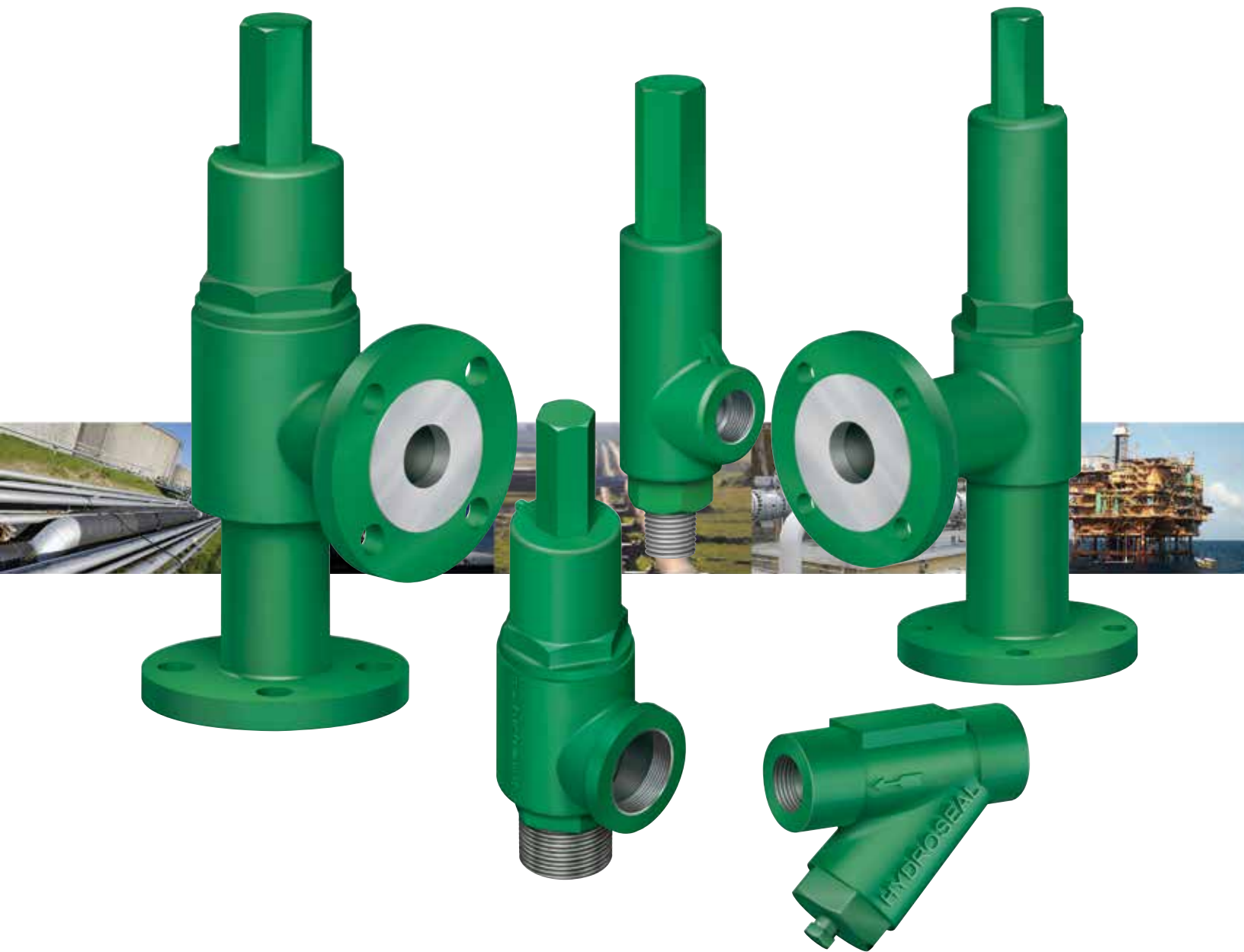


# Hydroseal Valves

Legacy Series

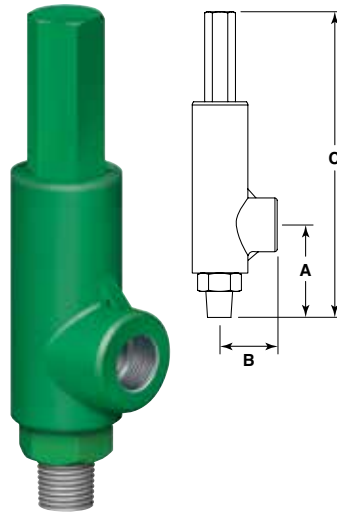


Hydroseal

# Series 1-4 Ball & Seat Threaded Safety Relief Valves

## General Design Features

- > Incorporates Hydroseal's "self-seeking soft seat" design
- > Ideal where economical low flow overpressure protection is required
- > ASME section VIII UV code stamped for air & gas
- > Available for non-code liquid applications
- > Operating temperatures to 800°F
- > ¼ "-1" NPT inlet sizes



