

OIL INDUSTRY

PRODUCT CATALOG

G-109 updated 11/2014



 **victaulic**[®]

VICTAULIC® SOLUTIONS FOR OIL, GAS, AND CHEMICAL PIPING SYSTEMS



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.

Regulatory Compliance

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 Przeciwpowazarowej (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 Piešťany, š.p. (Slovakia)

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

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

UKRFIRECERT – State Certification Center (Ukraine)

UL – Underwriter's Laboratories, LLC (USA)

ULC – Underwriter's Laboratories of Canada (Canada)

VdS – Verband der Schadenverhütung GmbH (Germany)

VKF – Vereinigung 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)

NSF – NSF International (USA)

ÖVGW – Österreichische Vereinigung für das Gas- und 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 (Sweden)

UL – Underwriter's Laboratories, LLC (USA)

WRAS – Water Regulations Advisory Scheme (UK)

ZUJOVA – 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 – Det Norske Veritas (Norway)

DNV GL (Global)

GL – Germanischer Lloyd (Germany)

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/Standards

ANSI – American National Standards Institute (USA)

API – American Petroleum Institute (USA)

APSAD – Assemblée Plénière Société Assurance Dommage (France)

AS/NZS – Standards Australia and Standards New Zealand (AU & NZ)

ASME (B31.1, B31.3, B31.9) – American Society of Mechanical Engineers (USA)

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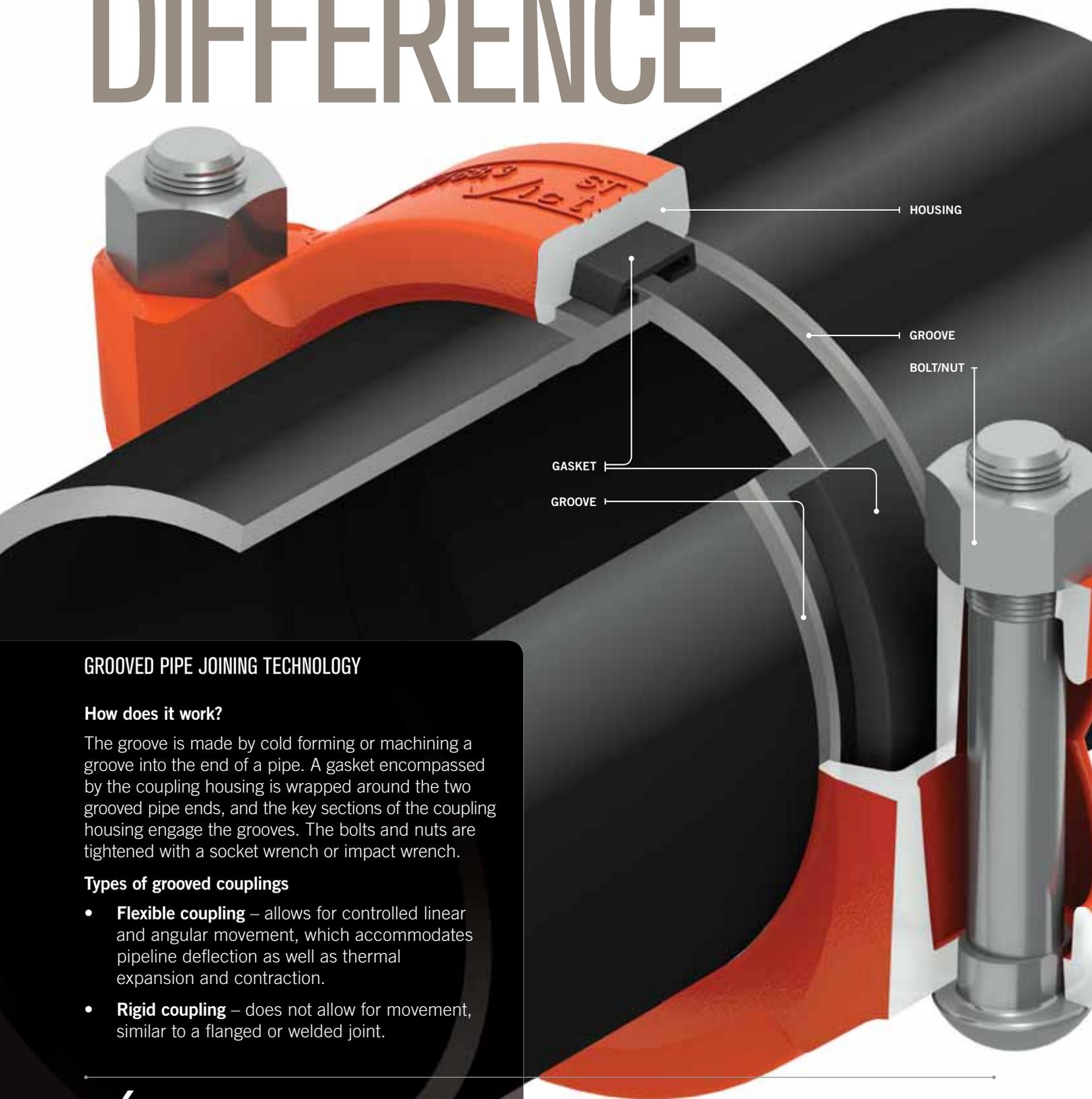
Today, *Victaulic* supports its customers with manufacturing facilities and branches located around the globe including our world headquarters location in Easton, Pennsylvania, USA. Our international presence ensures that our worldwide customers are served with speed and efficiency.

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, clean water and wastewater, fire protection, industrial construction, maritime, mining, oil, gas and chemical, and power generation.

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

THE VICTAULIC® DIFFERENCE



GROOVED PIPE JOINING TECHNOLOGY

How does it work?

The groove is made by cold forming or machining a groove into the end of a pipe. A gasket encompassed by the coupling housing is wrapped around the two grooved pipe ends, and the key sections of the coupling housing engage the grooves. The bolts and nuts are tightened with a socket wrench or impact wrench.

Types of grooved couplings

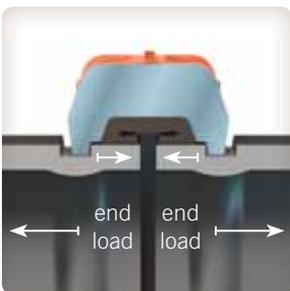
- **Flexible coupling** – allows for controlled linear and angular movement, which accommodates pipeline deflection as well as thermal expansion and contraction.
- **Rigid coupling** – does not allow for movement, similar to a flanged or welded joint.

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:



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



Self restrained pipe joints – Couplings engage the pipe grooves to hold the pipes against full pressure thrust loads without the need of supplemental restraints.

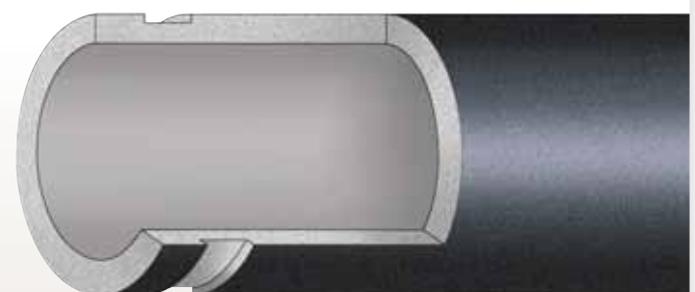


Rigidity – with an angled pad design that provides positive clamping of the pipe to resist torsional and flexural loads.

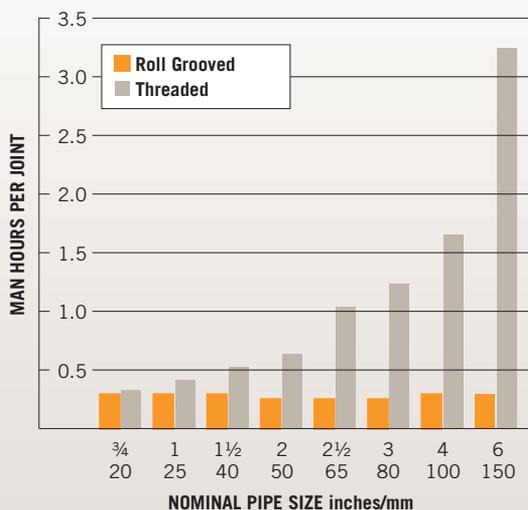
The distinguishing feature of the *Victaulic* grooved mechanical piping system is, as the name implies, a groove where the pipe and fitting engage to form a self-restraining joint. The position, depth and cross-section of this groove combine with the fitting housing in an optimal strength-to-weight relationship. The result is a permanent connection capable of withstanding thrust loads up to the maximum rated operating pressure.



