

Fire Protection Systems



G-105
UPDATED 6/2009

Victaulic®
Piping. Systems. Solutions.



More than 80 years of piping systems solutions

Victaulic® innovation began in 1925 with the first grooved-end mechanical pipe joining technology. In 1952, Victaulic released the first approved coupling for fire protection services. Today, Victaulic technology includes a complete offering of sprinklers, couplings, fittings, valves, accessories and tools to meet the needs of any fire protection application.

Every person at Victaulic is dedicated to providing the most innovative technologies and the fastest, most dedicated service in the industry to ensure product is available where and when you need it.



Innovation

Built into every FireLock® system are innovative features aimed to optimize system design and shorten installation hours. As an example, the FireLock EZ™ coupling eliminates loose parts which results in faster installation times.

Productivity

The Victaulic brand is synonymous with mechanical piping innovation. Innovation that provides better performance, easier installations, and a product line that is unmatched in the industry.

The result? You work smarter and more productively while delivering the reliability and performance your customers demand.





Efficiency

Ask your local sales representative about the many ways you can save time and resources by specifying genuine FireLock products for your system, from couplings to sprinklers to valves. Or by making use of some of our tools and accessories to help simplify your scheduled maintenance calls and service checks.

By specifying and installing Victaulic FireLock systems, your business is poised to become more profitable. Our labor-saving innovations and on-site project assistance combine to help your crew work more efficiently.

table of contents

1-2	Global Solutions
1-4	System Solutions Guide
1-6	Fire Protection Innovations
2-1	Design Data
3-1	Couplings
4-1	Fittings
5-1	Hole Cut Piping System
6-1	Valves and Accessories
7-1	FireLock Automatic Devices and Accessories
8-1	FireLock Automatic Sprinklers
9-1	Specialty Products
10-1	Pipe Preparation Tools
11-1	Product Index
12-1	Applications



Piping. Systems. Solutions.

Global Solutions

A world of applications at work

Our solutions are truly global.

Victaulic piping systems solutions are found in some of the world's most stunning and challenging engineering projects – buildings that arguably “push the design and construction envelope.”

Custom solutions for demanding challenges

Whether new construction or retrofit, Victaulic delivers a level of versatility unmatched in mechanical piping systems technology for today's engineering marvels.

Victaulic solutions provide superior design flexibility, the ability to accommodate seismic moments, noise and vibration attenuation, system access, system scalability, installation-friendly products and service, and more.

Projects spanning the globe

The projects illustrated here are just a few of the many buildings around the world for which Victaulic has provided innovative piping solutions.

For additional information on these and many other projects around the world, please visit www.victaulic.com.





UNITED STATES
Bellagio Casino



CANADA
Adobe Tower



EGYPT
Alexandria Library



GERMANY
Sony Center



CHINA
Jin Mao Tower



AUSTRALIA
Sydney Olympic
Stadium



UNITED STATES
EUROPE
MIDDLE EAST
CANADA
CENTRAL AND SOUTH
AMERICA
ASIA
AUSTRALIA AND
NEW ZEALAND



Typical System Solutions*

Fire Protection Systems Solutions

Use this convenient guide to select the Victaulic product or system solution most appropriate for your next fire protection project.

We have selected a few building types for which Victaulic fire protection products are typically specified. Not all are listed here. Consult your Victaulic sales representative for additional information.



BUILDING TYPE	RESIDENTIAL MULTI-STORY	PARKING GARAGE
System Goal	Life safety	Property protection
Considerations	Need maximum coverage in multi-floor, multi-unit living space	Multi-level structure that is prone to freezing and exposed to flammable fuels in automobiles
Recommended coupling/fitting piping system	FireLock couplings, fittings, and valves	FireLock couplings, fittings, and valves
Recommended device type	Series 751 alarm valves, Series 717/717R check valves	FireLock NXT Series 768 dry valves@
Recommended sprinkler type	Quick response commercial and residential recessed pendent and horizontal sidewall sprinklers	Upright extended coverage, ordinary hazard (ECOH)
Recommended sprinkler finishes/ coatings	White, chrome, or custom-painted	Brass or proprietary nickel/Teflon‡

* This solutions guide is a representative example of typical Victaulic fire protection applications.

@ In areas that do not experience freezing conditions the Series 751 alarm valves can be used.



INDUSTRIAL PLANT	MUSEUM	WAREHOUSE STORAGE (UNHEATED)	RESIDENTIAL (SINGLE FAMILY)
Provide maximum coverage to suppress fires quickly, eliminate risk of catastrophic event	Protect scientifically or historically significant artifacts, paintings, etc.	Provide maximum protection in large storage areas	Provide maximum protection for personal safety
Presence of multiple types of flammables	Archival areas need special care, minimize risk of damage to property	Freezing temperatures in unheated spaces, tall ceilings, high flows at low pressure required	Install system that accommodates low water pressure and pleasing aesthetics
FireLock couplings, fittings, and valves	FireLock couplings, fittings, and valves	FireLock couplings, fittings, and valves	FireLock couplings, fittings, and valves
FireLock NXT Series 769 deluge valves	FireLock NXT Series 769 preaction valves	FireLock NXT Series 768 dry valves	FireLock Series 717/717R check valves
Open Spray, Deluge	Quick response, recessed or concealed pendent	LP-46 low pressure pendent and upright, ESFR pendent, horizontal sidewall, upright or intermediate	Residential recessed pendent, sidewall or concealed pendent
Brass or nickel/Teflon [†]	Brass, chrome, or custom-painted cover plate	Brass or nickel/Teflon [‡]	White, chrome, or custom-painted

[†] Teflon is a registered trademark of Dupont Corporation.

Fire Protection Innovations

A constant flow of innovation since 1925

Founded in 1925 on the basis of marketing a single product called the “Victory Joint,” the Victaulic name comes from joining the words “victory” and “hydraulics” together. Used in World War I to provide fuel and water to the front, Victaulic products have evolved into the most innovative systems for joining pipe.

1925

	1925 Introduced grooved end pipe joining to the U.S.
1926	
1927	
1928	
1929	
	1930 AWWA products introduced for underground services
1931	
1932	
1933	
1934	Grooving changed the entire piping industry by creating a quick and easy method to assemble pipe joints. Pipe could be quickly cut-grooved and then securely connected with Victaulic couplings. The savings in time and labor would lead to dramatic gains in productivity.
1935	
1936	
1937	
1938	
1939	
1940	
1941	
1942	
1943	
1944	
1945	
	1946 Vic-Groover® cut grooving tools and Style 99 Roust-A-Bout® plain end coupling introduced
1947	
1948	
1949	



1950

	1950	1951
	1952	First grooved-end coupling to achieve UL listing
	1953	
	1954	
	1955	
	1956	
	1957	Introduced roll grooving to the industry
	1958	
	1959	
	1960	
	1961	
	1962	Introduced first production roll groover
	1963	
	1964	FlushSeal® gasket developed for dry systems
	1965	
	1966	First adjustable field cut grooving tool
	1967	
	1968	
	1969	First outlet coupling and first direct flanged-to-grooved adapter
	1970	
	1971	
	1972	Pioneered & achieved UL Approval of roll grooving for 0.188 lightwall pipe
	1973	
	1974	First grooved coupling for reducing on-the-run connections

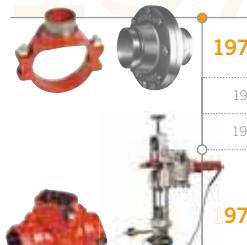


ROLL GROOVING GREATLY REDUCES GROOVING TIMES

The hallmark of Victaulic product development is finding faster, easier and better ways to join pipe, and in the 1950's, it led to one of the most significant concepts the company ever developed – roll grooving. By introducing this patented solution, Victaulic brought the efficiencies of the grooved coupling out of the realm of heavy wall pipe and into the lighter wall and smaller diameters used in such vital applications as fire protection.

