





WHERF INNOVATION AND SOLUTIONS ARE JOIL TOGETHER



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.

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THE VICTAULIC DIFFERENCE HOUSING GROOVE **BOLT/NUT** GASKET GROOVE ⊢ **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:



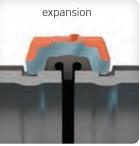
Easy system maintenance and expansion—through simple coupling disassembly that allows for easy access.

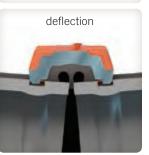


Alignment ease—through a design that allows for full rotation of the pipe and system components before tightening.

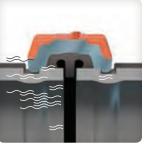


contraction

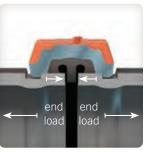




Flexibility—with the inherent axial movement and deflection properties of flexible couplings in a groove system. May be used to accommodate pipeline thermal expansion and contraction, misalignment and settlement, and seismic stress absorption.



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)

S50

AGS

Hole Cut

Plain End

Copper

AWWA

HDPE

Grooved AquamineTM PVC PVC

FRP

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.



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Vic-Ring Couplings







Original Groove System (OGS)





Strainers and Diffusers

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Design Data

QuickVic[™] Rigid Coupling

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

Certifications/Listings:







Download publication 10.01 for complete information

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



Certifications/Listings:





Download publication 10.01 for complete information

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 $1\frac{1}{2}-4$ " | $40-100 \,\text{mm}$
- Pressures up to 150 psi | 1034 kPa | 10 bar
- For stainless steel and FRP applications, contact Victaulic®

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 750 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

Certifications/Listings:











Download publication 10.01 for complete information

Flexible Coupling

STYLE 77

Download submittal 06.04 for complete information

- Cross-ribbed, two piece housing construction
- Sizes from 34-24" | 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



Certifications/Listings:

















Download publication 10.01 for complete information

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



Certifications/Listings:











Download publication 10.01 for complete information

Certifications/Listings: CULUSTED 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:









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

Download submittal 06.10 for complete information

- Joining device to provide an integral reducing outlet
- Sizes from $1\frac{1}{2} 6$ " $40 150 \,\text{mm}$
- Pressures up to 500 psi | 3447 kPa | 34 bar
- For coating options, download product submittal

Vic-Boltless Coupling and Tool STYLE 791 COUPLING AND 792 TOOL Download submittal 06.11 for complete information

- 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



Download publication 10.01 for complete information

High Pressure Rigid Coupling STYLE HP-70

Download submittal 06.12 for complete information

- 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

Certifications/Listings:





Download publication 10.01 for complete information



Style XL77 Pipe-to-Fitting Connections



Style XL79 Fitting-to-Fitting Connections



XL System for Rubber **Lined Services** See pg. 24 for information.

XL Couplings for use with XL Fittings

STYLE XL77 AND XL79

Download submittal 07.07 for complete information

- 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

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

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 300 psi | 2068 kPa | 21 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:











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:







Download publication 10.01 for complete information







Download publication 10.01 for complete information

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

Elbows



No. 10 90° Elbow



No. 100 90° Long Radius Elbow



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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**



For coating options, download product submittal



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 x Flange)



07.02













Download publication 10.01 for complete information

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









Download publication 10.01 for complete information

Fittings — Adapters, Nipples, Caps and Plugs

<u>Download submittal 07.01</u> 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 × Thread)



No. 42 Adapter Nipple (OGS Groove × Bevel)



No. 43
Adapter Nipple
(OGS Groove ×
OGS Groove)



No. 80Female Threaded Adapter



No. 53 Swaged Nipple (OGS Groove × OGS Groove)



No. 54
Swaged Nipple
(OGS Groove ×
Thread)



No. 55 Swaged Nipple (Thread × 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













Download publication 10.01 for complete information

Certifications/Listings

Reducers







No. 51Eccentric
Reducer



No. 52 Small Threaded Reducer



No. XL100 1½D90° Elbow



No. XL100 3D90° Elbow



No. XL110 1½D45° Elbow



No. XL110 3D 45° Elbow



XL Fittings for Rubber Lined Services See pg. 24 for information.

Other Fitting Systems

Fittings — Reducers

<u>Download submittal 07.01</u> for complete information on original grooved end fittings for carbon steel pipe

Standard fitting pressure ratings conform

All fittings supplied with grooves or shoulders

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

to ratings of installed coupling

for fast installation

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

<u>Download submittal 07.03</u> for EndSeal[™] Extra Heavy (ES) fittings

<u>Download submittal 07.04</u> 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 465 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

<u>Download submittal 25.03</u> for alternate style fittings machined for rubber or urethane lining

Download submittal 50.01 for Aquamine[™] fittings

AGS

VBSP

Hole Cut

Expansion

Stainless

AWWA Copper

Steam System

Hydronic 3alancing

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

211FF 133

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

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 $1\frac{1}{2} 6$ " $40 150 \,\text{mm}$
- Pressures up to 200 psi | 1379 kPa | 14 bar

AGS

VBSP

Hole Cut

Plain End Joint

stainless Steel

AWWA Copper

Steam

Hydronic

HDPE

Aquamine™ PVC

FRP PP

S

Gaskets, Seals and O-Rings

> Design Data

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



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

AGS

VBSP

s Hole Cut

Expansion Plain End Joints

Stainless Steel

AWWA

Steam

Hydronic

uamine™ PVC

Grooved Ac

Design

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 $1\frac{1}{2} 6$ " | $40 150 \,\text{mm}$
- 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

Download submittal 08.15 for complete information

Brass Body Valve — Threaded

- Standard port, female threaded end valve constructed from forged brass
- Sizes from \(\frac{1}{4} 2'' \) \(8 50 \text{ mm} \)
- Pressures up to 600 psi | 4137 kPa | 41 bar

Certifications/Listings:





Download publication 10.01 for complete information



Three Port Diverter

SERIES 723

SERIES 722

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







Download publication 10.01 for complete information

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 2½-12" | 65-300 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For AGS sizes 14–24" | 350–600 mm, download submittal 20.18 for more 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" | 125-150 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar

Triple 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" | 80-300 mm
- Pressures up to 175 psi | 1207 kPa | 12 bar





Suction Diffuser SERIES 731-D

Allows building up at a 90° angle from the pump, saving valuable space in the mechanical room while still protecting the pump against cavitation

Download submittal 09.20 for complete information

- 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 $1\frac{1}{2}-12$ " | 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

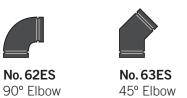


EndSeal[™] System

COUPLING: STYLE HP-70ES; FITTINGS: NO. 62ES, NO. 63ES, NO. 64ES, NO. 35ES, NO. 22ES

<u>Download submittal 06.13</u> for the Style HP-70ES coupling <u>Download submittal 07.03</u> 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





No. 64ES Tee







No. 22ES Header Tee



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

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





No. XL100 1½D90° Elbow



No. XL100 3D90° Elbow



No. XL110 1½D 45° Elbow



No. XL110 3D 45° Elbow





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

Advanced Groove System 465

AGS

Hole Cut

Plain End

Copper

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 seismicshock resistance and a union at every joint for easy adjustment, system maintenance or system expansion.





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30

Intro







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

HOUSING

Wider housing profile for greater end load capability.



contact area for superior sealing.

HOUSING

Original Groove System GASKET H GROOVE

wedge shaped groove for extremely strong, dependable joints.