Roll groove profile (exaggerated for clarity). The small dimple created on interior pipe wall has minimal effect on pressure or flow.



Cut groove profile (exaggerated for clarity). The groove created removes less metal than threading.



Original Groove System

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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 EndSeal™ System	3	 Butterfly Valve (Series 700)	10
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For specialty coatings and linings, see pg. 2

For global pipe size designations, download product submittals.

Original Groove System



Epoxy Coated Fittings:

Victaulic grooved piping products are designed to maintain the integrity of fusion bonded epoxy coated fittings and pipe. The grooved system provides a 100% holiday free installation and service for piping systems from 2–24" | 50–600 mm and pressures up to 2500 psi | 17237 kPa | 172 bar. *Victaulic* also offers a line of valves that can be epoxy coated for a complete corrosion resistant system.

Applications:

- Utilized on piping systems in corrosive environments
- Plant Utility Water
- Primary Production
- Secondary Production
- Tertiary Production
- Recirculated "FRAC" water disposal and crude oil
- Domestic Water
- Steam Condensate
- Fire Protection Systems
- Salt Water Systems

Victaulic fittings and valves are compatible with a variety of coatings designed to inhibit corrosion.



Original Groove System



Approvals/Listings:



[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
- For lay flat hydraulic fracturing, supply and flow back lines
- Sizes from 2–16" | 50–400 mm
- Pressures up to 1000 psi | 6895 kPa | 69 bar
- For coating options, download product submittal



EndSeal System

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

[Download submittal 06.13](#) for the Style HP-70ES Coupling

[Download submittal 07.03](#) for the ES Fittings

[Download PB-312](#) for Epoxy Coated Fittings

- For plastic coated pipe or high pressure rigid systems
- Schedule 80 wall thickness for use with HP-70ES couplings
- No. 22ES header tees reduce the number of joints required to complete header assemblies
- 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
- Available with epoxy linings for corrosion resistance



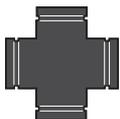
No. 62ES
90° Elbow



No. 63ES
45° Elbow



No. 64ES
Tee



No. 35ES
Cross



No. 22ES
Header Tee





High Pressure Ring Coupling

STYLE 809

[Download submittal 15.02](#) for complete information

- Designed specifically for high pressure injection lines
- Double-bolted coupling for use with Schedule 80 or heavier steel pipe
- Coupling engages directly onto 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



QuickVic Rigid Coupling

STYLE 107

[Download submittal 06.21](#) for complete information

- For lay flat hydraulic fracturing, supply and flow back lines
- 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

Approvals/Listings:



[Download publication 10.01](#) for complete information



Zero-Flex Rigid Coupling

STYLE 07

[Download submittal 06.02](#) for complete information

- For lay flat hydraulic fracking, supply and flow back lines
- 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

Approvals/Listings:



[Download publication 10.01](#) for complete information

Original Groove System

**QuickVic Flexible Coupling**

STYLE 177N

[Download submittal 06.24](#) for complete information

- Sizes from 2–6" | 50–150 mm
- Pressures up to 1000 psi | 6895 kPa | 69 bar
- For coating options, download product submittal

Approvals/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 ¾–24" | 20–600 mm
- Pressures up to 1000 psi | 6895 kPa | 69 bar
- For coating options, download product submittal
- For sizes 14–72" | 350–1800 mm, [download submittal 20.03](#) for information on AGS Style W77

Approvals/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



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

Approvals/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

Approvals/Listings:



[Download publication 10.01](#) for complete information

Available Fitting Systems

[Download submittal 07.01](#) for original grooved end fittings for carbon steel pipe

[Download submittal 07.03](#) for *EndSeal* fittings

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

[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 **AGS** fittings

[Download submittal 21.03](#) for aluminum fittings

Victaulic fittings provide a simple, economical method for joining carbon steel, ductile iron and stainless steel piping systems. Many systems require corrosion protection which can be achieved using coatings, linings or a variety of materials and finishes such as epoxy coated linings and galvanizing.



Approvals/Listings:



[Download publication 10.01](#) for complete information

Fittings for Carbon Steel Pipe

See pg. 8 for available types

[Download submittal 07.01](#) for complete information

- 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

Fittings for Carbon Steel Pipe



No. 10
90° Elbow



No. 11
45° Elbow



No. 110
45° Long
Radius Elbow



No. 12
22½° Elbow



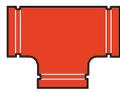
No. 13
11¼° Elbow



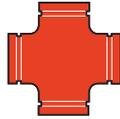
No. 18
90° Adapter
Elbows



No. 19
45° Adapter
Elbows



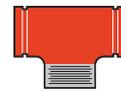
No. 20
Tee



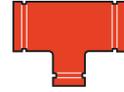
No. 35
Cross



No. 33
True Wye



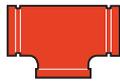
No. 29M
Tee with
Threaded Branch



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. 60
Cap



No. 61
Bull Plug



No. 40
Adapter Nipple
(OGS Groove x
Thread)



No. 42
Adapter Nipple
(OGS Groove x
Bevel)



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



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



No. 54
Swaged Nipple
(OGS Groove x
Thread)



No. 55
Swaged Nipple
(Thread x
OGS Groove)



No. 50
Concentric
Reducer



No. 51
Eccentric
Reducer



No. 52
Small Threaded
Reducer



No. 52F
BSPT Small
Threaded
Reducer



No. 80
Female Threaded
Adapter



No. 41
ANSI Class 125
Flanged Adapter
Nipple



No. 41-DN
PN10/16
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 submittal 07.01](#) for complete information on original grooved end fittings for carbon steel pipe



Aluminum Fittings

[Download submittal 21.03](#) for complete information

- Standard fitting pressure ratings conform to ratings of installed coupling
- All fittings supplied with grooves or shoulders for fast installation
- Sizes from 1–8" | 25–200 mm

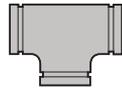
Aluminum Fittings



No. 10 A
90° Elbow



No. 11 A
45° Elbow



No. 20 A
Tee



No. 60 A
Cap



No. 40 A
Adapter Nipple
(Groove x Thread)



No. 42 A
Adapter Nipple
(Groove x Bevel)



No. 43 A
Adapter Nipple
(Groove x Groove)



No. 50 A
Concentric
Reducer



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
- For stainless steel option, see pg. 27



Butterfly Valve

SERIES 700

[Download submittal 08.05](#) for complete information

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



Vic-Check Valve

SERIES 716H

[Download submittal 08.08](#) for complete information

- Features a stainless steel disc
- 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



Swinger Swing Check Valve

SERIES 712

[Download submittal 08.11](#) for complete information

- Features a stainless steel clapper
- Sizes from 2–4" | 50–100 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For stainless steel option, see pg. 27



Vic-Check Valve

SERIES 716

[Download submittal 08.08](#) for complete information

- Features an elastomer encapsulated disc
- 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



Swinger Swing Check Valve

SERIES 713

[Download submittal 08.11](#) for complete information

- Features a stainless steel clapper
- Available size is 2" | 50 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 Class 600 NACE-compliant ball valve
- Up to 1/3 better flow than competitive standard port ball valves
- Floating ball reduces torque requirements
- Available as groove x groove or groove x thread
- Sizes from 2–6" | 50–150 mm
- Pressure up to 1500 psi | 10342 kPa | 103 bar
- For stainless steel option, see pg. 28



Three Port Diverter Valve

SERIES 723

[Download submittal 08.13](#) for complete information

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



Delta-Y Assemblies

STYLE DLY

[Download submittal 07.08](#) for complete information

- Ideal for bulk cement/barite systems commonly found on offshore drilling platforms
- Standard and long radius configurations available
- Sizes from 5–6" | 125–150 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar



Vic-Strainer Tee Type

SERIES 730

[Download submittal 09.02](#) for complete information

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



Vic-Strainer Wye Type

SERIES 732

[Download submittal 09.03](#) for complete information

- Provides straight through flow for lower pressure drop
- Sizes from 2–12" | 50–300 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For coating options, download product submittal
- For AGS sizes 14–24" | 350–600 mm, [download submittal 20.19](#) for information on Series W732

Advanced Groove System **AGS**

Victaulic offers a comprehensive portfolio of Advanced Groove System (AGS) couplings for systems 14–72" | 350–1800 mm and a full range of 14–60" | 350–1500 mm AGS fittings, valves and accessories. Our large diameter piping solutions provide strength and dependability in addition to speed, making them an excellent choice over welding. Other advantages AGS joints provide over welded joints include no flame installation, superior seismic-shock resistance and a union at every joint for easy adjustment, system maintenance or system expansion.



