Pressures up to 1450 psi | 9997 kPa | 100 bar

Certifications/Listings:
Download publication 02.06 for potable water approvals

Plug Valve
SERIES 466

Download submittal 17.39 for complete information

- Typically used in reverse osmosis desalination plants for on/off and control services
- Features grooved ends for installation in either StrequTin™ Systems or OGS
- Sizes from 10 – 24” | 250 – 600 mm
- Pressures up to 1200 psi | 8274 kPa | 83 bar

Certifications/Listings:
Download publication 02.06 for potable water approvals

victaulic.com
Stainless Steel System

Vic-Press™ For Schedule 10S Stainless Steel Type 304

Download submittal 18.12 for complete information

- Fast, easy, reliable way to join small diameter Schedule 5S or 10S Type 304/304L stainless steel
- Meet ASME requirements for ANSI Class 150 systems
- Sizes from DN15 – DN50 | ½ – 2"
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Download product submittal for standard thread options and flange bolt hole pattern options

Certifications/Listings:
Download publication 02.06 for potable water approvals

Connection Key

P Press
F Female Thread
M Male Thread
T Plain End
L Flanged
G Grooved

Style P597
Standard Coupling
(P × P)

Style P586
Short Tangent
90° Elbow
(P × P)

Style P542
90° Street
Elbow
(P × T)

Style P591
45° Elbow
(P × P)

Style P543
45° Street
Elbow
(P × T)

Style P592
Tee
(P × P × P)

Style P588
Tee with Threaded
Branch
(P × P × F)

Style P593
Tee with Reducing
Branch
(P × P × P)

Style P596
Male Threaded
Adapter
(P × M)

Style P599
Female Threaded
Adapter
(P × F)

Style P561
Weld Adapter
(P × T)

Style P584
Threaded
Union
(P × P)

Style P595
Flange Adapter
(P × L)

Style P565
Van Stone
Flange Adapter
(P × L)

Style P587
Transition
Nipple
(G × T)

Style P594
Concentric
Reducer
(P × P)

Style P540
End Cap

Style P569
Stainless Steel Ball Valve
(P × P shown)
(G × G and P × G also available)

Style P589
Brass Body Ball Valve
(P × P)

PFT510
Vic-Press
Tool,
pg. 115
Stainless Steel System

Vic-Press™ For Schedule 10S Stainless Steel Type 316

Download submittal 18.11 for complete information

- Fast, easy, reliable way to join small diameter Schedule 5S or 10S Type 316/316L stainless steel
- Meet ASME requirements for ANSI Class 150 systems
- Sizes from DN15 – DN50 | ½ – 2"
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Download product submittal for standard thread options and flange bolt hole pattern options

Certifications/Listings:
Download publication 02.06 for potable water approvals

Connection Key
P Press
F Female Thread
M Male Thread
T Plain End
L Flanged
G Grooved

Gaskets, Seals and O-Rings
FRP Design
Data Index
OGS
VBSP
AGS
Intro

Stainless Steel System
Copper System

The Victaulic® original grooved copper system offers a full line of couplings, fittings and valves for systems rated up to 300 psi | 2065 kPa | 21 bar, as well as a line of roll grooving tools for on-site grooving. The Victaulic grooved copper system is cold-formed, eliminating the need for soldering or brazing. The copper connection system joins 2–8” | 50–200 mm type K, L, M or DWV copper.

**Couplings**
- QuickVic™ Rigid Coupling (Style 607)  
  Download submittal 22.13 for complete information
- **INSTALLATION-READY™**

**Adapters**
- Vic-Flange Adapter for Copper (Style 641)

**Fittings**
- Fittings for Copper

**Valves**
- Butterfly Valve for Copper (Series 608N)

**Outlets**
- Mechanical-T Bolted Branch Outlet and Cross Assemblies for Copper (Style 622)

**QuickVic™ Rigid Coupling**

**STYLE 607**

**Download submittal 22.13 for complete information**

- Installation-Ready™ design
- Designed for use on K, L, M or DWV copper tubing
- Sizes from 2–8” | 50–200 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Optional galvanized housing coating

**Certifications/Listings:**

- UL Listed
- NSF 61

Download publication 10.01 for complete information
Download publication 02.06 for potable water approvals
Copper System

**Vic-Flange Adapter for Copper**

**STYLE 641**

*Download submittal 22.03 for complete information*

- Available for CTS, DIN, BS and AS copper systems
- Sizes from 2”–6” | 50–150 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar

**Fittings for Copper**

*Download submittal 22.04 for complete information*

- Full-flow, standard radius copper fittings are supplied as either roll grooved wrought copper or bronze fittings
- Designed for installation in copper systems using either a Style 607 rigid coupling or a Style 641 Vic-Flange adapter
- Sizes from 2–8” | 50–200 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar

Certifications/Listings:

Download publication 10.01 for complete information

Download publication 02.06 for potable water approvals

---

No. 610  90° Elbow
No. 611  45° Elbow
No. 620  Tee
No. 625  Reducing Tee (Groove × Groove × Groove)
No. 626  Reducing Tee (Groove × Groove × Cup)
No. 650  Concentric Reducer (Groove × Groove)
No. 652  Concentric Reducer (Groove × Cup)
No. 660  Cap
Dielectric Waterway Fitting
STYLE 647

Download submittal 22.21 for complete information

- Used to join carbon steel or stainless steel pipe to copper tubing with one fitting
- Available in groove × groove, groove × thread or thread × thread
- Sizes from ½ – 4” | 15 – 100 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar

Certifications/Listings:
Download publication 02.06 for potable water approvals
Butterfly Valve for Copper
SERIES 608N

**Download submittal 22.14 for complete information**

- Joins quickly to copper tube by utilizing Style 607 Installation-Ready™ couplings
- Sizes from 2½ – 6" | 65 – 150 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar

Mechanical-T Bolted Branch Outlet and Cross Assemblies for Copper
STYLE 622

**Download submittal 22.12 for complete information**

- Provides a direct branch connection at any location on K, L and M copper tubing
- Sizes from 2½ – 4" | 65 – 100 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar

Certifications/Listings:
*Download publication 02.06 for complete information*
*Download publication 02.06 for potable water approvals*
*Download publication 02.06 for potable water approvals*
The Victaulic® grooved AWWA piping system is the fastest and easiest method for joining AWWA size pipe with 75% fewer bolts than flanging. Victaulic grooved piping components are available for use on AWWA C-606 class 53 pipe or heavier and have a pressure rating of up to 500 psi | 3447 kPa | 34 bar and a size range from 3–36“ | 80–900 mm. Flush-Seal™ gaskets are specifically designed to seal on ductile iron pipe surfaces providing a triple seal to promote leak-free service for the life of the system.
Coupling for AWWA Ductile Iron Pipe
STYLE 31

**Download submittal 23.02 for complete information**

- Provides a rigid or flexible joint on Class 53 or higher pipe
- Sizes from 3 – 36’ | 80 – 900 mm
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Optional coatings include orange enamel, coal tar epoxy, organic zinc primer and bituminous

Transition Coupling for IPS to AWWA
STYLE 307

**Download submittal 23.03 for complete information**

- Single transition for connecting grooved end IPS steel to grooved end AWWA ductile iron
- Designed for Class 53 or higher pipe
- Sizes from 3 – 12’ | 80 – 300 mm
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Optional coatings include galvanized, organic zinc primer and bituminous

Vic-Flange Adapter for AWWA
STYLE 341

**Download submittal 23.04 for complete information**

- Designed for direct connection of flanged components into a grooved cast or ductile system
- Designed for Class 53 or higher pipe
- Sizes from 3 – 24” | 80 – 600 mm
- Pressures up to 250 psi | 1724 kPa | 17 bar
- Optional coatings include coal tar epoxy, organic zinc primer and bituminous
AWWA System

**AWWA Fittings**

*Download submittal 23.05 for complete information*

- AWWA size fittings are supplied with rigid radius grooves in accordance with ANSI/AWWA C-606
- Fittings conform to ANSI 21.10/AWWA C-110 for center-to-end dimensions and AWWA C-153 or ANSI 21.10/AWWA C-110 for wall thicknesses
- Available with a wide variety of coatings and linings
- Victaulic can supply tapped fittings that meet ANSI B16.1 dimension locations; specify fitting size, tap location by letter on order
- Sizes from 3”–36” | 80–900 mm
- Pressure rated up to 350 psi | 2413 kPa | 24 bar

**Certifications/Listings:**

*Download publication 02.06 for potable water approvals*

---

<table>
<thead>
<tr>
<th>No.</th>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-C</td>
<td>90° Elbow</td>
<td>90° Elbow</td>
</tr>
<tr>
<td>100-C</td>
<td>90° Long Radius Elbow</td>
<td>90° Long Radius Elbow</td>
</tr>
<tr>
<td>11-C</td>
<td>45° Elbow</td>
<td>45° Elbow</td>
</tr>
<tr>
<td>12-C</td>
<td>22 ½° Elbow</td>
<td>22 ½° Elbow</td>
</tr>
<tr>
<td>13-C</td>
<td>1 ¼° Elbow</td>
<td>1 ¼° Elbow</td>
</tr>
<tr>
<td>10-CR</td>
<td>90° Reducing Elbow</td>
<td>90° Reducing Elbow</td>
</tr>
<tr>
<td>100-CR</td>
<td>90° Long Radius Reducing Elbow</td>
<td>90° Long Radius Reducing Elbow</td>
</tr>
<tr>
<td>10-CB</td>
<td>Base Elbow</td>
<td>Base Elbow</td>
</tr>
<tr>
<td>100-CB</td>
<td>Long Radius Base Elbow</td>
<td>Long Radius Base Elbow</td>
</tr>
<tr>
<td>20-C</td>
<td>Tee</td>
<td>Tee</td>
</tr>
<tr>
<td>25-C</td>
<td>Reducing Tee</td>
<td>Reducing Tee</td>
</tr>
<tr>
<td>21-C</td>
<td>Bullhead Tee</td>
<td>Bullhead Tee</td>
</tr>
<tr>
<td>20-CB</td>
<td>Base Tee</td>
<td>Base Tee</td>
</tr>
<tr>
<td>25-CB</td>
<td>Reducing Base Tee</td>
<td>Reducing Base Tee</td>
</tr>
</tbody>
</table>
AWWA Fittings

Download submittal 23.05 for complete information

- AWWA size fittings are supplied with rigid radius grooves in accordance with ANSI/AWWA C-606
- Fittings conform to ANSI 21.10/AWWA C-110 for center-to-end dimensions and AWWA C-153 or ANSI 21.10/AWWA C-110 for wall thicknesses
- Available with a wide variety of coatings and linings
- Victaulic can supply tapped fittings that meet ANSI B16.1 dimension locations; specify fitting size, tap location by letter on order
- Sizes from 3 – 36” | 80 – 900 mm
- Pressure rated up to 350 psi | 2413 kPa | 24 bar

Certifications/Listings:
Download publication 02.06 for potable water approvals

No. 35-C
Cross

No. 35-CR
Reducing Cross

No. 33-C
True Wye

No. 30-C
45° Lateral

No. 30-CR
45° Reducing Lateral

No. 60-C
Cap

No. 50-C
Concentric Reducer

No. 51-C
Eccentric Reducer

No. 10-CF
90° Flare

No. 43-CF
Straight Flare

No. 100-CF
90° Long Radius Flare

No. 20-CS
Tee Side Outlet

No. 10-CS
90° Side Outlet

victaulic.com
**Check Valve for AWWA**

**SERIES 317**

Download submittal 23.09 for complete information

- Conforms to AWWA C-508 requirements for water and wastewater treatment services
- Sizes from 3 – 12” | 80 – 300 mm
- Pressures up to 175 psi | 1207 kPa | 12 bar

---

**Vic-Plug Valve for AWWA**

**SERIES 365**

Download submittal 23.06 for complete information

- Conforms to AWWA C-509 standard for end-to-end dimensions
- Round port provides better flow and allows easier passage of cleaning pigs
- Sizes from 3 – 12” | 80 – 300 mm
- Pressures up to 175 psi | 1207 kPa | 12 bar
Victaulic has expanded its line of grooved pipe joining solutions to include the industry’s first grooved mechanical pipe joint designed for use on commercial and industrial steam applications. Available in sizes 2–8” | 50–200 mm, the Style 870 rigid coupling is part of a complete system of fittings and pipe preparation tool roll sets that eliminate the need to weld steam systems up to 150 psi | 1034 kPa | 10 bar.

**Rigid Coupling for Steam**

**STYLE 870**

[Download submittal 100.02 for complete information]

- Lubricant-free installation
- Excellent chemical resistance
- Sizes from 2–8” | 50–200 mm
- Pressures up to 150 psi | 1034 kPa | 10 bar
- Nonsteam: Full vacuum up to 740 psi | 5102 kPa | 51 bar
- -20°F to +366°F | -29°C to +186°C

**Fittings for Steam**

[Download submittal 100.01 for complete information]

- 90° and 45° elbows, tees and reducing tees, caps, reducers and flange adapter nipples available
- Sizes from 2–8” | 50–200 mm
- Pressure ratings are equivalent to the Victaulic coupling used to install them

For more information on Victaulic OGS-200 roll groove specifications, [download submittal 25.12].

victaulic.com
Hydronic Balancing Solutions

Victaulic provides balancing products that allow contractors to improve productivity on the job site and engineers to accurately control building temperatures while optimizing energy efficiency. Balancing valves enhance comfort and cut energy costs through precise control of building temperature. Victaulic® KOIL-KIT™ Coil Packs provide a customizable coil solution delivered to the job site as a pre-connected unit for faster and easier installation.

