

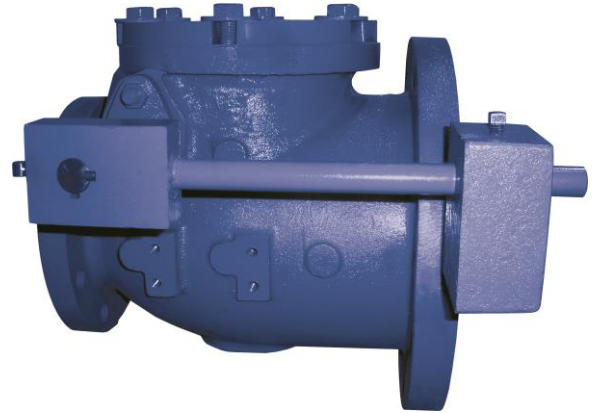
# Figure 221-D, 222-D Increasing Size Lever & Weight Swing Check Valve

## Description

GA Industries Figures 221-D and 222-D are heavy duty, customizable swing check valves that utilize an adjustable counterweight assisted closure to minimize slam and hammer. In addition, the valve's outlet connection is expanded one or two sizes larger than the inlet connection which can eliminate the need for an increaser fitting on the pump discharge.

Normally installed in the discharge of a pump to prevent backflow when the pump is off-line, it opens smoothly at pump start and closes quickly and quietly upon pump shutdown.

Figures 221-D and 222-D meet the design, materials of construction and testing required by AWWA C508 and is suitable for use with water or sewage.



## Product Features

- Heavy duty construction withstands rigors of pump station operation
- Expanded outlet connection can eliminate need for increaser fitting
- Full flow area when swung only 25° away from seat for low head loss and reduced pumping cost
- Replaceable rubber disc seat for tight seating at low and high pressure
- Lever & weight field convertible right hand to left hand side, and from horizontal to vertical installation

## Standard Materials

- Body & Disc Cast Iron, ASTM A126 Class B
- Cover Steel, ASTM A36
- Body Seat Stainless Steel, Type 316
- Disc Seat Buna-N
- Hinge Shaft Stainless Steel, Type 303
- External Fasteners Steel, A307, Zinc Plated

## Corrosion Protection

- Standard: Uncoated Internal, Enamel Primer External (See Option P2 and P3 for upgraded corrosion protection packages)

Non-Shock Working Water Pressure at up to 150F (66C)		
Figure No.	221-D Single Increasing	222-D Double Increasing
<b>Size (Inlet x Outlet)</b> <small>Inlet is Nominal Valve Size</small>	3" x 4" 4" x 6" 8" x 10" 10" x 12"	4" x 8" 6" x 10" 8" x 12"
<b>Flange</b>	ANSI B16.1 Class 125	
<b>Max Working Pressure</b>	200 PSI	
<b>Shell Test</b>	400 PSI	

## Approvals & Certifications

- NSF-61 Certified for Contact with Drinking Water
- NSF-372 Certified Lead Free (Max 0.25% Lead Content by Weighted Average)
- AIS and BABA Compliant

## Options

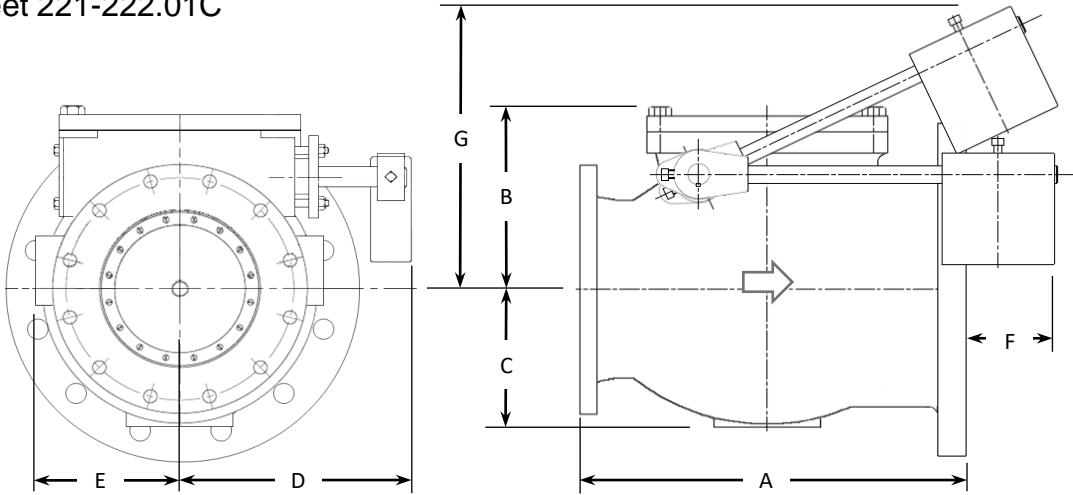
- Option 1D With Honeywell HDLS NEMA 1, 3, 4, 4X, 6, 6P, 12 & 13 DPDT Limit Switch
- Option LH With Lever & Weight Factory Installed on Left Side Facing Inlet
- Option P2: Minimum 6 mil Internal and External 2-Part NSF-61 Carboline 891 Epoxy and 316 SS External Fasteners
- Option P3 Minimum 6 mil Internal and External 2-Part NSF-61 Carboline 891 Epoxy, 316 SS Hinge Shaft and External Fasteners
- Option S3 Type 316 Stainless Steel Hinge Shaft (Included in Option P3)
- Option VI Configured for Vertical Flow Up Installation

## Ordering Data

- Figure Number (221-D or 222-D)
- Size
- Options and/or Accessories

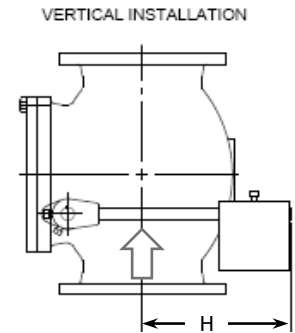
# Figure 221-D, 222-D Increasing Size Lever & Weight Swing Check Valve

Data Sheet 221-222.01C



**Installation Dimensions**

	FIGURE 221-D SINGLE INCREASING					FIGURE 222-D DOUBLE INCREASING		
	3" x 4"	4" x 6"	6" x 8"	8" x 10"	10" x 12"	4" x 8"	6" x 10"	8" x 12"
A	12	13	17½	18	23	13½	18⅝	22¼
B	7	8½	9	12	14	8½	9	12
C	5	5	6	9	9	5	6	9
D	10	11	12	14	15	11	12	14
E	5	5	7	8	9	5	7	8
F	5	5	3	3	--	4½	1⅝	--
G	15	16	19	21	23	16	19	21
H	9¼	8½	10⅝	9	9	8½	10⅝	9
WGT	120	175	250	350	525	180	270	390



- Size is Inlet x Expanded Outlet
- Dimension G is valve fully open. Dimensions F and H are valve fully closed.
- Dimensions in inches, weight in pounds and are approximate. Request certified drawings if critical.

**Full Open Head Loss**