Couplings	page	Fittings	page
 AGS Rigid Coupling (Style W77)	16	 AGS Fittings	18
 AGS Flexible Coupling (Style W07)	16		
 AGS Stainless Steel Rigid Coupling (Style W89)	17		
		Valves	page
		 AGS <i>Vic</i> -300 Butterfly Valve (Series W761)	19
		 AGS Butterfly Valve (Series W709)	19
		 AGS <i>Vic</i> -Check Dual Disc Valve (Style W715)	19
Adapters	page	Strainers	page
 AGS <i>Vic</i> -Flange Adapter (Style W741)	17	 AGS Tee Type <i>Vic</i> -Strainer (Series W730)	20
		 AGS Wye Type <i>Vic</i> -Strainer (Series W732)	20



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 06.24](#)



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 Stainless Steel Rigid Coupling

STYLE W89

[Download submittal 20.15](#) for complete information

- Wedge shaped coupling housing keys fully engage the patented 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-Flange Adapter

STYLE W741

[Download submittal 20.04](#) for complete information

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



AGS Fittings

[Download submittal 20.05](#) for complete information

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

AGS Fittings



No. W10
90° Elbow



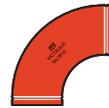
No. W11
45° Elbow



No. W12
22½° Elbow



No. W13
11¼° Elbow



No. W100
90° 1½ D Long
Radius Elbow



No. W110
45° 1½ D Long
Radius Elbow



No. W20
Tee



No. W35
Cross



No. W33
True Wye



No. W25
Reducing Tee



No. W30
45° Lateral



No. W30-R
45° Reducing
Lateral



No. W42
Adapter Nipple
(AGS Groove ×
Bevel)



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



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



No. W60
Cap



No. W50
Concentric
Reducer



No. W51
Eccentric
Reducer



No. W41
Flanged
Adapter Nipple



No. W45R
Flanged
Adapter Nipple





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

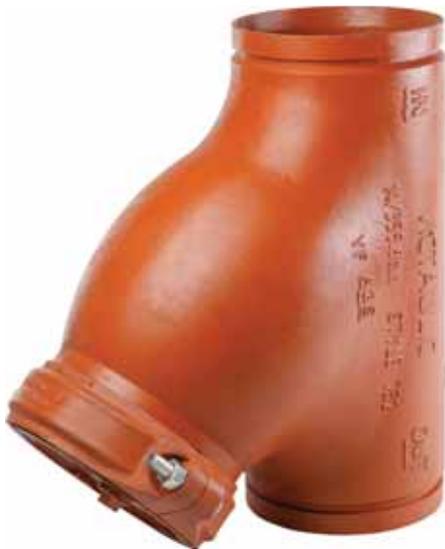


AGS Tee Type *Vic-Strainer*

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 Wye Type *Vic-Strainer*

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

Plain End Systems 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 UL and ULC 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)

21



Fittings

22



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



Fittings

[Download submittal 14.04](#) for complete information

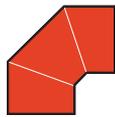
- Compatible with Style 99 *Roust-A-Bout* coupling
- For coating options, download product submittal



No. 10P
90° Elbow



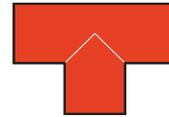
No. 11P
45° Elbow



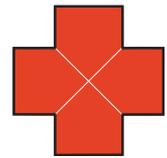
No. 100P
90° Long
Radius Elbow



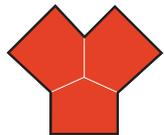
No. 110P
45° Long
Radius Elbow



No. 20P
Tee



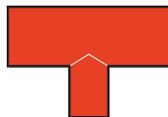
No. 35P
Cross



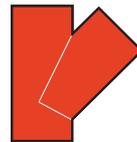
No. 33P
True Wye



No. 61P
Steel Bull Plug



No. 25P
Reducing Tee



No. 30P
45° Lateral



No. 53P
Swaged Nipple



No. 40P
Adapter Nipple
(Plain End x
Thread)



No. 42P
Adapter Nipple
(Plain End x
Bevel)



No. 43P
Adapter Nipple
(Plain End x
Groove)

Stainless Steel Systems

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 to join stainless steel pipe. Refer to the individual product submittals for additional information.

- [Style 07 Rigid Coupling](#)
- [Style HP-70 Rigid Coupling](#)
- [Style 77 Flexible Coupling](#)
- [Style 78 Snap Joint Coupling](#)
- [Style 741 Flange Adapter](#)
- [Style 743 Flange Adapter](#)

Couplings		page	Valves		page
	Type 316 Rigid Coupling (Style 489)	24		<i>Vic-300 MasterSeal</i> Stainless Steel Butterfly Valve (Series 461)	27
	Rigid Coupling (Style 89)	24		<i>Swinger</i> Check Valve (Series 712S)	27
	Type 316 Flexible Coupling (Style 77S)	24		<i>Vic-Ball</i> Valve (Series 726S)	28
Fittings		page		<i>Vic-Press</i> Three-Piece Ball Valve (Series P569 Groove x Groove)	28
	ANSI Schedule 10S Fittings	25	<i>Vic-Press</i>		page
	ANSI Schedule 40S Fittings	26		For Schedule 10 Stainless Steel 304	29
				For Schedule 10 Stainless Steel 316	30

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



Type 316 Rigid Coupling

STYLE 489

[Download submittal 17.25](#) for complete information

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

Approvals/Listings:



[Download publication 10.01](#) for complete information



Rigid Coupling

STYLE 89

[Download submittal 17.24](#) for complete information

- Greatly reduces linear or angular movement and is useful for valve connections where rigidity is required
- Galvanized coated ductile iron coupling
- Sizes from 2–12" | 50–300 mm
- Pressures up to 1200 psi | 8274 kPa | 83 bar
- For other ductile iron couplings to use on stainless steel pipe [download submittal 17.09](#)

Approvals/Listings:



[Download publication 10.01](#) for complete information



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



ANSI Schedule 10S Fittings

[Download submittal 17.16](#) for complete information

- Grooved ends eliminate pipe end preparation for the fittings
- Sizes from $\frac{3}{4}$ –12" | 20–300 mm
- Available in Type 304L or 316L
- [Download submittal 17.27](#) for flange bolt hole pattern options



No. 410 SS
90° Elbow



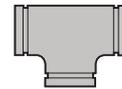
No. 411 SS
45° Elbow



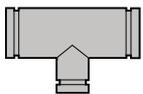
No. 412 SS
22½° Elbow



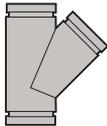
No. 413 SS
11¼° Elbow



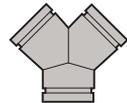
No. 420 SS
Tee



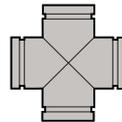
No. 425 SS
Grooved Branch
Reducing Tee



No. 430 SS
45° Lateral



No. 433 SS
True Wye



No. 435 SS
Cross



No. 442 SS
Adapter Nipple
(Groove x
Bevel)



No. 443 SS
Adapter Nipple
(Groove x
Groove)



No. 450 SS
Concentric
Reducer



No. 451 SS
Eccentric
Reducer



No. 460 SS
Cap



No. 441N
DN 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 ¾–12" | 20–300 mm
- Available in Type 304L or 316L
- Designed for higher pressure systems
- Download product submittal for standard thread options



