

PIPING SYSTEM  
**flow control**  
SOLUTIONS FROM VICTAULIC



## Victaulic® ingenuity

### The Victaulic grooved end piping system

The distinguishing feature of the Victaulic pipe joining system is a roll or cut groove in the pipe end that is secured by a coupling to form a self restrained joint. The grooved end design reduces weight and cuts installation time significantly. The result is an easy-to-install, easy-to-handle, maintenance-friendly mechanical connection that provides versatility and reliability (up to the maximum rated operating pressure of the coupling), for industrial, commercial and many other demanding applications.



Designed for a wide variety of applications, Victaulic valves are engineered and manufactured for dependable, trouble-free performance, superior flow control and durable, long-lasting reliability. These are just some of the hallmarks of genuine Victaulic valves.

And like our entire product line, our valves offer a high degree of system design flexibility for the specifying engineer, and installation, maintenance and repair benefits to the piping contractor and system maintenance engineer. Benefits including but not limited to conserving time and resources during installation; reduced downtime during maintenance and repair; and improved productivity during system reconfiguration, replacement or shutdown.

As an integral part of the Victaulic piping system, our valves have been designed to satisfy your specific commercial, industrial, oil field, water and wastewater, and mining operation piping system challenges.

Inside you will find a full complement of butterfly, check, ball, tri-service, circuit balancing and plug valves offered in a variety of wear-resistant materials and coatings to satisfy your specific piping application requirements.

## Performance engineered valve technology



### 1 DISC

Made of durable electroless nickel-coated ductile iron. The streamlined disc profile leaves more open pipe area, delivering higher flow coefficients ( $C_v$ ).

### 2 SEAT

Patented, pressure-responsive rubber seat design yields continuous 360° seat seal. This provides completely bi-directional services to full-rated pressure as well as dead-end service.

### 3 DRIVE HUB

Designed to accept nearly all standard types of actuation.

### 4 STEM SEALS

Pressure-responsive rubber stem seals prevent leakage of media.

### 5 UPPER AND LOWER STEM BEARINGS

TFE impregnated bearings effectively reduce torque required to open or close valve while minimizing wear over long cycle life.

### 6 STEM

Upper stem and lower trunnion are made of corrosion resistant stainless steel.

### 7 ISO MOUNTING FLANGE

Allows for direct mounting of ISO 5211 conforming actuators.

### 8 GROOVED END BODY

Greatly reduces valve assembly weight, making it easier to handle, install and maintain.

### 9 RECTANGULAR DRIVE

Positive rectangular drive design eliminates the potential for loose parts to travel downstream and cause damage to equipment.

### 10 SEAL CARTRIDGE

Patented seal cartridge houses stem seals, increases reliability and ease of servicing.

## Vic®-300 MasterSeal™ Butterfly Valve

A study in ingenuity and performance engineering

The Vic-300 MasterSeal features the latest innovations in Victaulic® fluid control technology. The Vic-300 MasterSeal makes use of superior materials and improved design to deliver excellent flow characteristics, a significant reduction in operating torque (when compared to typical wafer butterfly valves) and provides long cycle life for optimum performance. UL classified to potable water services.



## Victaulic® valves: reliability and performance

Victaulic valves are best known for their reliability, ease of installation and maintenance, low weight, and compact profile.



### Butterfly Valves

Victaulic butterfly valves deliver excellent performance characteristics, including low torque, high flow, dead-end service, and bi-directional flow capability to full rated pressure. Available in sizes from 1 1/2" – 24"/48.3mm – 610.0mm, our butterfly valves are offered in a variety of housing, disc and seat seal configurations, including bodies constructed of durable ductile iron, stainless steel, and bronze with EPDM, nitrile, or fluoroelastomer seat materials.

You will find a variety of styles to choose from, including tri-service and 3-way assemblies. All available with manual handles, gear operators or automated configurations.

For sizes 14" - 24"/350mm - 600mm, Victaulic Advanced Groove System (AGS) butterfly valves are available.

### Vic®-300 MasterSeal™ vs. Typical Wafer Butterfly Valve

**VIC-300  
MASTERSEAL**

**TYPICAL WAFER  
BUTTERFLY  
VALVE**

#### 4" Valve (lever handle)

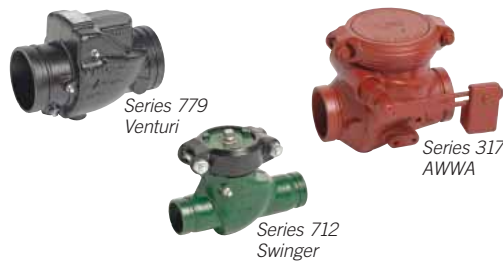
Weight (lbs.)	11	17
Max. C <sub>v</sub>	820	779
Torque (in-lbs) @ 150 psi	230	412

#### 8" Valve (gear operator)

Weight (lbs.)	37	49
Max. C <sub>v</sub>	3000	3613
Torque (in-lbs) @ 150 psi	1200	1736

#### 12" Valve (gear operator)

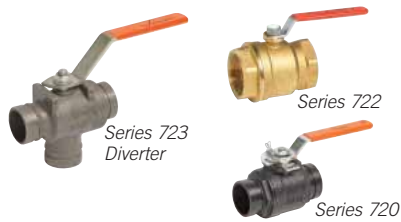
Weight (lbs.)	100	103
Max. C <sub>v</sub>	9500	8654
Torque (in-lbs) @ 150 psi	2400	4396



### Check Valves

Vic-Check® valves are available in several configurations. A spring-assisted, single disc design is used on Series 716 check valves, which can be installed in the horizontal or vertical position. The Series 779 Venturi check valve allows for calibrated flow measurement and easily connects to Vic-300 MasterSeal butterfly valves or Series 377 Vic-Plug valves for tri-service assemblies. Also available are swing check valves (ductile or stainless) for oil field applications; AWWA size check valves with lever and counterweight, and spring and lever; and adjustable air cushion options for wastewater systems. For 14" - 24"/350mm - 600mm systems, Victaulic offers the Series W715 dual disc Advanced Groove System (AGS) check valve.

