



## High Flow Relief Valve

Model

7595

### FEATURES

- Provides system pressure setting and protection for single or multiple gun and pump systems.
- Heavy duty, high flow design quickly and conveniently mounts directly into discharge line.
- Functions as a secondary pressure relief to assure system and pump protection from deadhead or excessive pressure.

### SPECIFICATIONS

	U.S. Measure	Metric Measure
Maximum Flow .....	53 GPM	(200 L/M)
Pressure Range .....	260-2600 PSI	(18-180 BAR)
Maximum Temperature .....	140°F	(60°C)
Inlet Port .....	3/4" NPTF	(3/4" NPTF)
By-Pass Port .....	1/2" NPTF	(1/2" NPTF)
Weight .....	29.0 oz.	(0.82 kg)
Dimensions .....	6.25 x 2.04 x 1.53"	(159 x 52 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.

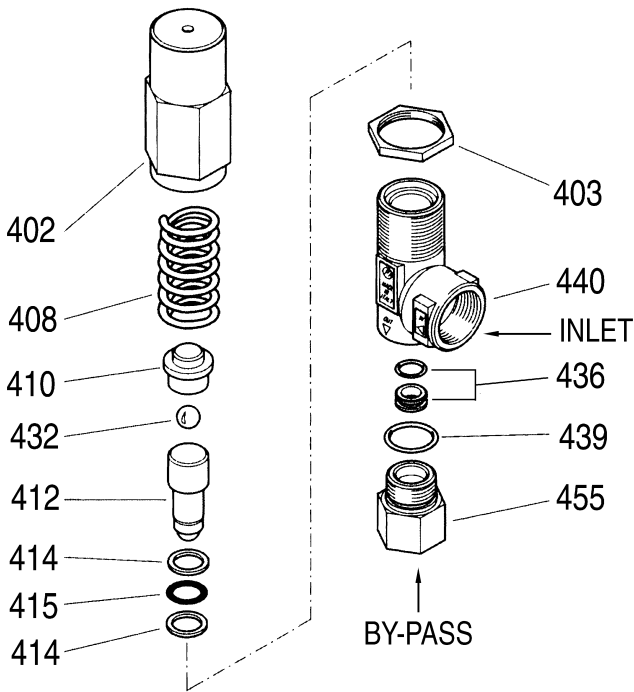
For FPM version add .0110 to model number.

#### **⚠ 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.

*“Customer confidence is our greatest asset”*

## EXPLODED VIEW



### PARTS LIST

ITEM	P/N	MATL	DESCRIPTION	QTY
402	—	BB	Cap, Adjusting	1
403	—	BB	Nut, Locking	1
408	—	STL	Spring	1
410	—	BB	Retainer, Spring	1
412	701601	S	Piston	1
414	701600	PTFE	Back-up-Ring, Piston	2
415	33014	NBR	O-Ring, Piston - 70D	1
432	31075	SSSS	Ball, Seat, 13/32"	1
436	33806	NBR	Seat, w/O-Ring	1
439	33044	NBR	O-Ring, By-Pass Fitting - 85D	1
440	—	BB	Body w/3/4" NPTF Port	1
455	—	BB	Fitting, By-Pass (1/2" NPTF)	1
468	39078	NBR	Kit, Repair (Incls: 412, 414, 415, 432, 436, 439)	1

*Italics are optional items.*

MATERIAL CODES (Not Part of Part Number): BB=Brass  
NBR=Medium Nitrile (Buna-N) PTFE=Pure Polytetrafluoroethylene  
S=304SS SSSS=440SS STL=Steel

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

**INSTALLATION:** The relief valve should be mounted in the discharge line **before any other accessories in the system** to provide optimum protection to the pump. The by-pass port (1/2" NPTF) is at the bottom. Relief valve by-pass liquid may be returned to the reservoir or drain to the floor. By-pass 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 inlet port (3/4" NPTF) is located at the side.

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

The relief valve should be set in **small** increments. Check your pressure gauge following each adjustment. It may be convenient to **set your unloader or regulating device** for the system working pressure in **small** increments, as you are setting the relief valve. The final adjustment for the 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, ball or piston is worn. Replace as needed.
Leaking out the top of valve	• O-Rings on piston is worn or cut. 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

### World Headquarters

#### CAT PUMPS

1681 - 94th Lane N.E. Minneapolis, MN 55449-4324

Phone (763) 780-5440 — FAX (763) 780-2958

e-mail: techsupport@catpumps.com

www.catpumps.com

### International Inquiries

FAX (763) 785-4329

e-mail: intlsales@catpumps.com



The Pumps with Nine Lives

### CAT PUMPS (U.K.) LTD.

1 Fleet Business Park, Sandy Lane, Church Crookham

FLEET, Hampshire, GU52 8BF, England

Phone Fleet 44 1252-622031 — Fax 44 1252-626655

e-mail: sales@catpumps.co.uk

### N.V. CAT PUMPS INTERNATIONAL S.A.

Heiveldkens 6A, B-2550 Kontich, Belgium

Phone 32-3-450.71.50 — Fax 32-3-450.71.51

e-mail: cpi@catpumps.be www.catpumps.be

### CAT PUMPS DEUTSCHLAND GmbH

Buchwiese 2, D-65510 Idstein, Germany

Phone 49 6126-9303 0 — Fax 49 6126-9303 33

e-mail: catpumps@t-online.de www.catpumps.de