FRP



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" | 350–1250 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 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 Stainless Steel Rigid Coupling

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 *Vic-Ring*Rigid Coupling System

STYLE W07

<u>Download submittal 16.11</u> for complete information

- Coupling installs on the supplied ring to maintain full pipe wall thickness on abrasive systems
- Sizes from 14-48" | 350-1200 mm
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For coating options, download product submittal
- For OGS Vic-Ring products, see pg. 7



AGS Vic-Ring Flexible Coupling System STYLE W77

Download submittal 16.12 for complete information

- Coupling installs on the supplied ring to maintain full pipe wall thickness on abrasive systems
- Sizes from 12-70" | 300-1750 mm
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For coating options, download product submittal
- For OGS Vic-Ring products, see pg. 7



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

Seals ar 0-Ring

Design

Intro

AWWA



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. W50

Reducer

Concentric

ictaulic

No. W42 Adapter Nipple (AGS Groove × Bevel)



No. W51

Eccentric

Reducer

No. W43 Adapter Nipple (AGS Groove × AGS Groove)



No. W41

Flanged

Adapter Nipple

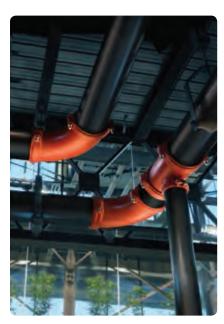
No. W49 Adapter Nipple (AGS Groove × OGS Groove)



No. W60 Cap



No. W45R Flanged Adapter Nipple



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

FRP

Victaulic® Bolted Split-Sleeve Products (VBSP)

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.



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Tools page



page

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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

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Expansion

Plain End

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Steam System

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HDPE

Aquamin PVC

Groove

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Gaskets, Seals and O-Rings

Design





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

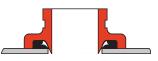
- Sizes from 8-60" | 200-1500 mm
- Pressures up to 200 psi | 1379 kPa | 14 bar
- Ideal for field joint connections requiring flexibility and thrust restraint

Design

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.





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Tools Vic-Tap Hole Cutting Tools



LPCB

VdS

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

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page

113

Outlet Coupling STYLE 72

Download submittal 06.10 for complete information

- Joining device to provide an integral reducing outlet
- Sizes from $1\frac{1}{2} 6$ " | $40 150 \, \text{mm}$
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Download product submittal for the following: coating options; standard thread options



Certifications/Listings:





Download publication 10.01 for complete information

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:



Download publication 10.01 for complete information

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.



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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 $\frac{34}{-12}$ | 20-300 mm, download submittal 09.05 for information on Style 155

Gaskets, Seals and O-Rings

Design



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

Expansion Joints

0GS

on Plain

Stainles

Copper

WWA

Steam System

Hydronic

HDPE

Aquamine"

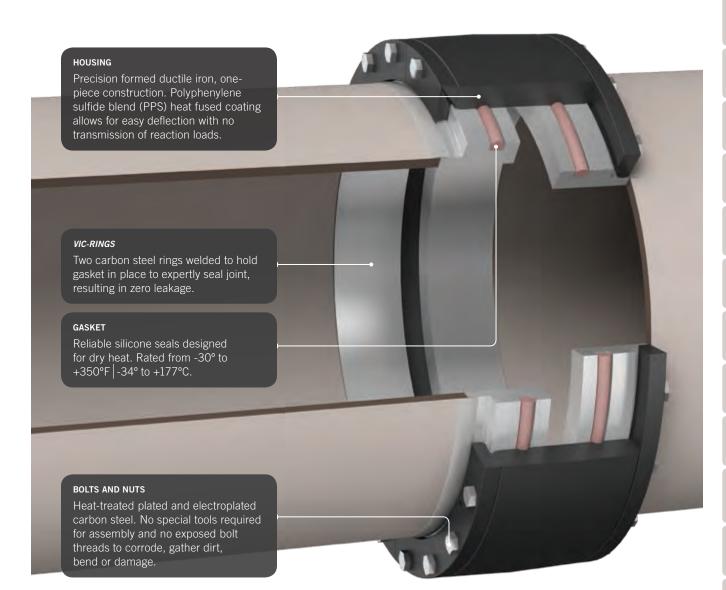
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Stainless Steel Bellow Expansion Joint STYLE 240S

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



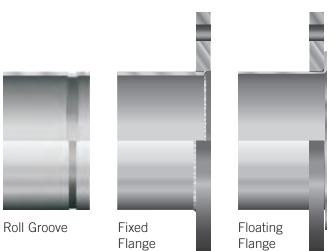


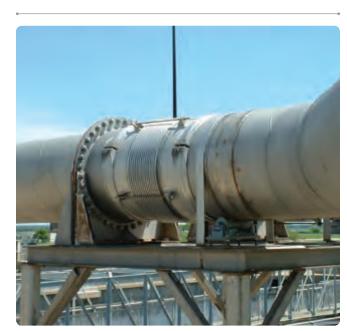


Beveled End



Restraint Ring







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

victaulic.com 44 G-103 REV Q

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.



Couplings page

Fittings page



Roust-A-Bout Plain End Coupling (Style 99) 45

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

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Intro

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. 11P 45° Elbow



No. 100P 90° Long Radius 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)

Plain

Design Data

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

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Duplex Flexible Coupling (Style 475DX)	50	Vic™-300 MasterSeal™ Stainless Steel	
StrengThin™ High Pressure Coupling		Butterfly Valve (Series 461)	54
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Adapters	page	Vic-Ball Valve (Series 726S and 726D)	55
Type 316 <i>Vic-Flange</i> Adapter (Style 441)	51	Three-Piece <i>Vic-Press</i> Ball Valve (Series P569 Groove × Groove)	55
Regardless of the coupling selected to join stainless steel pipe, the Victaulic pressure responsive	s	Plug Valve (Series 465 and Series 466)	56
elastomeric gasket seals the joint. Stainless steel housings provide the highest level of protection		Vic-Press	page
against external corrosion, while ductile iron couplings can be used to join stainless steel pipe in non-corrosive environments. For pressure ratings		For Schedule 10 Stainless Steel 304	57

and end loads for ductile iron couplings on

stainless steel pipe, download submittal 17.09.

For Schedule 10 Stainless Steel 316

58





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

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

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VBS

Hole Cut

Expansion

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Stainles Steel

Copper

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HDPE

Aquamine PVC

Grooved PVC

FRI

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Gasket Seals a

Design

068

AGS

VBSP

s Hole Cut

Plain End

AWWA Copper

Steam System

Hydronic Balancing



Duplex Rigid Coupling

STYLE 489DX

Download submittal 17.33 for complete information

- 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



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, <u>download submittal 17.34</u> for information on Style 475DX

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 $\frac{3}{4}-6$ " | 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

<u>Download submittal 17.34</u> 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



StrengThin[™] High Pressure Coupling STYLE DO8

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

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Tools

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Desigr Data



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

Download submittal 17.16 for complete information

- Grooved ends eliminate pipe end preparation for the fittings
- Sizes from 34-12" | 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



No. 410 SS 90° Elbow



No. 411 SS 45° Elbow



No. 412 SS 22½° Elbow



No. 413 SS 11¼° Elbow



No. 420 SS Tee



No. 425 SS Grooved Branch Reducing Tee



No. 430SS 45° Lateral



No. 433 SS True Wye



No. 435 SS Cross



No. 442 SS Adapter Nipple (Groove × Bevel)



No. 443 SS Adapter Nipple (Groove × Groove)



