

Figures 624-D, 625-D, 626-D Sewage/Wastewater Surge Relief Valves

Description

VAG/GA Industries Figures 624-D, 625-D and 626-D direct acting, spring loaded surge relief valves protect sewage and wastewater systems from excessively high pressure due to a sudden stoppage of pumping or valve closure.

The valves are closed as long as the pressure at its inlet is below the spring setting but open as quickly as needed to discharge fluid out of the system at the rate necessary to prevent an excessive rise in pressure. The valve closes slowly and seals tightly when pressure decreases below the pilot setting.

The valve's streamlined, flow efficient, non-clogging long radius elbow or wye body provides dependable surge protection even when handling solids-laden fluids such as raw sewage.

Product Features

- Heavy duty, flow efficient long radius elbow or wye body
- Tough 316 stainless steel replaceable body seat
- Durable resilient disc seat for tight shutoff
- Compression spring(s) enclosed in chambers, safer than exposed tension springs
- Self-contained hydraulic closing speed control

Standard Materials

- Body & Cover Cast Iron, ASTM A126 Class B
- Body Seat Type 316 Stainless Steel
- Disc Ductile Iron, ASTM A536 Gr 65-45-12
- Disc Seat Thiokol Composition or UHMWPE
- Shaft Stainless Steel
- External Fasteners Steel, A307, Zinc Plated
- Spring(s) Alloy Spring Steel, Painted

Corrosion Protection

- Standard: Internal and External Carboline 891 NSF-61 Certified Epoxy, min 6 mil DFT
- Option P2 316 Stainless Steel External Fasteners

Options

- Option HP High Pressure Spring (See Chart)
- Option 1S With Honeywell HDLS NEMA 1, 3, 4, 4X, 6, 6P, 12 & 13 SPDT Limit Switch

Ordering Data

- Figure Number (624-D, 625-D, 626-D)
- Size
- Installation Orientation
- Options and/or Accessories
- Relief Pressure Setting



Figure 625-D Shown

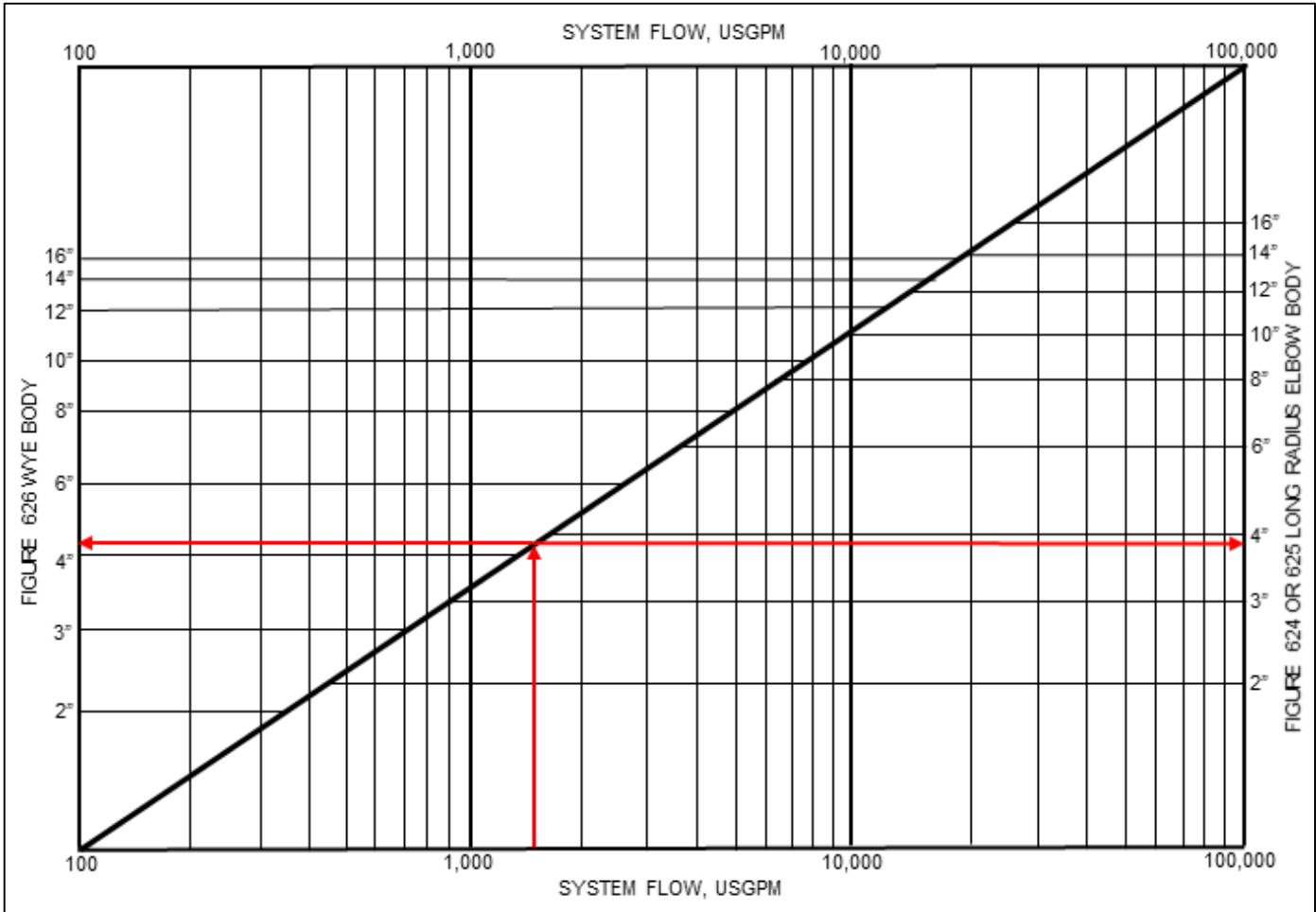
Figure Number and Size Range			
Figure Number	625-D	624-D	626-D
Body Type	Long Radius Elbow	Long Radius Elbow	Wye
Flange Connection	ANSI B16.1 Class 125	ANSI B16.1 Class 125	ANSI B16.1 Class 125
Size Range	2" to 8"	10" to 16"	2" to 16"