1957

1975



1975 First bolted mechanical branch connection; Vic-hole cutting tool; Vic-Check check valve

1976

1977



1978 Introduced FIT – First locking lug assembly system for small diameter pipe, no threading needed

Vic-Tap – First positive location, full port hot tapping device with UL Listing

1979

1980

1981

1982



1983 Zero-Flex, the first rigid grooved coupling, using angle-pad design

1984



1985 Series 718/719 TestMaster – First alarm test module combining 24 field assembled parts into one factory assembled unit

1986 First rubber coated disc butterfly valve with grooved ends designed specifically for fire protection

1987



1988 Style 005 FireLock coupling – First rigid grooved end coupling designed specifically for fire protection services

1989



1990 FireLock Fittings – First CAD designed, high flow efficiency, short radius grooved end fittings for fire protection

1991



Pressfit System – First IPS imperial size pressed fitting system

1992



In-place roll groover for grooving previously installed pipe; Portable, easy set-up, retrofit hole cutting tool

1993



717 FireLock Check Valve – First extended body swing; check design, grooved end check valve for fire protection

1994 Introduced 717-R FireLock Check, with a riser kit

Enhanced tracking rolls for "hands off" grooving

1995



1995 FireLock line of devices – engineered to be the lightest, most compact devices designed to date



1999 FireLock line of automatic sprinklers



2003 Introduced V36 dry fire sprinklers with UL listing



FIRELOCK EZ COUPLING

2005 Introduced FireLock EZ – first rigid coupling designed as a lightweight, installation ready coupling with no loose parts



FIRELOCK NXT

2006 Introduced FireLock NXT valve line with a single set point for all dry, deluge and preaction services



2007 Expanded FireLock NXT product line with Series 7C7 compressor package



2008 Introduced LP-46 Low-Pressure Storage Pendent Sprinkler

2009

Design Data

Introduction

This Victaulic Fire Protection Catalog provides general information on mechanical piping methods and Victaulic products for fire protection systems. For the latest and most up-to-date information, always consult the individual product submittals provided on the Victaulic web site. This catalog is organized to provide information in the context and form most readily usable. For easy identification of major sections of interest, see the condensed table of contents on pg. 1-1, for a fully detailed index, see pg. 11-1. For more detailed design guidelines, consult Design Data, Publication 26.01.

Important Information

Victaulic has developed, in over 80 years in mechanical piping, variations of piping practice for use on a wide variety of piping materials.

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 threaded pipe and/or fittings.**

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 (request publication 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, when required, 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 FireLock devices require proper set up and maintenance. Always refer to the latest manual included with each valve for details.

When installing Victaulic FireLock automatic sprinklers it is important to select the proper wrench for installation. A complete guide for proper installation of Victaulic automatic sprinklers is available by requesting publication I-40.

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.

All rights reserved. No part of this Victaulic catalog may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopy, recording or otherwise, without the prior written permission of Victaulic.

© Copyright 2009, Victaulic Company.

® Registered trademark of Victaulic Company.

Design Data

Notice

The technical and performance data, weights, dimensions and specifications published are current as of the date of publication. For the most up-to-date information visit the Victaulic web site for detailed specific product submittal information.

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 www.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-40 FireLock Automatic Sprinklers
- I-100 General Handbook
- I-300 AWWA Product Handbook
- I-500 Pressfit System Handbook
- I-600 Copper Products Handbook
- I-751 FireLock Alarm Valve Manual
- I-759 FireLock Alarm Valve Manual
- I-768 FireLock NXT Dry Valve Manual
- I-769D FireLock NXT Deluge Valve Manual
- I-769P FireLock NXT Preaction Valve Manual
- 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 www.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.

Imperial Inches – Size Group	Outside Diameter mm/Spec Ref	DIN mm	JIS mm	ANSI inches	China Standard (GB) mm
1/2	21.3 mm	15	15 A/21.7 mm	1/2	15*/21.3 mm
3/4	26.7 mm	20/26.9 mm	20 A/27.2 mm	3/4	20*/26.9 mm
1	33.4 mm	25/33.7 mm	25 A/34 mm	1	25*/33.7 mm
1 1/4	42.2 mm	32/42.4 mm	32 A/42.7 mm	1 1/4	32*/42.4 mm
1 1/2	48.3 mm	40	40 A/48.6 mm	1 1/2	40*/48.3 mm
2	60.3 mm	DN & ISO 50	50 A/60.5 mm	2	50*/60.3 mm
2 1/2	73.1 mm	—	—	2 1/2	—
3	76.1 mm DIN/ISO (3 OD)	DN & ISO 65	65 A/76.3 mm	—	65*/76.1 mm
	88.9 mm	DN & ISO 80	JIS 80 A	3	80*/88.9 mm
4	108 mm China and old DIN	DIN 108 mm	—	—	108 mm
	114.3 mm	DN & ISO 100	JIS 100 A	4	100*/114.3 mm
5	133 mm China and old DIN	DIN 133 mm	—	—	133 mm
	139.7 mm DIN/ISO (5.5 OD)	DN & ISO 125	125 A/139.8 mm	—	125*/139.7 mm
	141.3 mm	—	—	5	—
6	159 mm China and old DIN	DIN 159 mm	—	—	159 mm
	165.1 mm JIS (6.5 OD)	—	150 A/165.2 mm	—	—
	168.3 mm	DN & ISO 150	—	6	150*/168.3 mm
8	216.3 JIS	—	JIS 200 A	—	—
	219.1 mm	DN 200	—	8	219.1 mm
10	267.4 JIS	—	JIS 250 A	—	—
	273 mm	DN 250	—	10	273 mm
12	318.5 JIS	—	JIS 300 A	—	—
	323.9 mm	DN 300	—	12	323.9 mm

IMPORTANT NOTE:

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 orange are tubing sizes.

* Nominal sizes for China standard pipe.

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
.069	×	Pressure	↔	Bar	×	14.5
4.45	×	End Load (Lbs.)	↔	Newton's (N)	×	0.2248
1.356	×	Torque (Lb. Ft.)	↔	Newton Meters (N·m)	×	0.738
F – 32 ÷ 1.8		Temp. (°F)	↔	Celsius (°C)	C + 17.78 × 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
3.7865	×	10 ⁻³ Gal. per Min. (GPM)	↔	Cubic Meters per min. (m ³ /m)	×	264.2

Couplings

- Victaulic, the originator and innovator of grooved coupling technology, offers a variety of coupling sizes and styles for fire protection piping systems
- Victaulic developed the first UL Listed coupling in 1952 and continues to develop products that allow for faster and easier joining of pipe
- New product development continued with the introduction of the Style 009 FireLock EZ coupling—this installation ready, patented coupling eliminates the need for disassembling and reassembling components during installation



FireLock EZ®
Rigid Coupling
STYLE 009, PG. 3-3

c us < VNIPO

STYLE 009V, PG. 3-3

c us < VdS



FireLock
Rigid Coupling
STYLE 005, PG. 3-4

U us < U VdS

STYLE 005, PG. 3-4

U us < U VdS



Zero-Flex®
Rigid Coupling
STYLE 07, PG. 3-5

U us < U VdS

STYLE 07, PG. 3-5

U us < U VdS



Standard
Flexible Coupling
STYLE 77, PG. 3-6

U us < U VdS

STYLE 77, PG. 3-6



Flexible Coupling
STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

U us < U VdS

STYLE 75, PG. 3-7

Couplings

Gasket Type	Style 005	Style 009	Style 07	Style 77	Style 75	Style 750	Style 72 †	Style HP-70	Style 791
STANDARD		●		●	●		●	●	●
REDUCING							●		
FLUSHSEAL®		●		●	●				●
FIRELOCK EZ			●						

† Separate gasket specifically designed for outlet couplings.