No. 450 SS Concentric Reducer



No. 451 SS Eccentric Reducer



No. 460 SS Cap



No. 445F Flat Face Flanged Adapter Nipple



No. 445R Raised Face Flanged Adapter Nipple

ANSI Schedule 40S Fittings

Download submittal 17.16 for complete information

- Grooved ends eliminate pipe end preparation for the fittings
- Sizes from 34-12" | 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





No. 410HSS 90° Elbow



No. 411H SS 45° Elbow



No. 412HSS 22½° Elbow



No. 413H SS 11¹/₄° Elbow



No. 420H SS Tee



No. 425H SSGrooved Branch
Reducing Tee



No. 430H SS 45° Lateral



No. 433HSS True Wye



No. 435HSS Cross



No. 440H SS
Adapter Nipple
(Groove ×
Thread)

ictaulic



No. 442HSS Adapter Nipple (Groove × Bevel)



No. 443HSS Adapter Nipple (Groove × Groove)



No. 450H SS Concentric Reducer



No. 451HSS Eccentric Reducer



No. 460HSS Cap



Certifications/Listings:

Download publication 02.06 for potable water approvals

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

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" 50 mm



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

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Certifications/Listings:

Download publication 02.06 for potable water approvals

068

AGS

VBSP

Hole Cut

Plain End Joint

Stainless Steel

AWWA Copper

Steam

Hydronic Balancing

wine" HDPE

Grooved

Design Data



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 $1\frac{1}{2} 6$ " | $40 150 \,\text{mm}$
- 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 $\frac{1}{2}$ 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





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 StrengThin™ 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



Download publication 02.06 for potable water approvals

Plug Valve

Plug Valve SERIES 465

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 StrengThin™ Systems or OGS
- Sizes from 10-24" | 250-600 mm
- Pressures up to 1200 psi | 8274 kPa | 83 bar





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 \ \frac{1}{2}-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



Style P597 Standard Coupling

 $(P \times P)$



Style P586 **Short Tangent** 90° Elbow $(P \times P)$



Style P542 90° Street Elbow $(P \times T)$



Style P591 45° Elbow $(P \times P)$



Style P543 45° Street Elbow $(P \times T)$

Connection Key

P Press

F Female Thread

M Male Thread

T Plain End

L Flanged

G Grooved



Style P592

Tee $(P \times P \times P)$



Style P588

Tee with Threaded Branch $(P \times P \times F)$



Style P593

Tee with Reducing Branch $(P \times P \times P)$



Style P596

Male Threaded Adapter $(P \times M)$



Style P599

Female Threaded Adapter $(P \times F)$



Style P561

Weld Adapter $(P \times T)$



Style P584 Threaded Union

 $(P \times P)$

Style P595 Flange Adapter $(P \times L)$



Style P565

Van Stone Flange Adapter $(P \times L)$



Style P587

Transition **Nipple** $(G \times T)$



Style P594

Concentric Reducer $(P \times P)$



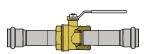
Style P540

End Cap



Style P569

Stainless Steel Ball Valve $(P \times P \text{ shown})$ $(G \times G \text{ and } P \times G \text{ also available})$



Style P589

Brass Body Ball Valve $(P \times P)$





57





Intro



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 \ \frac{1}{2}-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



Style P507 Standard Coupling



Style P568 **Short Tangent** 90° Elbow $(P \times P)$



Style P562 90° Street Elbow $(P \times T)$



Style P571 45° Elbow $(P \times P)$



Style P563 45° Street Elbow $(P \times T)$

Connection Key

P Press

F Female Thread

M Male Thread T Plain End

L Flanged

G Grooved



 $(P \times P)$

Style P508 Slip Coupling $(P \times P)$



Style P572 Tee $(P \times P \times P)$



Style P578 Tee with Threaded Branch $(P \times P \times F)$



Style P573 Tee with Reducing Branch $(P \times P \times P)$



Style P576 Male Threaded Adapter $(P \times M)$



Style P579 Female Threaded Adapter $(P \times F)$



Style P585 Threaded Union $(P \times P)$



Style P575 Flange Adapter $(P \times L)$



Style P566 Van Stone Flange Adapter $(P \times L)$



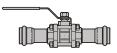
Style P577 Transition **Nipple** $(G \times T)$



Concentric Reducer $(P \times P)$

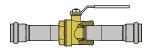


Style P574 Style P560 End Cap



Style P569 Stainless Steel Ball Valve

 $(P \times P \text{ shown})$ $(G \times G \text{ and } P \times G \text{ also available})$



Style P589

Brass Body Ball Valve $(P \times P)$



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	page	Dielectric Waterway Fitting	page
QuickVic™ Rigid Coupling (Style 607)	59	Dielectric Waterway Fitting	61
Adapters	page	Valves	page

Vic-Flange Adapter for Copper (Style 641)	60	Butterfly Valve for Copper (Series 608N)	62

Fittings	page	Outlets	page
Fittings for Copper	60	Mechanical-T Bolted Branch Outlet and Cross Assemblies for Copper (Style 622)	62



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:





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

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

Certifications/Listings:





Download publication 10.01 for complete information



Certifications/Listings:





<u>Download publication 10.01</u> for complete information <u>Download publication 02.06</u> for potable water approvals

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







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

Design Data

Dielectric Waterway Fitting STYLE 647

Used to join carbon steel or stainless steel pipe to copper tubing with one fitting

Download submittal 22.21 for complete information

- Available in groove x groove, groove x thread or thread x thread
- Sizes from $\frac{1}{2}$ 4" | 15 100 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar







Certifications/Listings:

 $\underline{\textbf{Download publication 02.06}} \text{ for potable water approvals}$



Certifications/Listings:

Download publication 02.06 for potable water approvals



Certifications/Listings:





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

Mechanical-T Bolted Branch Outlet and Cross Assemblies for Copper

Download submittal 22.12 for complete information

- Provides a direct branch connection at any location on K, L and M copper tubing
- Sizes from $2\frac{1}{2}-4$ " | $65-100 \, \text{mm}$

Butterfly Valve for Copper

Download submittal 22.14 for complete information

Pressures up to 300 psi | 2068 kPa | 21 bar

Joins quickly to copper tube by utilizing Style 607 Installation-Ready™ couplings

Sizes from $2\frac{1}{2}-6$ " | $65-150 \, \text{mm}$

SERIES 608N

STYLE 622

Pressures up to 300 psi | 2068 kPa | 21 bar

AGS

VBSP

Hole Cut

Stainless Steel Plain End

Copper

eam

Hydronic Balancing

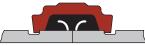
Aquamine™ PVC

Design Data

AWWA System

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.







Couplings	page

Coupling for AWWA Ductile Iron Pipe (Style 31) 64

Transition Coupling for IPS to AWWA (Style 307) 64

Adapters page

Vic-Flange Adapter for AWWA (Style 341) 64

Fittings page



Valves	page

Check Valve for AWWA (Series 317) 67



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

Certifications/Listings:





Download publication 10.01 for complete information

Certifications/Listings:





Download publication 10.01 for complete information

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

64

- Pressures up to 250 psi | 1724 kPa | 17 bar
- Optional coatings include coal tar epoxy, organic zinc primer and bituminous

Certifications/Listings:





Download publication 10.01 for complete information

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. 10-C 90° Elbow



No. 100-C 90° Long Radius Elbow



No. 11-C 45° Elbow



No. 12-C 22 ½° Elbow



No. 13-C 11 1/4° Elbow



No. 10-CR 90° Reducing Elbow



No. 100-CR 90° Long Radius Reducing Elbow



No. 10-CB Base Elbow



No. 100-CB Long Radius Base Elbow



No. 20-C Tee



No. 25-C Reducing Tee



No. 21-C Bullhead Tee



No. 20-CB Base Tee



No. 25-CB Reducing Base Tee



Certifications/Listings:

Download publication 02.06 for potable water approvals

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



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

FRP



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







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.

