

AGS Triple Service Valve Assembly



Victaulic AGS Tri-Service valve is an assembly (*shipped as individual components*) of a Series W761 AGS Vic-300 butterfly valve and Series W715 AGS Vic-Check valve. This combination provides shut-off, throttling with positive mechanical memory and non-slam check service in one unit. The Series W715 AGS check valve features spring assisted closing in a high flow design.

The AGS butterfly valve design eliminates the packing commonly found in many globe-type combination units. Low torque gear operator eases manual operation and reduces actuation costs. AGS butterfly/check valve assemblies are available in sizes from 14 – 24"/350 – 600mm. Assembly with either Style W07 AGS Zero-Flex® rigid couplings or Style W77 AGS standard flexible couplings provides the option of rigidity or a flexible connection for noise/vibration isolation.

Check combinations are available with gear operators for 14 – 24"/350 – 600mm sizes.

Working pressures for 14 – 24"/350 – 600mm AGS butterfly/check combinations are 232psi/1600kPa. Both configurations can be installed horizontally or vertically.

CAUTION:

The Series W715 Check Valve must always be oriented with its shafts vertical when used in a horizontal configuration. Orientation of the shaft in the butterfly valve at right angles to the shafts in the check valve is preferred but not mandatory.



AGS TRIPLE SERVICE GEAR OPERATED BUTTERFLY VALVE AND CHECK VALVE

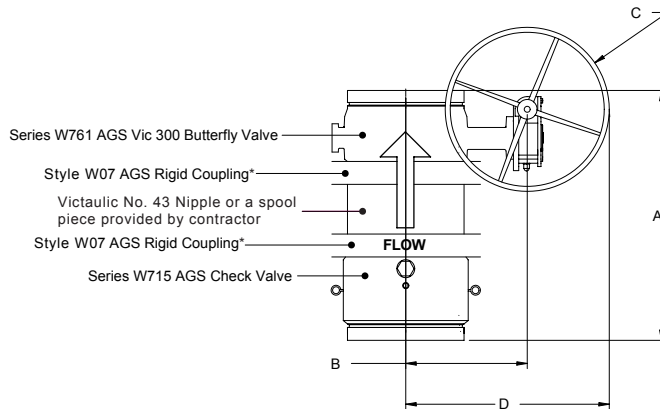
JOB/OWNER	CONTRACTOR	ENGINEER
System No. _____	Submitted By _____	Spec Sect _____ Para _____
Location _____	Date _____	Approved _____
		Date _____

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DIMENSIONS

AGS TRI-SERVICE BUTTERFLY/CHECK VALVE COMBINATION

Valve Size		Dimensions – Inches/millimeters				Approx. Assembly Wgt. Lbs/kg
Nominal Diameter Inches/mm	Actual Outside Diameter Inches/mm	A Inches/mm	B Inches/mm	C Inches/mm	D Inches/mm	
14 350	14 355.6	29.25 743.0	14.50 368.3	19.75 501.7	24.50 622.3	430 195.0
16 400	16 406.4	31.00 787.4	16.00 406.4	19.75 501.7	25.88 657.4	525 238.1
18 450	18 457.2	33.75 857.3	17.13 435.1	27.63 701.8	31.00 787.4	639 289.9
20 500	20 508.0	34.50 876.3	18.25 463.6	27.63 701.8	32.13 816.1	799 362.4
24 600	24 609.6	36.00 914.4	22.50 571.5	27.63 701.8	36.25 920.8	1140 517.1



14 – 24"/350 – 600MM TYPICAL WITH SERIES W761 AGS VIC-300 BUTTERFLY VALVES AND SERIES W715 AGS VIC-CHECK VALVES

* Assembly is provided with either Style W07 AGS Zero-Flex® rigid couplings or Style W77 AGS standard flexible couplings. Specify choice when ordering.

When connecting a Series W715 AGS Dual-Disk Vic-Check Valve to a Vic-300 AGS Butterfly Valve, a pipe spool is required between the two valves to prevent disk interference. For minimum spool piece lengths for assemblies, reference the chart below.