FireLock Flange Adapter
ANSI Class 150
PN10
JIS 10K
STYLE 744, PG. 3-9



Vic-Flange® Adapter
ANSI Class 150
PN10
JIS 10K
STYLE 741, PG. 3-10



Vic-Flange Adapter
ANSI Class 300
PN16
JIS 20K
STYLE 743, PG. 3-10



PRODUCTS

3-1 Couplings

- 4-1 Fittings
- 5-1 Hole Cut Piping System
- 6-1 Valves and Accessories
- 7-1 FireLock Automatic Devices and Accessories
- 8-1 FireLock Automatic Sprinklers
- 9-1 Specialty Products
- 10-1 Pipe Preparation Tools
- 11-1 Product Index

Outlet Coupling
STYLE 72, PG. 3-11



Available with female threaded outlets (shown) and grooved outlets

Rigid Coupling
STYLE HP-70, PG. 3-12



Vic-Boltless® Coupling

STYLE 791 COUPLING AND STYLE 792 ASSEMBLY TOOL, PG. 3-12



Couplings

FireLock EZ Rigid Coupling

STYLE 009

For Complete Information
Request Publication **10.60**



STYLE 009V (EUROPE ONLY)

For Complete Information
Request Publication **10.60**



- Provides rigidity; does not accommodate expansion, contraction or angular deflection
- Installation-ready design – assemble a joint without disassembling the bolts, nuts, gasket and housings
- For use in fire protection systems only
- Reduces installation time up to 60%
- Available with hot dipped galvanized finish
- Proprietary gasket design
- Rated up to 300psi/2065kPa - see submittal publication 10.60 for complete performance ratings
- Sizes from 1 $\frac{1}{4}$ "–4"/32–100mm

Size		Max. Work Pressure *	Max. End Load *	Allow. Pipe End Sep. †	Dimensions						Approx. Wgt. Each	
Nominal Size Inches mm	Actual Outside Dia. Inches mm				Lbs. N	Inches mm	Pre-assembled		Joint Assembled			
		psi kPa					X Inches mm	Y Inches mm	X Inches mm	Y Inches mm	Z Inches mm	Lbs. kg
1 $\frac{1}{4}$ 32	1.660 42.4	300 2065	649 2888	0.10 2.54		3.13 80	4.93 125	2.86 73	4.83 123	1.93 49	1.5 0.7	
1 $\frac{1}{2}$ 40	1.900 48.3	300 2065	851 3787	0.10 2.54		3.38 86	5.16 131	3.11 79	5.07 129	1.86 47	1.7 0.8	
2 50	2.375 60.3	300 2065	1329 5914	0.12 3.05		3.88 99	5.81 148	3.59 91	5.68 144	1.86 47	1.9 0.9	
2 $\frac{1}{2}$ 65	2.875 73.0	300 2065	1948 8668	0.12 3.05		4.38 111	6.21 158	4.08 104	6.10 155	1.87 48	2.0 0.9	
3 80	3.500 88.9	300 2065	2886 12842	0.12 3.05		5.03 128	6.88 175	4.70 119	6.78 172	1.88 48	2.3 1.0	
4 100	4.500 114.3	300 2065	4771 21230	0.17 4.32		6.19 157	8.11 206	5.94 151	8.01 203	2.09 53	3.9 1.8	

† The allowable pipe end separation dimension shown is for system layout purposes only. FireLock EZ couplings are considered rigid connections and will not accommodate expansion or contraction of the piping system.

* Refer to General Notes on pg.3-1.

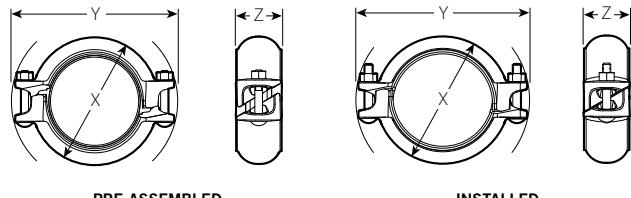
Size		Max. Work. Press. *	Max. End Load *	Allow. Pipe End Sep. †	@ Bolt/Nut No. – Size	Dimensions – Inches/mm						Aprx. Wgt. Ea.
Nominal Size Inches mm	Actual Outside Dia. Inches mm					Lbs. N	Inches mm	Inches	Pre-assembled (Stab in condition)			
		psi kPa							X	Y	Z	Lbs. kg
1 $\frac{1}{4}$ 32	1.660 42.4	300 2068	649 2888	0.10 2.54	2 – M10 x 57		3.14 80	4.84 123	2.85 72	4.65 118	1.91 49	1.6 0.7
1 $\frac{1}{2}$ 40	1.900 48.3	300 2068	851 3787	0.10 2.54	2 – M10 x 57		3.34 85	5.06 129	3.13 80	4.85 123	1.92 49	1.7 0.8
2 50	2.375 60.3	300 2068	1329 5914	0.12 3.05	2 – M10 x 64		3.91 99	5.66 144	3.61 92	5.47 139	1.94 49	2.1 0.9
76.1 mm	3.000 76.1	300 2068	1948 8668	0.12 3.05	2 – M10 x 64		4.57 116	6.46 164	4.17 106	6.18 157	1.96 50	2.3 1.1
3 80	3.500 88.9	300 2068	2886 12842	0.12 3.05	2 – M10 x 64		5.15 131	7.12 181	4.73 120	6.67 169	1.94 49	2.6 1.2
4 100	4.500 114.3	300 2068	4771 21230	0.17 4.32	2 – M10 x 64		6.39 162	8.74 222	6.05 154	8.46 215	2.11 54	4.6 2.1

† The allowable pipe end separation dimension shown is for system layout purposes only. FireLock EZ couplings are considered rigid connections and will not accommodate expansion or contraction of the piping system.

* Refer to General Notes on pg.3-1.

IMPORTANT NOTES:

When assembling FireLock EZ couplings onto end caps, take additional care to make certain the end cap is fully seated against the gasket end stop. For FireLock EZ Style 009/009V couplings, use FireLock No. 006 end caps containing the "EZ" marking on the inside face or No. 60 end caps containing the "QV EZ" marking on the inside face. Non-Victaulic end cap products should not be used with Style 009/009V couplings.



Couplings

FireLock Rigid Coupling

STYLE 005

For Complete Information
Request Publication **10.02**



- Unique angle-pad design for rigidity
- Allows supporting/hanging same as welded or threaded in accordance with NFPA-13 requirements
- For use in fire protection services only
- Available with hot dipped galvanized finish
- Pressure rated up to 350 psi/2410 kPa
- Sizes from 1 1/4"-8"/32-200 mm

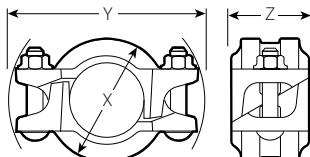
Size		Max. Work Pressure § *	Max. End Load *	Allow. Pipe End Sep. † *	Dimensions			Approx. Wgt. Each
Nominal Size Inches mm	Actual Outside Dia. Inches mm	psi kPa	Lbs. N	Inches mm	X Inches mm	Y Inches mm	Z Inches mm	Lbs. kg
1 1/4 32	1.660 42.4	350 2410	755 3370	0.05 1.2	2.75 70	4.50 114	1.88 48	1.2 0.5
1 1/2 40	1.900 48.3	350 2410	990 4415	0.05 1.2	3.00 76	4.75 121	1.88 48	1.2 0.5
2 50	2.375 60.3	350 2410	1550 6900	0.07 1.7	3.50 89	5.25 133	1.88 48	1.6 0.7
2 1/2 65	2.875 73.0	350 2410	2270 10110	0.07 1.7	4.00 102	5.75 146	1.88 48	1.9 0.9
76.1 mm	3.000 76.1	350 2410	2475 11010	0.07 1.7	4.13 105	5.75 146	1.88 48	1.9 0.9
	3.500 88.9	350 2410	3365 14985	0.07 1.7	4.63 118	6.13 156	1.88 48	2.1 1.0
4 ** 100	4.500 114.3	350 2410	5565 24770	0.16 4.1	5.75 146	7.25 184	2.13 54	3.1 1.4
108.0 mm	4.250 108.0	300 2065	4255 18940	0.16 4.1	5.63 143	7.25 184	2.13 54	3.1 1.4
5 125	5.563 141.3	300 2065	7290 32445	0.16 4.1	6.88 175	9.00 229	2.13 54	4.5 2.0
133.0 mm	5.250 133.0	300 2065	6495 28900	0.16 4.1	6.63 168	9.00 229	2.13 54	4.5 2.0
139.7 mm	5.500 139.7	300 2065	7125 31715	0.16 4.1	6.88 175	9.00 229	2.13 54	4.8 2.2
6 150	6.625 168.3	300 2065	10340 46020	0.16 4.1	8.00 203	10.00 254	2.13 54	5.0 2.3
159.0 mm	6.250 159.0	300 2065	9200 40955	0.16 4.1	7.63 194	10.00 254	2.13 54	5.5 2.5
165.1 mm	6.500 165.1	300 2065	9955 44295	0.16 4.1	8.15 207	10.00 254	2.13 54	5.5 2.5
8 ** 200	8.625 219.1	300 2065	17525 78000	0.19 4.8	10.50 267	13.13 334	2.63 67	11.3 5.1

† For field installation only. FireLock Style 005 couplings are essentially rigid and do not accommodate expansion/contraction.