No. 410H SS
90° Elbow



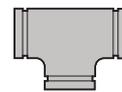
No. 411H SS
45° Elbow



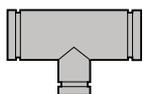
No. 412H SS
22½° Elbow



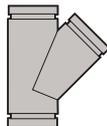
No. 413H SS
11¼° Elbow



No. 420H SS
Tee



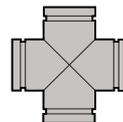
No. 425H SS
Grooved Branch
Reducing Tee



No. 430H SS
45° Lateral



No. 433H SS
True Wye



No. 435H SS
Cross



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



No. 442H SS
Adapter Nipple
(Groove ×
Bevel)



No. 443H SS
Adapter Nipple
(Groove ×
Groove)



No. 450H SS
Concentric
Reducer



No. 451H SS
Eccentric
Reducer



No. 60 SS
Cap



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" | 50–200 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For carbon steel option, see pg. 10



Swinger 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
- For carbon steel option, see pg. 11



Vic-Ball Valve

SERIES 726S

[Download submittal 17.22](#) for complete information

- High pressure Type 316 stainless steel standard port ball valve with grooved ends
- Sizes from 1½–6" | 40–150 mm
- Pressures up to 1000 psi | 6895 kPa | 69 bar
- For carbon steel option, see pg. 13



Vic-Press Three-Piece Ball Valve

SERIES P569

[Download submittal 18.14](#) for complete information

- The three-piece swing-out design permits easy in-line maintenance
- Sizes from ½–2" | 15–50 mm
- Pressures up to 400 psi | 2758 kPa | 28 bar
- For the entire *Vic-Press* line of products, see pgs. 29–30



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
- Meets ASME requirements for ANSI Class 150 systems
- Sizes from ½–2" | 15–50 mm
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Download product submittal for standard thread options and flange bolt hole pattern options

Connection Key

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



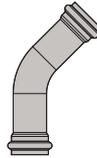
Style P597
Standard
Coupling
(P x P)



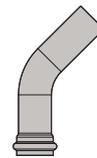
Style P586
Short Tangent
90° Elbow
(P x P)



Style P542
90° Street
Elbow
(P x T)



Style P591
45° Elbow
(P x P)



Style P543
45° Street
Elbow
(P x T)



Style P592
Tee
(P x P x P)



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



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



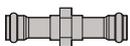
Style P596
Male Threaded
Adapter
(P x M)



Style P599
Female
Threaded
Adapter
(P x F)



Style P561
Weld Adapter
(P x T)



Style P584
Threaded
Union
(P x P)



Style P595
Flange Adapter
(P x L)



Style P565
Van Stone
Flange Adapter
(P x L)



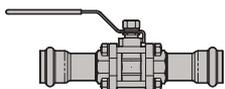
Style P587
Transition
Nipple
(G x T)



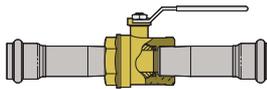
Style P594
Concentric
Reducer
(P x P)



Style P540
End Cap



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



Style P589
Brass Body Ball Valve
(P x P)



PFT510
Vic-Press
Tool,
pg. 48



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
- Meets ASME requirements for ANSI Class 150 systems
- Sizes from ½–2" | 15–50 mm
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Download product submittal for standard thread options and flange bolt hole pattern options

<p>Style P507 Standard Coupling (P x P)</p>						<p>Style P568 Short Tangent 90° Elbow (P x P)</p>						<p>Style P562 90° Street Elbow (P x T)</p>						<p>Style P571 45° Elbow (P x P)</p>						<p>Style P563 45° Street Elbow (P x T)</p>						<p>Connection Key</p> <p>P Press F Female Thread M Male Thread T Plain End L Flanged G Grooved</p>					
<p>Style P508 Slip Coupling (P x P)</p>						<p>Style P572 Tee (P x P x P)</p>						<p>Style P578 Tee with Threaded Branch (P x P x F)</p>						<p>Style P573 Tee with Reducing Branch (P x P x P)</p>						<p>Style P576 Male Threaded Adapter (P x M)</p>						<p>Style P579 Female Threaded Adapter (P x F)</p>					
<p>Style P585 Threaded Union (P x P)</p>						<p>Style P575 Flange Adapter (P x L)</p>						<p>Style P566 Van Stone Flange Adapter (P x L)</p>						<p>Style P577 Transition Nipple (G x T)</p>						<p>Style P574 Concentric Reducer (P x P)</p>						<p>Style P560 End Cap</p>					
<p>Style P569 Stainless Steel Ball Valve (P x P shown) (G x G and P x G also available)</p>												<p>Style P589 Brass Body Ball Valve (P x P)</p>												<p>PFT510 Vic-Press Tool, pg. 48</p>											

Fire Protection Systems

Victaulic is dedicated to developing intuitive and dependable solutions for virtually any fire protection application. For fire protection systems *Victaulic* offers a full range of products including FireLock™ valves, FireLock NXT™ devices and *FireLock* sprinklers.

For more information visit victaulicfire.com



Valves	page	Devices	page
 <i>FireLock</i> Butterfly Valve – Supervised Open (Series 705)	31	 <i>FireLock</i> NXT Deluge System Check Valve (Series 769)	33
 <i>FireLock</i> High Pressure Butterfly Valve – Supervised Open (Series 765)	32		
 <i>FireLock</i> Check Valve (Series 717)	32	Sprinklers	page
 <i>FireLock</i> OS&Y Gate Valves (Series 771H/771F)	32	 Nozzles	33
 <i>FireLock</i> NRS Gate Valves (Series 772H/772F)	33		



FireLock Butterfly Valve – Supervised Open

SERIES 705

[Download submittal 10.81](#) for complete information

- Weatherproof actuator housing approved for indoor or outdoor use
- Ductile iron body and disc with EPDM seats
- Sizes from 2–12" | 50–300 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar

Approvals/Listings:



[Download publication 10.01](#) for complete information



FireLock High Pressure Butterfly Valve – Supervised Open

SERIES 765

[Download submittal 10.80](#) for complete information

- Weatherproof actuator housing approved for indoor or outdoor use
- Ductile iron body and disc with Nitrile seats
- Sizes from 2–12" | 50–300 mm
- Pressures up to 365 psi | 2517 kPa | 25 bar

Approvals/Listings:



[Download publication 10.01](#) for complete information



FireLock Check Valve

SERIES 717

[Download submittal 10.08](#) for complete information

- Features an elastomer encapsulated disc with an electroless nickel plated seat
- Sizes from 2½–12" | 65–300 mm
- Pressures up to 365 psi | 2517 kPa | 25 bar

Approvals/Listings:



[Download publication 10.01](#) for complete information



FireLock OS&Y Gate Valves

SERIES 771H and 771F

[Download submittal 10.92](#) for complete information

- Available as Groove x Groove, or Groove x Flange
- Used when positive shut-off is required in a fire line and a quick visual indicator of open/closed position is needed
- Sizes from 2½–12" | 65–300 mm
- Pressures up to 250 psi | 1724 kPa | 17 bar

Approvals/Listings:



[Download publication 10.01](#) for complete information



Approvals/Listings:



[Download publication 10.01](#) for complete information

FireLock NRS Gate Valves

SERIES 772H and 772F

[Download submittal 10.92](#) for complete information

- Available as Groove × Groove, or Groove × Flange
- Used for shut-off service where the valve is operated remotely
- Sizes from 2½–12" | 65–300 mm
- Pressures up to 250 psi | 1724 kPa | 17 bar



Approvals/Listings:



[Download publication 10.01](#) for complete information

FireLock NXT Deluge System Check Valve

SERIES 769

[Download submittal 30.81](#) for complete information

- Available bare, pretrimmed, as a *Vic-Quick* riser or in a Series 745 *FireLock* Fire-Pac cabinet
- Sizes from 1½–8" | 40–200 mm
- Pressures up to 300 psi | 2068 kPa | 21 bar



Nozzles are shown in the upright position for clarity. May be installed in any position to meet design requirements. K5.6 versions shown.