### Manual Balancing Valves

- Solder End (TA Series 786) — page 71
- Female Threaded End (TA Series 787) — page 71
- Male × Female (Series 78K) — page 71
- Flanged End (TA Series 788) — page 72
- Grooved End (TA Series 789) — page 72

### Automatic Balancing Valves

- Female Threaded End (Series 76T) — page 73
- Female Threaded End with Ball Valve Kit (Series 76B) — page 73
- Male × Female (Series 76K) — page 73
- Male × Female with Ball Valve Kit (Series 76V) — page 74
- Grooved End (Series 76G) — page 74

### Balancing and Control Valves

- ICSS Low Lead Balancing Valve (TA Series 76X) — page 74
- Terminal Balancing and Control Valve—Female × Female (TA Series TC) — page 75
- Terminal Balancing Valve for Modulating Control—Female × Female (TA Series TCM) — page 75
- Combined Balancing and Control Valve—Thread × Thread (TA Series 7FC) — page 75
- Pressure Independent Balancing and Control Valve—Female × Female (TA Series TCP) — page 76
- Pressure Independent Modulating Balancing and Control Valve (PIBCV) Thread × Thread (TA Series 7FP) — page 76
- Compact Pressure Independent Balancing and Control Valve (TA Series 7FP) — page 77
- Control Valve with Return Temperature Controller (TA Series 7CT) — page 77
### Differential Pressure Controllers

<table>
<thead>
<tr>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differential Pressure Controller — Female Threaded End (TA Series 793)</td>
<td>78</td>
</tr>
<tr>
<td>Differential Pressure Controller — Flanged End (TA Series 794)</td>
<td>78</td>
</tr>
<tr>
<td>Link Differential Pressure Sensor</td>
<td>78</td>
</tr>
</tbody>
</table>

### Balancing Instruments

<table>
<thead>
<tr>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA Select Computer Program</td>
<td>82</td>
</tr>
<tr>
<td>CMI Pressure Differential Meter</td>
<td>82</td>
</tr>
<tr>
<td>TA Scope™</td>
<td>82</td>
</tr>
</tbody>
</table>

### KOIL-KIT™ Coil Packs

<table>
<thead>
<tr>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coil Pack (Series 799 and 79V)</td>
<td>79</td>
</tr>
<tr>
<td>Coil Pack with ATC and Bypass Options (Series 79B and 79A)</td>
<td>79</td>
</tr>
<tr>
<td>Coil Pack for Air Handling Units (Series 79C and 79D)</td>
<td>80</td>
</tr>
<tr>
<td>Coil Hose</td>
<td>80</td>
</tr>
<tr>
<td>Y-Strainer/Ball Valve Combination (Series 78Y)</td>
<td>81</td>
</tr>
<tr>
<td>Ball Valve/Union Combination (Series 78T)</td>
<td>81</td>
</tr>
<tr>
<td>Union Port Fitting (Series 78U)</td>
<td>81</td>
</tr>
</tbody>
</table>
Manual Balancing Valve—
Solder End
TA SERIES 786

Download submittal 08.16 for complete information

- “Y” patterned globe valve
- Digital hand wheel with 4 turns to open, 1440 degrees of rotation, and memory stop
- Sizes from ½ – 2” | 15 – 50 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Rated from -4°F to 250°F | -20°C to 120°C

Manual Balancing Valve—
Threaded End
TA SERIES 787

Download submittal 08.16 for complete information

- “Y” patterned globe valve
- Digital hand wheel with 4 turns to open, 1440 degrees of rotation, and memory stop
- Sizes from ½ – 2” | 15 – 50 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Rated from -4°F to 250°F | -20°C to 120°C

Manual Balancing Valve—
Union Inlet
SERIES 78K

Download submittal 08.16 for complete information

- “Y” patterned globe valve with a union adapter
- Digital hand wheel with 4 turns to open, 1440 degrees of rotation, and memory stop
- Optional tailpieces available for reductions
- Sizes from ½ – 2” | 15 – 50 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Rated from -4°F to 250°F | -20°C to 120°C
Manual Balancing Valve —
Flanged End
TA SERIES 788

Download submittal 08.16 for complete information

- “Y” patterned globe valve
- Digital hand wheel with 8, 12, or 16 turns to open (depending on size), 1440 degrees of rotation, and memory stop
- Class 150 RF, ASME/ANSI B16.42
- Sizes from 2½ – 16” | 65 – 400 mm
- Pressures up to 250 psi | 1725 kPa

Manual Balancing Valve —
Grooved End
TA SERIES 789

Download submittal 08.16 for complete information

- “Y” patterned globe valve
- Digital hand wheel with 8, 12, or 16 turns to open (depending on size), and memory stop
- Sizes from 2½ – 12” | 65 – 300 mm
- Pressures up to 350 psi | 2413 kPa | 24 bar
- Rated from -4°F to 250°F | -20°C to 120°C
Automatic Balancing Valve—Threaded End
SERIES 76T

Download submittal 08.34 for complete information

- Contains an automatic cartridge with a replaceable orifice plate, specify cartridge type when ordering
- Differential pressure range dependant upon cartridge selected; 43.5 psi | 300 kPa | 3 bar or 87 psi | 600 kPa | 6 bar
- DZR Brass body with an EPDM O-Ring and NPT thread
- Sizes from ½⁻²" | 15⁻50 mm
- Pressures up to 365 psi | 2517 kPa | 25 bar
- Rated from -4°F to 250°F | -20°C to 120°C

Automatic Balancing Valve with Ball Valve Kit—Female Threaded End
SERIES 76B

Download submittal 08.34 for complete information

- Contains an automatic cartridge with a replaceable orifice plate, specify cartridge type when ordering
- Differential pressure range dependant upon cartridge selected; 43.5 psi | 300 kPa | 3 bar or 87 psi | 600 kPa | 6 bar
- DZR Brass body with an EPDM O-Ring and NPT thread
- Sizes from ½⁻²" | 15⁻50 mm
- Pressures up to 365 psi | 2517 kPa | 25 bar
- Rated from -4°F to 250°F | -20°C to 120°C

Automatic Balancing Valve—Male x Female
SERIES 76K

Download submittal 08.34 for complete information

- Contains an automatic cartridge with a replaceable orifice plate, specify cartridge type when ordering
- Differential pressure range dependant upon cartridge selected; 43.5 psi | 300 kPa | 3 bar or 87 psi | 600 kPa | 6 bar
- DZR Brass body with an EPDM O-Ring and NPT thread
- Sizes from ½⁻²" | 15⁻50 mm
- Pressures up to 365 psi | 2517 kPa | 25 bar
- Rated from -4°F to 250°F | -20°C to 120°C
Automatic Balancing Valve with Ball Valve Kit — Union Inlet  
SERIES 76V

Download submittal 08.34 for complete information

- Contains an automatic cartridge with a replaceable orifice plate, specify cartridge type when ordering
- Differential pressure range dependant upon cartridge selected; 43.5 psi | 300 kPa | 3 bar or 87 psi | 600 kPa | 6 bar
- DZR Brass body with an EPDM O-Ring and NPT thread
- Sizes from ½ – 2” | 15 – 50 mm
- Pressures up to 365 psi | 2517 kPa | 25 bar
- Rated from -4°F to 250°F | -20°C to 120°C

Automatic Balancing Valve — Grooved End  
SERIES 76G

Download submittal 08.34 for complete information

- Integrated orifice plate for direct flow measurement
- Grooved body connection for easy maintenance
- Differential pressure range 1.9 – 87 psi | 13 – 600 kPa | 0.15 – 6 bar
- Size from 2½ – 6” | 65 – 150 mm
- Pressures up to 365 psi | 2517 kPa | 25 bar
- Rated from -4°F to 230°F | -20°C to 110°C

ICSS Low Lead Balancing Valve  
TA SERIES 76X

Download submittal 08.51 for complete information

- NSF Certified in accordance with ANSI/NSF 61 to 180°F | 82°C and ANSI/NSF 372
- Used in drinking water applications
- Differential pressure options 2 – 32 psi | 13.78 – 220.6 kPa | .15 – 2 bar and 5 – 60 psi | 34 – 414 kPa | 3 – 4 bar
- Sizes from ½ – ¾” | 15 – 20 mm
- Pressures up to 400 psi | 2758 kPa | 28 bar

Certifications/Listings:  
Download publication 02.06 for potable water approvals
Combined Balancing and Control Valve—Thread × Thread

**TA SERIES 7FC**

Download submittal 08.52 for complete information

- Measures flow, differential pressure, temperature and differential pressure
- EQM characteristics (Equal Percentage Modified)
- 1¼–2’ | 32–50 mm Female NPT Threads
  - 230 psi | 1586 kPa | 16 bar
- 2½–6’ | 65–150 mm ANSI Class 150 Flange
  - 365 psi | 2517 kPa | 25 bar
- Rated from -4°F to 250°F | -20°C to 120°C
- For sizes ½–1’ | 15–25 mm, see TA Series TCM

Terminal Balancing and Control Valve—Female × Female

**TA SERIES TC**

Download submittal 08.38 for complete information

- Designed for on/off control
- Ensures accurate hydronic control and optimum throughput over a long lifetime
- Sizes from ½–1’ | 15–25 mm
- Pressures up to 230 psi | 1586 kPa | 16 bar
- Rated from -4°F to 250°F | -20°C to 120°C

Terminal Balancing Valve for Modulating Control—Female × Female

**TA SERIES TCM**

Download submittal 08.38 for complete information

- Designed for modulating control or on-off
- Ensures accurate hydronic control and optimum throughput over a long lifetime
- Sizes from ½–1’ | 15–25 mm
- Pressures up to 230 psi | 1586 kPa | 16 bar
- Rated from -4°F to 250°F | -20°C to 120°C
Pressure Independent Balancing and Control Valve (PIBCV)
TA SERIES TCP

Download submittal 08.39 for complete information

- Ensures accurate hydronic control and optimum throughput over a long lifetime
- Sizes from ½ – 1” | 15 – 25 mm
- Pressures up to 230 psi | 1586 kPa | 16 bar
- Rated from -4°F to 250°F | -20°C to 120°C
- For sizes 1¼ – 6” | 32 – 150 mm, see TA Series 7FP

Pressure Independent Balancing and Control Valve (PIBCV)
TA SERIES 7FP

Download submittal 08.53 for complete information

- Measures flow, differential pressure, temperature and differential pressure
- EQM characteristics (Equal Percentage Modified)
- 1¼ – 2” | 32 – 50 mm Female NPT Threads
  230 psi | 1586 kPa | 16 bar
- 2½ – 6” | 65 – 150 mm ANSI Class 150 Flange
  365 psi | 2517 kPa | 25 bar
- Rated from -4°F to 250°F | -20°C to 120°C
- For sizes ½ – 1” | 15 – 25 mm, see TA Series TCP
Hydronic Balancing Solutions

Compact Pressure Independent Balancing and Control Valve
TA SERIES 7CP

Download submittal 08.37 for complete information

- Lower pump head/energy consumption
- Sizes from $\frac{1}{2}$ – $1\frac{3}{4}$" | 15 – 32 mm
- Pressures up to 230 psi | 1586 kPa | 16 bar
- Rated from 32°F to 0°F | 176°C to 80°C

Control Valve with Return Temperature Controller
TA SERIES 7CT

Download submittal 08.36 for complete information

- Lower pump head/energy consumption
- Sizes from $\frac{1}{2}$ – $1\frac{3}{4}$" | 15 – 32 mm
- Pressures up to 230 psi | 1586 kPa | 16 bar
- Rated from 32°F to 0°F | 176°C to 80°C
Differential Pressure Controller — Female Threaded End
TA SERIES 793

Download submittal 08.29 for complete information

- Features Ametal™ body providing dielectric protection
- Sizes from ½–2" | 15–50mm
- Capable of stabilizing differential pressures up to 23.3 psi | 160 kPa | 1.6 bar

Differential Pressure Controller — Flanged End
TA SERIES 794

Download submittal 08.29 for complete information

- Features a ductile iron body
- Sizes from 2½–4" | 65–100mm
- Capable of stabilizing differential pressures up to 23.3 psi | 160 kPa | 1.6 bar

Link Differential Pressure Sensor
TA SERIES 736

Download submittal 08.16 for complete information

- Provides connection between a building’s heating and cooling and building’s monitoring system (BMS)
- Continuously measures the flow and differential pressure through and across the IMI TA balancing valves
- Measurement probes provided for direct connection to the measurement points on all TA Series 786, 787, 788, and 789 balancing valves
KOIL-KIT™ Coil Pack
SERIES 799 and SERIES 79V

Download submittal 08.30 for complete information

- The Series 799 consists of the following components: Series 78Y Y-strainer/ball valve or Series 78T ball valve union combination, two coil hoses, a Series 78U union port fitting, and a balancing valve
- The Series 79V includes the option to have the ATC valve of your choice assembled and shipped with the Victaulic® KOIL-KIT coil pack
- Suitable for a variety of hot and cold water applications including treated and untreated water systems
- Sizes from $\frac{1}{2}$–2" | 15–50mm

KOIL-KIT™ Coil Pack with ATC and Bypass Options
SERIES 79B and SERIES 79A

Download submittal 08.30 for complete information

- The Series 79B consists of the following components: Series 78Y Y-strainer/ball valve or Series 78T ball valve union combination, two coil hoses, a Series 78U union port fitting, and a balancing valve as well as various options for bypass valves
- The Series 79A includes option to have the ATC valve of your choice assembled and shipped with the Victaulic KOIL-KIT coil pack
- Sizes from $\frac{1}{2}$–2" | 15–50mm
KOIL-KIT™ Coil Pack
for Air Handling Units
SERIES 79C and SERIES 79D

Download submittal 08.35 for complete information

- The Series 79C consists of the following components: Series 732 strainer with a blow down drain valve and a balancing valve
- The Series 79D includes the option of adding a Style 925 drain/air vent assembly included with the Victaulic® KOIL-KIT coil pack
- The Style 925 is provided with a Style 107 QuickVic™ rigid coupling which is used for connecting the Style 925 to the balancing valve
- Sizes from 2½–6" | 65–300 mm

KOIL-KIT™ Coil Hose

Download submittal 08.30 for complete information

- Stainless steel braided hose and an EPDM polymer core with stainless ferrules; available as male by female swivel and male by male swivel
- Available lengths: 12” | 300 mm; 24” | 600 mm; 36” | 900 mm
- Sizes from ½–2” | 15–50 mm
- 375 psi | 2585 kPa | 26 bar maximum CWP (varies by size)
- Suitable for operating temperatures up to 230°F | 110°C
KOIL-KIT™ Ball Valve/Union Combination
SERIES 78T

Download submittal 08.30 for complete information

- DZR brass body consisting of a union and blow down valve with flow measuring ports
- Multiple end connections available
- Sizes from ½–2” | 15–50mm
- Pressures up to 400 psi | 2758 kPa | 28 bar
- Rated up to 230°F | 110°C

KOIL-KIT™ Y-Strainer/Ball Valve Combination
SERIES 78Y

Download submittal 08.30 for complete information

- DZR brass body consisting of a full port valve, strainer and blow down valve with flow measuring ports
- Multiple end connections available
- Sizes from ½–2” | 15–50mm
- Pressures up to 400 psi | 2758 kPa | 28 bar
- Rated up to 230°F | 110°C

KOIL-KIT™ Union Port Fitting
SERIES 78U

Download submittal 08.30 for complete information

- Multiple end connections available
- Sizes from ½–2” | 15–50mm
- Pressures up to 400 psi | 2758 kPa | 28 bar
- Rated up to 230°F | 110°C

Hydronic Balancing Solutions
**CMI Pressure Differential Meter**

**TA SERIES 73M**

*Download submittal 08.16 for complete information*

- A handheld instrument for measuring differential pressure, temperature and flow through balancing valves in hydronic systems.
- Consists of a sensor unit and an instrument unit programmed with the TA valve characteristics, which makes it possible to take a direct reading of flow and differential pressure.

---

**TA Select Computer Program**

*Download submittal 08.16 for complete information*

- The software will advise the correct combination of valve, handwheel position and pipe size to correctly balance the system.
- The program will also size the pipe, generate \( C_v \mid K_v \) values for the ATC valves and give pre-set information for all TA valves on the project.

---

**TA Scope™**

**TA SERIES 734**

*Download submittal 08.16 for complete information*

- A wireless, handheld device for the swift and accurate measurement of differential pressure, flow, temperature and power.
- An independent sensor communicates with the TA Scope™ to deliver data quickly, thereby enabling contractors to balance a system, troubleshoot hydronic problems and log system performance.
**Refuse-to-Fuse™ HDPE System**

The Victaulic® Refuse-to-Fuse system for HDPE eliminates the need for any kind of fusion equipment to assemble HDPE pipe in the field. Fast, dependable pipe assembly with simple, battery-powered hand tools that can be accomplished in any weather, without specialized equipment and provides a joint that meets or exceeds the performance capability of the pipe.

