GENERAL Effective March 2020



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, are 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 of the benefits that Victaulic[®] solutions bring to a project – such as productivity, safety, design flexibility and quality – are the unique features of our products.

VICTAULIC GROOVED END PIPING SYSTEMS PROVIDE:

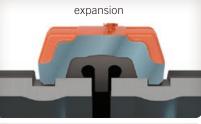


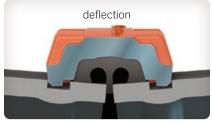
Easy system maintenance and expansion—through simple coupling disassembly that allows for easy access.



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



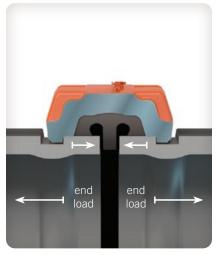




Flexibility—with the inherent axial movement and deflection properties of flexible couplings in a groove system. May be used to accommodate pipeline thermal expansion and contraction, misalignment and settlement, and seismic stresses.



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 for supplemental restraints.



Rigidity—with an angled bolt pad design that provides positive clamping of the pipe to resist torsional and flexural loads.

AGS

VBSP

Plain End Hole Cut

Potable Water Shouldered Steel

High Performance Hydronic Balancing

HDPE

Aquamine™ PVC CPVC/PVC

Specialty Tools





Certifications/Listings:













Download publication 10.01 for Fire Protection Certifications/Listings

QuickVic™ Flexible Coupling STYLE 177N

QuickVic™ Rigid Coupling

Sizes from 2-12" | DN50-DN300

in stainless steel systems

in aluminum systems

Download publication 06.23 for complete information

Pressures up to 750 psi | 5171 kPa | 52 bar **Download publication 17.01** for applications

Download publication 21.04 for applications

Angled bolt pad housing design provides rigidity

STYLE 107N

Download publication 06.24 for complete information

- Flexible pipe joint which allows for expansion, contraction and deflection
- Sizes from 2-8" | DN50-DN200
- Pressures up to 1000 psi | 6895 kPa | 69 bar
- **Download publication 17.01** for applications in stainless steel systems
- **Download publication 21.04** for applications in aluminum systems
- **Download publication 32.01** for applications in PVC systems





Download publication 10.01 for Fire Protection Certifications/Listings

Zero-Flex™ Rigid Coupling STYLE 07

Download publication 06.02 for complete information

- Angled bolt pad housing design provides rigidity
- Sizes from 1–12" | DN25–DN300
- Pressures up to 750 psi | 5171 kPa | 52 bar
- For sizes 14-50" DN350-DN1250, download publication 20.02 for information on AGS Style W07

Certifications/Listings:















Download publication 10.01 for Fire Protection Certifications/Listings















Download publication 10.01 for Fire Protection Certifications/Listings

Flexible Coupling

STYLE 77

Download publication 06.04 for complete information

- Flexible pipe joint which allows for expansion, contraction and deflection
- Sizes from 34-24" | DN20-DN600
- Pressures up to 1000 psi | 6895 kPa | 69 bar
- For sizes 14-78" DN350-DN1950, download publication 20.03 for information on AGS Style W77
- Download publication 32.01 for applications in PVC systems
- Download publication 21.01 for information on Style 77A for applications in aluminum systems

Flexible Coupling

STYLE 75

Download publication 06.05 for complete information

- Lightweight coupling for moderate pressures
- Flexible pipe joint which allows for expansion, contraction and deflection
- Sizes from 1-8" | DN25-DN200
- Pressures up to 500 psi | 3447 kPa | 34 bar
- **Download publication 32.01** for applications in PVC systems



Certifications/Listings:















Download publication 10.01 for Fire Protection Certifications/Listings

Reducing Coupling

STYLE 750

Download publication 06.08 for complete information

- Replaces two couplings and a reducing fitting
- Sizes from 2-10" | DN50-DN250
- Pressures up to 500 psi | 3447 kPa | 34 bar

Certifications/Listings:













Download publication 10.01 for Fire Protection Certifications/Listings

victaulic.com 4 **G-103** REV E **VBSP**

Hole Cut

Plain End







Snap-Joint[™] Coupling

STYLE 78

Download publication 06.09 for complete information

- Designed for quick disconnect service
- Sizes from 1-8" | DN25-DN200
- Pressures up to 300 psi | 2068 kPa | 21 bar
- <u>Download publication 21.02</u> for information on Style 78A for applications in aluminum systems

High Pressure Rigid Coupling

STYLE HP-70

Download publication 06.12 for complete information

- Heavy housing for high pressure service
- Sizes from 2–16" | DN50–DN400
- Pressures up to 1000 psi | 6895 kPa | 69 bar



Certifications/Listings:









Download publication 10.01 for Fire Protection Certifications/Listings





Download publication 10.01 for Fire Protection Certifications/Listings

Elbows



No. 10 90° Elbow



No. 100-1½D 90° 1½ D Long Radius Elbow



No. 100-3D 90° 3 D Long Radius Elbow



Fittings

No. 100-5D 90° 5 D Long Radius Elbow



Download publication 07.01 for complete information on OGS grooved end fittings for carbon steel pipe

All fittings supplied with grooves or shoulders

Fittings available from 34-24" DN20-DN600

publication 20.05 for complete information

For AGS sizes 14–60" DN350-DN1500, download

Standard fitting pressure ratings conform

to ratings of installed coupling

for fast installation

No. 100-6D 90° 6 D Long Radius Elbow

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

For Schedule 80 3D long radius cast ductile

iron elbows, download publication 07.12

For coating options, publication 07.01



No. 11 45° Elbow



No. 110-1½D 45° 1½ D Long Radius Elbow



No. 110-3D 45° 3 D Long Radius Elbow



No. 110-5D 45° 5 D Long Radius Elbow



No. 110-6D 45° 6 D Long Radius Elbow



No. 12

22½° Elbow



No. 13 11¼° Elbow



No. 18 90° Adapter **Elbows**



No. 19 45° Adapter **Elbows**



No. 10-DR Drain Elbow



No. R-10G Reducing Base Support Elbows (OGS Groove x OGS Groove)