Open Spray Nozzle

V1201–V1278

[Download submittal 40.96](#) for complete information

- *Victaulic* V12 Spray Nozzles are designed to apply cooling water to exposed vertical, horizontal, curved, and irregular shaped surfaces to allow cooling of objects externally when exposed to an adjacent fire
- Pressures up to 175 psi | 1207 kPa | 12 bar

K-Factor Imp. S.I.	Thread Size In.(NPT) mm	Sprinkler Finish	Wrench
1.2 – 7.2 1.7 – 10.4	½ 15	Plain Brass Nickel Teflon™ VC-250	V27

Approvals/Listings:

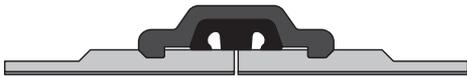


[Download publication 10.01](#) for complete information

FRP System

The *Victaulic* fiberglass-reinforced plastic piping solution offers more efficient installations and is ideal for most applications that currently use butt and wrap to join FRP/GRP pipe. The Style 296-A is rated for pressures up to 150 psi | 1034 kPa | 10 bar and the FlushSeal™ gasket ensures a smooth flow path.

The Style 296-A is used on a wide variety of applications. Pipe ends are built-up to accommodate AGS grooves that are used to engage the coupling on the pipe.



Coupling for Fiberglass Reinforced Plastic Pipe

STYLE 296-A

[Download submittal 90.01](#) for complete information

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

HDPE Systems

The *Victaulic* HDPE system provides easy incorporation of standard IPS fittings and valves directly to HDPE pipe using the HDPE-to-grooved transition coupling. The *Victaulic* system permits more accurate estimates and assures on-time modification and future retrofit. Unique mechanical features permit a wide variety of applications for most HDPE piping systems. It combines the advantages of fast installation, design integrity and reliable operation. *Victaulic* products for HDPE piping systems are FM Approved for underground water supplies.



Couplings

- | | | |
|--|---|----|
|  | Plain End Coupling for HDPE Pipe (Style 995N) | 35 |
|  | HDPE to Steel Transition Coupling (Style 997) | 36 |

Adapters

- | | | |
|---|---|----|
|  | <i>Vic-Flange</i> Plain End Adapter for HDPE Pipe (Style 994) | 36 |
|---|---|----|



Plain End Coupling for HDPE Pipe STYLE 995N

[Download submittal 19.02](#) for complete information

- Coupling teeth create 360° grip of HDPE pipe for secure seal
- Sizes from 2–20" | 50–500 mm
- Pressure rating conforms to the maximum rating of the pipe
- For coating options and available metric sizes, download product submittal

Approvals/Listings:



[Download publication 10.01](#) for complete information



HDPE to Steel Transition Coupling STYLE 997

[Download submittal 19.03](#) for complete information

- Fastest way to join HDPE to IPS pipe
- Sizes from 2–12" | 50–300 mm
- Pressure rating conforms to the maximum rating of the pipe
- For coating options, download product submittal

Approvals/Listings:



[Download publication 10.01](#) for complete information



Vic-Flange Plain End Adapter for HDPE Pipe STYLE 994

[Download submittal 19.04](#) for complete information

- Permits direct connection of ANSI Class 125 and 150 flange components into HDPE systems
- Sizes from 4–8" | 100–200 mm
- Pressure rating conforms to the maximum rating of the pipe
- For coating options, download product submittal

Approvals/Listings:



[Download publication 10.01](#) for complete information

Pipe Preparation Tools

The distinguishing feature of the *Victaulic* grooved mechanical piping system is a groove where the pipe and fitting engage to form a self-restraining joint.

The position, depth and cross-section of this groove combine with the fitting housing in an optimal strength-to-weight relationship.

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.

Victaulic offers two methods of pipe preparation. Roll grooving and cut grooving offer a reliable groove every time. Roll grooving tools are designed to rotate the pipe while using hydraulic pressure to force the grooving roll into the pipe, forming the groove. Roll grooving, built for use on thin and standard wall pipe, removes no metal, requires no cutting oil and is significantly faster than other methods of pipe joining.

Cut grooving, developed for use on standard and heavy wall pipe, provides a smoother inner flow path by removing material from the outer pipe wall to machine a groove into the pipe. When lining or coating the pipe interior for corrosive services, cut grooving is the preferred method of choice.

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For grooving stainless steel,
[download submittal 17.01.](#)



Vic-Press Tools



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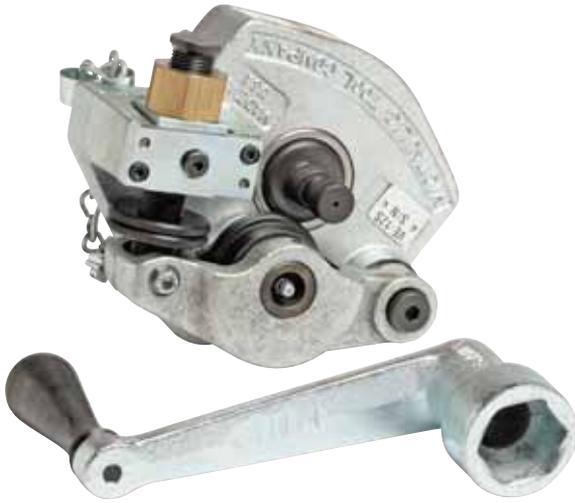
VAPS 131F

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VAPS 131T

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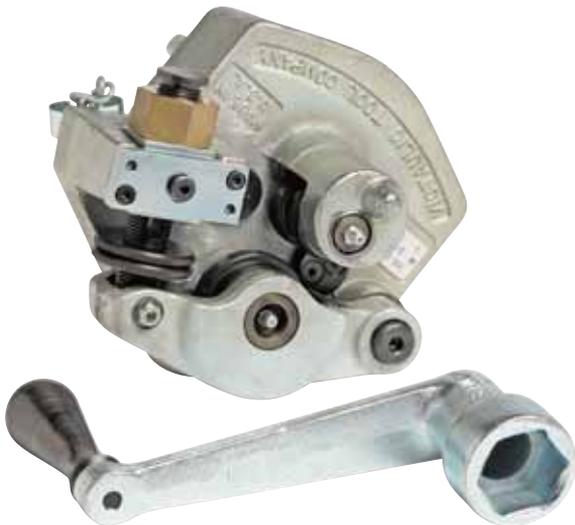


Field Portable Roll Grooving Tools

VE12 GROOVE IN-PLACE

[Download submittal 24.01](#) for complete information

- Tool is manually operated using the supplied ratchet handle
- For manual grooving of Schedule 5, 10 and 40 steel and stainless steel pipe
- Patented enhanced tracking rolls allow bi-directional grooving
- Roll grooves $\frac{3}{4}$ –2" | 20–50 mm pipe



Field Portable Roll Grooving Tools

VE26 GROOVE IN-PLACE

[Download submittal 24.01](#) for complete information

- Tool is manually operated using the supplied ratchet handle
- Repair and retrofit existing lightwall steel, Schedule 40 steel and stainless steel
- Enhanced tracking rolls allow bi-directional grooving
- Model VE26SS grooves Schedule 5 and 10 stainless steel
- Optional power drive adapter kit available to alternately groove pipe using a Ridgid™ 300 power drive or VPD752
- Roll grooves 2–6" | 50–150 mm pipe



Field Portable Roll Grooving Tools

VE46 GROOVE IN-PLACE

[Download submittal 24.01](#) for complete information

- Tool is manually operated using the supplied ratchet handle
- Designed for manually roll grooving Schedule 40 steel and stainless steel pipe
- 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 *Victaulic* VPD752
- Roll grooves 3½–6" | 90–150 mm pipe



Field Portable Roll Grooving Tools

VE26/46 POWER DRIVE KIT

[Download submittal 24.01](#) for complete information

- The VE26/46 power drive kit is available to allow both tools to be directly mounted to either a *Victaulic* VPD752 or Ridgid™ 300 Power Drive



Field Portable Roll Grooving Tools

VE106/VE107 GROOVE-N-GO

[Download submittal 24.01](#) for complete information

- Mobile light-duty roll grooving tool with an integral motor/drive unit mounted to portable hand truck
- Tool is operated using a standard $\frac{3}{8}$ " | 9.5 mm square ratchet drive (not included)
- 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
- Roll grooves $1\frac{1}{4}$ –6" | 32–150 mm pipe