Aquamine Grooved PVC

AGS

VBSP

Joints Hole Cut

Stainless Steel Plain End

Copper









looT s

FRP



Design Data

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.



Manu	al Balancing Valves	page	Balancing and Control Valves p	oage
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Auton	natic Balancing Valves	page	Pressure Independent Balancing and Control Valve—Female × Female (TA Series TCP)	76
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be	Female Threaded End with Ball Valve Kit (Series 76B)	73	Balancing and Control Valve (PIBCV) Thread × Thread (TA Series 7FP)	76
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كالم	Male \times Female with Ball Valve Kit (Series 76V	74	Control Valve with Return Temperature	
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Hydronic Balancing Solutions

Differential Pressure Controllers





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page

90

AGS

VBSP

Hole Cut

Expansion Plain End Joints

Stainless Steel

AWWA Copper

team

HDPE B

Aquamine™ PVC

FRP

Design Data

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 $\frac{1}{2} 2$ " | $15 50 \,\text{mm}$
- 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

- "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 $\frac{1}{2}$ 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 $2\frac{1}{2}-16$ " | $65-400 \, \text{mm}$
- Pressures up to 250 psi | 1725 kPa



Manual Balancing Valve—Grooved End

TA SERIES 789

- "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

AGS

VBSP

Hole Cut

Expansion Plain End Joints

less el Pk

Copper

AWWA

dronic Iancing

HDPE

Aquamine PVC

Groove

FRP

Gaskets, Seals and O-Rings

Design





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 768

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 × Female

SERIES 76K

- 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 $2\frac{1}{2}-6$ " | 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 $\frac{1}{2} \frac{3}{4}$ | 15 20 mm
- Pressures up to 400 psi | 2758 kPa | 28 bar

Certifications/Listings:

Download publication 02.06 for potable water approvals

Seals a

Desig Data



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 $\frac{1}{2} 1$ " | 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 $\frac{1}{2} 1$ " | 15 25 mm
- Pressures up to 230 psi | 1586 kPa | 16 bar
- Rated from -4°F to 250°F | -20°C to 120°C



Combined Balancing and Control Valve — Thread × Thread

TA SERIES 7FC

- 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

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 $\frac{1}{2} 1$ " | 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

- Measures flow, differential pressure, temperature and differential pressure
- EQM characteristics (Equal Percentage Modified)
- $1\frac{1}{4}-2$ " | 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 $\frac{1}{2}-1$ " | 15-25 mm, see TA Series TCP

AGS

SSP

Hole Cut

Expansion Plain End Joints

Stainless Steel

AWWA Copper

Steam



Compact Pressure Independent Balancing and Control Valve

TA SERIES 7CP

Download submittal 08.37 for complete information

- Lower pump head/energy consumption
- Sizes from $\frac{1}{2} \frac{1}{4}$ " | 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

- Lower pump head/energy consumption
- Sizes from $\frac{1}{2} \frac{1}{4}$ | $15 32 \, \text{mm}$
- 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" | 15-50 mm
- 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" | 65-100 mm
- Capable of stabilizing differential pressures up to 23.3 psi | 160 kPa | 1.6 bar

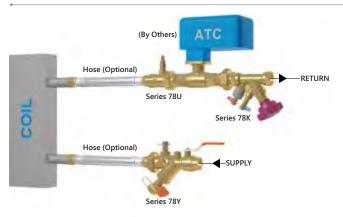


Link Differential Pressure Sensor

TA SERIES 736

- 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

FRP

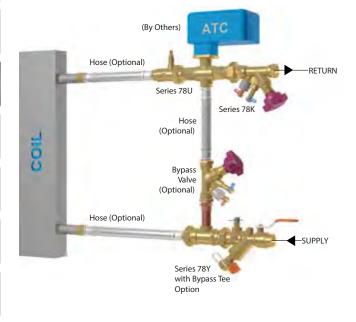


KOIL-KIT™ Coil Pack

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 ½-2" | 15-50 mm



KOIL-KIT™ Coil Pack with ATC and Bypass Options

SERIES 79B and SERIES 79A

- 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 ½-2" | 15-50 mm

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

Design



KOIL-KIT™ Y-Strainer/Ball ValveCombination

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" | 15-50 mm
- Pressures up to 400 psi | 2758 kPa | 28 bar
- Rated 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" | 15-50 mm
- Pressures up to 400 psi | 2758 kPa | 28 bar
- Rated up to 230°F | 110°C



KOIL-KIT™ Union Port Fitting

SERIES 78U

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

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 | K_v values for the ATC valves and give pre-set information for all TA valves on the project



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 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

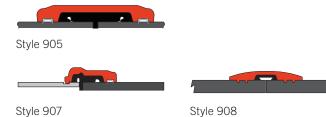
Ses

haskets, eals and P-Rings

Design Data

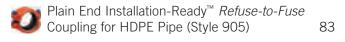
Refuse-to-Fuse™ HDPE System

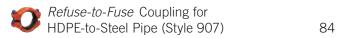
The Victaulic® Refuse-to-Fuse system for HDPE eliminates the need for any kind of fusion equipment to assemble HDPE pipe in the field. Fast, dependable pipe assembly with simple, battery-powered hand tools that can be accomplished in any weather, without specialized equipment and provides a joint that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

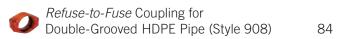




Couplings page











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

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



No. H10 90° Elbow



No. H11 45° Elbow



No. H20 Tee



No. H60 Reducer

Design Data

HDPE

AGS

Hole Cut

victaulic.com 84 G-103 REV Q

AGS

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VBS

Joints Hole Cut

Stainless Expansion Steel Plain End Joints

Copper

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Hydronic Balancing

Aquamine™ PVC

Grooved

Tools

FRP

Geals and O-Rings

Design Data 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	page	Fittings and Pipe	page
Aquamine Plain End Coupling (Series 2970)	85	Aquamine Fittings	87
Aquamine Transition Coupling for PVC to HDPE (Series 2971)	86	Aquamine Pipe (Series 2900)	88
Aquamine Transition Coupling for PVC to Groove (Series 2972)	86	Valves	page
		Aquamine Ball Valve (Series 2921)	88
		Aquamine Butterfly Valve (Series 2950)	88



Aquamine[™] Plain End Coupling SERIES 2970

- 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™ 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

- 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

Copper



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

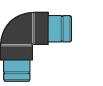
Certifications/Listings:

Download publication 02.06 for potable water approvals





Series 2904 Coupling $(ALF \times ALF)$



Series 2910 90° Elbow $(ALM \times ALM)$



Series 2905 Coupling (ALF×SCF)



Series 2912 45° Long $(ALM \times ALM)$



Series 2906 Coupling $(ALM \times PEM)$



Series 2913 90° Sweep $(ALM \times ALM)$



Series 2907 Coupling $(ALM \times VIC)$



Series 2914 45° Sweep $(ALM \times ALM)$



Series 2908 Coupling $(ALM \times NPT-M)$



Series 2909 Coupling $(PEM \times NPT-M)$



Series 2915 End Cap (ALM)



Series 2916 Transition Nipple $(ALM \times FLG)$



Series 2917 Tee



Series 2918 Reducing Tee $(ALM \times ALM \times ALM)$ $(ALM \times ALM \times ALM)$ $(ALF \times ALM)$



Series 2919 Reducer



Series 2920 Reducer $(ALM \times SCF)$



Series 2930 **Outlet Coupling** $(ALF \times ALF \times NPT-F)$



Series 2937 (1" | 25 mm Outlet) **Series 2938** (1½" | 38 mm Outlet) **Series 2939** (2" | 50 mm Outlet) Formed Outlet Coupling $(NPT-F \times NPT-F \times NPT-F)$



Series 2940 **Outlet Fitting** $(ALM \times ALM \times$ NPT-F)

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** 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

Intro

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AC

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SP

Hole Cut

Expansion

Plain F

Stainles

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AWW.