**Couplings**

<table>
<thead>
<tr>
<th>Plain End Installation-Ready™ Refuse-to-Fuse Coupling for HDPE Pipe (Style 905)</th>
<th>83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refuse-to-Fuse Coupling for HDPE-to-Steel Pipe (Style 907)</td>
<td>84</td>
</tr>
<tr>
<td>Refuse-to-Fuse Coupling for Double-Grooved HDPE Pipe (Style 908)</td>
<td>84</td>
</tr>
</tbody>
</table>

**Fittings**

Refuse-to-Fuse Fittings for HDPE Pipe 84

---

**Plain End Installation-Ready™ Refuse-to-Fuse™ Coupling for HDPE Pipe**

**STYLE 905**

- Designed for plain end HDPE pipe from SDR 7 to 17
- Sizes from 2–6”
- Pressure rating meets or exceeds the performance capabilities of the pipe
- For coating options and available metric sizes, download product submittal

---

**Download submittal 19.07 for complete information**
Refuse-to-Fuse™ Coupling for HDPE-to-Steel Pipe

**STYLE 907**

Download submittal [19.10](#) for complete information

- Designed for plain end HDPE from SDR 7 to 17
- Sizes from 2 – 6”
- Pressure rating meets or exceeds the performance capability of the pipe
- For coating options and available metric sizes, download product submittal

Refuse-to-Fuse™ Coupling for Double-Grooved HDPE Pipe

**STYLE 908**

Download submittal [19.09](#) for complete information

- Designed for double grooved HDPE from SDR 7 to 17
- Sizes from 8 – 36” | 225 – 900 mm
- Pressure rating meets or exceeds the performance capability of the pipe
- For coating options and available metric sizes, download product submittal
- Standard Victaulic coupling assembly procedure used for installation

Refuse-to-Fuse™ Fittings for HDPE Pipe

Download submittal [19.11](#) for complete information

- Available in SDR 11 and 17
- Sizes from 2 – 6”
- Full flow fittings
- Compatible for use with Style 905 and 907 HDPE Couplings

<table>
<thead>
<tr>
<th>No.</th>
<th>Fitting</th>
</tr>
</thead>
<tbody>
<tr>
<td>H10</td>
<td>90° Elbow</td>
</tr>
<tr>
<td>H11</td>
<td>45° Elbow</td>
</tr>
<tr>
<td>H20</td>
<td>Tee</td>
</tr>
<tr>
<td>H60</td>
<td>Reducer</td>
</tr>
</tbody>
</table>

victaulic.com
Aquamine™ PVC System

Victaulic® Aquamine Reusable PVC piping system offers a complete line of high impact, resistant, reusable pipe, fittings, valves and specialty items. This product line is ideal for a wide variety of water services due to its high impact resistant PVC pipe and synthetic rubber o-rings that provide chemical resistance. The spline assembly used in Victaulic Aquamine PVC piping uniquely engages into the grooves of both the coupling and the pipe. The thickened pipe end provides joint reinforcement and security.

### Couplings

- **Aquamine Plain End Coupling (Series 2970)** | page 85
- **Aquamine Transition Coupling for PVC to HDPE (Series 2971)** | page 86
- **Aquamine Transition Coupling for PVC to Groove (Series 2972)** | page 86

### Fittings and Pipe

- **Aquamine Fittings** | page 87
- **Aquamine Pipe (Series 2900)** | page 88

### Valves

- **Aquamine Ball Valve (Series 2921)** | page 88
- **Aquamine Butterfly Valve (Series 2950)** | page 88

---

### Aquamine™ Plain End Coupling

**SERIES 2970**

**Download submittal 50.01 for complete information**

- Repair coupling for PVC systems; no pipe preparation required
- Sizes from 2–8” | 50–200 mm
- Pressures up to 350 psi | 2413 kPa | 24 bar
Aquamine™ PVC System

Aquamine™ Transition Coupling for PVC to HDPE
SERIES 2971

Download submittal 50.05 for complete information

• Provides convenient transition from PVC to HDPE without need for special adapters
• Sizes from 2 – 8’ | 50 – 200 mm
• Pressures up to 350 psi | 2413 kPa | 24 bar

Aquamine™ Transition Coupling for PVC to Groove
SERIES 2972

Download submittal 50.06 for complete information

• Provides convenient transition from PVC to grooved steel without need for special adapters
• Sizes from 2 – 8’ | 50 – 200 mm
• Pressures up to 350 psi | 2413 kPa | 24 bar
Aquamine™ Fittings

Download submittal 50.01 for complete information

- Variety of straight and reducing fittings
- Sizes from 2 – 12" | 50 – 300 mm
- Pressures up to 350 psi | 2413 kPa | 24 bar

Certifications/Listings:
Download publication 02.06 for potable water approvals

Connection Key
ALF Female End
ALM Male End
FLG Flange End
SCF Solvent Cement Female End
PEM Plain End Male
VIC Victaulic® Standard Groove End
NPT-F National Pipe Taper Thread Female
NPT-M National Pipe Taper Thread Male
Aquamine™ PVC System

Aquamine™ PVC Pipe
SERIES 2900

Download submittal 50.01 for complete information

- PVC 1120 Type 1, grade 1 (class 12454) conforming to ASTM D-1784 and ASTM D-2241
- Sizes from 2 – 12" | 50 – 300 mm
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For Aquamine grooving tools, see pg. 112

Certifications/Listings:
Download publication 02.06 for potable water approvals

Aquamine™ Ball Valve
SERIES 2921

Download submittal 50.01 for complete information

- Available with a lever handle or a square nut
- Sizes from 2 – 6" | 50 – 150 mm
- Pressures up to 100 psi | 690 kPa | 7 bar

Aquamine™ Butterfly Valve
SERIES 2950

Download submittal 50.01 for complete information

- Provided with a lever handle for easy on-off operation
- Sizes from 2 – 6" | 50 – 150 mm
- Pressures up to 250 psi | 1724 kPa | 17 bar
Before the Victaulic® grooved system, joining PVC pipe was time consuming and difficult. Weather conditions and curing times delayed the completion of glued or solvent cement joined PVC systems.

Victaulic grooved products assemble PVC pipe joints in a matter of minutes. A groove can be roll or cut grooved into the PVC pipe. Mechanical couplings require just two bolts and nuts and are used to join the pipe ends while also providing a union at every joint.

The following Victaulic products may also be used on PVC pipe. Refer to the individual product submittals for additional information.

- **Style 177N Rigid Coupling**
- **Style 72 Outlet Coupling**
- **Style 75 Flexible Coupling**
- **Style 77 Flexible Coupling**
- **Style 78 Snap-Joint™ Coupling**
- **Style 791 Vic-Boltless Coupling**
- **Style 741 Flange Adapter**
- **Style 743 Flange Adapter**
- **Style HP-70 Rigid Coupling**

---

**Composite Flexible Coupling**

**STYLE 171**

*Download submittal 06.22 for complete information*

- For use where corrosive conditions exist
- Designed for use on reverse osmosis systems
- For use on roll/cut grooved PVC
- Sizes from 1½–4” | 40–100 mm
- Pressures up to 150 psi | 1034 kPa | 10 bar
- For stainless steel and FRP applications, contact Victaulic

---

**Hole Cut**

**Expansion Joints**

**Plain End**

**Stainless Steel**

**Copper**

**AWWA**

**Steam System**

**Hydraulic Balancing**

**HDPE**

**Aquamine™ PVC**

**Grooved PVC System**

**Tools**

**Gaskets, Seals and O-Rings FRP**

**Design Data**

**Index**
FRP System

The Victaulic® fiberglass-reinforced piping solutions offer more efficient installation for applications currently being joined by wrap and butt welding. The Style 296-A and Style 229S couplings can be installed in adverse conditions while saving installation time that is currently seen with traditional joining methods.

Victaulic FRP system solutions can be installed in inclement weather conditions and used on various applications including odor control.

Coupling for Fiberglass Reinforced Plastic Pipe
STYLE 296-A

Download submittal 90.01 for complete information

- Designed to create a rigid pipe joint without any special tools while maintaining existing support requirements
- Can be installed in any weather
- No curing time required
- Sizes from 1 – 12” | 25 – 300 mm
- Pressures up to 150 psi | 1034 kPa | 10 bar

Non-Restrained Flexible Coupling for Fiberglass Reinforced Plastic Pipe
STYLE 229S

Download submittal 60.16 for complete information

- Designed for FRP odor control piping systems
- Can be installed in any weather
- No curing time required
- Sizes from 6 – 54” | 150 – 1350 mm
- Pressures up to 25 psi | 172 kPa | 1.7 bar

victaulic.com
Victaulic is the world’s leading developer of pipe preparation tools. These tools simplify pipe end preparation and are available for pipe sizes ranging from $\frac{1}{2}''$ | 15 mm up to 72" | 1800 mm.

Victaulic tools are available for manual use, field use and fab shop environments. As with our pipe joining technologies, Victaulic tools make pipe end preparation faster, easier and safer.

Additionally, Victaulic offers cut grooving tools, hole cutting, pipe cut-off, pressing tools, VBSP closure tools and a variety of accessories.

Tools are shipped with standard rolls included.

### Field Portable Roll Grooving Tools

<table>
<thead>
<tr>
<th>Tool</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE12</td>
<td>93</td>
</tr>
<tr>
<td>VE26</td>
<td>93</td>
</tr>
<tr>
<td>VE26/46 Power Drive Kit</td>
<td>94</td>
</tr>
<tr>
<td>VE46</td>
<td>94</td>
</tr>
<tr>
<td>VE226</td>
<td>95</td>
</tr>
<tr>
<td>VE226 Power Drive Kit</td>
<td>95</td>
</tr>
</tbody>
</table>

### Plant/Shop Fabrication Roll Grooving Tools

<table>
<thead>
<tr>
<th>Tool</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE268</td>
<td>103</td>
</tr>
<tr>
<td>VE414MC</td>
<td>104</td>
</tr>
<tr>
<td>VE460</td>
<td>105</td>
</tr>
<tr>
<td>VE872</td>
<td>106</td>
</tr>
</tbody>
</table>

### Field Fabrication Roll Grooving Tools

<table>
<thead>
<tr>
<th>Tool</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE106/VE107</td>
<td>96</td>
</tr>
<tr>
<td>VE206</td>
<td>97</td>
</tr>
<tr>
<td>VE272SFS</td>
<td>98</td>
</tr>
<tr>
<td>VE270FSD/VE271FSD</td>
<td>99</td>
</tr>
<tr>
<td>VE416FS</td>
<td>100</td>
</tr>
<tr>
<td>VE416FSD/VE417FSD</td>
<td>101</td>
</tr>
<tr>
<td>VE450FSD</td>
<td>102</td>
</tr>
</tbody>
</table>

### Field Manual and Motorized Cut Grooving Tools

<table>
<thead>
<tr>
<th>Tool</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VG28GD, VG28GD-ABR, VDG26GD</td>
<td>107</td>
</tr>
<tr>
<td>VG824, VG824DG, VG824-ABR, VG828</td>
<td>108-109</td>
</tr>
<tr>
<td>VG</td>
<td>110</td>
</tr>
<tr>
<td>VG412</td>
<td>110</td>
</tr>
</tbody>
</table>

### Cut Grooving Tools for Plastic Pipe

<table>
<thead>
<tr>
<th>Tool</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPG26</td>
<td>111</td>
</tr>
<tr>
<td>VPG824</td>
<td>111</td>
</tr>
</tbody>
</table>

For grooving stainless steel, download submittal 17.01.
## Pipe Preparation Tools

<table>
<thead>
<tr>
<th>Aquamine™ Grooving Tools</th>
<th>page</th>
<th>Tool Accessories</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>APG</td>
<td>112</td>
<td>VPD752</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Power Mule II</td>
<td>116</td>
</tr>
<tr>
<td>Hole Cutting Tools</td>
<td></td>
<td>VAPS112</td>
<td>116</td>
</tr>
<tr>
<td>HCT908</td>
<td>112</td>
<td>VAPS224</td>
<td>117</td>
</tr>
<tr>
<td>VHCT900</td>
<td>113</td>
<td>VAPS1672</td>
<td>117</td>
</tr>
<tr>
<td>VIC-TAP II</td>
<td>113</td>
<td>Pipe Preparation Measuring Tools</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tool Carry Bag</td>
<td>119</td>
</tr>
</tbody>
</table>

### Pipe Cut-Off Tools

<table>
<thead>
<tr>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCT1 Manual</td>
</tr>
<tr>
<td>VCT2 Automatic</td>
</tr>
</tbody>
</table>

### Vic-Press™ Tools

<table>
<thead>
<tr>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFT510</td>
</tr>
</tbody>
</table>

## VBSP Closure Tools

<table>
<thead>
<tr>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual VBSP Closure Tools</td>
</tr>
<tr>
<td>Hydraulic VBSP Closure Tools</td>
</tr>
</tbody>
</table>

## Fabrication Cell

<table>
<thead>
<tr>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAP131</td>
</tr>
<tr>
<td>VAPS 131R</td>
</tr>
<tr>
<td>VAPS 131F</td>
</tr>
<tr>
<td>VAPS 131T</td>
</tr>
</tbody>
</table>
Field Portable Roll Grooving Tools
VE12 GROOVE IN-PLACE

Download submittal 24.01 for complete information

- Tool is manually operated using the supplied crank
- Enhanced tracking rolls allow bi-directional grooving
- Power Requirements: None
- Weight: 17 lbs. | 8 kg

| Model | Pipe Material | Notes | Pipe Size (in |mm|) / Schedule |
|-------|---------------|-------|---------------|---------------|
| VE12  | Steel         |       | ⅜ | 1  | ⅞ | 2 | 10 | 5 – 10 | 5 – 40 |
|       | Stainless     |       |   |  |   |  |   |       | 40S     |
|       | Aluminum      |       | ⅜ | 1  | ⅞ | 2 | 10 | 5 – 10 | 5 – 40 |
| VE12SS| Lt. Wall SS   |       |   |  |   |  |   |       | 5S – 10S|

1. 6061-T4 or 6063-T4 Alloy must be used.

Field Portable Roll Grooving Tools
VE26 GROOVE IN-PLACE

Download submittal 24.01 for complete information

- Tool is manually operated using the supplied crank
- Enhanced tracking rolls allow bi-directional grooving
- Optional power drive adapter kit available to alternately groove pipe using a Ridgid® 300 power drive or VPD752
- Power Requirements: None
- Weight: 22 lbs. | 10 kg

| Model | Pipe Material | Notes | Pipe Size (in |mm|) / Schedule |
|-------|---------------|-------|---------------|---------------|
| VE26S | Steel         |       | 2 | 5 | 7½ | 10 | 12 | 15 | 20 | 40 | 5 – 40      |
|       | Stainless     |       | 2 |   | 5 |   | 7½ | 10 | 12 |   | 40S Only    |
| VE26C | Copper        |       | 2 |   | 5 |   | 7½ | 10 | 12 |   | K, L, M and DWV |
| VE26AC| Australia Copper|       | 2 |   | 5 |   | 7½ | 10 | 12 |   | A, B and D  |
| VE26P | Aluminum      |       | 2 |   | 5 |   | 7½ | 10 | 12 |   | 1 | 5 – 40    |
|       | PVC Plastic   |       | 2 |   | 5 |   | 7½ | 10 | 12 |   | 40          |
| VE26SS| Lt. Wall SS   |       | 2 |   | 5 |   | 7½ | 10 | 12 |   | 55 – 105 |

1. 6061-T4 or 6063-T4 Alloy must be used.
Field Portable Roll Grooving Tools
VE26/46 POWER DRIVE KIT

**Download submittal 24.01 for complete information**

- Available to allow both tools to be directly mounted to either a Victaulic® VPD752 or Ridgid® 300 Power Drive
- Newer tools with serial numbers ending in “C” are compatible with the Power Drive Kit; tools which do not contain the “C” suffix will require retrofit to accept the Power Drive Kit; contact Victaulic for details
- Weight: 7 lbs. | 3 kg

Field Portable Roll Grooving Tools
VE46 GROOVE IN-PLACE

**Download submittal 24.01 for complete information**

- Tool is manually operated using the supplied crank
- Enhanced tracking rolls allow bi-directional grooving and helps to hold the tool on the pipe end during the roll grooving process
- Optional power drive adapter kit available to alternately groove pipe using a Ridgid® 300 Power Drive or VPD752
- Power Requirements: None
- Weight: 28 lbs. | 13 kg

### Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>Notes</th>
<th>Pipe Size (in</th>
<th>mm)/Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE46S</td>
<td>Steel</td>
<td></td>
<td>3½ 90</td>
<td>4 100</td>
</tr>
<tr>
<td></td>
<td>Stainless</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VE46P</td>
<td>Aluminum</td>
<td>1</td>
<td></td>
<td>40S Only</td>
</tr>
<tr>
<td></td>
<td>PVC Plastic</td>
<td>40</td>
<td></td>
<td>40 – 80</td>
</tr>
</tbody>
</table>

1. 6061-T4 or 6063-T4 Alloy must be used.
Pipe Portable Roll Grooving Tools
VE226 PORTABLE GROOVER

Download submittal 24.01 for complete information

- Tool is operated using a standard $\frac{3}{8}" | 9.5 \text{ mm}$ square ratchet drive (not included)
- Drive Requirements: Mounts to Victaulic® VPD752 or Ridgid® 300 Power Drive; optional bases available
- Weight: 37 lbs. | 17 kg

### Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>Notes</th>
<th>¾</th>
<th>1</th>
<th>1¼</th>
<th>1½</th>
<th>2</th>
<th>2½</th>
<th>3</th>
<th>3½</th>
<th>4</th>
<th>4½</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE226S</td>
<td>Steel</td>
<td></td>
<td>5–40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless</td>
<td></td>
<td></td>
<td>40S Only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VE226B</td>
<td>Steel</td>
<td></td>
<td>5–40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless</td>
<td></td>
<td></td>
<td>40S Only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum</td>
<td>1</td>
<td></td>
<td>5–40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVC Plastic</td>
<td></td>
<td></td>
<td>40</td>
<td>40–80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VE226M</td>
<td>Steel</td>
<td></td>
<td>5–40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless</td>
<td></td>
<td></td>
<td>40S Only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VE226C</td>
<td>Copper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VE226BSS</td>
<td>Lt. Wall SS</td>
<td>5S–10S</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VE226MSS</td>
<td>Lt. Wall SS</td>
<td>5S–10S</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VE226P</td>
<td>Aluminum</td>
<td>1</td>
<td>5–40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVC Plastic</td>
<td></td>
<td></td>
<td>40–80</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. 6061-T4 or 6063-T4 Alloy must be used.