§ Style 005 couplings are VdS and LPCB Approved to 12 Bar/175 psi.

* Refer to General Notes on pg. 3-1.

** Korea MPI Approved



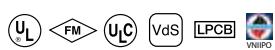
TYPICAL FOR ALL SIZES

Couplings

Zero-Flex Rigid Coupling

STYLE 07

For Complete Information
Request Publication **06.02**



- Angled-pad design for rigidity
- Resists flexural and torsional loads
- Pressure rated up to 500 psi/3450 kPa
- Sizes from 1–12"/25–300 mm

Size		Max. Work Pressure ‡	Max. End Load *	Allow. Pipe End Sep. *	Dimensions			Approx. Wgt. Each
Nominal Size Inches mm	Actual Outside Dia. Inches mm	psi kPa	Lbs. N	Inches mm	X Inches mm	Y Inches mm	Z Inches mm	Lbs. kg
1 25	1.315 33.7	500 3450	679 3020	0.05 1.2	2.36 60	4.22 107	1.84 47	1.6 0.7
1 1/4 32	1.660 42.4	500 3450	1082 4813	0.05 1.2	2.69 68	4.62 117	1.84 47	1.6 0.7
1 1/2 40	1.900 48.3	500 3450	1417 6305	0.05 1.2	2.94 75	5.81 148	1.84 47	1.6 0.7
2 50	2.375 60.3	500 3450	2214 9852	0.07 1.7	3.35 85	5.78 147	1.84 47	2.3 1.0
2 1/2 65	2.875 73.0	500 3450	3244 14437	0.07 1.7	3.88 98	6.38 162	1.84 47	2.6 1.2
76.1 mm	3.000 76.1	500 3450	3533 15720	0.07 1.7	4.21 107	6.61 168	1.84 47	3.6 1.6
3 80	3.500 88.9	500 3450	4808 21396	0.07 1.7	4.54 115	6.81 173	1.84 47	3.0 1.4
4 ** 100	4.500 114.3	500 3450	7948 35369	0.16 4.1	5.81 148	8.21 209	2.07 53	5.3 2.4
108.0 mm	4.250 108.0	500 3450	7090 31548	0.16 4.1	5.56 141	7.98 203	2.07 53	5.2 2.4
5 125	5.563 141.3	500 3450	12147 54053	0.16 4.1	7.03 179	9.89 251	2.07 53	7.4 3.4
133.0 mm	5.250 133.0	500 3450	10818 48141	0.16 4.1	6.69 170	9.60 244	2.07 53	7.4 3.4
139.7 mm	5.500 139.7	500 3450	11873 52835	0.16 4.1	6.94 176	9.82 249	2.07 53	7.6 3.4
6 150	6.625 168.3	500 3450	17227 76660	0.16 4.1	8.26 210	10.83 275	2.07 53	8.3 3.8
159.0 mm	6.250 159.0	500 3450	15332 68228	0.16 4.1	7.84 199	10.54 268	2.07 53	9.2 4.2
165.1 mm	6.500 165.1	500 3450	16583 73795	0.16 4.1	8.13 207	10.84 275	2.07 53	8.3 3.8
8 ** 200	8.625 219.1	450 3100	26278 116939	0.19 4.8	10.54 268	13.74 349	2.51 64	15.1 6.8
10 #@ 250	10.750 273.0	400 2750	36287 161475	0.13 3.3	12.86 327	16.98 431	2.56 65	23.5 10.7
12 #@ 300	12.750 323.9	400 2750	51045 227149	0.13 3.3	14.86 377	18.88 480	2.56 65	28.2 12.8

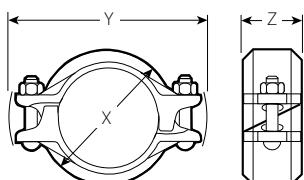
‡ Pressure ratings for Victaulic couplings used in services other than fire protection will differ from the ratings published here.
Please consult the individual product submittal for specific pressure rating information.

* Refer to General Notes on pg. 3-1.

Couplings in 8"/200mm, 10"/250mm and 12"/300mm sizes are approved for JIS piping standards

@ Only couplings in 10"/250mm and 12"/300mm sizes are approved for use in China

** Korea MPI Approved



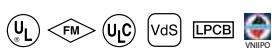
TYPICAL FOR ALL SIZES

Couplings

Standard Flexible Coupling

STYLE 77

For Complete Information
Request Publication **06.04**



- Cross-ribbed construction design
- Provides flexibility for expansion, contraction, and deflection
- Pressure rated up to 500 psi/3450 kPa
- Sizes from $\frac{3}{4}$ "–12"/20–300 mm

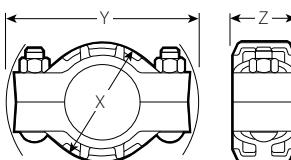
Size		Max. Work Pressure [‡]	Max. End Load *	Allow. Pipe End Sep. *	Dimensions			Approx. Wgt. Each
Nominal Size Inches mm	Actual Outside Dia. Inches mm	psi kPa	Lbs. N	Inches mm	X Inches mm	Y Inches mm	Z Inches mm	Lbs. kg
$\frac{3}{4}$ 20	1.050 26.7	500 3450	433 1926	0 – 0.06 0 – 1.6	2.13 54	4.00 102	1.75 44	1.1 0.5
1 25	1.315 33.4	500 3450	679 3020	0 – 0.06 0 – 1.6	2.38 61	4.12 105	1.75 44	1.2 0.5
$1\frac{1}{4}$ 32	1.660 42.2	500 3450	1082 4813	0 – 0.06 0 – 1.6	2.65 67	5.00 127	1.88 48	2.0 0.9
$1\frac{1}{2}$ 40	1.900 48.3	500 3450	1417 6305	0 – 0.06 0 – 1.6	3.13 79	5.38 137	1.88 48	2.1 1.0
2 50	2.375 60.3	500 3450	2214 9852	0 – 0.06 0 – 1.6	3.63 92	5.88 149	1.88 48	2.6 1.2
$2\frac{1}{2}$ 65	2.875 73.0	500 3450	3244 14437	0 – 0.06 0 – 1.6	4.25 108	6.50 165	1.88 48	3.1 1.4
76.1 mm	3.000 76.1	500 3450	3533 15720	0 – 0.06 0 – 1.6	4.38 111	6.63 168	1.88 48	3.2 1.5
3 80	3.500 88.9	500 3450	4808 21396	0 – 0.06 0 – 1.6	5.00 127	7.13 181	1.88 48	3.7 1.7
4 ** 100	4.500 114.3	500 3450	7948 35369	0 – 0.13 0 – 3.3	6.13 156	8.88 226	2.13 54	6.7 3.0
108.0mm	4.250 108.0	500 3450	7090 31548	0 – 0.13 0 – 3.2	6.00 152	8.63 219	2.13 54	11.0 5.0
5 125	5.563 141.3	500 3450	12147 54053	0 – 0.13 0 – 3.3	7.75 197	10.65 270	2.13 54	10.6 4.8
133.0 mm	5.250 133.0	500 3450	10818 48141	0 – 0.13 0 – 3.3	7.63 194	10.38 264	2.13 54	10.0 4.5
139.7 mm	5.500 139.7	500 3450	11873 52835	0 – 0.13 0 – 3.3	8.63 219	10.65 270	2.13 54	10.0 4.5
6 150	6.625 168.3	500 3450	17227 76660	0 – 0.13 0 – 3.3	8.63 219	11.88 302	2.13 54	12.0 5.4
159.0mm	6.250 159.0	500 3450	15332 68228	0 – 0.13 0 – 3.3	8.63 219	11.50 292	2.13 54	13.2 6.0
165.1 mm	6.500 165.1	500 3450	16583 73795	0 – 0.13 0 – 3.3	8.88 226	11.63 295	2.13 54	13.2 6.0
8 # 200	8.625 219.1	500 3450	29198 129933	0 – 0.13 0 – 3.3	11.00 279	14.75 375	2.50 63	20.8 9.4
10 # 250	10.750 273.0	500 3450	45358 201844	0 – 0.13 0 – 3.3	13.63 346	17.13 435	2.63 67	31.1 14.1
12 # 300	12.750 323.9	500 3450	63806 283936	0 – 0.13 0 – 3.3	15.63 397	19.25 489	2.63 67	27.8 12.6

‡ Pressure ratings for Victaulic couplings used in services other than fire protection will differ from the ratings published here.
Please consult the individual product submittal for specific pressure rating information.