Steam

Hydronic

HDPE

\quamine[™] PVC

PVC

FRI

J.

Gasket Seals a

Design

AGS

/BSP

Hole Cut

Plain End

Stainless Steel

AWWA Copper

Steam System

Hydronic Balancing

Grooved PVC System

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

- For use where corrosive conditions exist
- Designed for use on reverse osmosis systems
- For use on roll/cut grooved PVC
- Sizes from $1\frac{1}{2}-4$ " | 40-100 mm
- Pressures up to 150 psi | 1034 kPa | 10 bar
- For stainless steel and FRP applications, contact Victaulic

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

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

Intro

990

AG

VBS

Hole Cut

Expansion

Plain Fn

Stainles

Coppe

× A

Hydro

HDPE

\quamine™ PVC

Grooved

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Tool

Seals 0-Rin

Design

Q

FRP

Pipe Preparation Tools

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 ½" | 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	page	Plant/Shop Fabrication Roll Grooving Tools	page
VE12	93	₩ VE268	103
VE26	93	VE414MC	104
VE26/46 Power Drive Kit	94	₩ VE460	105
VE46	94	₩ VE872	106
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VE226 Power Drive Kit	95	Field Manual and Motorized Cut Grooving Tools	page
		VG28GD, VG28GD-ABR, VDG26GD	107
Field Fabrication Roll Grooving Tools	page	VG824, VG824DG, VG824-ABR, VG828	108-109
VE106/VE107	96	🅭 VG	110
VE206	97	ŷ VG412	110
VE272SFS	98		
VE270FSD/VE271FSD	99	Cut Grooving Tools for Plastic Pipe	page
VE416FS	100	VPG26	111
VE416FSD/VE417FSD	101	VPG824	111
YE450FSD	102		

For grooving stainless steel, download submittal 17.01.

Pipe Preparation Tools

Aquamine[™] Grooving Tools





1 9			
APG	112	VPD752	115
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₩ НСТ908	112	VAPS224	117
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Pipe Cut-Off Tools	page		
VCT1 Manual	114	VBSP Closure Tools	page
VCT2 Automatic	114	Manual VBSP Closure Tools	120
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		VAPS 131R	121
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page

Tool Accessories

page

AWWA



Tool Ratings Pipe Size Ca	— Maximum pacity	Pipe Size (in mm)/Schedule								
Model	Pipe Material	Notes	³ ⁄ ₄ 20	1 25	1¼ 32	1½ 40	2 50			
	Steel		5-10		5-40					
VE12	Stainless				40S					
VEIZ	Aluminum	1	5-10		5-40					
	PVC Plastic				40					
VE12SS	Lt. Wall SS									

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

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

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



Tool Ratings Pipe Size Ca	— Maximum pacity		Pipe Size (in mm)/Schedule								
Model	Pipe Material	Notes	2 50	5 125	6 150						
VE26S	Steel			5-40			5-10	-10			
VE203	Stainless		4	OS Onl	у						
VE26C	Copper		K, L, M and DWV								
VE26AC	Australia				A, B and D						
VE26P	Aluminum	1	5-40 5-10								
VEZOP	PVC Plastic										
VE26SS	Lt. Wall SS				5S-	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



Tool Ratings — Maximum Pipe Size (in mm)/Schedule Pipe Size Capacity 41/2 Model Pipe Material Notes 100 120 125 150 Steel 5-40 VE46S Stainless 40S Only Aluminum 5-40 VE46P PVC Plastic 40 - 80

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

Field Portable Roll Grooving Tools

VE46 GROOVE IN-PLACE

<u>Download submittal 24.01</u> 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

Design

FRP



Field Portable Roll Grooving Tools

VE226 PORTABLE GROOVER

Download submittal 24.01 for complete information

- Tool is operated using a standard %" | 9.5 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				Pipe Size (in mm)/Schedule												
Model	Pipe Material	Notes	³ ⁄ ₄ 20	/· · · /· · /-			2 50	2½ 60	3 80	3½ 90	4 100	4½ 120	5 125	6 150			
VEDDEC	Steel					5 –	40				5-10						
VE226S	Stainless					40S	Only										
	Steel			5 -	40												
VE226B	Stainless			405	Only												
VEZZOD	Aluminum	1		5 –	40												
	PVC Plastic		40 40-80														
VE226M	Steel						5-40						5-10				
VEZZOWI	Stainless							4	0S On	y							
VE226C	Copper						K, L, M and DWV										
VE226BSS	Lt. Wall SS			5S-	105												
VE226MSS	Lt. Wall SS									5S -	-10S						
VE226P	Aluminum	1					5-40					5-10					
VE226P	PVC Plastic					40-	-80 40										

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



Field Portable Roll Grooving Tools

VE226 POWER DRIVE KIT

- Kit for connecting a VE226 roll grooving tool to a Ridgid® 700 Power Drive
- Weight: 75 lbs. 34 kg



Tipe Freparation Tools

Field Fabrication Roll Grooving Tools VE106/VE107 GROOVE-N-GO

- 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
- 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 Pipe Size C	s — Maximum apacity	Pipe Size (in mm)/Schedule												
Model	Pipe Material	Notes	1¼ 32	1½ 40	2 50	2½ 60	3 80	3½ 90	4 100	5 125	6 150			
	Steel	2, 3	5-40											
VE106	Stainless	2	40S											
12100	Lt. Wall SS	4		5S-10S										
	Copper	5		K, L, M and DWV										

- 2. Use standard grooving rolls marked with the prefix R.
- $3.\, End Seal^{\text{TM}}\, grooving\, rolls\, marked\, with\, the\, prefix\, RZ\, are\, available.\, Contact\, Victaulic\, for\, details.$
- 4. Use grooving rolls marked with the prefix RX.
- 5. Use grooving rolls marked with the prefix RR.



Portable Roll Groover

STYLE VE206

- 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 $1\frac{1}{4}-6$ " | 32-150 mm pipe
- Weight: 165 lbs. 75 kg

Tool Ratings Pipe Size Ca	s — Maximum apacity	Pipe Size (in mm)/Schedule												
Model	Pipe Material	Notes	1¼ 32	1½ 40	2 50	2½ 60	3 80	3½ 90	4 100	5 125	6 150			
	Steel	2, 3		5-40										
V/F206	Stainless	2	40S											
VE206	Lt. Wall SS	4				Į.	5S – 10S	5						
	Copper	5					K, L, I	M and	DWV					

- 2. Use standard grooving rolls marked with the prefix $\ensuremath{\mathsf{R}}.$
- $3.\, End Seal^{\,\!\top\!\!\!\!M} \, grooving \, rolls \, marked \, with \, the \, prefix \, RZ \, are \, available. \, Contact \, Victaulic \, for \, details.$
- 4. Use grooving rolls marked with the prefix RX.
- 5. Use grooving rolls marked with the prefix RR.