*Note: Victaulic butterfly, plug and ball valves can be equipped with a full line of electric, pneumatic and hydraulic remote power operators, actuators and accessories. Contact Victaulic for details.*



## Ball Valves

The Vic-Ball® valve is a high-pressure, standard-port ball valve with grooved ends. Its internal design has been streamlined to provide excellent flow characteristics, and comes available in ductile iron and stainless steel versions. A three-port diverter ball for redirecting flow 90° left or right is available for carbon steel or stainless steel piping systems. Vic-Ball valves are sized 1 1/2" – 6"/48.3 mm – 168.3 mm. A 1/4" – 2"/13.7 mm – 60.3 mm threaded brass ball valve is also available for a variety of services.



## Circuit Balancing Valves

Tour & Andersson circuit balancing valves offer a reliable, efficient and cost effective method of balancing and measuring system flow rates. Full throttling range is achieved by 4, 8, 12, or 16 full turns of the handwheel, enabling a precise setting. Automated valves and accessories are also available. The result is a high degree of accurate adjustment and precise system balancing.

Our circuit balancing valves are offered in a variety of end configurations and sizes for a variety of heating and cooling applications.



## AGS (Advanced Groove System) Valves

For 14" - 24"/350mm - 600mm piping systems, Victaulic offers the AGS (Advanced Groove System) line of products. Featuring a deeper, wider groove, AGS valves are designed for use with Style W07 and Style W77 AGS couplings and AGS grooved pipe.

Victaulic offers two AGS butterfly valves: Series W706 for 300 psi/2065 kPa service and Series W709 for 175 psi/1270 kPa service. Both valves have excellent flow characteristics and low torque.

Check Valve – Series W715 AGS Check valve utilizes a spring-assisted dual-disc design. Engineered for long-life and seize-free operation, the Series W715 is rated to 230 psi/1585 kPa.









## Plug Valves

Made of ductile iron in a variety of coatings, Series 365 Vic-Plug® valves are the lightest, most easily installed eccentric plug valves on the market today. The round port design with welded-in nickel seat provides reliable, long-lasting service. Available in 3" – 12"/100.6 mm – 323.9 mm 175 psi/1200 kPa.

Series 377 Vic-Plug balancing valves are the only eccentric grooved end plug valves on the market made specifically for throttling services, and comes available in 3" – 12"/88.9 mm – 355.6 mm sizes for systems up to 175 psi/1200 kPa.

# A valve for virtually every application

VALVE TYPE	MARKET					
	HVAC	INDUSTRIAL	WATER AND WASTEWATER	MINING	OIL FIELD	PLUMBING
	VIC®-300 MASTERSEAL SERIES 700	VIC-300 MASTERSEAL SERIES 763 SERIES 700	VIC-300 MASTERSEAL SERIES 700	VIC-300 MASTERSEAL SERIES 700	SERIES 763 SERIES 700	SERIES 608 COPPER
	VIC-CHECK® SERIES 716 SERIES 779 SERIES W715	VIC-CHECK SERIES 716 SERIES W715	VIC-CHECK SERIES 317	VIC-CHECK SERIES 716	SWINGER SERIES 712 SWINGER SERIES 713 VIC-CHECK SERIES 716	
	SERIES 722 VIC-BALL® SERIES 726	VIC-BALL SERIES 726 VIC-BALL SERIES 726S	VIC-BALL SERIES 726 VIC-BALL SERIES 726S	VIC-BALL SERIES 726 VIC-BALL SERIES 726S	VIC-BALL SERIES 723 VIC-BALL SERIES 726 VIC-BALL SERIES 726S	SERIES 722
	SERIES W706 SERIES W709 SERIES W715	SERIES W706 SERIES W709 SERIES W715				
	SERIES 785 SERIES 786 SERIES 787 SERIES 788 SERIES 789	SERIES 785 SERIES 786 SERIES 787 SERIES 788 SERIES 789				SERIES 785 SERIES 786 SERIES 787
	VIC-PLUG® SERIES 377	VIC-PLUG SERIES 377	AWWA VIC-PLUG SERIES 365	AWWA VIC-PLUG SERIES 365		

For specific information about individual Victaulic valve models including specifications and application information, request the following publications, or log onto [www.victaulic.com](http://www.victaulic.com) and activate the product selection feature.

SERIES PUBLICATION NUMBER		SERIES PUBLICATION NUMBER	
<b>Butterfly Valves</b>		<b>Circuit Balancing Valves</b>	
Vic®-300 Masterseal™	PB-282, 08.20	785-789	08.16
W706 AGS, W709 AGS	20.06, 20.07		
700	08.04		
763	17.23		
608 Copper	22.05		
<b>Check Valves</b>		<b>Plug Valves</b>	
W715 AGS	20.08	365	23.06
716	08.08	377	08.12
779	08.09, 08.10		
712, 713	08.11		
317	23.09		
<b>Ball Valves</b>			
377	08.12		
723	08.13, 17.07		
722	08.15		
726, 726S	08.23		



For the most up-to-date information  
on all Victaulic products please visit  
[www.victaulic.com](http://www.victaulic.com)



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