* Refer to General Notes on pg. 3-1.

Couplings in 8"/200mm, 10"/250mm and 12"/300mm sizes are approved for JIS piping standards

** Korea MPI Approved



TYPICAL FOR ALL SIZES

Couplings

Flexible Coupling

STYLE 75

For Complete Information
Request Publication **06.05**



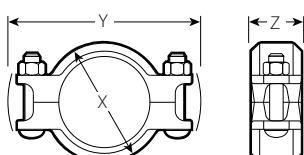
- For use where moderate pressures are expected and weight considerations are flexibility factors
- 50% lighter in weight than Style 77
- Pressure rated up to 500psi/3450kPa
- Sizes from 1-8"/25-304.8mm

Size		Max. Work Pressure *	Max. End Load *	Allow. Pipe End Sep. *	Dimensions			Approx. Wgt. Each
Nominal Size Inches mm	Actual Outside Dia. Inches mm	psi kPa	Lbs. N	Inches mm	X Inches mm	Y Inches mm	Z Inches mm	Lbs. kg
1 25	1.315 33.4	500 3450	680 3025	0 - 0.06 0 - 1.6	2.38 61	4.27 108	1.77 45	1.3 0.6
1 1/4 32	1.660 42.2	500 3450	1,080 4805	0 - 0.06 0 - 1.6	2.68 68	4.61 117	1.77 45	1.4 0.6
1 1/2 40	1.900 48.3	500 3450	1,420 6320	0 - 0.06 0 - 1.6	2.91 74	4.82 122	1.77 45	1.5 0.6
2 50	2.375 60.3	500 3450	2,215 9860	0 - 0.06 0 - 1.6	3.43 87	5.22 133	1.88 48	1.7 0.8
2 1/2 65	2.875 73.0	500 3450	3,245 14440	0 - 0.06 0 - 1.6	3.88 98	5.68 144	1.88 48	1.9 0.9
76.1 mm	3.000 76.1	500 3450	3,535 15730	0 - 0.06 0 - 1.6	4.00 102	5.90 150	1.88 48	1.9 0.9
3 80	3.500 88.9	500 3450	4,800 21360	0 - 0.06 0 - 1.6	4.50 114	7.00 178	1.88 48	2.9 1.3
3 1/2 90	4.000 101.6	500 3450	6,300 28035	0 - 0.06 0 - 1.6	5.00 127	7.50 191	1.88 48	2.9 1.3
4 ** 100	4.500 114.3	500 3450	7,950 35380	0 - 0.13 0 - 3.2	5.80 147	8.03 204	2.13 54	4.1 1.9
108.0 mm	4.250 108.0	450 3100	6,380 28395	0 - 0.13 0 - 3.2	5.55 141	7.79 198	2.13 54	3.7 1.7
4 1/2 120	5.000 127.0	450 3100	8,820 39250	0 - 0.13 0 - 3.2	6.13 156	9.43 240	2.13 54	5.5 2.5
5 125	5.563 141.3	450 3100	10,935 48660	0 - 0.13 0 - 3.2	6.88 175	10.07 256	2.13 54	5.8 2.6
133.0 mm	5.250 133.0	450 3100	9,735 43325	0 - 0.13 0 - 3.2	6.55 166	9.37 238	2.13 54	6.0 2.7
139.7 mm	5.500 139.7	450 3100	10,665 47460	0 - 0.13 0 - 3.2	6.80 173	9.59 244	2.13 54	6.3 2.9
6 150	6.625 168.3	450 3100	15,525 69085	0 - 0.13 0 - 3.2	8.00 203	11.07 281	2.13 54	7.0 3.2
152.4 mm	6.000 152.4	450 3100	12,735 56670	0 - 0.13 0 - 3.2	7.38 187	10.48 266	1.88 48	6.2 2.8
159.0 mm	6.250 159.0	450 3100	13,800 61405	0 - 0.13 0 - 3.2	7.63 194	10.49 266	2.13 54	6.8 3.1
165.1 mm	6.500 165.1	450 3100	14,940 66483	0 - 0.13 0 - 3.2	7.84 199	10.66 271	2.06 52	7.2 3.3
203.2 mm #	8.000 203.2	450 3100	22,635 100725	0 - 0.13 0 - 3.2	9.72 247	13.33 339	2.31 54	12.6 5.7
8 ** 200	8.625 219.1	450 3100	26,280 116945	0 - 0.13 0 - 3.2	10.34 263	13.97 355	2.32 59	12.4 5.6
254.0 mm #	10.000 254.0	350 2400	27,500 122375	0 - 0.13 0 - 3.2	12.16 309	15.81 402	2.53 64	20.8 9.4
304.8 mm #	12.000 304.8	350 2400	39,500 175775	0 - 0.13 0 - 3.2	14.16 360	17.69 449	2.53 64	23.6 10.7

Style 74 Coupling.

* Refer to General Notes on pg.3-1.

** Korea MPI Approved



TYPICAL FOR ALL SIZES

Couplings

Reducing Coupling

STYLE 750

For Complete Information
Request Publication **06.08**



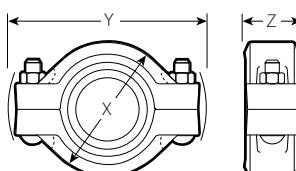
- Direct reduction on the piping run
- Designed to replace two couplings and a reducing fitting
- Special reducing gasket for pressure responsive sealing
- Pressure rated up to 350 psi/2410 kPa
- Sizes from 2×1"/50×25mm through 8×6"/200×150mm

Size		Max. Work Pressure *	Max. End Load *	Allow. Pipe End Sep. *	Dimensions			Approx. Wgt. Each
Nominal Size Inches	mm	psi kPa	Lbs. N	Inches mm	X Inches mm	Y Inches mm	Z Inches mm	Lbs. kg
2 50	1 25	350 2410	1,000 4450	0 - 0.07 0 - 1.8	3.38 85	5.28 134	1.88 48	2.7 1.2
	1½ 40	350 2410	1,000 4450	0 - 0.07 0 - 1.8	3.38 85	5.28 134	1.88 48	2.0 1.0
2½ 65	2 50	350 2410	2,215 9850	0 - 0.07 0 - 1.8	4.00 102	5.93 151	1.88 48	3.1 1.4
	76.1 × 50	350 2410	1,550 6900	0 - 0.07 0 - 1.8	4.38 111	6.00 152	1.88 48	4.6 2.1
3 80	2 50	350 2410	1,550 6900	0 - 0.07 0 - 1.8	4.75 121	7.13 181	1.88 48	4.9 2.2
	2½ 65	350 2410	3,250 14460	0 - 0.07 0 - 1.8	4.75 121	7.13 181	1.88 48	4.3 2.0
88.9 × 76.1		350 2410	2,275 10125	0 - 0.07 0 - 1.8	4.75 121	7.13 181	1.88 48	4.2 1.9
4 100	2 50	350 2410	1,550 6900	0 - 0.13 0 - 3.2	6.25 159	8.90 226	2.25 57	8.1 3.7
	2½ 65	350 2410	2,275 10125	0 - 0.13 0 - 3.2	6.25 159	8.90 226	2.25 57	8.6 3.9
	3 80	350 2410	4,810 21400	0 - 0.13 0 - 3.2	6.00 152	8.90 226	2.25 57	6.7 3.0
114.3 × 76.1		350 2410	2,275 10125	0 - 0.13 0 - 3.2	6.25 159	8.90 226	2.25 57	6.9 3.1
5 125	4 100	350 2410	5,565 24765	0 - 0.13 0 - 3.2	7.18 182	10.70 272	2.13 54	11.2 5.1
6 150	4 100	350 2410	5,565 24765	0 - 0.13 0 - 3.2	8.63 219	11.90 302	2.25 57	16.7 7.6
	5 125	350 2410	8,500 37825	0 - 0.13 0 - 3.2	8.31 211	11.90 302	2.25 57	12.9 5.9
165.1 × 100		350 2410	5,565 24765	0 - 0.13 0 - 3.2	8.63 219	11.90 302	2.25 57	15.2 6.9
8 200	6 150	350 2410	12,000 53400	0 - 0.13 0 - 3.2	10.81 275	14.88 378	2.50 64	22.4 10.2

* Refer to General Notes on pg. 3-1.