AGS

Design

Field Fabrication Roll Grooving Tools **VE272SFS**

- 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

Tool Ratings Pipe Size Ca		Pipe Size (in mm)/Schedule														
Model	Pipe Material	Notes	³ ⁄ ₄ 20	1 25	1¼ 32	1½ 40	2 50	2½ 60	3 80	3½ 90	4 100	5 125	6 150	8 200	10 250	12 300
	Steel	2, 3		5-40 5-												20
	Stainless	2		40\$.2	50
VE272SFS	Lt. Wall SS	4, 13		5S-10S												
VE2/23F3	Aluminum	1		5-40								5-	20			
	PVC Plastic	6, 14					40			40 -	- 80			40		
	Copper	5, 13							K,	L, M a	nd D\	۸V				

- 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.
- 13. Use sway brace for 8"/200 mm copper and 8"-12"/200 300 mm lightwall stainless steel.
- 14. A special lower roll exclusively for grooving 2" Sch. 80 PVC is available. Part. No. RP02272L02



Field Fabrication Roll Grooving Tools

- 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, 15 amp power; VE271FSD is provided with 220 volt, 6 amp power
- Weight: 340 lbs. | 154 kg

Tool Ratings Pipe Size Ca	— Maximum pacity	Pipe Size (in mm)/Schedule														
Model	Pipe Material	Notes	³ ⁄ ₄ 20	1 25	1¼ 32	1½ 40	2 50	2½ 60	3 80	3½ 90	4 100	5 125	6 150	8 200	10 250	12 300
	Steel	2, 3	5-40												5-20	
	Stainless	2		40S												50
VE270FSD/	Lt. Wall SS	4, 13		5S – 10S												
VE271FSD	Aluminum	1		5-40									5-20			
	PVC Plastic	6, 14					40	40 – 80 40						40		
	Copper	5, 13	K, L, M and DWV													

- 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.
- 13. Use sway brace for 8"/200 mm copper and 8"-12"/200 300 mm lightwall stainless steel.
- 14. A special lower roll exclusively for grooving 2" Sch. 80 PVC is available. Part. No. RP02272L02



Field Fabrication Roll Grooving Tools VE416FS Download submittal 24.01 for complete information 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 for initial groove diameter The fully-motorized, semi-automatic,

Groove depth adjuster allows for easy adjustment

- 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

			Pipe Size (in mm)/Schedule												
Tool Ratings Pipe Size Ca	s — Maximum apacity		OGS										GS		
Model	Pipe Material	Notes	2 50	2½ 60	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400		
	Steel	2, 3				5 –	40				10-STD	STD Wall AGS			
	Stainless	2	40S STD										STD Wall RW AGS		
VE416FS	Lt. Wall SS	4				10S RWX									
VE410F3	Aluminum	1,6				5 –	40				5-STD				
	PVC Plastic	6	40 40 - 80 40												
	Copper	5			K, L,	M and	DWV								

- 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

- 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 Pipe Size Ca	— Maximum pacity				AGS										
Model	Pipe Material	Notes	2 50	2½ 60	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400		
	Steel	2, 3	5-40 10-STD							STD Wall AGS					
	Stainless	2		40S STD									STD Wall RW AGS		
VE416FSD/	Lt. Wall SS	4	5S-10S									10S RWX			
VE417FSD	Aluminum	1,6		5-40 5-STD											
	PVC Plastic	6	40 40 – 80						40						
	Copper	5			K, L, I	M and	DWV								

- 1. 6061-T4 or 6063-T4 Alloy must be used.
- 2. Use standard grooving rolls marked with the prefix $\ensuremath{\mathrm{R}}.$
- 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.



VEASORSO

Field Fabrication Roll Grooving Tools

- 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

Tool Ratings — Maximum Pipe			Pipe Size (in mm)/Schedule														
Size Capacit	OGS									AGS							
	Pipe		4	5	6	8 10 12 14 16	18	14	16	18	20	22	24				
Model	Material .	Notes	100	125	150	200	250	300	350	400	450	350	400	450	500	550	600
	Steel	3, 7	5-40									5-STD					
VE450FSD	Stainless	8			405				ST	D		STD					
VE450F3D	Lt. Wall SS	9			5S-	· 10S						10S RWX					
	Aluminum	1, 6			5-40)		STD									
	PVC Plastic	6	4	10 – 8	0	40											

- 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.
- 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

- 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 Pipe Size Ca	s — Maximum apacity	Pipe Size (in mm)/Schedule														
Model	Pipe Material	Notes	³ ⁄ ₄ 20	1 25	1¼ 32	1½ 40	2 50	2½ 60	3 80	3½ 90	4 100	5 125	6 150	8 200	10 250	12 300
	Steel	2, 3	5-40												5-	20
	Stainless	2		40\$												
VE268	Lt. Wall SS	4		5S-10S												
VE200	Aluminum	1, 6		5-40										5-20		
	PVC Plastic	6, 14					40	40 40 - 80 40								
	Copper	5	K, L, M and DWV													

- 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

- 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

Tool Ratings Pipe Size Ca	— Maximum					Pip	e Size OGS	(in mi	n)/Scl	nedule		AC	as
Model	Pipe Material	Notes	2 50	2½ 60	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400
	Steel	3, 7				5-	40				10-STD	STD W	all AGS
	Stainless	8					40S					STD Wall	RW AGS
VE414MC	Lt. Wall SS	9					5S – 10	OS				10S F	RWX
VE414IVIC	Aluminum	1, 6				5 –	40				5-STD		
	PVC Plastic	6	40			40 – 80)		40				
	Copper	5			K, L,	M and	DWV						

- 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).

Design Data



Plant/Shop Fabrication Roll Grooving Tools

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

									P	ipe Siz	e (in l	nm)/S	chedu	le						
ool Ratings ipe Size C	s — Maximum apacity										AC	S								
Model	Pipe Material	Notes	14 350	16 400	18 450	20 500	22 550	24 600	26 650	28 700	30 750	32 800	34 850	36 900	38 950	40 1000	42 1050	48 1200	50 1250	60 1500
	Steel	3, 8			10-	-XS								.375 -	500					
VE460	Stainless	8			ST	ΓD														
	Lt. Wall SS	9	5S – 1	OS, TRI	JE 10															

Tool Ratings	s — Maximum					Pi	pe Siz		mm)/S	Schedi	ule			
Model	Pipe Material	Notes	4 100	5	6	8	10	12	14	16	18	20	22	24
	. 1400			125	150	200	250	300	350	400	450	500	550	600
	Steel 3,8			5 –	80		5 –	XS						
	Stainless	8			40S				ST	ΓD				
VE460	Lt. Wall SS	9			5S -	10S			55-1	OS, TR	UE 10			
	Aluminum	1, 6			5 -	40								
	PVC Plastic	6		40 – 80)	40								

- 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

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 Rating Pipe Size C	gs — Maximum Capacity											Pipe	Size	(in ı	mm)	†/Sc	hedu	ıle						
Model	Pipe Material	Note	8 200	10 250	12 300	12										72 1800								
VE872	Carbon Steel	11	S	ch. 4 .500										.375/	9.5 m	ım to	.500	/12.7	7 mm					
VE8/2	Carbon Steel													.562	/.625	wall	Grac	le 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.

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.

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

90

AGS

VBSP

Hole Cut

Plain End

Stainles

AWWA

Steam Syster

Hydronic Balancing

Jamine™ PVC





Field Manual Cut Grooving Tools

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

- 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 Size Capacit		ximum Pipe			Pipe S	Size (in l	mm)/Sc	hedule		
Model	Note	Pipe Material	2 50	2½ 65	3 80	3½ 90	4 100	5 125	6 150	8 200
	15, 16	Steel				40-80				40
VG28GD	15	Stainless				40-	-80			
VG28GD	15	Aluminum				40-	-80			
	15	Ductile Iron				CI	ass 53 M	in.		

