

# DATA SHEET

## POP-OFF VALVE



The Pumps with Nine Lives

**Brass Model: 9940**

**Stainless Steel Model: 9941**



Model 9940 Shown

### FEATURES

- Lightweight, compact design quickly and conveniently mounts directly into discharge line.
- Provides back-up protection as a secondary relief valve to assure complete pressure relief for maximum pump and system protection.

### SPECIFICATIONS

	U.S. Measure	Metric Measure
Flow Range	0-25 gpm	0-95 lpm
System Pressure Range	1000-4000 psi	69-275 bar
Maximum relief setting	4400 psi	303 bar
Maximum Operating Temp	180°F	82°C
Inlet Port – Male	3/4" NPT	3/4" NPT
Barb	1.0"	1.0"
Weight	9.6 oz.	.27 kg
Dimensions	1.125 x 3.500"	28.6 x 88.9 mm

### 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 exit flow from the pop-off valve should be returned to a reservoir or drain to the floor, not to the inlet of the pump. Following final pressure adjustment, attach a hose over the barb end of the pop-off valve and commence operation.

### PRESSURE ADJUSTMENT

Before system is brought up to pressure ensure that the primary pressure regulating device is set at its minimum setting. The pressure setting may be **increased** by turning **clockwise** or **decreased** by turning **counterclockwise**. Hand-thread the lock nut towards the 3/4" NPT(M) inlet port. Then slide the o-ring down to the lock nut. Adjust the pop-off valve to a high pressure setting by turning the adjusting barb approximately 1/2". Bring your system up to desired pressure using the primary pressure device.

**NOTE: If the pop-off valve relieves water in this process increase its setting.**

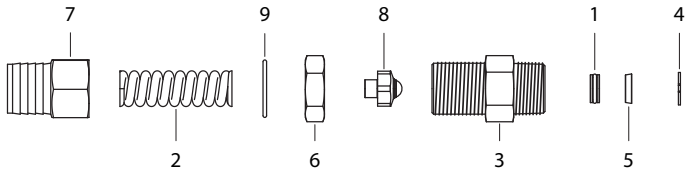
With your system operating at full pressure with the primary pressure device, slowly back the pop-off adjusting barb until a small amount of water is dripping. Immediately adjust in 1/2 turn at a time until dripping stops; (no more than [3] 1/2 turns should be required). Slide o-ring up to the adjusting barb and then hand-thread lock nut up to o-ring and adjusting barb so o-ring is fully compressed.

### OPERATION

This pop-off valve provides back-up protection to the primary relief valve for complete pressure relief and maximum pump and system protection.

**Note: the pop-off valve is a secondary safety device, it does not replace a pressure regulator or unloader.**

## EXPLODED VIEW



## PARTS LIST

ITEM DESCRIPTION	9940 BB		9941 SS		QTY
	P/N	MATL	P/N	MATL	
1 Seat, w/O-Ring	31205	NBR	76567	SS	1
2 Spring, Pressure	33329	STZP	994778	S	1
3 Body, Inlet (3/4" NPT(M))	76528	BB	76569	SS	1
4 Ring, Retaining	76529	SSS	76529	SSS	1
5 Spacer, Seat	76530	BB	76570	SS	1
6 Nut, Lock	76531	BB	76571	SS	1
7 Barb, Adjusting (1")	76532	BB	76572	SS	1
8 Retainer, Spring - w/ Ball	76533	BB	76573	SS	1
9 O-Ring, Barb-70D	76125	NBR	76125	NBR	1

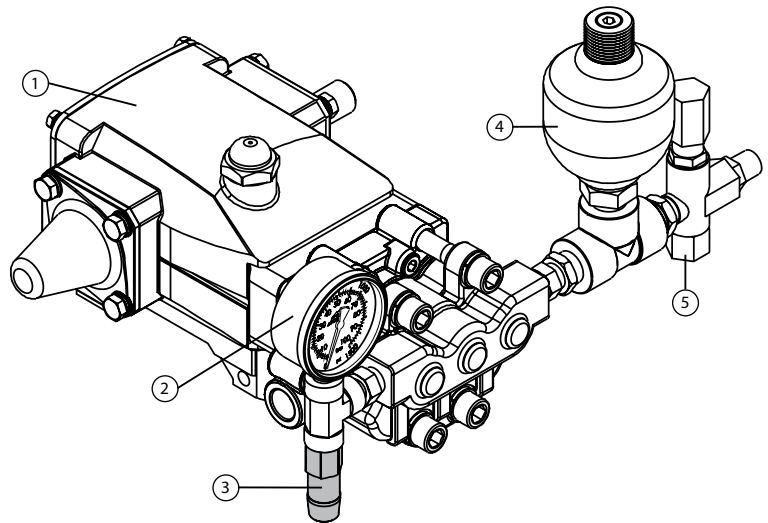
## TROUBLESHOOTING

Valve cycles	<ul style="list-style-type: none"> <li>Valve is improperly set. Repeat adjustment procedure.</li> </ul>
Valve continually by-passes	<ul style="list-style-type: none"> <li>Seat or retainer is worn. Replace as needed.</li> </ul>

Material Codes (Not Part of Part No.):  
 BB=Brass NBR=Medium Nitrile S=304SS SS=316 SS SSS=416 SS  
 STZP=Steel/Zinc Plated

## TYPICAL POP-OFF VALVE INSTALLATION

1. Triplex Plunger Pump
2. Pressure Gauge
3. Pop-off Valve (secondary relief valve)
4. Pulsation Dampener
5. Pressure Sensitive Regulating Unloader



### ⚠ 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/cautions-warnings](http://www.catpumps.com/cautions-warnings) or can be requested directly from Cat Pumps.

### WARRANTY

View the Limited Warranty on-line at [www.catpumps.com/warranty](http://www.catpumps.com/warranty).



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