### Field Portable Roll Grooving Tools
VE226 POWER DRIVE KIT

Download submittal 24.01 for complete information

- Kit for connecting a VE226 roll grooving tool to a Ridgid® 700 Power Drive
- Weight: 75 lbs. | 34 kg
### Field Fabrication Roll Grooving Tools

**VE106/VE107 GROOVE-N-GO**

**Download submittal 24.01 for complete information**

- Mobile light-duty roll grooving tool with an integral motor/drive unit mounted to portable hand truck
- Reduces pipe handling by allowing the tool to be wheeled directly to the pipe preparation site
- \( \frac{3}{8} \)"  9.5 mm square ratchet drive for operation (standard)
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Completely self-contained unit with an integral motor, safety foot switch and power plug
- **Power Requirements:**
  - VE106 is provided with 110 volt, 15 amp power
  - VE107 is provided with 220 volt, 6 amp power
- **Weight:** 140 lbs. | 64 kg

---

**Tool Ratings — Maximum Pipe Size Capacity**

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>Notes</th>
<th>1(\frac{1}{4})</th>
<th>2</th>
<th>2(\frac{1}{2})</th>
<th>3</th>
<th>3(\frac{1}{2})</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE106</td>
<td>Steel</td>
<td>2, 3</td>
<td>32</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td>125</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Stainless</td>
<td>2</td>
<td>40</td>
<td></td>
<td>40S</td>
<td></td>
<td>5S – 10S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lt. Wall SS</td>
<td>4</td>
<td>5S – 10S</td>
<td></td>
<td></td>
<td></td>
<td>K, L, M and DWV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Copper</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Use standard grooving rolls marked with the prefix R.
3. EndSeal™ grooving rolls marked with the prefix RZ are available. Contact Victaulic for details.
4. Use grooving rolls marked with the prefix RX.
5. Use grooving rolls marked with the prefix RR.
Pipe Preparation Tools

Portable Roll Groover
STYLE VE206

Download submittal 24.01 for complete information

- Tool head mounts to any tripod stand with a Ridgid® 300 bolt pattern or the flat bed of a work truck
- Hydraulic hand pump can be mounted on either side of the tool for right or left hand operation
- Supplied with Victaulic® tool carry bag for accessory storage
- Power Requirements: Compatible with multiple power drive units; Victaulic VPD752, Ridgid* 300 or 700 and Rems Amigo II
- Roll grooves 1¼ – 6' | 32 – 150 mm pipe
- Weight: 165 lbs. | 75 kg

Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>Notes</th>
<th>Pipe Size (in</th>
<th>mm)/Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE206</td>
<td>Steel 2, 3</td>
<td></td>
<td>5 – 40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stainless 2</td>
<td></td>
<td>40S</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lt. Wall SS 4</td>
<td></td>
<td>55 – 105</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Copper 5</td>
<td></td>
<td>K, L, M and DWV</td>
<td></td>
</tr>
</tbody>
</table>

2. Use standard grooving rolls marked with the prefix R.
3. EndSeal™ grooving rolls marked with the prefix RZ are available. Contact Victaulic for details.
4. Use grooving rolls marked with the prefix RX.
5. Use grooving rolls marked with the prefix RR.
Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>Notes</th>
<th>Pipe Size (in</th>
<th>mm) / Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE272SFS</td>
<td>Steel</td>
<td>2, 3</td>
<td>5 – 40</td>
<td>5 – 20</td>
</tr>
<tr>
<td></td>
<td>Stainless</td>
<td>2</td>
<td>40S</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lt. Wall SS</td>
<td>4, 13</td>
<td>SS – 10S</td>
<td>5 – 20</td>
</tr>
<tr>
<td></td>
<td>Aluminum</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PVC Plastic</td>
<td>6, 14</td>
<td>40</td>
<td>40 – 80</td>
</tr>
<tr>
<td></td>
<td>Copper</td>
<td>5, 13</td>
<td>K, L, M and DWV</td>
<td>40</td>
</tr>
</tbody>
</table>

1. 6061-T4 or 6063-T4 Alloy must be used.
2. Use standard grooving rolls marked with the prefix R.
3. EndSeal™ grooving rolls marked with the prefix RZ are available. Contact Victaulic for details.
4. Use grooving rolls marked with the prefix RX.
5. Use grooving rolls marked with the prefix RR.
6. Use grooving rolls marked with the prefix RP.
7. Use sway brace for 8"/200 mm copper and 8"-12"/200 – 300 mm lightwall stainless steel.
8. A special lower roll exclusively for grooving 2" Sch. 80 PVC is available. Part. No. RP02272L02

Field Fabrication Roll Grooving Tools
VE272SFS

Download submittal 24.01 for complete information

- Hand pump operation with a unique pivot arm design reduces handle effort
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch
- Power Requirements: Victaulic® VPD752 or Ridgid® 300 Power Drive
- Weight: 184 lbs. | 84 kg

victaulic.com
Field Fabrication Roll Grooving Tools

**VE270FSD/VE271FSD**

**Download submittal 24.01 for complete information**

- Completely self-contained unit with integral gear motor, safety guards, safety foot switch and power cord/plug
- Equipped with a unique pivot arm design, making roll changing quick and easy without removing shafts
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch
- Power Requirements:
  - VE270FSD is provided with 110 volt, 15amp power
  - VE271FSD is provided with 220 volt, 6amp power
- Weight: 340lbs. | 154 kg

**Tool Ratings — Maximum Pipe Size Capacity**

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>Notes</th>
<th>Pipe Size (in</th>
<th>mm)/Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE270FSD/</td>
<td>Steel</td>
<td>2, 3</td>
<td>5 – 40</td>
<td>5 – 20</td>
</tr>
<tr>
<td>VE271FSD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lt. Wall SS</td>
<td>Stainless</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aluminum</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PVC Plastic</td>
<td>6, 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Copper</td>
<td>5, 13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. 6061-T4 or 6063-T4 Alloy must be used.
2. Use standard grooving rolls marked with the prefix R.
3. EndSeal™ grooving rolls marked with the prefix RZ are available. Contact Victaulic for details.
4. Use grooving rolls marked with the prefix RX.
5. Use grooving rolls marked with the prefix RR.
6. Use grooving rolls marked with the prefix RP.
7. Use sway brace for 8”/200 mm copper and 8”-12”/200 – 300 mm lightwall stainless steel.
8. A special lower roll exclusively for grooving 2” Sch. 80 PVC is available. Part No. RP02272L02
Field Fabrication Roll Grooving Tools
VE416FS

- VE416FS is designed for field grooving of OGS pipe and should not be used for continuous field production grooving; For field production grooving capabilities, use a VE450FSD tool, see pg. 102
- Equipped with a pipe stabilizer for 6 – 16" | 150 – 400 mm pipe sizes to control pipe sway
- Groove depth adjuster allows for easy adjustment for initial groove diameter
- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch
- Power Requirements: Victaulic® VPD752 or Ridgid® 300 Power Drive
- Weight: 240 lbs. | 109 kg

### Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>Pipe Size (in.)</th>
<th>OGS Schedule</th>
<th>AGS Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE416FS</td>
<td>Steel</td>
<td>2, 3</td>
<td>5 – 40</td>
<td>10 – STD STD Wall AGS</td>
</tr>
<tr>
<td></td>
<td>Stainless</td>
<td>2</td>
<td>40S</td>
<td>STD STD Wall RW AGS</td>
</tr>
<tr>
<td></td>
<td>Lt. Wall SS</td>
<td>4</td>
<td>55 – 10S</td>
<td>10S RWX</td>
</tr>
<tr>
<td></td>
<td>Aluminum</td>
<td>1, 6</td>
<td>5 – 40</td>
<td>5 – STD</td>
</tr>
<tr>
<td></td>
<td>PVC Plastic</td>
<td>6</td>
<td>40</td>
<td>40 – 80</td>
</tr>
<tr>
<td></td>
<td>Copper</td>
<td>5</td>
<td>K, L, M and DWV</td>
<td></td>
</tr>
</tbody>
</table>

1. 6061-T6 or 6063-T6 Alloy must be used.
2. Use standard grooving rolls marked with the prefix R.
3. EndSeal™ grooving rolls marked with the prefix RZ are available. Contact Victaulic for details.
4. Use grooving rolls marked with the prefix RX.
5. Use grooving rolls marked with the prefix RR.
6. Use grooving rolls marked with the prefix RP.

Download submittal 24.01 for complete information
### Field Fabrication Roll Grooving Tools

**VE416FSD/VE417FSD**

**Download submittal 24.01 for complete information**

- **VE416FSD/VE417FSD** is designed for field grooving of OGS pipe and should not be used for continuous field production grooving. For field production grooving capabilities, use a VE450FSD tool, see pg. 102.
- Groove depth adjuster allows for easy adjustment for initial groove diameter.
- Completely self-contained units with integral gear motors, safety foot switch and power cord/plug.
- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch.
- Power Requirements: VE416FSD is provided with 110 volt, 15 amp for integral gear motor; VE417FSD is provided with 220 volt, 8 amp service.
- Weight: 340 lbs. | 154 kg

#### Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>Notes</th>
<th>2</th>
<th>2½</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>5½</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE416FSD/VE417FSD</td>
<td>Steel</td>
<td>2, 3</td>
<td>5–40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stainless</td>
<td>2</td>
<td>40S</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lt. Wall SS</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aluminum</td>
<td>1, 6</td>
<td>5–40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PVC Plastic</td>
<td>6</td>
<td></td>
<td></td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Copper</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Pipe Size (in | OGS | AGS |
| mm) / Schedule |
|----------------|-----|-----|
| 200            | 50  |     |
| 250            | 60  |     |
| 300            | 80  |     |
| 400            | 100 |     |

1. 6061-T4 or 6063-T4 Alloy must be used.
2. Use standard grooving rolls marked with the prefix R.
3. EndSeal™ grooving rolls marked with the prefix RZ are available. Contact Victaulic for details.
4. Use grooving rolls marked with the prefix RX.
5. Use grooving rolls marked with the prefix RR.
6. Use grooving rolls marked with the prefix RP.
Field Fabrication Roll Grooving Tools
VE450FSD

Download submittal 24.01 for complete information

- The VE450FSD is designed for field production grooving and not continuous fabrication shop production grooving
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process, and quickly change upper roll design
- Lifting point to move the tool using a crane
- Frame can accept most forklifts
- Onboard storage for tool accessories
- Power Requirements: Self-contained unit with two 220 volt, single phase 50/60 hertz, 20 amp integral gear motors to handle heavier loads, safety foot switch and power cord/plug
- Weight: 825 lbs. | 374 kg

<table>
<thead>
<tr>
<th>Tool Ratings</th>
<th>Maximum Pipe Size Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipe Material</td>
<td>Notes</td>
</tr>
<tr>
<td>Steel</td>
<td>3, 7</td>
</tr>
<tr>
<td>Stainless</td>
<td>8</td>
</tr>
<tr>
<td>Lt. Wall S5</td>
<td>9</td>
</tr>
<tr>
<td>Aluminum</td>
<td>1.6</td>
</tr>
<tr>
<td>PVC Plastic</td>
<td>6</td>
</tr>
</tbody>
</table>

1. 6061-T4 or 6063-T4 Alloy must be used.
2. EndSeal™ grooving rolls marked with the prefix RZ are available. Contact Victaulic for details.
3. Use grooving rolls marked with the prefix RP.
4. Use standard grooving rolls marked with the prefix R for OGS and RW for AGS.
5. Use standard grooving rolls marked with the prefix RX for OGS and RWX for AGS. (Special RWX Rolls are available for grooving true Sch. 10 (0.250 | 6.4 mm).
Plant/Shop Fabrication
Roll Grooving Tools
VE268

Download submittal 24.01 for complete information

- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch
- Equipped with a unique pivot arm design, making roll changes quick and easy, without removing shafts
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Power Requirements: 220/440 volt, 3-phase, 60 hertz standard; the tool can also be supplied in various voltages, contact Victaulic for details
- 3-phase requires tool power to be hard wired by a local certified electrician
- Weight: 735 lbs. | 333 kg

---

### Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>Notes</th>
<th>¼</th>
<th>1/8</th>
<th>1/4</th>
<th>1/2</th>
<th>1</th>
<th>3/4</th>
<th>1</th>
<th>11/2</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE268</td>
<td>Steel</td>
<td></td>
<td>2</td>
<td>25</td>
<td></td>
<td></td>
<td>32</td>
<td></td>
<td>40</td>
<td></td>
<td>50</td>
<td></td>
<td>60</td>
<td></td>
<td>80</td>
<td></td>
<td>100</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>Stainless</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td></td>
<td>60</td>
<td></td>
<td>80</td>
<td></td>
<td>100</td>
<td></td>
<td>125</td>
<td></td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Lt. Wall</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>50</td>
<td></td>
<td>60</td>
<td></td>
<td>80</td>
<td></td>
<td>100</td>
<td></td>
<td>125</td>
<td></td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Aluminum</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td></td>
<td>40</td>
<td></td>
<td>60</td>
<td></td>
<td>80</td>
<td></td>
<td>100</td>
<td></td>
<td>125</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>PVC Plastic</td>
<td></td>
<td>6,14</td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td></td>
<td>60</td>
<td></td>
<td>80</td>
<td></td>
<td>100</td>
<td></td>
<td>125</td>
<td></td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Copper</td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td></td>
<td>40</td>
<td></td>
<td>60</td>
<td></td>
<td>80</td>
<td></td>
<td>100</td>
<td></td>
<td>125</td>
<td>150</td>
</tr>
</tbody>
</table>

1. 6061-T4 or 6063-T4 Alloy must be used.
2. Use standard grooving rolls marked with the prefix R.
3. EndSeal™ grooving rolls marked with the prefix RZ are available. Contact Victaulic for details.
4. Use grooving rolls marked with the prefix RX.
5. Use grooving rolls marked with the prefix RR.
6. Use grooving rolls marked with the prefix RP.
14. A special lower roll exclusively for grooving 2” Sch. 80 PVC is available. Part No. RP02272L02
Plant/Shop Fabrication
Roll Grooving Tools
VE414MC

Download submittal 24.01 for complete information

- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch
- Roll changes are quick and easy, without removing shafts
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Power Requirements: 220/440 volt, 3-phase, 60 hertz standard; the tool can also be supplied in various voltages, contact Victaulic for details
- 3-phase requires tool power to be hard wired by a local certified electrician
- Weight: 735 lbs. | 333 kg