^{15.} Special knives and stops may be required.

^{16.} Maximum steel pipe wall thickness up to 0.437"/11.1 mm.

Tool Ratings — Capacity	Maximu	m Pipe Size			Pipe S	ize (in l	nm)/Sc	hedule		
		Pipe	2	21/2	3	31/2	4	5	6	8
Model	Note	Material	50	65	80	90	100	125	150	200
VG28GD-ABR	15	Steel				40-80				40

^{15.} Special knives and stops may be required.

Tool Ratings Size Capacit		kimum Pipe			Pipe S	ize (in l	mm)/Sc	hedule		
Model	Note	Pipe Material	2 50	2½ 65	3 80	3½ 90	4 100	5 125	6 150	8 200
VDG26GD	15	Steel							40-80	

^{15.} Special knives and stops may be required.

Field Manual Cut Grooving Tools

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

- 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. 1½hp | 1.12kw
- Drive Speed: 38 rpm max. Weight: 82 lbs. 37.2 kg

Tool Ratings Size Capaci		ximum Pipe			Pipe	Size (in mm)/Sche	dule		
Model	Note	Pipe Material	8 200	10 250	12 300	14 350	16 400	18 450	20 500	22 550	24 600
		Steel		40-	-80			3	30 – STE)	
VC024	1.5	Stainless		3	30 – STE	350 400 450 500 550 60 30-STD					
VG824	15	Aluminum	3	30 – ST[)						
		Ductile Iron				Cla	ss 53 N	1in.			

^{15.} Special knives and stops may be required.

Tool Ratings Size Capacity		imum Pipe			Pipe	Size (in mm)/Sche	dule		
		Pipe	8	10	12	14	16	18	20	22	24
Model	Note	Material	200	250	300	350	400	450	500	550	600
VG824-ABR	15	Steel					40 – XS				

^{15.} Special knives and stops may be required.

	Tool Ratings Size Capacit		ximum Pipe			Pipe	Size (in mm)/Sche	dule		
	Model	Note	Pipe Material	8 200	10 250	12 300	14 350	16 400	18 450	20 500	22 550	24 600
Ì	VG824DG	15	Steel		40-80							

^{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

Tool Ratings Size Capacit		ximum Pipe	F	Pipe Siz	ze (in ı	nm)/S	chedul	e
Model	Note	Pipe Material	14 350	16 400	18 450	20 500	22 550	24 600
Model	INOTE	IVIALEITAI	330	700	730	300	330	000
VG828	15	Steel			.500	750		

15. Special knives and stops may be required.

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 — Capacity	Maximum Pipe Size				Pi	pe Si	ze (in	mm).	/Sche	dule			
		3/4	1	11/4	1½	2	21/2	3	3½	4	5	6	8
Model	Pipe Material	20	25	32	40	50	60	80	90	100	125	150	200
	Steel						40	-80					
	Stainless						40	-80					
VG	Aluminum ¹						40	-80					
	PVC Plastic						40	-80					
	Ductile Iron									Cl. 53		Class 5	3 Min.



Tool Ratings Pipe Size Ca	— Maximum pacity	Pipe Size (in mm)/Schedule						
Model	Pipe Material						12 300	
VG412	Steel	Steel 40-80						
VG412	Ductile Iron			Cla	ss 53 N	1in.		

Field Motorized Cut Grooving Tools

VG412 ORBITAL MACHINING TOOL

- 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

Design Data



Tool Ratings Pipe Size Ca	— Maximum pacity	Pipe Size (in mm)/Schedule						
Model	Pipe Material	2 50	2½ 60	3 80	3½ 90	4 100	5 125	6 150
VPG26	PVC Plastic	40-80						

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

Cut Grooving Tools for Plastic Pipe VPG824

- 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



Tool Ratings Pipe Size Ca	— Maximum apacity	Pipe	Size (in mm)/Sche	dule
Model	Pipe Material	8 200	10 250	12 300	14 350	16 400
VPG824	PVC Plastic	40-80				



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

- 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

Design Data



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

- 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 2¾" 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

- 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



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,
 - (1) battery charger,
 - (1) tool carrying case,
 - (1) jaw carrying case,
 - (1) each of jaws sized ½" | 15 mm, ¾" | 20 mm,
 - 1" 25 mm, 1½" 40 mm, and 2" 50 mm, and
 - (1) 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" | 25 mm jaw)



Tool Accessories

VPD752 POWER DRIVE

- 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: 115 volts, 15 amp, 50/60 hertz (220 volt, 6 amp, 50/60 cycle option)
- Weight: 140 lbs. 634 kg

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

- 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: 34-12" 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

- 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 $\frac{3}{4} 24$ " $\frac{20}{600}$ mm pipe; tape marked with $\frac{3}{6}$ 0.01" $\frac{3}{6}$ 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)

Tool Accessories

TOOL CARRY BAG

- 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

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

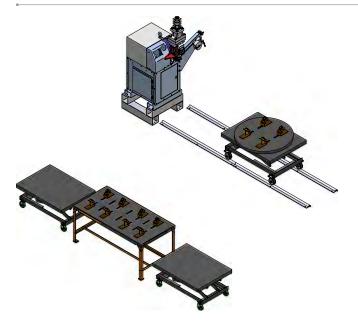
CTH-01 SMALL 10-TON HYDRAULIC TOOL CTH-02 LARGE 25-TON HYDRAULIC TOOL

Download submittal 24.01 for complete information

For specific information on the appropriate tool by coupling, please download individual coupling product submittals

Design Data

Design Data



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

- 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

- 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



Gaskets/Seals/O-Rings

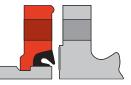
Victaulic offers a broad variety of synthetic rubber gaskets suitable for a wide range of applications. Victaulic gaskets® provide high- and low-temperature limits, tensile strength, chemical resistance and shelf life.









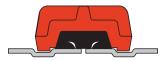


Installation-Ready™

Standard

Reducing

Vic-Flange









Flush-Seal™

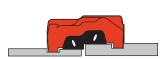
Grooved Copper Tubing with Flush-Seal Gasket

Advanced Groove System (AGS)

EndSeal™









Outlet

Mechanical-T

IPS to AWWA Transition

AWWA Flush-Seal









Plain End

Plain End for HDPE Pipe

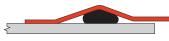
Double Grooved for HDPE Pipe

IPS to HDPE Transition



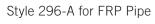


Vic-Press[™] for Schedule 10S Stainless Steel



Victaulic Bolted Split-Sleeve Products (VBSP)







OGS-200 for Style 870 Rigid Coupling



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 $+350^{\circ}F + 177^{\circ}C$.

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 "EHP" and Grade "EHP" Vic-Plus gaskets are UL Classified in accordance with ANSI/NSF 61 for cold $(+86^{\circ}F | +30^{\circ}C)$ and hot $(+180^{\circ}F | +82^{\circ}C)$ 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.

Vic-Press[™] Schedule 10S couplings and fittings: UL Classified in accordance with ANSI/NSF 61 for cold +73°F | +23°C and hot +180°F | +82°C potable water service with "E" and "H" o-rings 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.