Field Portable Roll Grooving Tools

VE206

[Download submittal 24.01](#) for complete information

- Tool head mounts to any tripod stand with a Ridgid* 300 bolt pattern or the flat bed of a roustabout truck
- Compatible with multiple power drive units; *Victaulic* VPD752, Ridgid™ 300 or 700 and Rems Amigo II
- Hydraulic hand pump can be mounted on either side of the tool for right or left hand operation
- Roll grooves $1\frac{1}{4}$ –6" | 32–150 mm pipe



Field Fabrication Roll Grooving Tools

VE272SFS

[Download submittal 24.01](#) for complete information

- Portable roll groover mounts easily to the *Victaulic* VPD752 or *Ridgid™* 300 power drive
- Hand pump operation with a unique pivot arm design reduces handle effort
- Patented enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Roll grooves $\frac{3}{4}$ – 12" | 20 – 300 mm pipe
(Supplied with 2 – 12" | 50 – 300 mm roll sets)



Field Fabrication Roll Grooving Tools

VE270FSD/VE271FSD

[Download submittal 24.01](#) for complete information

- Completely self-contained unit with integral gear motor, safety guards, safety foot switch and power cord/plug
- Equipped with a unique pivot arm design, making roll changing quick and easy, without removing shafts
- Patented enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Roll grooves $\frac{3}{4}$ – 12" | 20 – 300 mm pipe
(Supplied with 2 – 12" | 50 – 300 mm roll sets)



Field Fabrication Roll Grooving Tools

VE416FS

[Download submittal 24.01](#) for complete information

- For field roll grooving of 2–12" | 50–300 mm standard wall pipe, lightwall steel pipe and stainless steel pipe
- Groove depth adjuster allows for easy adjustment for initial groove diameter
- Roll grooves 2–12" | 50–300 mm pipe (Supplied with 2–12" | 50–300 mm original rolls).
- Equipped with a pipe stabilizer for 6–12" | 50–300 mm pipe sizes to control pipe sway



Field Fabrication Roll Grooving Tools

VE416FSD/VE417FSD

[Download submittal 24.01](#) for complete information

- For field roll grooving of 2–16" | 50–400 mm standard wall pipe, lightwall steel pipe and stainless steel pipe
- 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
- Equipped with a pipe stabilizer for 6–16" | 150–400 mm pipe sizes to control pipe sway



Field Fabrication Roll Grooving Tools

VE450FSD

[Download submittal 24.01](#) for complete information

- Designed for field roll grooving of 4–24" | 100–600 mm pipe
- Tool is supplied with roll sets for grooving 4–12" | 100–300 mm original groove and 14–24" | 350–600 mm AGS groove on carbon steel pipe
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process, and quick change upper roll design
- Features:
 - Lifting point to move the tool using a crane
 - Frame can accept most fork lifts
 - On board storage for tool accessories



Plant/Shop Fabrication

VE460

[Download submittal 24.01](#) for complete information

- Fully-motorized, semi-automatic, hydraulic shop tool is shipped fully assembled with safety foot switch and rolls for standard grooving (4–24" | 100–600 mm) 0.500 wall maximum.
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Tool ships with 4–12" | 100–300 mm OGS groove rolls (8–12" | 200–300 mm rolls installed) and 14–24" | 350–600 mm AGS groove rolls
- Grooving kits available to accommodate AGS grooving 26–60" | 650–1500 mm

Plant/Shop Fabrication

VE268

[Download submittal 24.01](#) for complete information

- Designed for fabrication shop roll grooving
- 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
- Roll grooves ¾–12" | 20–300 mm pipe (¾–1½" | 20–32 mm rolls are optional)





Plant/Shop Fabrication

VE414MC

[Download submittal 24.01](#) for complete information

- Designed for fabrication shop roll grooving Schedule 5, 10, and standard wall carbon steel pipe and standard wall stainless steel pipe
- Unique roll design, making roll changing quick and easy, without removing main shafts
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- The tool comes equipped with pipe stabilizers to provide smooth grooving operation
- Roll grooves 2–16" | 50–400 mm pipe (Supplied with 2–12" | 50–300 mm original rolls and 14–16" | 350–400 mm AGS rolls)



Field Manual Cut Grooving Tools

VG28GD (GEAR DRIVE)

VG26GD-COR (CORROSION)

[Download submittal 24.01](#) for complete information

- VG28GD will produce a single OGS cut groove for unlined piping systems; Cut grooves 2–8" | 50–200 mm pipe
- VG26GD-COR is specifically designed for carbon steel pipe for corrosion resistant systems; Cut grooves 2–6" | 50–150 mm pipe
- The VG28GD and VG26GD-COR are designed to be driven by the Power Mule II, see pg. 50
- Drive Requirements: External drive, min. 1½ hp | 1.12 kw
- Drive Speed: 38 rpm max.
- Weight: 37 lbs. | 17 kg



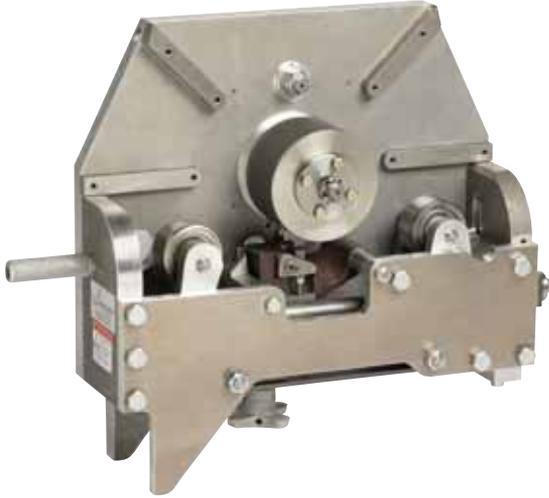
Field Manual Cut Grooving Tools

VG824 (OGS)

VG824-COR (CORROSION)

[Download submittal 24.01](#) for complete information

- VG824 will produce a single OGS cut groove for unlined piping systems; Cut grooves 8–24" | 200–600 mm pipe
- VG824-COR is specifically designed for carbon steel pipe for corrosion resistant systems; Cut grooves 8–24" | 200–600 mm pipe
- The VG824 and VG824-COR are designed to be driven by the Power Mule II, see pg. 50
- Drive Requirements: External drive, min. 1½ hp | 1.12 kw
- Drive Speed: 38rpm max.
- Weight: 82 lbs. | 37.2 kg



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, see pg. 50
- Drive Requirements: External drive, min. 1.12 kw | 1½ hp
- Drive Speed: 38rpm max.
- Weight: 82 lbs. | 37.2 kg



Field Cut Grooving Tools

VG *Vic-Groover*

[Download submittal 24.01](#) for complete information

- Designed for manual or power cut grooving of a single size on steel and stainless steel pipe
- Tools are supplied with a ratchet handle for manual operation
- Tools 2" | 50mm and larger are supplied with a power yoke
- Cut grooves ¾–8" | 20–200mm pipe



Vic-Press Tools

PFT510

[Download submittal 24.01](#) for complete information

- The *Vic-Press* Schedule 10S System requires a *Vic-Press* Schedule 10S tool designed for securing *Vic-Press* Schedule 10S products onto IPS Schedule 10S stainless steel pipe
- Tool package include one (1) *Vic-Press* PFT510 tool, two (2) 18V Lithium Ion batteries, one (1) battery charger, one (1) corded adapter, one (1) tool carrying case, one (1) jaw carrying case, one (1) ½" | 15mm jaw, one (1) ¾" | 20mm jaw, one (1) 1" | 25mm jaw, one (1) 1 ½" | 40mm hinged jaw, 2" | 50mm hinged jaw, and one (1) adapter jaw
- Jaws are included with every tool purchase