Maximum Relief Set Pressure, PSI						
Size	2" – 6"	8"	10"	12"	14"	16"
Standard Maximum	175	140	125	90	65	50
Optional High Pressure Maximum	--	175	175	160	100	90

Relief valve typically set at 10% above highest normal pressure at valve inlet

Data Sheet SSRV.01

Figures 624, 625 and 626 Sizing Guideline Chart



Read up or down to diagonal line and to right for 2" to 8" Figure 625-D and 10" to 16" Figure 624-D LONG RADIUS ELBOW BODY relief valves and to right for Figure 626 WYE BODY relief valves. Select next larger size valve. For example, $Q_{max} = 1,500$ USGPM, select 4" Figure 625-D or 6" Figure 626-D.

Above is for guidance only. Line velocity, system pressure and other factors can affect surge relief valve sizing. Consult VAG/GA Industries for computer aided surge relief valve sizing.

SIZE	2"	3"	4"	6"	8"	10"	12"	14"	16"
Flow Area Through Valve, Square Inches	3.1	7.1	12.6	28.3	50.3	78.5	113.1	153.9	201.1

A multiple of smaller surge relief valves with a combined flow area equal or greater than a single large valve may be substituted for the single large valve (e.g., 3 – 10" versus 1 – 16")

Data Sheet SSRV.01

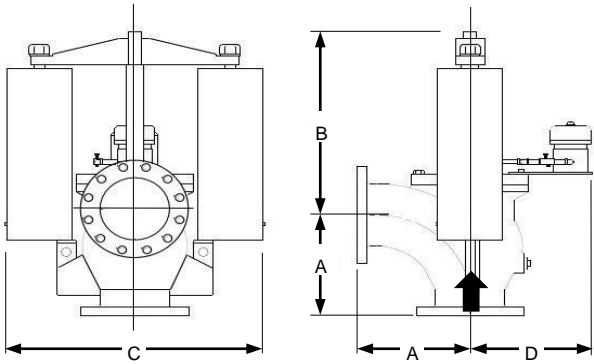


Figure 625 Long Radius Elbow Body

SIZE	A	B	C	D	WEIGHT
2"	7¼	16½	14	8	250
3"	7¼	16½	14	8	250
4"	9	23	20	10	375
6"	11½	24½	26	9	405
8"	14	26	28	10	500

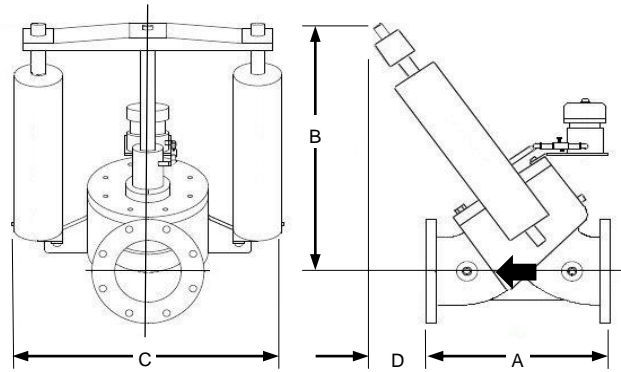


Figure 626 Wye Body

SIZE	A	B	C	D	WEIGHT
2"	12	17¼	13½	4½	250
3"	12	17¼	13½	4½	250
4"	13	23	16	6½	375
6"	18	26½	26½	5½	405
8"	24½	35	32½	2	500

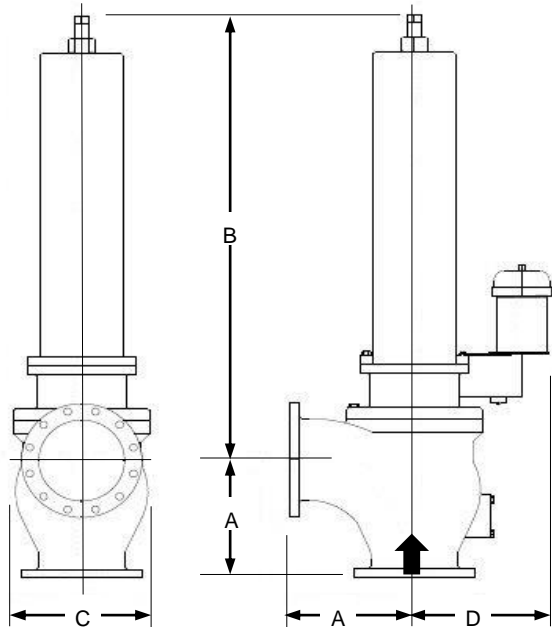


Figure 624 Long Radius Elbow Body

SIZE	A	B	C	D	WEIGHT
10"	16½	75	18	11	685
12"	19	76	19½	13	1,170
14"	21½	87	23½	13	1,900
16"	24	87	25½	16	2,500

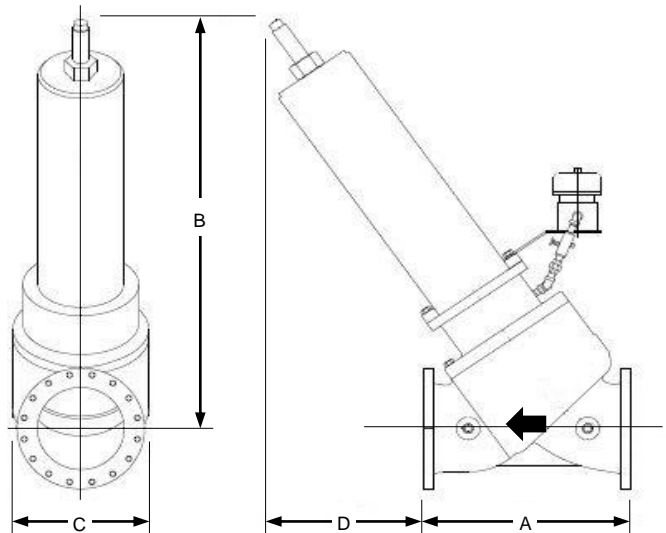


Figure 626 Wye Body

SIZE	A	B	C	D	WEIGHT
10"	26	56½	18	20½	685
12"	31	64½	19½	22½	1,170
14"	33	72½	23½	27½	1,900
16"	36	68½	25½	20½	2,500

- All dimensions in inches, weights in pounds, are approximate and represent standard construction. Request certified drawings if dimensions are critical.
- Figure 624 and 625 shown in standard "VH" (vertical up inlet, horizontal outlet) installation orientation. Other orientations are available, consult factory.