AGS

VBSP

Stainless Expansion Steel Plain End Joints Hole Cut

System AWWA Copper

Grooved AquamineTM HDPE PVC

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

Grade	Temp. Range 1	Compound	Color Code	General Service Guidelines
E	-30°F to +230°F -34°C to +110°C	EPDM	Green Stripe	May be specified for hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. UL Classified in accordance with ANSI/NSF 61 for cold +73°F +23°C and hot +180°F +82°C potable water service and ANSI/NSF 372. NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES.
EHP ²	-30°F to +250°F -34°C to +120°C	EPDM	Red and Green Stripes	May be specified for hot water service within the specified temperature range. UL Classified in accordance with ANSI/NSF 61 for cold +73°F +23°C and hot +180°F +82°C potable water service and ANSI/NSF 372. NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES.
Т	-20°F to +180°F -29°C to +82°C	Nitrile	Orange Stripe	May be specified for petroleum products, hydrocarbons, 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.
(Type A) ³	Ambient	EPDM	Violet Stripe	Applicable for wet and dry (oil-free air) sprinkler services only. For dry services Flush-Seal [™] gaskets may be specified. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.
E2	Ambient	EPDM	Double Green Stripe	UL Classified in accordance with ANSI/NSF 61 for cold +73°F +23°C and hot +180°F +82°C potable water service and ANSI/NSF 372. NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES.

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.



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

Vic-Plus pre-lubricated gasket.

Stainless Steel

Copper

AWWA

Ste

Hydronic

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.

AGS

Hole Cut

Stainless Expansion Steel Plain End Joints

AWWA Coupling Gaskets

Grade	Temp. Range 1	Compound	Color Code	General Service Guidelines
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.

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

Grade	Temp. Range ¹	Compound	Color Code	General Service Guidelines
н	-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.
	St	andard Seal: Vic-Pres	ss products will ship	with Grade "H" seal unless otherwise specified on order.
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.
0	+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.

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.



Grade	Temp. Range ¹	Compound	Color Code	General Service Guidelines
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 ozo 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 SERVICE
ı	-40°F to +160°F -40°C to +71°C	Isoprene	N/A	Water; saltwater; sewage; good resistance to oxygen and dilute ac

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

VBSP Gaskets

Grade	Temp. Range ¹	Compound	Color Code	General Service Guidelines
Т	-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.
0	+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.

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

OGS

AGS

/BSP

Hole Cut

Plain End

Stail Stail Stail

m AV

Hydronic Balancing

HDPE

d Aquamine PVC

Grooved

FRP

Tools

Gaskets, Seals and O-Rings

sign Se

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. i, 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 used on 14–72" 350–1800 mm pipe sizes.

Pipe must be prepared to meet Victaulic specifications outlined for each specific product style. Performance data listed herein is based on proper pipe preparation. The proper gasket must be selected for the service intended. It should be noted that there are various services for which Victaulic gaskets are not recommended. 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.



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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.



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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 strict compliance to applicable codes, standards, and directives, relevant to specific industries and markets.

PRODUCT CERTIFICATIONS:

Fire Protection

ACTIVFIRE - ActivFire 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 Przeciwpozarowej (Poland)

CNPP - Centre National de Prévention et de Protection (France)

CTPC - Consiliul Technic Permanent Pentru Constructii (Romania)

cULus - Underwriter's Laboratories, LLC (USA)

EMI – Epitesugyi Minosegellenorzo Innovacious (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)

SBSC - Svensk Brand & Säkerhets Certifiering AB (Sweden)

TFRI - Tanjin Fire Research Institute of Ministry of Public Security (China)

TSU - Technický Skúšobný Ústav Pieštany, š.p. (Slovakia)

TSUS – Technický Skúšobný Ústav Stavebný, n.o. (Slovakia)

TZUS – Technický a Zkuševní Ústav Stavební Praha, s.p. (Czech Republic)

UKRFIRESERT - State Certification Center (Ukraine)

UI - Underwriter's Laboratories, LLC (USA)

ULC - Underwriter's Laboratories of Canada (Canada) VdS - Verband der Schadenverhütung GmBH (Germany)

VKF - Vereinigug Kantonaler Feuerversicherungen (Switzerland)

Zagrebinspekt (Croatia)

Potable Water

ÁNTSZ – Állami Népegészségügyi És Tisztiorvosi Szologálat (Hungary)

ARPA – Agenzia Regionale per la Protezione dell'Ambiente (Italy)

DVGW - Deutscher Verein des Gas- und Wasserfaches e.V. (Germany)

Eurofins - ACS: Attestation de Conformité Sanitaire (France)

HZJZ - Croatian National Institute of Public Health (Croatia)

KWWA - Korea Water and Wastewater Works Association

NSF - NSF International (USA)

ÖVGW - Österreichische Vereinigung für das Gasund Wasserfach (Austria)

PZH – Panstwowy Zaklad Higieny (Poland)

RUVZPP – Regionálny úrad verejného zdravotníctva so sídlom v Poprade (Slovakia)

SAI – SAI Global (Australia)

SPAN – Suruhanjaya Perkhidmatan Air Negara (Malaysia)

SVGW - Schweizerischer Verein des Gas- und Wasserfaches

UL - Underwriter's Laboratories. LLC (USA)

WRAS - Water Regulations Advisory Scheme (UK)

ZUOVA - ZDRAVOTNÍ ÚSTAV se sídlem v Ostrave (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)

RINA - Registro Italiano Navale (Italy)

USCG – US Coast Guard (USA)

HVAC

CSTB - Centre Scientifique et Technique du Bâtiment (France)

ITB - Instytut Techniki Budowlanej (Poland)

Sercons Europe BV (Russia)

Plumbing

IAPMO - International Association of Plumbing & Mechanical Officials (USA)

ICC-ES - International Code Council- Evaluation Service (USA)

NSF – NSF International (USA)

WaterMark (Australia)

COMPLIANCE:

Codes and Standards Compliance

ANSI - American National Standards Institute (USA)

API – American Petroleum Institute (USA)

APSAD – Assemblée Plenière Société Assurance Dommage (France)

AS/NZS – Standards Australia and Standards New Zealand (AIJ & N7)

ASTM - American Society for Testing and Materials (USA)

AWWA - American Water Works Association (USA)

BOCA - Building Officials and Code Administrators (USA)

CSA - Canadian Standards Association (Canada)

CSFM - California State Fire Marshal (USA)

EN - European Standards

GOST R – Gosstandart (Russia)

IPC - International Plumbing Code (USA)

ISO - International Standards Organization (Global)

NACE - National Association of Corrosion Engineers (USA)

NFPA - National Fire Protection Association (USA)

SBCCI - Southern Building Code Congress International (USA)

UPC - Uniform Plumbing Code (USA)

Pressure Equipment Safety

(97/23/EC) PED - Pressure Equipment Directive (Europe)

CSA B51 - "Boiler, Pressure Vessel, and Pressure Piping Code" (Canada)

CRN – Canadian Registration Number per CSA B51 (Canada)

Chemical Safety / Recycling

(EC/1907/2006) REACH-Registration, Evaluation, Authorization, and Registration of Chemicals (Europe)

(2002/95/EC) RoHS -Restriction of Hazardous Substances Directive (Europe)

(2002/96/EC) WEEE - Waste Electrical and Electronic Equipment Directive (Europe)

Building Services

(EU/305/2011) CPR -Construction Products Regulation-Fire safety products (Europe)

NBC - National Building Code (Canada)

PSB - TUV SUD PSB Singapore (Singapore)

Explosive Environments

(94/9/EC) ATEX - Equipment and protective systems for potentially explosive atmospheres (Europe)

Seismic

OSHPD - Office of Statewide Health Planning and Development (USA)

Tools and Machinery

(2006/42/EC) MD - Machinery Directive (Europe)

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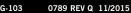












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