<table>
<thead>
<tr>
<th>Tool Ratings — Maximum Pipe Size Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pipe Size (in/\text{mm})/Schedule</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>OGS</strong></td>
</tr>
<tr>
<td>2  50</td>
</tr>
<tr>
<td>2\text{%}  60</td>
</tr>
<tr>
<td>3  80</td>
</tr>
<tr>
<td>4  100</td>
</tr>
<tr>
<td>5  125</td>
</tr>
<tr>
<td>6  150</td>
</tr>
<tr>
<td>8  200</td>
</tr>
<tr>
<td>10 250</td>
</tr>
<tr>
<td>12 300</td>
</tr>
<tr>
<td>14 350</td>
</tr>
<tr>
<td>16 400</td>
</tr>
<tr>
<td><strong>AGS</strong></td>
</tr>
<tr>
<td>5 – 40</td>
</tr>
<tr>
<td>10 – STD</td>
</tr>
<tr>
<td>STD Wall AGS</td>
</tr>
<tr>
<td><strong>Stainless</strong></td>
</tr>
<tr>
<td>8  405</td>
</tr>
<tr>
<td>STD Wall RW AGS</td>
</tr>
<tr>
<td><strong>Lt. Wall SS</strong></td>
</tr>
<tr>
<td>9  55 – 105</td>
</tr>
<tr>
<td>105 RWX</td>
</tr>
<tr>
<td><strong>Aluminum</strong></td>
</tr>
<tr>
<td>1, 6 5 – 40</td>
</tr>
<tr>
<td>5 – STD</td>
</tr>
<tr>
<td><strong>PVC Plastic</strong></td>
</tr>
<tr>
<td>6  40</td>
</tr>
<tr>
<td>40 – 80</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td><strong>Copper</strong></td>
</tr>
<tr>
<td>5  K, L, M and DWV</td>
</tr>
</tbody>
</table>

1. 6061-T4 or 6063-T4 Alloy must be used.
3. EndSeal™ grooving rolls marked with the prefix RZ are available. Contact Victaulic for details.
5. Use grooving rolls marked with the prefix RR.
6. Use grooving rolls marked with the prefix RP.
7. Use standard grooving rolls marked with the prefix R for both OGS and AGS.
8. Use standard grooving rolls marked with the prefix R for OGS and RW for AGS.
9. Use grooving rolls marked with the prefix RX for OGS and RWX for AGS. (Special RWX Rolls are available for grooving true Sch. 10 (0.250 | 6.4 mm).
Plant/Shop Fabrication
Roll Grooving Tools
VE460

Download submittal 24.01 for complete information

- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Support bases are required to groove pipe sizes 26" | 650 mm and larger. Each support base is 12" | 305 mm in height and corresponds with a range of allowable pipe sizes it can groove
- Power Requirements: 220/440 volt, 3-phase, 60 hertz standard; the tool can also be supplied in various voltages, contact Victaulic for details
- 3-phase requires tool power to be hard wired by a local certified electrician
- Weight: 1500 lbs. | 680 kg

Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE460</td>
<td>Steel</td>
<td>3, 8</td>
</tr>
<tr>
<td></td>
<td>Stainless</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Lt. Wall S5</td>
<td>9</td>
</tr>
</tbody>
</table>

Pipe Size (in | mm)/Schedule

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>AGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>XS</td>
</tr>
<tr>
<td>.375</td>
<td>.500</td>
</tr>
</tbody>
</table>

Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE460</td>
<td>Steel</td>
<td>3, 8</td>
</tr>
<tr>
<td></td>
<td>Stainless</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Lt. Wall S5</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Aluminum</td>
<td>1, 6</td>
</tr>
<tr>
<td></td>
<td>PVC Plastic</td>
<td>6</td>
</tr>
</tbody>
</table>

Pipe Size (in | mm)/Schedule

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>OGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>125</td>
</tr>
<tr>
<td>6</td>
<td>150</td>
</tr>
<tr>
<td>8</td>
<td>200</td>
</tr>
<tr>
<td>10</td>
<td>250</td>
</tr>
<tr>
<td>12</td>
<td>300</td>
</tr>
<tr>
<td>14</td>
<td>350</td>
</tr>
<tr>
<td>16</td>
<td>400</td>
</tr>
<tr>
<td>18</td>
<td>450</td>
</tr>
<tr>
<td>20</td>
<td>500</td>
</tr>
<tr>
<td>22</td>
<td>550</td>
</tr>
<tr>
<td>24</td>
<td>600</td>
</tr>
</tbody>
</table>

1. 6061-T4 or 6063-T4 Alloy must be used.
3. EndSeal™ grooving rolls marked with the prefix RZ are available. Contact Victaulic for details.
6. Use grooving rolls marked with the prefix RP.
8. Use standard grooving rolls marked with the prefix R for OGS and RW for AGS.
9. Use grooving rolls marked with the prefix RX for OGS and RWX for AGS. (Special RWX Rolls are available for grooving true Sch. 10 (0.250 | 6.4 mm).

Note: Maximum ratings are limited to pipe that does not exceed the yield strength of API-5L Grade “B”, ASTM Grade “B”, 150 Brinell Hardness Number (BHN) maximum.
Plant/Shop Fabrication
Roll Grooving Tools
VE872

Download submittal 24.01 for complete information

- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch
- Support bases are required to groove 30" | 762 mm and larger pipe sizes; each support base is 16" | 406 mm in height and corresponds with a range of allowable pipe sizes it can groove
- Power Requirements: 220/440 volt, 3-phase, 60 hertz standard; the tool can also be supplied in various voltages, contact Victaulic for details
- 3-phase requires tool power to be hard wired by a local certified electrician
- Weight: 1900 lbs. | 862 kg

Tool Ratings — Maximum Pipe Size Capacity

| Model | Pipe Material | Note | Pipe Size (in | mm) | Schedule |
|-------|---------------|------|----------------|--------|
| VE872 | Carbon Steel  | 11   | 8               | 200    | Sch. 40 |
|       |               |      | 10              | 250    | .500    |
|       |               |      | 12              | 300    | .500/12.7 mm |
|       | Carbon Steel  |      |                 |        | .562/.625 wall Grade B Only |

11. Physical properties shall be in accordance with API specification 5L, Grades B, X42, X46, X52, X56 or X60, download publication 25.09. For physical properties not listed contact Victaulic for details.

† Sizes 8 – 12" require OGS roll sets; for 14 – 72" sizes AGS roll sets are needed.

Note: Maximum ratings are limited to pipe that does not exceed the yield strength of API-5L Grade “B”, ASTM Grade “B”, 150 Brinell Hardness Number (BHN) maximum.
Field Manual Cut Grooving Tools

VG28GD (GEAR DRIVE)
VG28GD-ABR (ABRASION)
VDG26GD (DOUBLE GROOVE)

Download submittal 24.01 for complete information

- VG28GD will produce a single OGS cut groove for unlined piping systems
- VG28GD-ABR will produce a single OGS cut groove that allows for lining of the pipe for abrasive services
- VDG26GD will produce a double OGS cut groove for high pressure systems in conjunction with installing the 6" | 150 mm Style 808 couplings
- The VG28GD, VG28GD-ABR and VDG26GD are designed to be driven by the Power Mule II
- Drive Requirements: External drive, min. 1½ hp | 1.12 kw
- Drive Speed: 38 rpm max.
- Weight: 37 lbs. | 17 kg

### Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Pipe Size (in/mm) / Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 50</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>15, 16 Steel</td>
</tr>
<tr>
<td>15 Stainless</td>
</tr>
<tr>
<td>15 Aluminum</td>
</tr>
<tr>
<td>15 Ductile Iron</td>
</tr>
</tbody>
</table>

15. Special knives and stops may be required.
16. Maximum steel pipe wall thickness up to 0.437"/11.1 mm.

### Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Pipe Size (in/mm) / Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 50</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>15 VG28GD-ABR Steel</td>
</tr>
<tr>
<td>15 Stainless</td>
</tr>
<tr>
<td>15 Aluminum</td>
</tr>
</tbody>
</table>

15. Special knives and stops may be required.
Field Manual Cut Grooving Tools

VG824 (OGS)
VG824-ABR (ABRASION OGS)
VG824DG (DOUBLE GROOVE)

Download submittal 24.01 for complete information

- VG824 will produce a single OGS cut groove for unlined piping systems
- VG824-ABR will produce a single OGS cut groove that allows for lining of the pipe for abrasive services
- VG824DG will produce a double OGS cut groove for high pressure piping systems in conjunction with installing Style 808 couplings
- The VG824, VG824DG and VG824-ABR are designed to be driven by the Power Mule II
- Drive Requirements: External drive, min. 1½ hp | 1.12 kw
- Drive Speed: 38 rpm max.
- Weight: 82 lbs. | 37.2 kg

### Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Note</th>
<th>Pipe Material</th>
<th>Pipe Size (in/mm)/Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>VG824</td>
<td></td>
<td>Steel</td>
<td>8 200 10 250 12 300 14 350 16 400 18 450 20 500 22 550 24 600</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Stainless</td>
<td>40 – 80 30 – STD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aluminum</td>
<td>30 – STD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ductile Iron</td>
<td>Class 53 Min.</td>
</tr>
</tbody>
</table>

15. Special knives and stops may be required.

### Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Note</th>
<th>Pipe Material</th>
<th>Pipe Size (in/mm)/Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>VG824-ABR</td>
<td>15</td>
<td>Steel</td>
<td>8 200 10 250 12 300 14 350 16 400 18 450 20 500 22 550 24 600</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40 – XS</td>
</tr>
</tbody>
</table>

15. Special knives and stops may be required.

### Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Note</th>
<th>Pipe Material</th>
<th>Pipe Size (in/mm)/Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>VG824DG</td>
<td>15</td>
<td>Steel</td>
<td>8 200 10 250 12 300 14 350 16 400 18 450 20 500 22 550 24 600</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40 – 80</td>
</tr>
</tbody>
</table>

15. Special knives and stops may be required.
Field Manual Cut Grooving Tools
VG828 (AGS)

Download submittal 24.01 for complete information

- VG828 will produce a single AGS cut groove
- The VG828 is designed to be driven by the Power Mule II
- Drive Requirements: External drive, min. 1½ hp | 1.12 kw
- Drive Speed: 38 rpm max.
- Weight: 82 lbs. | 37.2 kg

<p>| Tool Ratings — Maximum Pipe Size Capacity | Pipe Size (in/|mm)/Schedule |
|------------------------------------------|------------------|</p>
<table>
<thead>
<tr>
<th>Model</th>
<th>Note</th>
<th>Pipe Material</th>
<th>14</th>
<th>16</th>
<th>18</th>
<th>20</th>
<th>22</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>VG828</td>
<td>15</td>
<td>Steel</td>
<td>350</td>
<td>400</td>
<td>450</td>
<td>500</td>
<td>550</td>
<td>600</td>
</tr>
</tbody>
</table>

15. Special knives and stops may be required.
Field Motorized Cut Grooving Tools
VG412 ORBITAL MACHINING TOOL

Download submittal 24.01 for complete information

- Specifically designed for field closure pieces (not suitable for production grooving)
- External mounting and drive action is particularly suited to cement lined ductile iron pipe grooving
- Hinged frame design allows cutting at any point along the pipeline
- Drive Requirements: 120 volt, 11.5 amp
- Weight: 151 lbs. | 69 kg

Pipe Preparation Tools

Field Cut Grooving Tools
VG VIC-GROOVER

Download submittal 24.01 for complete information

- Designed for manual or power cut grooving
- Supplied with a ratchet handle for manual operation
- Drive Requirements: Manual or external drive, min. ½ hp | 0.37 kw
- External power drives must meet all safety conditions
- Drive Speed: 40 rpm max.
- Weight: 28 lbs. | 13 kg

Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>¾”</th>
<th>1”</th>
<th>1¼”</th>
<th>1½”</th>
<th>2”</th>
<th>2½”</th>
<th>3”</th>
<th>3½”</th>
<th>4”</th>
<th>5”</th>
<th>6”</th>
<th>8”</th>
</tr>
</thead>
<tbody>
<tr>
<td>VG</td>
<td>Steel</td>
<td>40</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stainless</td>
<td>40</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aluminum¹</td>
<td>40</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PVC Plastic</td>
<td>40</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ductile Iron</td>
<td>40</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CL 53 Class 53 Min.</td>
<td></td>
</tr>
</tbody>
</table>

Note: ¹ Aluminum cut groove for Vic-Groover

---

Pipe Preparation Tools

Field Motorized Cut Grooving Tools
VG412 ORBITAL MACHINING TOOL

Download submittal 24.01 for complete information

- Specifically designed for field closure pieces (not suitable for production grooving)
- External mounting and drive action is particularly suited to cement lined ductile iron pipe grooving
- Hinged frame design allows cutting at any point along the pipeline
- Drive Requirements: 120 volt, 11.5 amp
- Weight: 151 lbs. | 69 kg

Tool Ratings — Maximum Pipe Size Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Pipe Material</th>
<th>4”</th>
<th>4½”</th>
<th>5”</th>
<th>6”</th>
<th>8”</th>
<th>10”</th>
<th>12”</th>
</tr>
</thead>
<tbody>
<tr>
<td>VG412</td>
<td>Steel</td>
<td>100</td>
<td>120</td>
<td>125</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>Ductile Iron</td>
<td>40</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Class 53 Min.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cut Grooving Tools for Plastic Pipe
VPG26

Download submittal 24.01 for complete information

- Features a high speed, router-type tool bit which cuts a radial groove, to full depth, in one manual rotation of the tool around the pipe
- Rotation Drive: Manual (clockwise)
- Power Requirements: 110 volt, single phase, 60 hertz, 7 amp
- Weight: 41 lbs. | 19 kg

<table>
<thead>
<tr>
<th>Tool Ratings — Maximum Pipe Size Capacity</th>
<th>Pipe Size (in/mm)/Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Pipe Material</td>
</tr>
<tr>
<td>VPG26</td>
<td>PVC Plastic</td>
</tr>
</tbody>
</table>

Cut Grooving Tools for Plastic Pipe
VPG824

Download submittal 24.01 for complete information

- Features a high speed, router-type tool bit which cuts a radial groove, to full depth, in one manual rotation of the tool around the pipe
- Rotation Drive: Manual (Clockwise)
- Power Requirements: 110 volt, single phase, 60 hertz, 7 amp
- Weight: 47 lbs. | 21 kg

<table>
<thead>
<tr>
<th>Tool Ratings — Maximum Pipe Size Capacity</th>
<th>Pipe Size (in/mm)/Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Pipe Material</td>
</tr>
<tr>
<td>VPG824</td>
<td>PVC Plastic</td>
</tr>
</tbody>
</table>

Pipe Preparation Tools

- Hole Cut
- Expansion Joints
- Grooved PVC
- Stainless Steel
- Copper
- FRP
- Gaskets, Seals, and O-Rings
- Design Data
- Index
Aquamine™ Grooving Tools
APG

**Download submittal 24.01 for complete information**

- Manually operated tool used for producing a cut spline groove and beveled end on Aquamine PVC pipe
- Prepares 4 – 12" | 100 – 300 mm Aquamine pipe to receive an Aquamine coupling
- Orbital tool which is rotated around a stationary, secured pipe
- May be operated on pipe held in a pipe vise or on supported in-place piping that is depressurized and drained
- Weight: 13 lbs. | 5.9 kg

Hole Cutting Tools
HCT908

**Download submittal 24.01 for complete information**

- One-piece hole cutting tool designed to cut holes up to 4½" | 120 mm in carbon and stainless steel pipe; for pipe sizes up to 8" | 200 mm
- Allows use of Mechanical-T, Vic-Let, and Vic-O-Well outlets
- Power Requirements: 110 volt, single phase, 60 hertz, 7 amp
- Weight: 23 lbs. | 10 kg
Hole Cutting Tools

VHCT900

Download submittal 24.01 for complete information

- Three-piece hole cutting tool designed to cut holes up to 3½”|90 mm in diameter for Mechanical-T, Vic-Let, and Vic-O-Well outlets
- Base unit clamps quickly onto the pipe in vertical, horizontal or overhead positions
- Available extended chain for 10–24”|250–600 mm pipe
- Power Requirements: Grounded 120 volt, single phase, 60 hertz, 10 amp electrical supply (220 volt, single phase, 60 hertz, 5 amp available on request)
- Weight: 36 lbs.|16 kg

