



FEATURES

- Special hardened Stainless Steel seat and "Acetal" needle valve eliminates weeping.
- Lightweight, compact design quickly and conveniently mounts directly into discharge line.
- Provides back-up protection to assure complete pressure relief for maximum pump and system protection.

⚠ WARNING

All systems require both a primary pressure regulating device (i.e., regulator, unloader) and a secondary pressure safety relief device (i.e., pop-off valve, safety valve). Failure to install such relief devices could result in personal injury or damage to the pump or to system components. CAT PUMPS does not assume any liability or responsibility for the operation of a customer's high pressure system.

Pop-Off Valve

1/4" Models	30960
	30961
	33961
3/8" Models	33960
	33962

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SPECIFICATIONS	
U.S. Measure	Metric Measure
MODEL 30960	
System Pressure Range300-1500 PSI	(20-105 BAR)
Inlet Port1/4" NPTM	(1/4" NPTM)
MODEL 33960	
	(20-105 BAR)
System Pressure Range300-1500 PSI Inlet Port3/8" NPTM	,
Iniet Port3/8 INPTIVI	(3/8" NPTM)
MODEL 30961	
System Pressure Range1000-3000 PSI	(70-210 BAR)
Inlet Port1/4" NPTM	(1/4" NPTM)
22004	,
MODEL 33961	
System Pressure Range1000-4000 PSI	(70-275 BAR)
Inlet Port1/4" NPTM	(1/4" NPTM)
MODEL 33962	
System Pressure Range1000-4000 PSI	(70-275 BAR)
Inlet Port3/8" NPTM	(3/8" NPTM)
	(6/6 111 1111)
COMMON SPECIFICATIONS	
Maximum Flow6.0 GPM	(23 L/M)
Maximum Temperature180°F	(82°C)
Barb3/4"	(3/4")
Weight2.96 oz.	(0.84 kg)
Dimensions	(19 x 60 mm)

NOTE: Add .S to above models for alternate Stainless Steel Needle Valve and Seat

SELECTION: Select a Pop-Off Valve to meet or exceed the flow and pressure requirements of the system. The valve with the **Blue** spring covers the 1000-3000 PSI range, the **Silver** spring covers the 300-1500 range and the **Red** spring covers the 1000-4000 PSI range.

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.

OPERATION: The adjustment screw is internal on this Pop-Off Valve. Using a 1/4" allen wrench, the pressure setting may be **increased** by turning **clockwise** or **decreased** by turning **counterclockwise**.

SETTING: Before 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 a high pressure setting by turning the adjustment screw approximately 1/2" from flush. 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 adjustment screw 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). The Pop-Off Valve is now set at approximately 10% over system pressure.

REMEMBER, THE POP-OFF VALVE IS A SECONDARY SAFETY DEVICE. IT DOES NOT REPLACE A PRESSURE REGULATOR OR UNLOADER.

PARTS LIST

P/N	MATL	DESCRIPTION	QTY
31135	S	Valve Seat	1
31128	D	Valve, Needle	1
33954	SSS	Valve, Needle	1
30953	S	Valve, Seat, Cone	1
30956	S	Spring, Silver (1500 PSI)	1
30957	S	Spring, Blue (3000 PSI)	1
33957	S	Spring, Red (4000 PSI)	1
_	BB	Body - 1/4" NPTM	1
_	BB	Body - 3/8" NPTM	1
30959	BB	Adjustment Screw	1

Italics are optional items

Material Codes (Not Part of Part No.):

BB=Brass D=Acetal S=304SS SS=440SS SSS=416SS

TROUBLESHOOTING

Valve cycles	 Valve is improperly set. Repeat adjustment procedure.
Valve continually by-passes	 Seat or needle valve is worn. Replace as needed.

WARRANTY

90 Day Warranty

Refer to complete CAT PUMPS Warranty for further information.

Products described hereon are covered by one or more of the following U.S. patents 3558244, 3652188, 3809508, 3920356, 3930756 and 5035580

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