# DATA SHEET POP-OFF VALVE



# Stainless Steel 1/2" 997587 Model:



| SPECIFICATIONS         | U.S.            | Metric           |
|------------------------|-----------------|------------------|
| Flow Range             | 0–15 gpm        | 0–56.7 lpm       |
| Pressure Range         | 1500–10,000 psi | 103–689 bar      |
| Maximum Relief Setting | 12,500 psi      | 862 bar          |
| Maximum Temperature    | 300° F          | 149° C           |
| Inlet Port             | 1/2" NPT(F)     | 1/2" NPT(F)      |
| Discharge Ports (2)    | 1" NPT(F)       | 1" NPT(F)        |
| Weight                 | 6 lbs           | 2.7 kg           |
| Dimensions             | 8.5 x 4.75"     | 215.9 x 120.7 mm |

## FEATURES

- 316 stainless steel body.
- FPM seals and O-rings.
- Provides back-up protection as a secondary relief valve to ensure complete pressure relief for maximum pump and system protection.

#### SELECTION

Select a Pop-Off Valve to meet or exceed the flow and pressure requirements of the system.

#### INSTALLATION

The Pop-Off Valve should be mounted in the discharge line before any pressure regulator or unloader in the system to provide optimum protection. The bypass flow from the Pop-Off Valve should be returned to a reservoir (preferred method) or drain to the floor. Do not route the bypass flow to the inlet of the pump.

#### **OPERATION**

This Pop-Off Valve provides back-up protection to the primary pressure regulating device for complete pressure relief and maximum pump and system protection.

#### **PRESSURE ADJUSTMENT**

Before the system is brought up to pressure, ensure that the primary pressure regulating device is set at its minimum setting. Adjust the Pop-Off Valve to the high-pressure setting by turning the adjusting screw in a clockwise direction. Bring your system up to the desired pressure using the primary pressure regulating device.

**Note:** If there is visible water coming from the Pop-Off Valve discharge port during this process, continue to increase the setting.

With your system operating at full pressure with the primary pressure regulating device, slowly turn the Pop-Off adjusting screw in a counter clockwise direction until a small amount of water is dripping. Adjust  $\frac{1}{2}$  turn at a time in a clockwise direction until dripping stops; (no more than three (3)  $\frac{1}{2}$  turns should be required). The Pop-Off Valve is now set at approximately 25% over system pressure.

Note: The Pop-Off Valve is a secondary pressure regulating device, it does not replace a pressure regulator or unloader.

# CUTAWAY VIEW



### TROUBLESHOOTING

| Valve cycles               | <ul> <li>Valve is improperly set. Repeat<br/>adjustment procedure.</li> </ul> |
|----------------------------|---|
| Valve continually bypasses | <ul> <li>Seat or retainer is worn. Replace as needed.</li> </ul>              |

#### $\ensuremath{\Delta}$ cautions and warnings

All high-pressure systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high-pressure system. Read all CAUTIONS and WARNINGS before commencing service or operation of any high-pressure system. The CAUTIONS and WARNINGS are included in each Service Manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at www.catpumps.com/dynamic-literature/cautions-and-warnings or can be requested directly from Cat Pumps.

#### WARRANTY

View the Limited Warranty on-line at www.catpumps.com/literature/cat-pumps-limited-warranty

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