Hole Cutting Tools

VIC-TAP II

Download submittal 24.01 for complete information

- Hole cutting tool including Style 931 Vic-Tap II Mechanical-T unit for tapping into steel pipe systems under pressure up to 500 psi | 3447 kPa | 34 bar
- Hole size 2⅜”|60.5 mm
- Power Requirements: 115 volt, single phase, 60 hertz, 7.5 amp
- Weight:
  Drill guide base: 15 lbs.|6.8 kg;
  Drill motor and feed assembly: 16 lbs.|7.3 kg;
  Style 931 valve unit, 12–15 lbs.|5.4–6.8 kg, depending upon size (4, 5, 6 and 8”|100, 125, 150, 200 mm available)
- Standard Capability: 4–8”|100–200 mm Run outlet only × 2½”|65 mm (IPS) Outlet
Pipe Cut-Off Tools
VCT1 MANUAL

*Download submittal 24.01 for complete information*

- Lightweight and portable pipe cut-off tool handles 4 – 24” | 100 – 600 mm pipe, up to 0.5” | 12.7 mm thick
- Worm gear drive crank handle provides smooth, manual travel, easy control and accurate cutting
- Wall thickness: 0.065 – 0.500” | 1.65 – 12.7 mm (with tips supplied)
- Tips: Acetylene – 1 ea. #00, #0, #1
- Power Requirements: NA
- Weight: 22 lbs. | 10 kg

Pipe Cut-Off Tools
VCT2 AUTOMATIC

*Download submittal 24.01 for complete information*

- Rotation is powered by a small 120 VAC motor with SCR remote control
- Unique distributor design has stainless steel insert which extends tip life, eases cleaning and reduces backfire
- Wall thickness: 0.065 – 0.500” | 1.65 – 12.7 mm (with tips supplied)
- Tips: Acetylene – 1 ea. #00, #0, #1
- Motor rating: 15 W, 10,000 rpm
- Power requirements: 120 volt, single phase, 60 hertz, 15 amp
- Weight: 33 lbs. | 15 kg
Pipe Preparation Tools

**Vic-Press™ Tools**

**PFT510**

*Download submittal 24.01 for complete information*

- Designed for securing Vic-Press Schedule 10S products onto Schedule 10S stainless steel pipe
- Tool package includes:
  1. PFT510 tool,
  2. 18V Lithium Ion batteries,
  3. battery charger,
  4. tool carrying case,
  5. jaw carrying case,
  6. each of jaws sized ½" | 15 mm, ¾" | 20 mm, 1" | 25 mm, 1½" | 40 mm, and 2" | 50 mm, and
  7. adapter jaw
- Not compatible with PFT505 and/or PFT509 tools/components
- Power Requirements: Battery pack 110 volt,
  60 cycle, 6.5 amp (optional 220 volt)
- Weight: 21 lbs. | 9.5 kg
  (PFT510 with 1" | 25mm jaw)

**Tool Accessories**

**VPD752 POWER DRIVE**

*Download submittal 24.01 for complete information*

- Can be used as the power drive unit for the VE226, VE26, VE206, VE46, VE416FS and VE272SFS roll grooving tools provided each tool is equipped with the correct base plate and the VG, VG28GD, and VG824 tools, with universal drive shaft
- Operated with a safety foot switch
- Power Requirements: 115volts, 15 amp, 50/60 hertz
  (220 volt, 6 amp, 50/60 cycle option)
- Weight: 140lbs. | 634 kg
Pipe Preparation Tools

Tool Accessories

POWER MULE II

Download submittal 24.01 for complete information

- Ideal for driving individual Victaulic® cut grooving tools
- Heavy-duty, two wheeled unit drives Victaulic cut grooving tools at the speed/power necessary for accurate grooving
- Rotating head for horizontal and vertical applications
- Power Mule II equipped with forward-off-reverse control and integral safety foot switch
- Full load speed: 35 rpm
- Power Requirements: 115 volts, 15 amp, 50/60 cycle (220 volts optional)
- Weight: 190 lbs. | 86 kg

Tool Accessories

VAPS112 ADJUSTABLE PIPE STAND

Download submittal 24.01 for complete information

- Designed for supporting pipe to be roll grooved
- Turnstile design allows pipe to be spun around for grooving of both pipe ends without dismounting pipe from stand
- Forward/traverse movement
- Capacity: ¾ – 12” | 20 – 300 mm IPS pipe
- Load rating: 1,075 lbs. | 490 kg
- Vertical stroke: 14½” | 368 mm for adjusting rod, 8½” | 216 mm leg adjustment 23” | 584 mm
- Minimum pipe height from floor: 23” | 584 mm on 12” | 300 mm pipe and 21” | 533 mm on 1” | 25 mm pipe
- Weight: 190 lbs. | 86 kg
Tool Accessories
VAPS224 ADJUSTABLE PIPE STAND

Download submittal 24.01 for complete information

- Designed specifically for supporting pipe to be roll grooved
- Self-standing, heavy-duty unit permits free pipe rotation and traversing on ball transfers
- Capacity: 2 – 24” | 50 – 600 mm IPS pipe
- Load rating: 1,800 lbs. | 816 kg
- Vertical stroke: 23” | 584 mm
- Minimum pipe height from floor 13” | 325 mm on 24” | 600 mm IPS pipe
- Maximum pipe height from floor 38” | 965 mm on 2” | 50 mm IPS pipe
- Weight: 260 lbs. | 118 kg

Tool Accessories
VAPS1672 ADJUSTABLE PIPE STAND

Download submittal 24.01 for complete information

- Designed specifically for supporting pipe to be roll grooved
- Self-standing, heavy duty unit permits free pipe rotation and traversing on ball transfers
- Designed for use with VE436MC and VE460 tools
- Capacity: 16 – 72” | 400 – 1800 mm IPS pipe
- Load rating: 10,000 lbs. | 4535 kg
- Vertical Stroke 17” | 425 mm
- Minimum pipe height from floor 16” | 406 mm on 72” | 1800 mm pipe
- Maximum pipe height from floor 28” | 711 mm on 16” | 400 mm pipe
- Weight: 480 lbs. | 218 kg
Tool Accessories
PT100A AND PT102

Download submittal 24.01 for complete information

- Go/No-Go pocket-sized steel tapes for taking circumferential measurements of pipe
- Go/No-Go side can be used to check cut or roll grooved pipe for conformance to Victaulic® grooved pipe specifications
- Tapes notched on the lead end to allow proper overlap within the groove for more accurate measurement
- PT100A contains Go/No-Go markings for use with ¾ – 24" | 20 – 600 mm pipe; tape marked with 0.01" | 0.25 mm increments on the opposite side
- PT102 contains Go/No-Go markings for use with Original Groove System sizes 8 – 12" | 200 – 300 mm and Advanced Groove System sizes 14 – 72" | 350 – 1800 mm; tape marked in 0.02" | 0.5 mm increments on the opposite side
- Go/No-Go side of tapes may not be used to measure cast iron, ductile iron, or copper tube sizes

Tool Accessories
GROOVE DIAMETER CABLE

- Go/No-Go pocket-sized cable for taking circumferential measurements of copper tubing
- GDC-CTS cable should only be used to check roll-grooved tubing to CTS Standard Types K, L, M hard-drawn copper tubing per ASTM B-88 and DMV per ASTM B-306 specifications (2 – 8" | 54.0 – 206.4 mm tubing sizes)
- GDC-EC cable should only be used to check roll-grooved tubing to European Standard EN 1057 R250 (Half-Hard) specifications (54 – 159 mm tubing sizes).
- GDC-AC cable should only be used to check roll-grooved tubing to Australian Standard AS 1432 Types A, B and D copper tubing specifications (DN50 – DN2000 tubing sizes)
Pipe Preparation Tools

Tool Accessories

TOOL CARRY BAG

Download submittal 24.01 for complete information

• Heavy duty tool carry bag for transporting roll grooving tools, grooving rolls, and other tool accessories
• Carry bag can accommodate up to 50 lbs. | 23 kg
• Weight: 4 lbs. | 2 kg
Pipe Preparation Tools

Manual Victaulic® Bolted Split-Sleeve Products (VBSP) Closure Tools
CTM-01 SMALL MANUAL TOOL
CTM-02 LARGE MANUAL TOOL

Download submittal 24.01 for complete information
• For specific information on the appropriate tool by coupling, please download individual coupling product submittals

Hydraulic VBSP Closure Tools
CTH-01 SMALL 10-TON HYDRAULIC TOOL
CTH-02 LARGE 25-TON HYDRAULIC TOOL

Download submittal 24.01 for complete information
• For specific information on the appropriate tool by coupling, please download individual coupling product submittals
Fabrication Cell

VAP131

Download submittal 24.01 for complete information

- Turn-key, fab-shop solution
- Maximize productivity gains associated with Victaulic® grooved systems
- Includes hydraulic adjustable pipe stand and tracks, tool support, two adjustable positioner tables, an assembly table, as well as caster wheels and ball transfers

Fabrication Cell

VAPS 131R HYDRAULIC ADJUSTABLE PIPE STAND

Download submittal 24.01 for complete information

- Designed to support pipe for roll grooving
- Permits free pipe rotation and traversing on ball transfers
- Turnstile design allows pipe to be spun around for grooving of both pipe ends without dismounting from pipe stand
- Capacity: 4–24" | 100–600 mm IPS pipe; load rating: 2000 lbs. | 907 kg
- Vertical stroke: 30.5" | 775 mm
- Minimum pipe height from floor: Compatible with Victaulic production roll grooving tools
- Power Requirements: 230 volt, 6 amp, 50 hertz (120 volt, 12 amp, 60 hertz option available)
- Weight: 500 lbs. | 227 kg
Fabrication Cell
VAPS 131F HYDRAULIC POSITIONER

Download submittal 24.01 for complete information

- Designed to support grooved pipe, valves, and fittings when used in conjunction with the VAPS 131T Assembly Table
- Foot control provided for hands-free operation
- Swivel caster wheel design for better mobility
- Capacity: 4–24" | 100–600 mm IPS pipe; load rating: 1200 lbs. | 544 kg with wheels installed, 2000 lbs. | 907 kg without wheels
- Vertical stroke: 29.25" | 743 mm
- Power Requirements: 230 volt, 6 amp, 50 hertz (120 volt, 12 amp, 60 hertz option available)
- Weight: 400 lbs. | 181 kg

Fabrication Cell
VAPS 131T ASSEMBLY TABLE

Download submittal 24.01 for complete information

- Designed to support grooved pipe, valves, and fittings when used in conjunction with VAPS 131F Hydraulic Positioner
- Ball transfer assemblies can be positioned to accommodate pipe from 2–24" | 50–600 mm
- Capacity: 4–24" | 100–600 mm IPS pipe; load rating: 8000 lbs. | 3629 kg, ball transfers load rating 700 lbs. | 318 kg
- Vertical stroke: 29.25" | 743 mm
- Weight: 500 lbs. | 227 kg
Victaulic offers a broad variety of synthetic rubber gaskets suitable for a wide range of applications. Victaulic gaskets provide high- and low-temperature limits, tensile strength, chemical resistance and shelf life.
Gasket Materials

Victaulic offers a wide variety of synthetic rubber gaskets for a broad range of applications. For most water applications, the Victaulic® Grade “E” EPDM (ethylene propylene diene monomer) gasket compound is compatible. Victaulic Grade “E” material has premium performance properties with respect to aging and resistance to heat and hot water. Heat aging tests at +250°F | +121°C conducted on this material show essentially no change in physical properties. This situation is further enhanced when this rubber is subjected to an essentially non-oxidative environment, such as a gasket in a water piping system. For example, aging tests in a non-oxidative atmosphere show essentially no change in physical properties of this material even when tested at temperatures up to +350°F | +177°C.

Since water has no deteriorating effect on the elastomer, temperature is the only limiting factor to be considered in determining the life expectancy of the elastomer in water service. The superior performance of the Grade “E” elastomer permits its use for hot water service up to +230°F | +110°C. The Grade “E” gasket is superior to previous gasket materials by all performance barometers, including high and low temperature limits, tensile strength, chemical resistance and shelf life.

Gasket/Seal/O-Ring Data

Victaulic offers a variety of synthetic rubber gaskets/seals/o-rings for the widest range of applications. To assure the maximum life for the service intended, proper gasket selection and specification in ordering is essential. The foremost consideration is temperature, along with concentration of product, duration of service and continuity of service. Temperatures beyond the compatibility limits have a degrading effect on the polymer.

Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets/seals/o-rings are not compatible. Reference should always be made to the latest Gasket Chemical Services Guide (download publication GSG-100) for specific service guidelines and for a listing of services which are not compatible.

Gasket guidelines apply only to Victaulic gaskets, seals and o-rings. Guidelines for a particular service do not necessarily imply compatibility of the coupling housing, related fittings or other components for the same service.

These guidelines do not apply to rubber-lined or rubber seal valves or other rubber-lined products. Victaulic gaskets are clearly marked as part of the mold with the gasket size, style and compound for easy identification.

Potable Water Listings and Classifications

Grade “E” EPDM, Grade “E” Vic-Plus, Grade “E2”, Grade “EHP” and Grade “EHP" Vic-Plus gaskets are UL Classified in accordance with ANSI/NSF 61 for cold (+86°F | +30°C) and hot (+180°F | +82°C) potable water service and ANSI/NSF 372. Download publication 02.06 for more details.

Victaulic Grade “M” halogenated butyl gasket material (which is typically used with our AWWA sized products) is UL Classified in accordance with ANSI/NSF 61 for cold (+86°F | +30°C) potable water service and ANSI/NSF 372. Download publication 02.06 for more details.

In addition to the above, the standard black asphalt coating used on our cement lined AWWA size fittings is NSF 61 Listed. As the coating is the only material that comes in contact with the water, NSF 61 compliant coatings are commercially available and may be applied to our products. For more details about Victaulic gasket construction and testing, download submittal 05.01.

Gasket Lubricant

Thorough lubrication of the gasket exterior, including the lips and/or pipe ends and housing interiors, is essential for proper installation. Use Victaulic Lubricant for installation. Other compatible material, such as silicone and others may be used on Grades “E” or “L” gaskets. Victaulic Lubricant is available in a box of (12) 4 fluid ounce | 114 milliliter tubes or in 1 quart | 946 milliliters containers.

ALWAYS USE LUBRICANT FOR PROPER COUPLING ASSEMBLY.

Valve Seals

Victaulic Gasket Selection Guide (05.01) does not include Victaulic seals for valves. Refer to the individual Victaulic valve submittal for information on the seals available for each valve.
WARNING

• To assure maximum life for the service intended, proper gasket selection and specification in ordering is essential. For specific chemical and temperature compatibility, refer to the Gasket Selection and Chemical Services sections. The information shown defines general ranges for all compatible fluids.

Failure to select the proper rubber compound may result in personal injury or property damage, improper installation, joint leakage or joint failure.

Standard Gaskets — IPS

<table>
<thead>
<tr>
<th>Grade</th>
<th>Temp. Range</th>
<th>Compound</th>
<th>Color Code</th>
<th>General Service Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>-30°F to +230°F</td>
<td>EPDM</td>
<td>Green Stripe</td>
<td>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</td>
</tr>
<tr>
<td>EHP 2</td>
<td>-30°F to +250°F</td>
<td>EPDM</td>
<td>Red and Green Stripes</td>
<td>May be specified for hot water service within the specified temperature range. UL Classified in accordance with ANSI/NSF 61 for cold +73°F</td>
</tr>
<tr>
<td>T</td>
<td>-20°F to +180°F</td>
<td>Nitrile</td>
<td>Orange Stripe</td>
<td>May be specified for petroleum products, hydrocarbons, air with oil vapors, vegetable and mineral oils within the specified temperature range. <strong>NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.</strong></td>
</tr>
<tr>
<td>E (Type A) 3</td>
<td>Ambient</td>
<td>EPDM</td>
<td>Violet Stripe</td>
<td>Applicable for wet and dry (oil-free air) sprinkler services only. For dry services Flush-Seal™ gaskets may be specified. <strong>NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.</strong></td>
</tr>
<tr>
<td>E2</td>
<td>Ambient</td>
<td>EPDM</td>
<td>Double Green Stripe</td>
<td>UL Classified in accordance with ANSI/NSF 61 for cold +73°F</td>
</tr>
</tbody>
</table>

1. For specific chemical and temperature compatibility, refer to the Gasket Selection Guide (05.01) which includes the Gasket Chemical Services Short Report or refer to the Gasket Chemical Services Guide Long Report (GSG-100) located on victaulic.com. The information shown defines general ranges for all compatible fluids.