IMPORTANT NOTES:

No. 60 Cap is not for use in vacuum services with Style 72 or 750 couplings. No. 61 bull plug should be used.



TYPICAL FOR ALL SIZES

Couplings

FireLock Flange Adapter
ANSI Class 150
PN10
JIS 10K
STYLE 744

For Complete Information
Request Publication **10.04**



- Directly incorporates ANSI Class 150, PN10, JIS 10K or ANSI Class 300, PN16, JIS 20K bolt hole patterns into a grooved system
- Hinged for easy handling with integral end tabs which facilitate assembly
- Small teeth inside the key shoulder inside diameter prevent rotation
- Pressure rated up to 175 psi/1200 kPa
- Sizes from 2-8"/50-200 mm

Size		Max. Work Pressure *	Max. End Load *	Sealing Surface		Dimensions		Approx. Wgt. Each
Nominal Size Inches mm	Actual Outside Dia. Inches mm	psi kPa	Lbs. N	A Max. Inches mm	B Min. Inches mm	W Inches mm	Z Inches mm	Lbs. kg
2 50	2.375 60.3	175 1200	775 3450	2.38 60	3.41 87	6.75 172	0.75 19	2.7 1.2
2 1/2 65	2.875 73.0	175 1200	1135 5050	2.88 73	3.91 99	7.88 200	0.88 22	4.2 1.9
3 80	3.500 88.9	175 1200	1685 7500	3.50 89	4.53 115	8.44 214	0.94 24	4.8 2.2
4 100	4.500 114.3	175 1200	2780 11045	4.50 114	5.53 141	9.94 252	0.94 24	7.1 3.2
5 125	5.563 141.3	175 1200	4250 18920	5.56 141	6.71 171	11.00 279	1.00 25	8.3 3.8
6 150	6.625 168.3	175 1200	6030 26840	6.63 168	7.78 198	12.00 305	1.00 25	9.3 4.2
8 200	8.625 219.1	175 1200	10219 45475	8.63 219	9.94 252	14.63 372	1.13 29	13.9 6.3

* Working Pressure and End Load are total, from all internal and external loads, based on standard weight steel pipe, standard roll or cut grooved in accordance with Victaulic specification. Contact Victaulic for performance on other pipe.

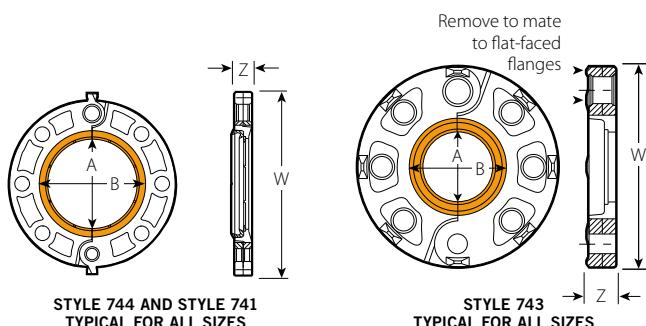
IMPORTANT NOTES

WARNING: For one time field test only, the Maximum Joint Working Pressure may be increased to 1½ times the figures shown.

Style 744 FireLock Flange adapters provide rigid joints when used on pipe with standard roll or cut groove dimensions and consequently allow no linear or angular movement at the joint.

WARNING: Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.

Style 744 FireLock flange adapters provide rigid joints when used on pipe with standard cut or roll groove dimensions and consequently allow no linear or angular movement at the joint. When used with Victaulic Series 765/705W/707 butterfly valves, plastic pipe or lightwall metallic pipe, small teeth in inside diameter of key section should be removed and may be used on one side of the valve.



Orange area of mating face must be free from gouges, undulations or deformities of any type for effective sealing.

Couplings

Vic-Flange Adapter
ANSI Class 300
PN16
JIS 20K

STYLE 741

For Complete Information
Request Publication **06.06**



- Directly incorporates ANSI Class 150 PN10 JIS 10K or ANSI Class 300 PN16 JIS 20K flanged components into a grooved system
- Pressure rated up to 250psi/1725kPa
- Sizes from 2–12"/50–300mm (hinged)

Vic-Flange Adapter
ANSI Class 300
PN16
JIS 20K

STYLE 743

For Complete Information
Request Publication **06.06**



- Pressure rated up to 500psi/3450kPa
- Sizes from 2–12"/50–300mm

Size		Max. Work Pressure *	Max. End Load *	Sealing Surface		Dimensions		Approx. Wgt. Each
Nominal Size Inches mm	Actual Outside Dia. Inches mm			A Max. Inches mm	B Min. Inches mm	W Inches mm	Z Inches mm	
2 50	2.375 60.3	250 1725	1107 4926	2.38 60	3.41 87	6.75 172	0.75 19	3.1 1.4
2½ 65	2.875 73.0	250 1725	1622 7218	2.88 73	3.91 99	7.87 200	0.88 22	4.8 2.1
3 80	3.500 88.9	250 1725	2404 10698	3.50 89	4.53 115	8.29 211	0.94 24	5.3 2.4
4 100	4.500 114.3	250 1725	3974 17685	4.50 114	5.53 141	9.87 251	0.94 24	7.4 3.4
5 125	5.563 141.3	250 1725	6073 27026	5.56 141	6.71 171	10.90 277	1.00 25	8.6 3.9
6 150	6.625 168.3	250 1725	8614 38330	6.63 168	7.78 198	11.90 302	1.00 25	9.9 4.5
	165.1 mm	6.500 165.1	250 1725	8292 36897	6.50 165	7.66 195	11.92 303	1.00 25
8 200	8.625 219.1	250 1725	14599 64966	8.63 219	9.94 252	14.50 368	1.13 29	16.6 7.5
10 250	10.750 273.0	250 1725	22679 100922	10.75 273	12.31 313	17.24 438	1.19 30	24.2 11.0
12 300	12.750 323.9	250 1725	31903 141968	12.75 324	14.31 364	20.25 514	1.25 32	46.8 21.2

* Refer to Publication 06.06 for more details.

IMPORTANT NOTES:

Style 741 Vic-Flange adapters provide rigid joints when used on pipe with standard cut or roll groove dimensions and consequently allow no linear or angular movement at the joint. When used with Victaulic Series 765/705W/707 butterfly valves, plastic pipe or lightwall metallic pipe, small teeth in I.D. of key section should be removed and may be used on one side of the valve. Total bolts required to be supplied by installer, may be ordered from Victaulic Company.

For restrictions on where and how Vic-Flange adapters and flange washers can be used, refer to Publication 06.06.

Size		Max. Work Pressure *	Max. End Load *	Sealing Surface		Dimensions		Approx. Wgt. Each
Nominal Size Inches mm	Actual Outside Dia. Inches mm			psi kPa	Lbs. N	A Max. Inches mm	B Min. Inches mm	
2 50	2.375 60.3	250 1725	1107 4926	2.38 60	3.41 87	7.70 196	0.94 24	4.8 2.2
2½ 65	2.875 73.0	250 1725	1622 7218	2.88 73	3.91 99	8.61 219	1.06 27	7.4 3.4
3 80	3.500 88.9	250 1725	2404 10698	3.50 89	4.53 115	9.48 241	1.18 30	9.1 4.1
4 100	4.500 114.3	250 1725	3974 17685	4.50 114	5.53 141	11.35 288	1.31 33	15.3 6.9
5 125	5.563 141.3	250 1725	6073 27026	5.56 141	6.71 171	12.31 313	1.43 36	17.7 8.0
6 150	6.625 168.3	250 1725	8614 38330	6.63 168	7.78 198	13.77 350	1.50 38	23.4 10.6
8 200	8.625 219.1	250 1725	14599 64966	8.63 219	9.94 252	16.68 424	1.68 43	34.3 15.6
10 250	10.750 273.0	250 1725	22679 100922	10.75 273	12.31 313	19.25 489	1.93 49	48.3 21.9
12 300	12.750 323.9	250 1725	31903 141968	12.75 324	14.31 364	22.25 565	2.06 52	70.5 32.0

* Refer to Publication 06.06 for more details.

