



## High Pressure Relief Valve

Model

**7196**

### FEATURES

- Functions as a secondary pressure relief valve to either an unloader or regulator for optimum system overpressure protection.
- Designed for single or multiple gun or pump system to protect from excessive pressure.
- By-passes unused flow when set relief pressure is reached to avoid excessive pressure on the pump.

### SPECIFICATIONS

	U.S. Measure	Metric Measure
Flow Range .....	0-21 gpm	(0 to 80 l/m)
Pressure Range .....	100-7250 psi	(7 to 500 bar)
Maximum Temperature .....	140°F	(60°C)
Inlet Port .....	1/2" BSPF	(1/2" BSPF)
By-Pass Port .....	3/8" BSPF	(3/8" BSPF)
Weight .....	3.12 lbs.	(1.42 kg)
Dimensions .....	8.75 x 1.96 x 1.54"	(222 x 50 x 39 mm)

Relief valve is stamped with a European safety pressure. Use only at above specifications to assure proper relief valve life and performance.

#### **⚠ 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 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**

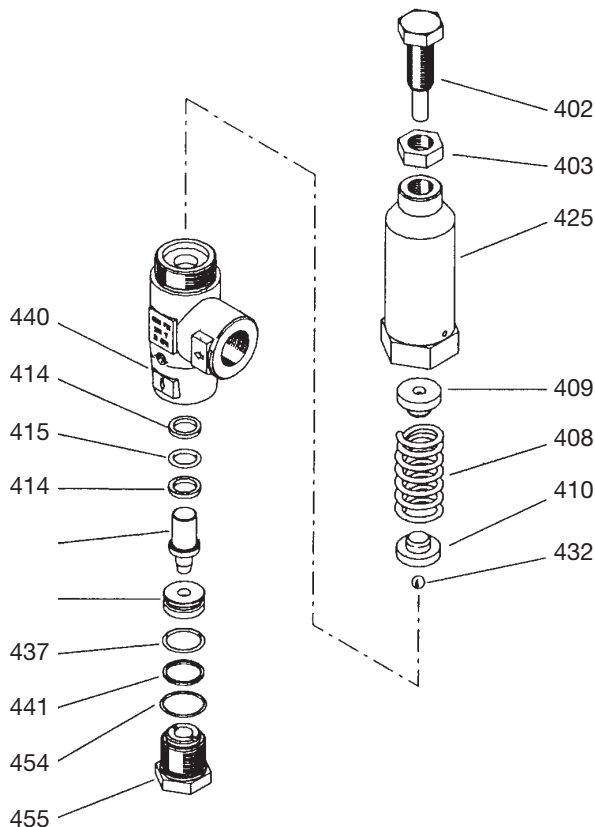
View the Limited Warranty on-line at [www.catpumps.com/warranty](http://www.catpumps.com/warranty).

**SELECTION:** Select a relief valve to meet or exceed the flow and pressure requirements of the system.

**INSTALLATION:** The relief valve should be mounted on the discharge manifold or in the discharge line **before any other accessories in the system** to provide optimum protection to the pump. The relief valve should be teed into the discharge manifold or discharge line. The by-pass connection is at the bottom. relief valve by-pass liquid may be returned to reservoir or drain to the floor. By-pass (continued on back)

*"Customer confidence is our greatest asset"*

## EXPLODED VIEW



### PARTS LIST

ITEM	P/N	MATL	DESCRIPTION	QTY
402	33833	SS	Adjuster, Pressure	1
403	33823	SS	Nut, Lock (M14x2)	1
408	33804	STL	Spring	1
409	33815	BB	Retainer, Spring (Upper)	1
410	33814	BB	Retainer, Spring (Lower)	1
412	33816	SS	Piston	1
414	—	PTFE	Back-up-Ring, Piston	2
415	—	NBR	O-Ring, Piston	1
425	—	BB	Housing, Spring	1
432	33825	SS	Ball	1
436	33826	SS	Seat	1
437	—	NBR	O-Ring, Seat	1
440	—	BB	Body	1
441	—	PTFE	Back-up-Ring, By-Pass Fitting	1
454	—	NBR	O-Ring, By-Pass Fitting	1
455	33829	BB	Fitting, By-Pass (3/8 BSP)	1
468	33840	NBR	Kit, O-Ring	1

*Italics are optional items.*

MATERIAL CODES (Not Part of Part Number):

BB=Brass NBR=Medium Nitrile (Buna-N)

PTFE=Pure Polytetrafluoroethylene SS=316SS STL=Steel

returned to the inlet of the pump should be done with caution to avoid pressure spikes or excessive heat build-up from recirculating liquids. The standard inlet connection is at the side.

**OPERATION:** The pressure adjusting screw is located at the top of the relief valve. Using a wrench, the pressure setting may be **increased** by turning **clockwise** or **decreased** by turning **counterclockwise**.

The relief valve should be set in small increments. Check your pressure gauge following each adjustment. It is recommended to set your primary and secondary relief valve simultaneously in small increments. The final adjustment for the secondary relief valve should be set to relieve at approximately 200 PSI above the system working pressure.

**REMEMBER, THE RELIEF VALVE IS A SECONDARY SAFETY DEVICE. IT DOES NOT REPLACE A PRESSURE REGULATOR OR UNLOADER.**

### TROUBLESHOOTING

Valve chatters	• Valve is improperly set. Repeat adjustment procedure.
Valve continually by-passes	• Seat or piston valve is worn. Replace as needed.
Leaking out the top of valve	• O-Ring on piston worn or cut. Replace as needed.

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