2. The Grade EHP gasket is only available on Style 107, 607 and 177 couplings.

3. Vic-Plus pre-lubricated gasket.
### Special Gaskets — IPS

<table>
<thead>
<tr>
<th>Grade</th>
<th>Temp. Range 1</th>
<th>Compound</th>
<th>Color Code</th>
<th>General Service Guidelines</th>
</tr>
</thead>
</table>
| **M2** | –40°F to +160°F  
–40°C to +71°C | Epichlorohydrin | White Stripe | Specially compounded to provide superior service for common aromatic fuels at low temperatures. Also suitable for certain ambient temperature water services. |
| **V** | –30°F to +180°F  
–34°C to +82°C | Neoprene | Yellow Stripe | May be specified for hot lubricating oils and certain chemicals. Good oxidation resistance. Will not support combustion. |
| **O** | +20°F to +300°F  
–7°C to +149°C | Fluoroelastomer | Blue Stripe | May be specified for many oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids and air with hydrocarbons. **NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.** |
| **L** | –30°F to +350°F  
–34°C to +177°C | Silicone | Red Gasket | May be specified for dry heat, air without hydrocarbons to +350°F  
+177°C and certain chemical services. |
| **A** | +20°F to +180°F  
–7°C to +82°C | White Nitrile | White Gasket | No carbon black content. May be used for food. Meets FDA requirements. Conforms to CFR Title 21 Part 177.2600. **Not compatible for use with hot, dry air over +140°F  
+60°C and water over +150°F  
+66°C.** **NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.** |
| **T** (Type A) 2, 3 | +20°F to +180°F  
–29°C to +82°C | Nitrile | Gray Gasket | May be specified for petroleum products, air with oil vapors, oil-free gas, vegetable and mineral oils within the specified temperature range. **Not compatible for use with hot, dry air over +140°F  
+60°C and water over +150°F  
+66°C.** **NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.** |
| **HMT** (T EndSeal™) | –20°F to +150°F  
–29°C to +66°C | Nitrile | Orange and Silver Stripes | Specially compounded with excellent oil resistance and a high modulus for resistance to extrusion. May be specified for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. For maximum gasket life under pressure extremes, the temperature should be limited to +120°F  
+49°C. **NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OVER +150°F  
+66°C OR FOR HOT, DRY AIR OVER +140°F  
+60°C.** |
| **EF** | –30°F to +230°F  
–34°C to +110°C | EPDM | Green “X” | May be specified for hot and cold water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. Also meets hot and cold potable water requirements per DVGW, KTW, ÖVGW, SVGW and French ACS (Crecep), approved for W534, approved for EN681-1 Type WA cold potable and Type WB hot potable water service. **NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES.** |
| **EW** | –30°F to +230°F  
–34°C to +110°C | EPDM | Green “W” | 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. WRAS approved material to BS 6920 for cold and hot potable water service up to +149°F  
+65°C  
+23°C and hot +180°F  
+82°C potable water service and ANSI/NSF 372. **NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES.** |

1 For specific chemical and temperature compatibility, refer to the [Gasket Selection Guide (05.01)](https://victaulic.com) which includes the Gasket Chemical Services Short Report or refer to the [Gasket Chemical Services Guide Long Report (GSG-100)](https://victaulic.com) located on victaulic.com. The information shown defines general ranges for all compatible fluids.

2 Vic-Plus pre-lubricated gasket.

3 The Grade T Type A gasket is fire resistant and only available on Style 07, 75, 77 couplings and Style 741 Vic-Flange adapter in marine applications.
### AWWA Coupling Gaskets

<table>
<thead>
<tr>
<th>Grade</th>
<th>Temp. Range</th>
<th>Compound</th>
<th>Color Code</th>
<th>General Service Guidelines</th>
</tr>
</thead>
</table>
| S     | –20°F to +180°F  
–29°C to +82°C | Nitrile | Orange Stripe | Specially compounded to conform to ductile pipe surfaces.  
May be specified for petroleum products, air with oil vapors,  
vegetable and mineral oils within the specified temperature range.  
**Not compatible for use with hot, dry air over +140°F (+60°C) and water over +150°F (+66°C).**  
**NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.** |
| M     | –20°F to +200°F  
–29°C to +93°C | Halogenated Butyl | Brown Stripe | May be specified for water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. Readily conforms to ductile iron pipe surfaces.  
UL Classified in accordance with ANSI/NSF 61 for cold +86°F (+30°C) potable water service and ANSI/NSF 372.  
**NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES.** |

1 For specific chemical and temperature compatibility, refer to the Gasket Selection Guide (05.01) which includes the Gasket Chemical Services Short Report or refer to the Gasket Chemical Services Guide Long Report (GSG-100) located on victaulic.com. The information shown defines general ranges for all compatible fluids.

### Vic-Press™ Seals

<table>
<thead>
<tr>
<th>Grade</th>
<th>Temp. Range</th>
<th>Compound</th>
<th>Color Code</th>
<th>General Service Guidelines</th>
</tr>
</thead>
</table>
| H     | –20°F to +210°F  
–29°C to +98°C | Hydrogenated Nitrile Butadiene Rubber (HNBR) | Two Orange Stripes | May be specified for hot petroleum/water mixtures, hydrocarbons, air with oil vapors, vegetable and mineral oils, engine oil and transmission oil, 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. |

**Standard Seal:** Vic-Press products will ship with Grade "H" seal unless otherwise specified on order.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Temp. Range</th>
<th>Compound</th>
<th>Color Code</th>
<th>General Service Guidelines</th>
</tr>
</thead>
</table>
| E     | –30°F to +250°F  
–34°C to +121°C | EPDM | Green Stripe | May be specified for hot water service, dilute acids, oil-free air, 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 OR STEAM SERVICES.** |
| O     | +20°F to +300°F  
+6°C to +149°C | Fluoroelastomer | Blue Stripe | May be specified for oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids, and air with hydrocarbons.  
**NOT COMPATIBLE FOR USE WITH HOT WATER OR STEAM SERVICES.** |

1 For specific chemical and temperature compatibility, refer to the Gasket Selection Guide (05.01) which includes the Gasket Chemical Services Short Report or refer to the Gasket Chemical Services Guide Long Report (GSG-100) located on victaulic.com. The information shown defines general ranges for all compatible fluids.
### VBSP O-rings

<table>
<thead>
<tr>
<th>Grade</th>
<th>Temp. Range ¹</th>
<th>Compound</th>
<th>Color Code</th>
<th>General Service Guidelines</th>
</tr>
</thead>
</table>
| E     | -30°F to +230°F  
-34°C to +110°C | EPDM | N/A | 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 COMPATIBLE FOR USE WITH PETROLEUM SERVICES.** |
| L     | -30°F to +350°F  
-34°C to +177°C | Silicone | N/A | Dry, hot air applications; excellent resistance to many chemicals.  
**NOT COMPATIBLE FOR USE WITH HOT WATER OR STEAM SERVICES.** |
| I     | -40°F to +160°F  
-40°C to +71°C | Isoprene | N/A | Water; saltwater; sewage; good resistance to oxygen and dilute acids. |

¹ For specific chemical and temperature compatibility, refer to the Gasket Selection Guide (05.01) which includes the Gasket Chemical Services Short Report or refer to the Gasket Chemical Services Guide Long Report (GSG-100) located on victaulic.com. The information shown defines general ranges for all compatible fluids.

### VBSP Gaskets

<table>
<thead>
<tr>
<th>Grade</th>
<th>Temp. Range ¹</th>
<th>Compound</th>
<th>Color Code</th>
<th>General Service Guidelines</th>
</tr>
</thead>
</table>
| T     | -20°F to +180°F  
-28°C to +82°C | Nitrile | N/A | Water; petroleum products, vegetable and mineral oils; air with oil vapors within allowable temperature. |
| O     | +20°F to +300°F  
-7°C to +149°C | Fluoroelastomer | N/A | Outstanding resistance to heat and most chemicals. |
| V     | -30°F to +180°F  
-34°C to +82°C | Neoprene | N/A | Water and wastewater; good resistance to ozone, effects of UV and some oils. |

¹ For specific chemical and temperature compatibility, refer to the Gasket Selection Guide (05.01) which includes the Gasket Chemical Services Short Report or refer to the Gasket Chemical Services Guide Long Report (GSG-100) located on victaulic.com. The information shown defines general ranges for all compatible fluids.
**Design Data**

**Introduction**

This Victaulic General Catalog has been written for the piping system installer, designer, specification writer and owner as a basic reference guide for data about Victaulic® mechanical piping methods. This catalog is organized to provide information in the context and form most readily usable. For easy identification of major sections of interest, see the condensed table of contents on pg. 1, for a fully detailed index, see pg. 131. For more detailed information, download Design Data 26.01.

**Important Information**

Victaulic standard grooved pipe couplings are designed for use with pipe grooved to meet Victaulic groove specifications and Victaulic grooved end fittings, valves, and related grooved end components only. They are not intended for use with plain end pipe and/or fittings. Victaulic plain end couplings are designed for use only with plain end or beveled end steel pipe (unless otherwise indicated) and Victaulic plain end fittings. ***Victaulic plain end couplings must not be used with grooved end or threaded end pipe and/or fittings. Nor are they intended for use with Advanced Groove System (AGS) components.*** Reference should always be made to the latest Victaulic Gasket Selection Guide (download submittal 05.01) for specific gasket service recommendations and for a listing of services which are not recommended. Gaskets for Victaulic products always must be lubricated for proper assembly. Gasket lubricant must meet manufacturer’s specifications. Thorough lubrication of the gasket exterior, including the lips and/or pipe ends and housing interiors, is essential to prevent gasket pinching. Lubrication assists proper gasket seating and alignment during installation.

Victaulic has a complete line of tools for preparing pipe to Victaulic specifications. Use of these tools is recommended in preparing pipe to receive Victaulic products. Always read and understand the Tool Operating Instructions supplied with every Victaulic tool prior to using any tools. All data contained herein, is subject to change without notice.

**Notice**

The technical and performance data, weights, dimensions and specifications published in this catalog supersede all previously published data. Victaulic maintains a policy of continual product improvement and, therefore, reserves the right to change product specifications, designs, and standard equipment without notice and without incurring obligation.

For the most up-to-date Victaulic product information, please visit victaulic.com.

The material presented in this catalog is intended for piping design reference in utilization of Victaulic products for their intended application. It is not intended as a substitute for competent, professional assistance which is an obvious requisite to any specific application.

**Design**

Reference should always be made to design information available at no charge on request from Victaulic. Good piping practices should always prevail. Specific pressures, temperatures, external or internal loads, performance standards and tolerances must never be exceeded. Many applications require recognition of special conditions, code requirements and use of safety factors. Qualified engineers must make these decisions.

While every effort has been made to ensure its accuracy, Victaulic, its subsidiaries and affiliated companies, make no express or implied warranty of any kind respecting the information contained in this catalog or the material referred to herein.

Anyone making use of the information or material contained herein does so at their own risk and assumes any and all liability resulting from such use.

**Installation**

Reference should always be made to the specific Victaulic Field Installation Handbook for the product you are installing. The following is a list of handbooks that can be requested for free from Victaulic:

- I-D08  StrengThin™ Products Handbook
- I-100  General Handbook
- I-300  AWWA Products Handbook
- I-P500  Vic-Press™ Handbook
- I-600  Copper Products Handbook
- I-900  HDPE Products Handbook

Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at victaulic.com.
Index

Original Groove System (OGS)
- Ball Valve 17
- Brass Body Valve — Threaded 18
- Butterfly Valve 14
- Composite Flexible Coupling 3
- Delta-Y Assembly 19
- Diverter Valve 16
- EndSeal™ System 21
- Expansion Joint 13
  - Fittings — Adapters, Nipples, Caps and Plugs 11
  - Fittings — Elbows 9
  - Fittings — Reducers 12
  - Fittings — Tees, Crosses, Wyes and Laterals 10
  - Flexible Coupling 4
  - High Pressure Double Grooved Coupling 22
  - High Pressure Rigid Coupling 6
  - High Pressure Ring Coupling 22
- Mechanical-T Spigot Assembly 23
- Mover Expansion Joint 13
  - Outlet Coupling 5
  - QuickVic™ Flexible Coupling 3
  - QuickVic Rigid Coupling 3
  - Reducing Coupling 5
  - Snap-Joint™ Coupling 5
  - Suction Diffuser 20
  - Swing Check Valve 16
  - Three Port Diverter 18
  - Triple Service (Duty) Assemblies Butterfly/Check Valve 19
  - Triple Service (Duty) Assemblies Plug/Check Valve 19
  - Venturi Check Valve 15
- Vic-Ball Valve 17
- Vic-Boltsless Coupling and Tool 6
- Vic-Check Valve 15
- Vic-Flange Adapter 8
- Vic-Plug Valve 18
- Vic-Ring Coupling 7
- Vic-Strainer Tee Type 20

Vic-Strainer Wye Type 20
Vic™-300 MasterSeal™ Butterfly Valve 14
XL Couplings for use with XL Fittings 6
XL (Extended Life) System for Rubber-lined Abrasive Services 23
Zero-Flex™ Rigid Coupling 4

Advanced Groove System (AGS)
- AGS Butterfly Valve 30
- AGS Expansion Joint 30
- AGS Fittings 29
- AGS Flexible Coupling 27
- AGS Rigid Coupling 27
- AGS Stainless Steel Rigid Coupling 27
- AGS Suction Diffuser 32
- AGS Triple Service Valve Assemblies 31
- AGS Vic-Check Dual Disc Valve 31
- AGS Vic-Flange Adapter 28
- AGS Vic-Ring Flexible Coupling System 28
- AGS Vic-Strainer Tee Type 32
- AGS Vic-Strainer Wye Type 32
- AGS Vic™-300 Butterfly Valve 31

Victaulic Bolted Split-Sleeve Products (VBSP)
- Non-Restrained Flexible Coupling for Carbon Steel Pipe 34
- Non-Restrained Flexible Coupling for Fiberglass Reinforced Plastic Pipe 90
- Non-Restrained Flexible Coupling for Stainless Steel Pipe 34
- Non-Restrained Flexible Expansion Coupling for Carbon Steel Pipe 41
- Non-Restrained Flexible Expansion Coupling for Stainless Steel Pipe 41
- Restrained Coupling for Carbon Steel Pipe 34
- Restrained Coupling for Stainless Steel Pipe 35
- Restrained Flexible Couplings for Dynamic Joint Deflection on Carbon Steel Pipe 35
- Restrained Flexible Couplings for Dynamic Joint Deflection on Stainless Steel Pipe 35
- Restrained Flexible Single-Gasket Coupling for Carbon Steel Pipe 36
- Restrained Flexible Single-Gasket Coupling for Stainless Steel Pipe 36

Hole Cut System
- Mechanical-T Outlet 37
- Outlet Coupling 38
- Vic-Let Strapless Outlet 38
- Vic-O-Well Strapless Thermometer Outlet 38

Expansion Joints
- AGS Expansion Joint 40
- Expansion Barrel 44
- Expansion Joint 40
- Expansion Joint Coupling 42
- Mover Expansion Joint 40
- Non-Restrained Flexible Expansion Coupling for Carbon Steel Pipe 41
- Non-Restrained Flexible Expansion Coupling for Stainless Steel Pipe 41
- Stainless Steel Bellow Expansion Joint 43