IMPORTANT NOTES:

Style 743 Vic-Flange must be ordered as a factory assembly when connected to a Victaulic fitting or valve. Contact Victaulic for details. Total bolts required to be supplied by installer, may be ordered from Victaulic.

For restrictions on where and how Vic-Flange adapters and flange washers can be used, refer to Publication 06.06.

Couplings

Outlet Coupling

STYLE 72

For Complete Information
Request Publication **06.10**



- Serves dual purpose as a coupling and outlet
- Designed to seal on the joined pipe ends and in the neck of the outlet
- Outlet can be prepared for grooved, female threaded or male threaded connections
- Pressure rated up to 500psi/3450kPa
- Sizes from $1\frac{1}{2} \times \frac{1}{2}$ /40x15mm through 6×2 /150x50mm

Size		Max. Work Pressure *	Allow. Pipe End Sep. *	Dimensions						Approx. Wgt. Each
Run x Reducing Outlet Nominal Size Inches mm				Grooved Male Pipe Thread	Inches mm	T † Inches mm	V § Inches mm	X Inches mm	Y Inches mm	
Female Pipe Thread	Grooved Male Pipe Thread	psi kPa	Inches mm							Lbs. kg
1 1/2 40	1/2	—	500 3450	0.75 – 0.88 19 – 22	2.06 52	2.63 67	2.94 75	4.50 114	2.75 70	1.4 0.6
	15	—	500 3450	0.75 – 0.88 19 – 22	2.06 52	2.63 67	2.94 75	4.50 114	2.75 70	1.4 0.6
	3/4	—	500 3450	0.75 – 0.88 19 – 22	2.06 52	2.63 67	2.94 75	4.50 114	2.75 70	1.4 0.6
	20	—	500 3450	0.75 – 0.88 19 – 22	1.94 49	2.63 67	2.94 75	4.50 114	2.75 70	1.4 0.6
2 50	1	—	500 3450	0.75 – 0.88 19 – 22	1.94 49	2.63 67	2.94 75	4.50 114	2.75 70	1.4 0.6
	25	—	500 3450	0.75 – 0.88 19 – 22	1.94 49	2.63 67	2.94 75	4.50 114	2.75 70	1.4 0.6
	1/2	—	500 3450	0.81 – 0.88 20 – 22	2.47 63	3.03 77	3.38 86	5.00 127	2.75 70	3.5 1.6
	15	—	500 3450	0.81 – 0.88 20 – 22	2.47 63	3.03 77	3.38 86	5.00 127	2.75 70	2.5 1.1
2 1/2 65	3/4	—	500 3450	0.81 – 0.88 20 – 22	2.47 63	3.03 77	3.38 86	5.00 127	2.75 70	2.5 1.1
	20	—	500 3450	0.81 – 0.88 20 – 22	2.47 63	3.03 77	3.38 86	5.00 127	2.75 70	2.5 1.1
	1	—	500 3450	0.81 – 0.88 20 – 22	2.44 60	3.03 77	3.38 86	5.00 127	2.75 70	2.5 1.1
	25	—	500 3450	0.81 – 0.88 20 – 22	2.44 60	3.03 77	3.38 86	5.00 127	2.75 70	2.5 1.1
3 80	1 1/4	—	500 3450	1.25 – 1.50 32 – 38	3.00 76	3.69 94	4.06 103	6.88 175	3.25 83	5.0 2.3
	32	—	500 3450	1.25 – 1.50 32 – 38	3.00 76	3.69 94	4.06 103	6.88 175	3.25 83	5.0 2.3
	1 1/2	—	500 3450	1.25 – 1.50 32 – 38	—	3.69 94	4.06 103	6.88 175	3.25 83	5.0 2.3
	40	—	500 3450	1.25 – 1.50 32 – 38	—	3.69 94	4.06 103	6.88 175	3.25 83	5.0 2.3
4 100	3/4	—	500 3450	0.50 – 0.63 13 – 16	2.75 70	3.31 84	4.50 114	7.00 178	2.38 60	3.4 1.5
	20	—	500 3450	0.50 – 0.63 13 – 16	2.75 70	3.31 84	4.50 114	7.00 178	2.38 60	3.4 1.5
	—	25	500 3450	0.50 – 0.63 13 – 16	—	3.31 84	4.50 114	7.00 178	2.38 60	3.4 1.5
	1	—	500 3450	1.25 – 1.50 32 – 38	4.06 103	4.75 121	4.75 121	8.00 203	3.25 83	7.0 3.2
6 150	—	25	500 3450	1.25 – 1.50 32 – 38	—	4.25 108	4.75 121	8.00 203	3.25 83	7.0 3.2
	1 1/2	—	500 3450	1.25 – 1.50 32 – 38	—	4.25 108	4.75 121	8.00 203	3.25 83	7.0 3.2
	40	—	500 3450	1.25 – 1.50 32 – 38	—	4.25 108	4.75 121	8.00 203	3.25 83	7.0 3.2
	2	—	400 2750	1.63 – 1.81 41 – 46	3.91 99	4.59 117	6.13 156	9.00 229	3.69 94	11.4 5.2
6 150	—	50	400 2750	1.63 – 1.81 41 – 46	—	4.59 117	6.13 156	9.00 229	3.69 94	11.4 5.2
	1	—	400 2750	1.63 – 1.81 41 – 46	6.19 157	6.88 175	8.13 206	12.00 305	3.69 94	18.0 8.2
	1 1/2	—	400 2750	1.63 – 1.81 41 – 46	6.19 157	6.88 175	8.13 206	12.00 305	3.69 94	18.0 8.2
	2	—	400 2750	1.63 – 1.81 41 – 46	—	6.06 154	8.13 206	12.00 305	3.69 94	18.0 8.2

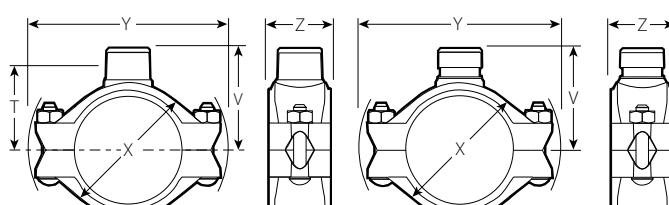
* Refer to General Notes on pg. 3-1.

§ Center of run to end of fittings.

† Center of run to the engaged pipe end. Female threaded outlet only (dimensions approximate).

IMPORTANT NOTES:

No. 60 Cap is not for use in vacuum services with Style 72 or 750 couplings. No. 61 bull plug should be used.