No. R-10F Reducing Base Support Elbows (OGS Groove x Flange)



VBSP

Hole Cut

Plain End

CPVC/PVC

victaulic.com





Download publication 10.01 for Fire Protection Certifications/Listings

Tees, Crosses, Wyes, and Laterals



No. 20 Tee



No. 25 **Grooved Branch** Reducing Tee



No. 29M Tee with Threaded Branch



Fittings

Download publication 07.01 for complete information on OGS grooved end fittings for carbon steel pipe

All fittings supplied with grooves or shoulders

Fittings available from 34-24" DN20-DN600 For AGS sizes 14-60" | DN350-DN1500, download publication 20.05 for complete

Standard fitting pressure ratings conform

to ratings of installed coupling

for fast installation

information

No. 29T Threaded Branch Reducing Tee



No. 30 45° Lateral



No. 30-R 45° Reducing Lateral



No. 32 Tee Wye



No. 32-R Reducing Tee Wye



No.33 True Wye



No. 35 Cross







Download publication 10.01 for Fire Protection Certifications/Listings

Adapters, Nipples, Caps and Plugs



No. 40 Adapter Nipple (OGS Groove x Thread)



No. 41 ANSI Class 125 Flanged Adapter **Nipple**



No. 41-DN PN10/16 Flanged Adapter **Nipple**



Fittings

No. 42 Adapter Nipple (OGS Groove x Bevel)



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

Download publication 07.01 for complete information on OGS grooved end fittings for carbon steel pipe

All fittings supplied with grooves or shoulders

Fittings available from 34-24" DN20-DN600

For AGS sizes 14-60" DN350-DN1500, download publication 20.05 for complete

Standard fitting pressure ratings conform

to ratings of installed coupling

for fast installation

information



No. 45F ANSI Class 150 Flat Face Flanged Adapter **Nipple**



No. 45FE PN10/16 Flat Face Flanged Adapter **Nipple**



No. 45R ANSI Class 150 Raised Face Flanged Adapter Nipple



No.45RE PN10/16 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**



No. 48 Hose Nipple



No. 50 Concentric Reducer



No. 51 Eccentric Reducer



No. 52 Small Threaded Reducer



No. 53

Swaged Nipple (OGS Groove x OGS Groove)



No. 54 Swaged Nipple (OGS Groove x Thread)



No. 55 Swaged Nipple (Thread × OGS Groove)



No. 60 Cap



No. 61 Bull Plug



No. 80 Female Threaded Adapter

Dynamic Movement Joint STYLE 257

Download publication 09.17 for complete information

- M11 Compliant assembly built to accommodate dynamic movement up to 4" | 102 mm including differential settlement, seismic and thermal movement
- Sizes from 2–12" | DN50–DN300 carbon steel pipe
- Working pressure is equal to the Style 77 coupling on equivalent wall thickness pipe, **download publication 06.04** for complete information



Certifications/Listings:



Download publication 10.01 for Fire Protection Certifications/Listings

Vic-300[™] MasterSeal[™] Butterfly Valve

SERIES 761

Download publication 08.20 for complete information

- Designed for bi-directional, dead end services to full working pressure
- Multiple seat, disc material and handle options available
- Sizes from 2–12" | DN50–DN300
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For AGS sizes 14–24" | DN350–DN600,
 download publication 20.06 for information on Series W761

Butterfly Valve

SERIES 700

Download publication 08.05 for complete information

- Two-piece stem permits narrow disc design for low pressure drop performance
- Supplied standard with aluminum bronze disc, 316 stainless steel optional
- Sizes from 1½-6" | DN40-DN150
- Pressures up to 200 psi | 1379 kPa | 14 bar

Certifications/Listings:



Download publication 10.01 for Fire Protection Certifications/Listings

G-103 REV E

SE

0GS

VBSF

Hole Cut

Plain End

Stainles Steel

Potab

Shouldere

Iron

High Performan

Hydronic Balancing

HP

Aquamın

CPVC/PVC

Special

Tools

Seals and O-Rings

Design Data

Guide

Tools



Certifications/Listings:



Download publication 10.01 for Fire Protection Certifications/Listings

Vic-Ball Valve

SERIES 726

Download publication 08.23 for complete information

- High pressure standard port NACE MR-01-75compliant ball valve
- Available without a handle, or with a lever or gear operator
- Sizes from 1½-6" | DN40-DN150
- Pressures up to 1000 psi | 6895 kPa | 69 bar



Ball Valve

SERIES 727

Download publication 08.42 for complete information

- High pressure enhanced port NACE MR-01-75compliant ball valve
- Up to ⅓ better flow than competitive standard port ball valves
- Floating ball with standard port, reduces torque requirements
- Sizes from 2-6" DN50-DN150
- Pressures up to 1500 psi | 10342 kPa | 103 bar



Brass Body Ball Valve — Threaded SERIES 722

Download publication 08.15 for complete information

- Standard port, female threaded end valve constructed from forged brass
- Sizes from \(\frac{1}{4} 2 \) DN8 DN50
- Pressures up to 600 psi | 4137 kPa | 41 bar

Certifications/Listings:





Download publication 10.01 for Fire Protection Certifications/Listings