Plain End System for Carbon Steel
- Fittings 46
- Roust-A-Bout Plain End Coupling 45

Stainless Steel System
- ANSI Schedule 10S Fittings 52
- ANSI Schedule 40S Fittings 53
- AGS Stainless Steel Fittings 30
- AGS Stainless Steel Rigid Coupling 27
- Double Disc Check Valve 54
- Duplex Flexible Coupling 50

Copper System
- Butterfly Valve for Copper 62
- Dielectric Waterway Fitting 61
- Fittings for Waterway 60
- Mechanical-T Bolted Branch Outlet and Cross Assemblies for Copper 62
- QuickVic Rigid Coupling 59
- Vic-Flange Adapter for Copper 60

AWWA System
- AWWA Fittings 65 – 66
- Check Valve for AWWA 67
- Coupling for AWWA 67
- Ductile Iron Pipe 64
- Transition Coupling for IPS to AWWA 64
- Vic-Flange Adapter for AWWA 64
- Vic-Plug Valve for AWWA 67
Index

Steam System
- Fittings for Steam 68
- Rigid Coupling for Steam 68

Hydronic Balancing Solutions
- Automatic Balancing Valve — Grooved End 74
- Automatic Balancing Valve — Male x Female 73
- Automatic Balancing Valve — Threaded End 73
- Automatic Balancing Valve with Ball Valve Kit — Female Threaded End 73
- Automatic Balancing Valve with Ball Valve Kit — Union Inlet 74
- CMI Pressure Differential Meter 82
- Combined Balancing and Control Valve — Thread x Thread 75
- Compact Pressure Independent Balancing and Control Valve 77
- Control Valve with Return Temperature Controller 77
- Differential Pressure Controller — Female Threaded End 78
- Differential Pressure Controller — Flanged End 78
- ICSS Low Lead Balancing Valve 74
- KOIL-KIT™ Ball Valve/Union Combination 81
- KOIL-KIT Coil Hose 80
- KOIL-KIT Coil Pack 79
- KOIL-KIT Coil Pack for Air Handling Units 80
- KOIL-KIT Coil Pack with ATC and Bypass Options 79
- KOIL-KIT Union Port Fitting 81
- KOIL-KIT Y-Strainer/Ball Valve Combination 81
- Link Differential Pressure Sensor 78
- Manual Balancing Valve — Flanged End 72
- Manual Balancing Valve — Grooved End 72
- Manual Balancing Valve — Solder End 71

Manual Balancing Valve — Threaded End 71
Manual Balancing Valve — Union Inlet 71
Pressure Independent Balancing and Control Valve (PIBCV) 76
TA Scope™ 82
TA Select Computer Program 82
Terminal Balancing and Control Valve — Female x Female 75
Terminal Balancing Valve for Modulating Control — Female x Female 75

Refuse-to-Fuse™ HDPE System
- Plain End Installation-Ready™ Refuse-to-Fuse Coupling for HDPE Pipe 83
- Refuse-to-Fuse Coupling for Double-Grooved HDPE Pipe 84
- Refuse-to-Fuse Coupling for HDPE-to-Steel Pipe 84
- Refuse-to-Fuse Fittings for HDPE Pipe 84

Grooved PVC System
- Aquamine™ Ball Valve 88
- Aquamine Butterfly Valve 88
- Aquamine Fittings 87
- Aquamine Plain End Coupling 85
- Aquamine PVC Pipe 88
- Aquamine Transition Coupling for PVC to Groove 86
- Aquamine Transition Coupling for PVC to HDPE 86

Grooved PVC System
- Composite Flexible Coupling 89

FRP System
- Coupling for Fiberglass Reinforced Plastic Pipe 90
- Non-Restrained Flexible Coupling for Fiberglass Reinforced Plastic Pipe 90

Pipe Preparation Tools
- VE12 Groove In-Place 93
- VE26 Groove In-Place 93
- VE26/46 Power Drive Kit 94
- VE46 Groove In-Place 94
- VE226 Portable Groover 95
- VE226 Power Drive Kit 95
- VE106/VE107 Groove-N-Go 96
- Style VE206 97
- VE2722FS 98
- VE270/VE271/VE416FS 100
- VE416FS/VE417/VE450FS 102
- VE268 103
- VE414MC 104
- VE460 105
- VE872 106
- VG2BGD (Gear Drive) 107
- VG2BGD-ABR (Abrasion) 107
- VDG26GD (Double groove) 107
- VGB24 (OGS) 108
- VGB24-ABR (Abrasion OGS) 108
- VGB24DG (Double groove) 108
- VGB28 (AGS) 109
- VG Vic-Groover 110
- VG412 Orbital Machining Tool 110
- VPG26 111
- VPG824 111
- APG 112
- HCT908 112
- VHCT900 113
- VIC-TAP II 113
- VCT1 Manual 114
- VCT2 Automatic 114
- PFT510 115
- VPD752 Power Drive 115
- Power Mule II 116
- VAPS112 Adjustable Pipe Stand 116
- VAPS224 Adjustable Pipe Stand 117
- VAPS1672 Adjustable Pipe Stand 117
- PT100A and PT102 Groove Diameter Cable 118
- Tool Carry Bag 119
- CTM-01 Small Manual Tool 120
- CTM-02 Large Manual Tool 120

Refuse-to-Fuse™ HDPE System
AWWA Coupling Gaskets 127
Special Gaskets — IPS 126
Standard Gaskets — IPS 125
VBSP Gaskets 128
VBSP O-rings 128
Vic-Press™ Seals 127

Gaskets/Seals/O-Rings

victaulic.com
Warranty

We warrant all products to be free from defects in materials and workmanship under normal conditions of use and service. Our obligation under this warranty is limited to repairing or replacing at our option at our factory any product which shall within one year after delivery to original buyer be returned with transportation charges prepaid, and which our examination shall show to our satisfaction to have been defective.

THIS WARRANTY IS MADE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE BUYER’S SOLE AND EXCLUSIVE REMEDY SHALL BE FOR THE REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS AS PROVIDED HEREIN. THE BUYER AGREES THAT NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO HIM.

Victaulic neither assumes nor authorizes any person to assume for it any other liability in connection with the sale of such products.

This warranty shall not apply to any product which has been subject to misuse, negligence or accident, which has been repaired or altered in any manner outside of a Victaulic factory or which has been used in a manner contrary to Victaulic instructions or recommendations. Victaulic shall not be responsible for design errors due to inaccurate or incomplete information supplied by Buyer or its representatives.

Items purchased by Victaulic and resold will have the original equipment manufacturer’s warranty extended to Victaulic customers.
WHERE INNOVATION AND SOLUTIONS ARE JOINED TOGETHER

PRODUCT CERTIFICATIONS:

**Fire Protection**
- ACTYFYRE® – Active Fire Register of Fire Protection Equipment (Australia)
- CCCEF – China Certification Center for Fire Protection Products (China)
- CFPSG – Chinese Fire Protection Safety Center (Taiwan)
- CNFDP – Centro Nacional de Fuego y Protección (Argentina)
- CNFPP – Centre National de Prévention et de Protection (France)
- CTFC – Consul Technic Permanent Prenu Constructii (Romania)
- (UL)us – Underwriter’s Laboratories, LLC (USA)
- DMY – Dermaziou Sintagma Innovatikos (Greece)
- (FN)Y – City of New York Fire Department (USA)
- FM – FM Approvals (USA)
- HDB – Singapore Housing Development Board (Singapore)
- KFI – Korea Fire Industry Technology Institute (Korea)
- LCPS – Loss Prevention Certification Board (USA)
- SBC – Swedish Brand & SafeWater Testing AB (Sweden)
- TFRI – Tärnby Fire Research Institute of Ministry of Public Security (Sweden)
- TSU – Technický Stavobný Ústav Predajny, s. p. (Slovakia)
- TSUS – Technický Stavobný Ústav Stavebne, n.o. (Slovakia)
- TUZS – Technikus és Zsűrtani Útmutatókészítési Intézet (Hungary)
- UL – Underwriter’s Laboratories, LLC (USA)
- OLC – Underwriter’s Laboratory of Canada (Canada)

**Regulatory Compliance**

Victaulic piping system products are tested and certified for a wide range of applications. Victaulic engages with many certifying authorities, approval bodies, and standards organizations globally, and maintains product certifications and test compliance to applicable codes, standards, and directions, relevant to specific industries and markets.

**PRODUCT CERTIFICATIONS:**

<table>
<thead>
<tr>
<th>Fire Protection</th>
<th><strong>Regulatory Compliance:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTYFYRE® – Active Fire Register of Fire Protection Equipment (Australia)</td>
<td>Codes and Standards Compliance</td>
</tr>
<tr>
<td>CCCEF – China Certification Center for Fire Protection Products (China)</td>
<td>ANSI – American National Standards Institute (USA)</td>
</tr>
<tr>
<td>CFPSG – Chinese Fire Protection Safety Center (Taiwan)</td>
<td>API – American Petroleum Institute (USA)</td>
</tr>
<tr>
<td>CNFDP – Centro Nacional de Fuego y Protección (Argentina)</td>
<td>APSAD – Assemblée Plénière Sociale Assurance Dommage (France)</td>
</tr>
<tr>
<td>CNFPP – Centre National de Prévention et de Protection (France)</td>
<td>ASTM – American Society for Testing and Materials (USA)</td>
</tr>
<tr>
<td>CTFC – Consul Technic Permanent Prenu Constructii (Romania)</td>
<td>AWIR – American Water Works Association (USA)</td>
</tr>
<tr>
<td>(UL)us – Underwriter’s Laboratories, LLC (USA)</td>
<td>BODA – Building Officials and Code Administrators (USA)</td>
</tr>
<tr>
<td>DMY – Dermaziou Sintagma Innovatikos (Greece)</td>
<td>CSA – Canadian Standards Association (Canada)</td>
</tr>
<tr>
<td>(FN)Y – City of New York Fire Department (USA)</td>
<td>CFM – California State Fire Marshal (USA)</td>
</tr>
<tr>
<td>FM – FM Approvals (USA)</td>
<td>EN – European Standards</td>
</tr>
<tr>
<td>HDB – Singapore Housing Development Board (Singapore)</td>
<td>COST – Goodstand (Russia)</td>
</tr>
<tr>
<td>KFI – Korea Fire Industry Technology Institute (Korea)</td>
<td>IPC – International Plumbing Code (USA)</td>
</tr>
<tr>
<td>LCPS – Loss Prevention Certification Board (USA)</td>
<td>ISO – International Standards Organization (Global)</td>
</tr>
<tr>
<td>SBC – Swedish Brand &amp; SafeWater Testing AB (Sweden)</td>
<td>NACE – National Association of Corrosion Engineers (USA)</td>
</tr>
<tr>
<td>TFRI – Tärnby Fire Research Institute of Ministry of Public Security (Sweden)</td>
<td>NFPA – National Fire Protection Association (USA)</td>
</tr>
<tr>
<td>TSU – Technický Stavobný Ústav Predajny, s. p. (Slovakia)</td>
<td>SBCCI – Southern Building Code Congress International (USA)</td>
</tr>
<tr>
<td>TSUS – Technický Stavobný Ústav Stavebne, n.o. (Slovakia)</td>
<td>UPC – Uniform Plumbing Code (USA)</td>
</tr>
<tr>
<td>TUZS – Technikus és Zsűrtani Útmutatókészítési Intézet (Hungary)</td>
<td>Pressure Equipment Safety</td>
</tr>
<tr>
<td>UL – Underwriter’s Laboratories, LLC (USA)</td>
<td>OY/3(2006) PED – Pressure Equipment Directive (Europe)</td>
</tr>
<tr>
<td>OLC – Underwriter’s Laboratory of Canada (Canada)</td>
<td>CSA B53 – Boiler, Pressure Vessel, and Pressure Piping Code® (Canada)</td>
</tr>
</tbody>
</table>

**COMPLIANCE:**

- **Codes and Standards Compliance**
  - ANSI – American National Standards Institute (USA)
  - API – American Petroleum Institute (USA)
  - APSAD – Assemblée Plénière Sociale Assurance Dommage (France)
  - ASTM – American Society for Testing and Materials (USA)
  - AWIR – American Water Works Association (USA)
  - BODA – Building Officials and Code Administrators (USA)
  - CSA – Canadian Standards Association (Canada)
  - CFM – California State Fire Marshal (USA)
  - EN – European Standards
  - COST – Goodstand (Russia)
  - IPC – International Plumbing Code (USA)
  - ISO – International Standards Organization (Global)
  - NACE – National Association of Corrosion Engineers (USA)
  - NFPA – National Fire Protection Association (USA)

**Building Services**

- **Building Services**
  - (EU)2016/421: IPER – Construction Products Regulation- Fire safety products (Europe)
  - NBC – National Building Code (Canada)
  - PSB – TUV SUD PSB Singapore (Singapore)

**Explosive Environment**

- TR/CE/EXTEX – Equipment and protective systems for potentially explosive atmospheres (Europe)

**Seismic**

- GSPHD – Office of Statewide Health Planning and Development (USA)

**Tools and Machinery**

- 0060A303000 – Mechanical Directive (Europe)

---

© Copyright 2015, Victaulic® Company. All rights reserved.

No part of this Victaulic catalog may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photographic, recording or otherwise, without the prior written permission of Victaulic Company.
Effective November 1, 2015

North and South America

UNITED STATES AND WORLD HEADQUARTERS
4901 Kesslersville Road
Easton, PA 18040 USA
1 800 PICK VIC
1 800 742 5842
(vital North America)
1 610 559 3300
pickvic@victaulic.com

CANADA
123 Newkirk Road
Richmond Hill
Ontario L4C 3G0 Canada
1 905 884 7444
victaulic.com

MEXICO
Calle Circuito del Marques
No 8 al 11
Parque Industrial El Marques
Municipio El Marques
Queretaro, Mexico
CP 76246
52 442 253 0066
victaulic.com

EUROPE, MIDDLE EAST, AFRICA AND INDIA

BELGIUM
Prievelstraat 36
9330 Nazareth, Belgium
32 9 381 15 00
vicoeuro@victaulic.com

UNITED KINGDOM
Units B1 & B2, IG1 Industrial Park
Cockrell Close, Gunnell Wood Road
Stevenage, Hertfordshire, UK
SG 1 2NB
44 1438 310 690
vicoeuro@victaulic.com

GERMANY
LOGICPARK
Gutenbergstrasse 19
D-64431 Weiterstadt, Germany
49 6151 9573 0
vicoeuro@victaulic.com

UNITED ARAB EMIRATES
P.O. Box 17683, Unit XB 8
Jebel Ali Free Zone
Dubai, United Arab Emirates
971 4 883 88 70
vicoeuro@victaulic.com

INDIA
India Land Global Industrial Park
Plot 4, Hinjewadi, Phase-I, Mulshi
Pune 411057, India
91 20 67 919 300
vicoeuro@victaulic.com

ASIA PACIFIC

CHINA
Unit 808, Building B
Hongwell International Plaza
No.1602 West Zhongshan Road
Shanghai, China 200235
86 21 6021 9400
vicap@victaulic.com

KOREA
4F, Seoul Building, 3400-5,
Seocho-Dong, Seocho-Gu
Seoul, Korea 137-070
82 2 531 7235
vicap@victaulic.com

TAIWAN
No. 55, NanGong Rd, Luhu Township
Taichung County, Taiwan 338
886 3 222 3220
vicap@victaulic.com

AUSTRALIA AND NEW ZEALAND
7 Chambers Road
Unit 1
Albina North, Victoria
Australia 3025
1 300 PIC VIC
1 300 742 842
(within Australia)
0 508 PICK VIC
0 508 7425 842
(within New Zealand)
61 3 9302 4000
vicaust@victaulic.com

For additional locations, information and support, visit victaulic.com/contactus