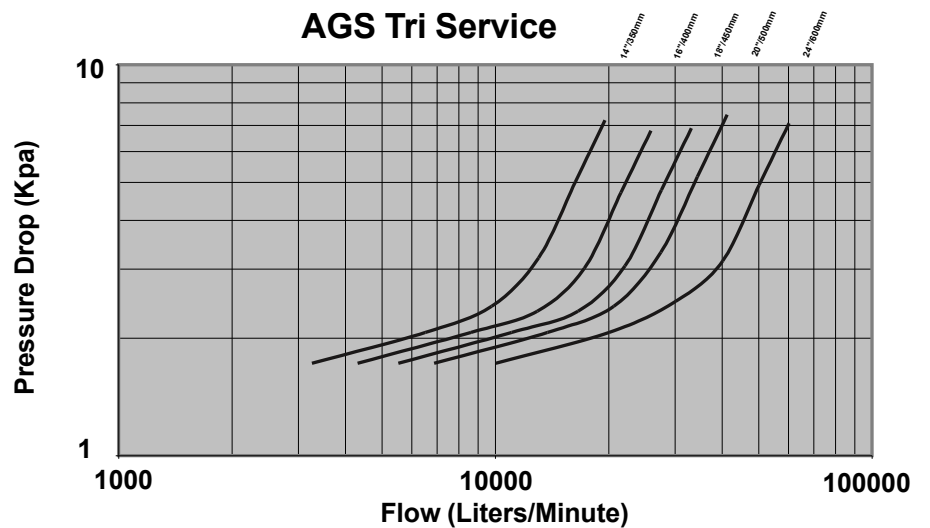
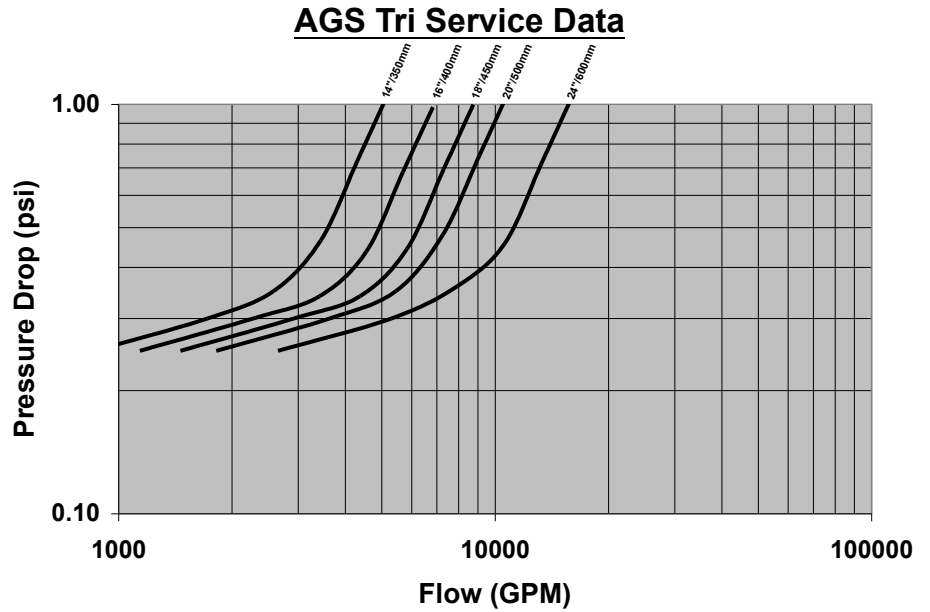
Nominal Pipe Sizes	Min. Length
Inches/mm	Inches/mm
14 350	12 300
16 300	12 300
18 450	18 450
20 500	18 450
24 600	18 450

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PERFORMANCE

AGS Tri-Service Butterfly/Check Valve Combination

NOTE: Placement of AGS check valves too close to sources of unstable flow will shorten the life of the valve and potentially may damage the system. To extend valve life, valves should be installed a reasonable distance downstream from pumps, elbows, expanders, reducers or other similar devices. Sound piping practices dictate a minimum of five (5) times the pipe diameter for general use. Distances between three (3) and five (5) diameters are allowable provided the flow velocity is less than eight (8) feet per second (2.4 mps). Distances less than three (3) diameters are not recommended and will violate the Victaulic product warranty.



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PERFORMANCE

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Flow Coefficients – C_v

Formulas for C_v and K_v values:

$$\Delta P = \frac{Q^2}{C_v^2}$$

$$Q = C_v \times \sqrt{\Delta P}$$

Where:

Q = Flow (GPM)

ΔP = Pressure Drop (psi)