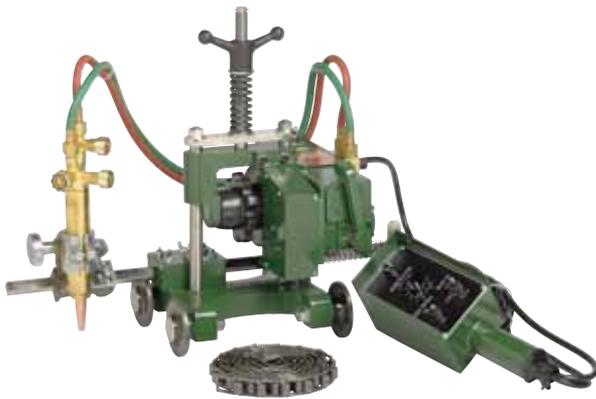


Pipe Cut-Off Tools

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 ½" | 12.7 mm thick
- Worm gear drive crank handle provides smooth, manual travel, easy control and accurate cutting



Pipe Cut-Off Tools

VCT2 AUTOMATIC

[Download submittal 24.01](#) for complete information

- Rotation is powered by a small 120VAC motor with SCR remote control
- Unique distributor design has stainless steel insert which extends tip life, eases cleaning and reduces backfire



Tool Accessories

VICTAULIC VPD752 POWER DRIVE

[Download submittal 24.01](#) for complete information

- Can be used as the power drive unit for the VE26, VE46, VE416FS and VE272SFS roll grooving tools, provided the tool is equipped with the correct base plate and the VG, VG28GD, and VG824 cut grooving tools with universal drive shaft
- Operated with a safety foot switch



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 and power necessary for accurate grooving
- Rotating head for horizontal and vertical applications
- Power Mule is equipped with a Forward-Off-Reverse control and integral foot switch



Tool Accessories

VAPS112 ADJUSTABLE PIPE STAND

[Download submittal 24.01](#) for complete information

- Designed for supporting pipe to be roll grooved
- Four adjustable legged portable self-standing unit
- Turnstile design allows pipe to be spun around for grooving of both pipe ends without dismounting pipe from stand
- Unique trough design allows for rotational and forward/traverse movement



Tool Accessories

VAPS224 ADJUSTABLE PIPE STAND

[Download submittal 24.01](#) for complete information

- Designed specifically for supporting 2–24" | 50–600 mm IPS pipe to be roll grooved
- Self-standing heavy-duty unit permits free pipe rotation and traversing on ball transfers
- Ball transfers are mounted in a manner permitting use of pipe slings
- Turnstile design allows pipe to be spun around for grooving of both pipe ends without dismounting pipe from stand



Tool Accessories

VAPS1672 ADJUSTABLE PIPE STAND

[Download submittal 24.01](#) for complete information

- *Vic-Easy* Adjustable Pipe Stands are portable and self-standing units that permit free pipe rotation and traversing on ball transfers. They are designed for direct use with *Vic-Easy* roll grooving tools: VE436MC and VE460.
- For use with 16–24" | 400–600 mm pipe

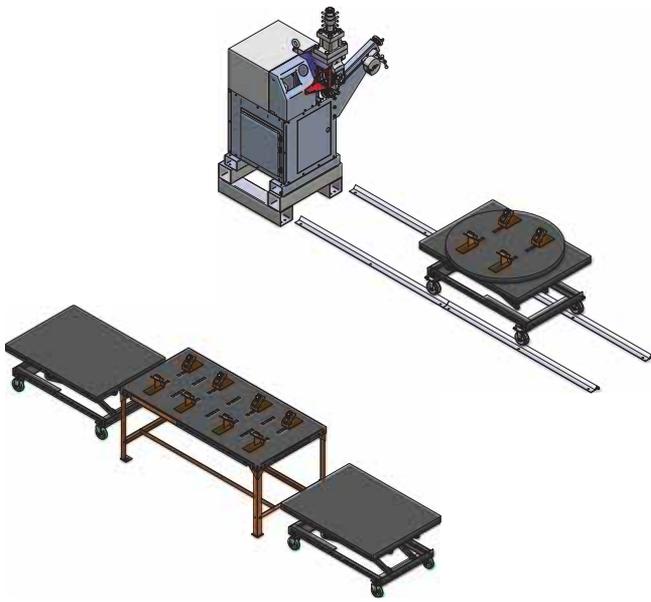


Tool Accessories

TOOL CARRY BAG

[Download submittal 24.01](#) for complete information

- Heavy duty tool carry bag for transporting roll grooving tools, grooving rolls, and other tool accessories
- Carry bag can accommodate up to 50 lbs. | 23 kg
- Weight: 4 lbs. | 2 kg
- Not available in EMEA



Fabrication Cell

VAP131

[Download submittal 24.01](#) for complete information

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



Fabrication Cell

VAPS 131R HYDRAULIC ADJUSTABLE PIPE STAND

[Download submittal 24.01](#) for complete information

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



Fabrication Cell

VAPS 131F HYDRAULIC POSITIONER

[Download submittal 24.01](#) for complete information

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



Fabrication Cell

VAPS 131T ASSEMBLY TABLE

[Download submittal 24.01](#) for complete information

- Designed to support grooved pipe, valves, and fittings when used in conjunction with VAPS 131F Hydraulic Positioner
- Ball transfer assemblies can be positioned to accommodate pipe from 2–24" | 50–600 mm
- Capacity: 4–24" | 100–600 mm IPS pipe; load rating: 8000 lbs. | 3629 kg; ball transfers load rating 700 lbs. | 318 kg
- Vertical stroke: 29.25" | 743 mm
- Weight: 500 lbs. | 227 kg

Elastomer Gasket Seals

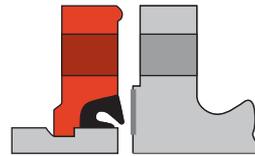
Victaulic offers a broad variety of synthetic rubber gaskets suitable for a wide range of applications. *Victaulic* gaskets provide high- and low-temperature limits, tensile strength, chemical resistance and shelf life.



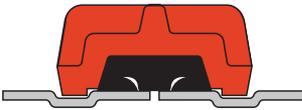
Installation-Ready



Standard



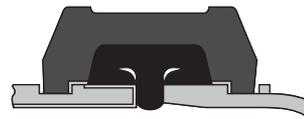
Vic-Flange



FlushSeal



Advanced Groove System
(AGS)



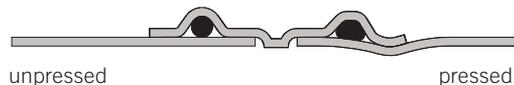
EndSeal



Plain End



Plain End Piping System
for HDPE Pipe



unpressed
Vic-Press for Schedule
10S Stainless Steel
pressed



FRP

⚠ 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.

Gasket Materials

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

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

Gasket/Seal/O-Ring Data

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

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

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

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

Potable Water Listings and Classifications

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

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) 114 milliliter | 4 fluid ounce tubes or in 946 milliliters | 1 quart containers.

Important Note: *Victaulic* Lubricant is not compatible for use with high-density polyethylene (HDPE) pipe.

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.

Standard Gaskets—IPS

Grade	Temp. Range ¹	Compound	Color Code	General Service Guidelines
T	-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.
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.
E (Type A) ²	Ambient	EPDM	Violet Stripe	Applicable for wet and dry (oil-free air) sprinkler services only. For dry services <i>FlushSeal</i> gaskets may be specified. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.

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

² *Vic-Plus* pre-lubricated gasket.

Special Gaskets—IPS

Grade	Temp. Range ¹	Compound	Color Code	General Service Guidelines
V	-30°F to +180°F -34° C to +82° C	Neoprene	Yellow Stripe	May be specified for hot lubricating oils and certain chemicals. Good oxidation resistance. Will not support combustion.
O	+20°F to +300°F -7° C to +149° C	Fluoroelastomer	Blue Stripe	May be specified for many oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids and air with hydrocarbons. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.
HMT (T <i>EndSeal</i>)	-20°F to +150°F -29° C to +66° C	Nitrile	Orange and Silver Stripes	Specially compounded with excellent oil resistance and a high modulus for resistance to extrusion. May be specified for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. For maximum gasket life under pressure extremes, the temperature should be limited to +120°F +49°C. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OVER +150°F +66°C OR FOR HOT, DRY AIR OVER +140°F +60°C.

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

Variety of other gaskets available upon request.
Please contact *Victaulic* for details.