## Dimensional Data (in.)

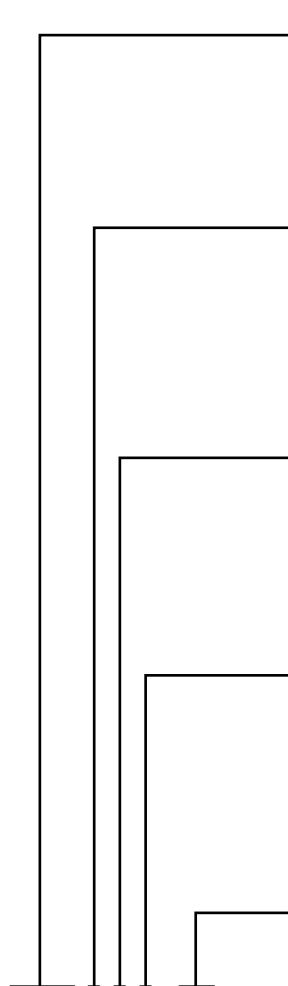
| Cap Type   | Dimension (in.) |      |       | Weight (lbs.) |
|------------|-----------------|------|-------|---------------|
|            | A               | B    | C     |               |
| Closed Cap | 3.00            | 1.75 | 9.00  | 5             |
| Lever Cap  | 3.00            | 1.75 | 10.00 | 6             |

## Sizing Information

| Orifice | Area  | Gas KD | Liquid KD | Slope | Liq. Flow Factor |
|---------|-------|--------|-----------|-------|------------------|
| AV/DV   | 0.049 | —      | 0.11      | —     | 0.20             |
| BV/EV   | 0.110 | 0.34   | 0.07      | 0.68  | 0.30             |
| CRV/FRV | 0.196 | 0.31   | 0.13      | 1.11  | 0.95             |
| CXV/FXV | 0.248 | 0.25   | 0.15      | 1.15  | 1.40             |

Leak tested in accordance with factory standard. Contact factory in order to receive sizing program and/or capacity charts. Water capacities determined at 25% over set pressure.

## Part Number Codes



### Inlet x Outlet/Orifice

Specify Model Number(Lower Right)

### Material

- 0** • Std. Trim
- 2** • Std. Trim w/ Stellite® Ball
- 3** • All 316SS w/ Stellite® Ball
- 4** • All 316SS w/ Inconel® Spring & Stellite® Ball (NACE)
- 5** • 316SS Trim w/ Stellite® Ball
- 6** • 316SS Trim w/ Inconel® Spring & Stellite® Ball (NACE)
- 7** • Std. Material w/ Inconel® Spring

### Cap Type

- 0** • Closed Cap
  - L** • Open Lift Lever
  - P** • Packed Lift Lever
- ASME Code requires lift lever on air service.

### O-Ring/Soft Seat

- 0** • Nitrile (Buna-N) O-Ring w/ Viton® Soft Seat
- C** • Neoprene
- E** • EPDM
- F** • Fluorocarbon (Viton®)
- K** • Kalrez® O-Ring w/ Viton® Soft Seat
- M** • Metal Gasket
- N** • Nitrile (Buna-N)

Elastomer selection is media and temperature dependent.

### Spring Code

Consult Factory for Spring Chart.

**14EV 0 0 F / XX**

Example

## Model Number

| Model  | Inlet x Outlet FNPT x FNPT | Orifice Dia. | Max Set (psig) |
|--------|----------------------------|--------------|----------------|
| 14AV   |                            | ¼            | 4350           |
| 14BV   | ¼ x ¾                      | 3/8          | 1350           |
| 14DV   |                            | ¼            | 4350           |
| 14EV   | ¼ x 1                      | 3/8          | 1350           |
| 38AV   |                            | ¼            | 3800           |
| 38BV   | 3/8 x ¾                    | 3/8          | 3800           |
| 38DV   |                            | ¼            | 3800           |
| 38EV   | 3/8 x 1                    | 3/8          | 3800           |
| 2AV    |                            | ¼            | 4850           |
| 2BV    |                            | 3/8          | 4850           |
| 2CXV*  | ½ x ¾                      | 9/16         | 3500           |
| 2CRV** |                            | ½            | 2500           |
| 2DV    |                            | ¼            | 4850           |
| 2EV    | ½ x 1                      | 3/8          | 4850           |
| 2FXV*  |                            | 9/16         | 3500           |
| 2FRV** |                            | ½            | 2500           |
| 1AV    |                            | ¼            | 10,800         |
| 1BV    |                            | 3/8          | 6000           |
| 1CXV*  | ½ x ¾                      | 9/16         | 2600           |
| 1CRV** |                            | ½            | 2500           |
| 1DV    |                            | ¼            | 10,800         |
| 1EV    |                            | 3/8          | 6000           |
| 1FXV*  | ½ x 1                      | 9/16         | 2600           |
| 1FRV** |                            | ½            | 2500           |
| 3AV    |                            | ¼            | 12,500         |
| 3BV    | ¾ x ¾                      | 3/8          | 6000           |
| 3CXV*  |                            | 9/16         | 3500           |
| 3CRV** |                            | ½            | 2500           |
| 3DV    |                            | ¼            | 12,500         |
| 3EV    |                            | 3/8          | 6000           |
| 3FXV*  | ¾ x 1                      | 9/16         | 3500           |
| 3FRV** |                            | ½            | 2500           |
| 4DV    |                            | ¼            | 12,500         |
| 4EV    |                            | 3/8          | 6000           |
| 4FXV*  | 1 x 1                      | 9/16         | 3500           |
| 4FRV** |                            | ½            | 2500           |

Models 14, 38 and ¼" orifice are not ASME Code Stamped valves.  
\*Non-Code Below 21 psi  
+Soft Seat Valve