C_v = Flow Coefficient

$$\Delta P = \frac{Q^2}{K_v^2}$$

$$Q = K_v \times \sqrt{\Delta P}$$

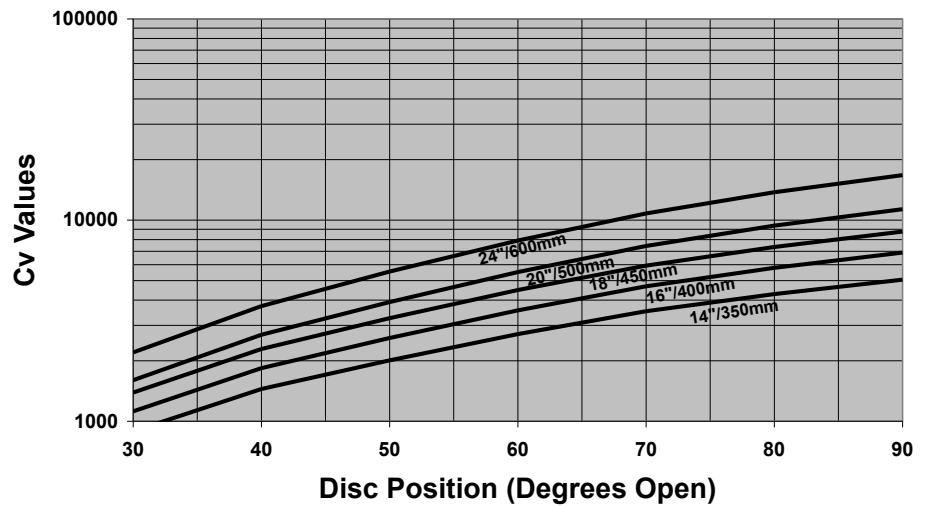
Where:

Q = Flow (m³/h)

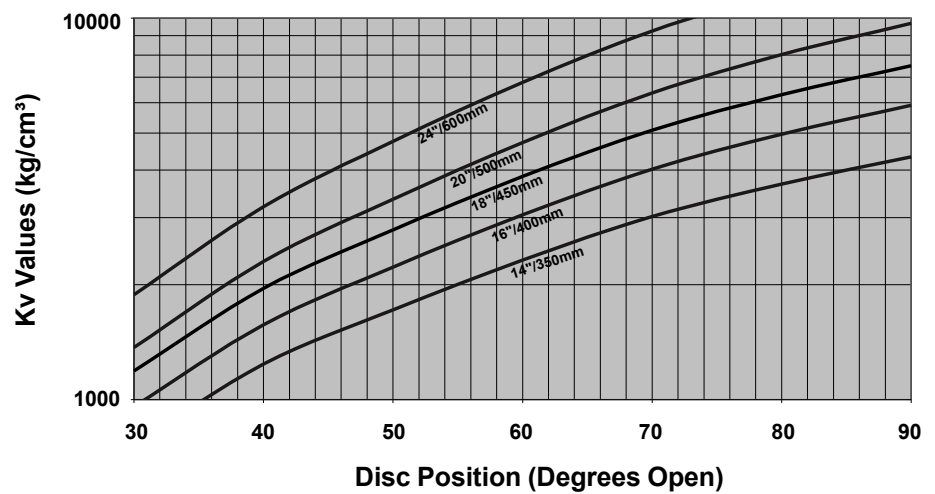
ΔP = Pressure Drop (bar)

K_v = Flow Coefficient

AGS Tri Service Data



AGS Tri Service



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IMPORTANT INSTALLATION CONSIDERATIONS

When installing a Victaulic AGS triple service valve assembly into a piping system, follow the instructions supplied with the coupling. Refer to the notes below for applications/limitations.



DO NOT INSTALL AGS BUTTERFLY VALVES INTO THE SYSTEM WITH THE DISC IN THE FULLY OPEN POSITION.

When using valves for throttling service, Victaulic recommends the disc or plug be positioned no less than 30 degrees open. For best results, the disc or plug should be between 30 and 70 degrees open. High pipeline velocities and/or throttling with the disc or plug less than 30 degrees open may result in noise, vibration, cavitation, severe line erosion, and/or loss of control. For details regarding throttling services, contact Victaulic.

Victaulic recommends that flow velocities for water service are limited to 20 ft/sec/6.1 m/sec. When higher flow velocities are necessary, contact Victaulic. When dealing with flow media other than water, contact Victaulic.

Triple Service with AGS Butterfly Valve

Victaulic AGS Butterfly Valves are designed with AGS grooved ends for use with AGS grooved pipe couplings. If flange connections are required, refer to the following note regarding Vic-Flange Adapter restrictions.

NOTE: Style W741 AGS Vic-Flange Adapters can be used on all sizes AGS Vic-300 Butterfly Valves, and Series W715 AGS Check Valves.

NOTE: Placement of AGS check valves too close to sources of unstable flow will shorten the life of the valve and potentially may damage the system. To extend valve life, valves should be installed a reasonable distance downstream from pumps, elbows, expanders, reducers or other similar devices. Sound piping practices dictate a minimum of five (5) times the pipe diameter for general use. Distances between three (3) and five (5) diameters are allowable provided the flow velocity is less than eight (8) feet per second (2.4 mps). Distances less than three (3) diameters are not recommended and will violate the Victaulic product warranty.

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INSTALLATION

Reference should always be made to the I-100 Victaulic Field Installation Handbook for the product you are installing. 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.

WARRANTY

Refer to the Warranty section of the current Price List or contact Victaulic for details.

NOTE

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.



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For complete contact information, visit www.victaulic.com

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