Vic-Press Seals

Grade	Temp. Range ¹	Compound	Color Code	General Service Guidelines
H	-20°F to +210°F -29°C to +98°C	Hydrogenated Nitrile Butadiene Rubber (HNBR)	Two Orange Stripes	May be specified for hot petroleum/water mixtures, hydrocarbons, air with oil vapors, vegetable and mineral oils, engine oil and transmission oil. UL Classified in accordance with ANSI/NSF 61 for cold +73°F +23°C and hot +180°F +82°C potable water service and ANSI/NSF 372.
	Standard Seal: Vic-Press products will ship with Grade "H" seal unless otherwise specified on order.			
E	-30°F to +250°F -34°C to +121°C	EPDM	Green Stripe	May be specified for hot water service, dilute acids, oil-free air, chemical services. UL Classified in accordance with ANSI/NSF 61 for cold +73°F +23°C and hot +180°F +82°C potable water service and ANSI/NSF 372. NOT COMPATIBLE FOR USE WITH PETROLEUM OR STEAM SERVICES.
O	+20°F to +300°F +6°C to +149°C	Fluoroelastomer	Blue Stripe	May be specified for oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids, and air with hydrocarbons. NOT COMPATIBLE FOR USE WITH HOT WATER OR STEAM SERVICES.

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

Design Data

Introduction

This *Victaulic* General Catalog has been written for the piping system installer, designer, specification writer and owner as a basic reference guide for data about *Victaulic* mechanical piping methods. This catalog is organized to provide information in the context and form most readily usable. For easy identification of major sections of interest, see the condensed table of contents on pg. i, for a fully detailed index, see pg. 63. 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-100	General Handbook
I-P500	<i>Vic-Press</i> 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.

Design Data

Global Pipe Size Designations

Victaulic product data is utilized worldwide and all technical data is shown in both imperial (U.S.) and metric terms. The following chart shows a comparison between typical metric and IPS pipe sizes.

Nominal Imperial Inches – Size Group	Outside Diameter mm/Spec Ref	DN mm	JIS mm	ANSI inches	China Standard (GB) mm
½	21.3 mm	DN15 21.3 mm	15 A 21.7 mm	½	15* 21.3 mm
¾	26.7 mm	DN20 26.9 mm	20 A 27.2 mm	¾	20*/26.9 mm
1	33.4 mm	DN25 33.7 mm	25 A 34 mm	1	25*/33.7 mm
1¼	42.2 mm	DN32 42.4 mm	32 A/42.7 mm	1 1/4	32*/42.4 mm
1½	48.3 mm	DN40 48.3 mm	40 A/48.6 mm	1 1/2	40*/48.3 mm
2	60.3 mm	DN50 60.3 mm	50 A/60.5 mm	2	50*/60.3 mm
2½	73.1 mm	73.1 mm	—	2 ½	—
3	76.1 mm DIN/ISO (3 OD)	DN65 76.1 mm	65 A/76.3 mm	—	65*/76.1 mm
	88.9 mm	DN80 88.9 mm	JIS 80 A	3	80*/88.9 mm
4	108.0 mm China and old DIN	108.0 mm	—	—	108 mm
	114.3 mm	DN100 114.3 mm	JIS 100 A	4	100*/114.3 mm
5	133 mm China and old DIN	133.0 mm	—	—	133 mm
	139.7 mm DIN/ISO (5.5 OD)	DN125 139.7 mm	125 A/139.8 mm	—	125*/139.7 mm
	141.3 mm	141.3 mm	—	5	—
6	159 mm China and old DIN	159.0 mm	—	—	159 mm
	165.1 mm JIS (6.5 OD)	165.1 mm	150 A/165.2 mm	—	—
	168.3 mm	DN150 168.3 mm	—	6	150*/168.3 mm
8	216.3 JIS	—	JIS 200 A	—	—
	219.1 mm	DN200 219.1 mm	—	8	219.1 mm
10	267.4 JIS	—	JIS 250 A	—	—
	273 mm	DN250 273.0 mm	—	10	273 mm
12	318.5 JIS	—	JIS 300 A	—	—
	323.9 mm	DN300 323.9 mm	—	12	323.9 mm
14	355.6 mm	DN350 355.6 mm	JIS 350 A	14	355.6 mm
	377 mm China	—	—	—	377 mm
16	406.4 mm	DN400 406.4 mm	JIS 400 A	16	406.4 mm
	426 mm China	—	—	—	426 mm
18	457.2 mm	DN450 457.2 mm	JIS 450 A	18	457.2 mm
	480 mm China	—	—	—	480 mm
20	508 mm	DN500 508.0 mm	JIS 500 A	20	508 mm
	530 mm China	—	—	—	530 mm
22	558.8 mm	558.8 mm	JIS 550 A	22	559 mm

Continued on next page.

Design Data

Nominal Imperial Inches – Size Group	Outside Diameter mm/Spec Ref	DN mm	JIS mm	ANSI inches	China Standard (GB) mm
24	610 mm	DN600 610 mm	JIS 600 A	24	610 mm
	630 mm China	—	—	—	630 mm
26	660 mm	660 mm	JIS 650 A	26	660 mm
28	711 mm	DN700 711 mm	—	28	711 mm
30	762 mm	762.0 mm	—	30	762 mm
32	813 mm	DN800 813 mm	—	32	813 mm
34	864 mm	—	—	34	864 mm
36	914 mm	DN900 914 mm	—	36	914 mm
40	1016 mm	DN1000 1016 mm	—	40	1016 mm
42	1067 mm	DN1050 1067 mm	—	42	1067 mm
44	1118 mm	DN1100 1118 mm	—	44	1118 mm
46	1168 mm	DN1150 1168 mm	—	46	1168 mm
48	1219 mm	DN1200 1219 mm	—	48	1219 mm
54	1372 mm	DN1350 1372 mm	JIS 1372	54	1372 mm
56	1422 mm	DN1400 1422 mm	JIS 1422	56	1422 mm
60	1524 mm	DN1500 1524 mm	JIS 1524	60	1524 mm
62	1574 mm	DN1550 1574 mm	JIS 1574	62	1574 mm
72	1828 mm	DN1800 1828 mm	JIS 1828	72	1828 mm

GENERAL NOTES:

Nominal designations are used where the actual OD of the pipe matches the ANSI size. Otherwise both the nominal and actual OD are listed. China sizes are listed as actual OD in mm. China sizes in shaded boxes are tubing sizes.

* Nominal sizes

Design Data

Imperial (U.S.)/Metric Conversion Chart

This chart is provided as a guide for converting imperial and metric measurements provided within this catalog.

Convert Imperial (U.S.) to Metric				Convert Metric to Imperial (U.S.)			
25.4	×	Inches (In.)	⇔	Millimeters (mm)	×	0.03937	
0.3048	×	Feet (Ft.)	⇔	Meters (m)	×	3.281	
0.4536	×	Pounds (Lbs.)	⇔	Kilograms (kg)	×	2.205	
28.35	×	Ounces (Oz.)	⇔	Grams (g)	×	0.03527	
6.894	×	Pressure (psi)	⇔	Kilopascals (kPa)	×	0.145	
0.069	×	Pressure	⇔	Bar	×	14.5	
4.45	×	End Load (Lbs.)	⇔	Newtons (N)	×	0.2248	
1.356	×	Torque (Lb. Ft.)	⇔	Newton Meters (N•m)	×	0.738	
$F - 32 \div 1.8$		Temp.(°F)	⇔	Celsius (°C)		$C + 17.78 \times 1.8$	
745.7	×	Horsepower (hp)	⇔	Watts (w)	×	1.341×10^{-3}	
3.785	×	Gal. per Min. (GPM)	⇔	Liters per Min. (L/M)	×	0.2642	
3.785	×	10^{-3} Gal. per Min. (GPM)	⇔	Cubic Meters per Min. (m ³ /m)	×	264.2	

Intro

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AGS

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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.

DOWNSTREAM APPLICATIONS:



Header Assembly



Fire Lines



Plant/Equipment Air



Fire Protection Valve Room

UPSTREAM APPLICATIONS:



Drop Header



Prefabricated Well Head Assembly



Tank Piping



Distribution Piping



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