TYPICAL
1 1/2 x 1/2" – 6 x 1 1/2" / 40 x 25 mm – 150 x 40 mm
SIZES WITH FEMALE THREADED OUTLET

TYPICAL
2 x 1" – 6 x 2" / 50 x 25 mm – 150 x 50 mm
SIZES WITH GROOVED OUTLET

Couplings

Rigid Coupling

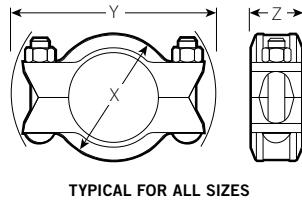
STYLE HP-70

For Complete Information
Request Publication **06.12**

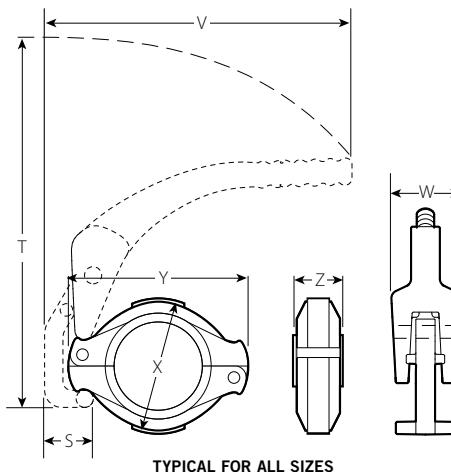


- Essentially rigid joint
- Pressure rated up to 750psi/5170kPa
- Sizes from 2–12"/50–300mm

Size		Max. Work Pressure *	Max. End Load *	Allow. Pipe End Sep. *	Dimensions			Approx. Wgt. Each
Nominal Size Inches mm	Actual Outside Dia. Inches mm	psi kPa	Lbs. N	Inches mm	X Inches mm	Y Inches mm	Z Inches mm	Lbs. kg
2 50	2.375 60.3	750 5170	3321 14778	0.14 3.6	3.50 89	6.68 168	2.00 51	3.2 1.5
2½ 65	2.875 73.0	750 5170	4866 21655	0.14 3.6	4.13 105	7.13 181	2.00 51	4.0 1.8
3 80	3.500 88.9	750 5170	7212 32094	0.14 3.6	4.75 121	7.75 197	2.00 51	4.4 2.0
4 100	4.500 114.3	750 5170	11922 53054	0.25 6.4	6.00 152	9.63 245	2.13 54	7.5 3.4
6 150	6.625 168.3	750 5170	25841 114991	0.25 6.4	8.63 219	12.68 321	2.50 64	16.0 7.3
8 200	8.625 219.1	750 5170	43797 194899	0.25 6.4	11.00 279	15.00 381	2.75 70	26.1 11.8
10 250	10.750 273.0	700 4825	63502 282582	0.25 6.4	13.50 343	17.25 438	3.00 76	32.8 14.9
12 300	12.750 323.9	700 4825	89328 397510	0.25 6.4	15.63 397	19.13 486	3.13 80	46.0 20.9



* Refer to General Notes on pg. 3-1.

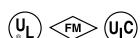


TYPICAL FOR ALL SIZES

Vic-Boltless Coupling

STYLE 791 COUPLING AND STYLE 792 ASSEMBLY TOOL

For Complete Information
Request Publication **06.11**



Size		Max. Work Pressure *	Max. End Load *	Allow. Pipe End Sep. *	Locking Pin Size	Dimensions							Approx. Wgt. Each
Nominal Size Inches mm	Actual Outside Dia. Inches mm	psi kPa	Lbs. N	Inches mm	Diameter x Length Inches	S Inches mm	T Inches mm	V Inches mm	W Inches mm	X Inches mm	Y Inches mm	Z Inches mm	Lbs. kg
2 50	2.375 60.3	350 2410	1550 6896	0 – 0.06 0 – 1.6	5/16 x 1 7/8	1.55 40	13.05 332	9.24 235	2.63 67	3.43 87	4.75 121	1.84 47	1.8 0.8
2½ 65	2.875 73.0	350 3410	2271 10106	0 – 0.06 0 – 1.6	3/8 x 1 7/8	1.55 40	13.05 332	9.24 235	2.63 67	3.97 101	5.53 140	1.84 47	2.7 1.2
3 80	3.500 88.9	350 2410	3366 14977	0 – 0.06 0 – 1.6	3/8 x 1 7/8	1.55 40	13.05 332	9.24 235	2.63 67	4.59 117	6.20 157	1.84 47	2.6 1.2
4 100	4.500 114.3	350 2410	5564 24758	0 – 0.13 0 – 3.2	7/16 x 2	1.55 40	13.05 332	9.24 235	2.63 67	5.94 151	7.67 195	1.93 49	4.8 2.2
6 150	6.625 168.3	350 2410	12059 53662	0 – 0.13 0 – 3.2	1/2 x 2 1/16	1.55 40	13.05 332	9.24 235	2.63 67	8.06 205	10.17 258	2.06 51	6.3 2.9
8 200	8.625 219.1	350 2410	20439 90953	0 – 0.13 0 – 3.2	1/2 x 2 5/16	1.55 40	13.05 332	9.24 235	2.63 67	10.34 263	12.48 317	2.31 59	12.0 5.4

- Provides secure, tamper resistant, low profile joint
- Features locking pin installation with a separate tool
- Pressure rated up to 350psi/2410kPa
- Sizes from 2–8"/50–200mm

* Refer to General Notes on pg. 3-1.

IMPORTANT NOTES:

Complete coupling includes one-piece hinged housing, gasket and locking pin only. Assembly tool Style 792 is required for assembly (one tool fits all size couplings).

Applications

Piping. Systems. Solutions.

Victaulic offers a broad, innovative fire protection product line that has been designed to meet tight timeline challenges and expectations of world-class quality and performance.

This commitment to quality and performance, bundled with prompt product delivery, superior customer and engineering support, and ease of installation and maintenance make Victaulic products the preferred choice for fire protection professionals worldwide.



The Victaulic FireLock NXT valve line saves space and requires less room for installation than most competitive valves.

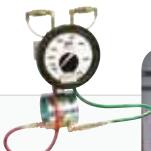


Victaulic valves have a single set point that allow for a smaller compressor and easier initial set-up.





Victaulic provides a complete line of valves, couplings, fittings and specialty products for all sizes of fire pumps.



A full line of fire protection devices for alarm, dry, deluge and preaction sprinkler systems.



Victaulic FireLock sprinklers are designed to protect a wide range of spaces including large storage areas.



The new installation-ready FireLock EZ coupling reduces the time required to install systems by up to 60%.



www.victaulic.com

Piping. Systems. Solutions.

www.victaulic.com

The Victaulic website is an information resource that can help you with your piping projects. Among the many resources available at the site:

- Fully searchable product and project databases
- Free product submittals and literature available in 11 languages
- Piping software demos and modules
- Information on new product innovations
- Support services, and more...



VICTAULIC GLOBAL CONTACT INFORMATION

US & WORLD HEADQUARTERS

P.O. Box 31
Easton, PA 18044-0031 USA

4901 Kesslersville Road
Easton, PA 18040 USA

1-800-PICK-VIC
(+1-800-742-5842)
(within North America)
+1-610-559-3300
+1-610-250-8817 (fax)
pickvic@victaulic.com

CANADA

123 Newkirk Road
Richmond Hill, ON L4C 3G5
+1-905-884-7444
+1-905-884-9774 (fax)
viccanada@victaulic.com

www.victaulic.com

CENTRAL AND SOUTH AMERICA

P.O. Box 31
Easton, PA 18044-0031 USA

4901 Kesslersville Road
Easton, PA 18040 USA

+1-610-559-3300
+1-610-559-3608 (fax)
vical@victaulic.com

UNited KINGDOM
Units B1 & B2, SG1 Industrial Park
Cockerell Close
Gunnel Wood Road
Stevenage
Hertfordshire, SG1 2NB (UK)
+44-(0)-1438-310-690
+44-(0)-1438-310-699 (fax)
0124-60219 (direct to Ireland
within the UK)
viceuro@victaulic.be

EUROPE

Prijkelstraat 36
9810 Nazareth, Belgium
+32-9-381-15-00
+32-9-380-44-38 (fax)
viceuro@victaulic.be

MIDDLE EAST
P.O. Box 17683
Unit XB 8
Jebel Ali Free Zone
Dubai
United Arab Emirates
+971-4-883-88-70
+971-4-883-88-60 (fax)

ASIA

Unit 06-10, Floor 3A
A Mansion 291 Fumin Road
Shanghai, China 200031
+86-21-6170-1222
+86-21-6170-1221 (fax)
vicap@victaulic.com

AUSTRALIA AND NEW ZEALAND

7 Chambers Road
Unit 1
Altona North, Victoria
Australia 3025

1-300-PIC-VIC
(+1-300-742-842)
(within Australia)
+61-39392-4000
+61-39399-9905 (fax)
vicaust@victaulic.com



WCAS-7S7NUF

UPDATED 6/2009

G-105 3567 REV E

VICTAULIC IS A REGISTERED TRADEMARK OF VICTAULIC COMPANY. © 2009 VICTAULIC COMPANY. ALL RIGHTS RESERVED.

victaulic[®]