

MODEL HPRV

High Pressure Relief Valve

TRUSTED
SINCE 1958
WORLDWIDE

FROM THE
CREATORS
OF THE
Original
BUCKLING
PIN
VALVE

Precise.

Quality.

Reliable.



Get Better Performance
and Longer Life!

Lower your Downtime
and Save Money!

“POCO” Pin Design Variation

This intelligent design allows the user to change the set pressure of the valve by simply changing pins. This is done by affixing pin spacers on each end of the Rupture Pin while keeping the overall length of the pin assembly constant.

Advantages

3" 1502 hammer unions.

Relief settings from 7,000 to 15,000 PSI with POCO set pressure pins.

Change the settings by changing the pin. The set pressure is shown on the pin label. The 3" Model HPRV valves use interchangeable pins. In addition, the pins are color-coded accordingly.

Reliable settings. Plant set pressure of +/- 5%^{*} accuracy.

Simple dependable operation.

One moving part.

Fatigue and pulsation are not factors that affect the set pressure of the valve.

Reaches open position in milliseconds.

Provides a bubble-tight seal to set point.

Stainless-steel seat and piston are standard.

Greater washout resistance with no direct impingement on the seat, piston or seal.

Field repairable.

Visual indication of opening.

Unaffected by changing ambient temperatures on the pin.

Pin cannot fatigue and buckle early.

No environmental exposure to process fluids.



COLOR CODED PINS

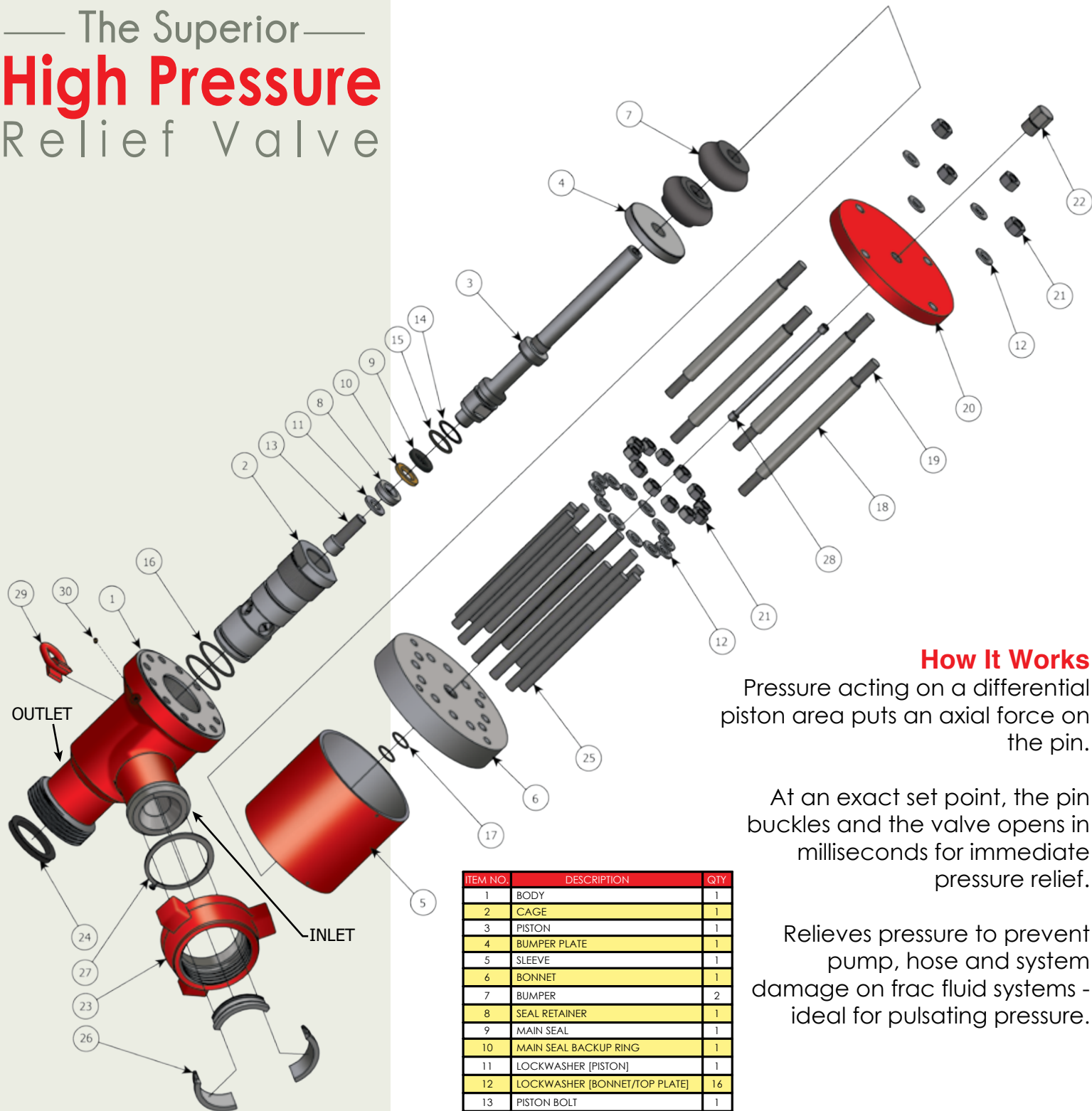
Pins for the Frac Valve are color coded to show each individual set pressure.

HIGH PRESSURE RELIEF VALVES - “POCO” PIN CHART

PIN TYPE	SIZE	COLOR	
HPRV - 7,000 PSI	3"	GRAY	GOLD
HPRV - 7,500 PSI	3"	GRAY	LT. BLUE
HPRV - 8,000 PSI	3"	GRAY	OLIVE
HPRV - 8,500 PSI	3"	GRAY	PURPLE
HPRV - 9,000 PSI	3"	GRAY	YELLOW
HPRV - 9,500 PSI	3"	GRAY	GREEN
HPRV - 10,000 PSI	3"	GRAY	DK. BLUE
HPRV - 10,500 PS	3"	GRAY	TAN
HPRV - 11,000 PSI	3"	GRAY	ORANGE
HPRV - 11,500 PSI	3"	GRAY	BRONZE
HPRV - 12,000 PSI	3"	GRAY	PINK
HPRV - 12,500 PSI	3"	GRAY	RED
HPRV - 13,000 PSI	3"	GRAY	DK. GREEN
HPRV - 13,500 PSI	3"	GRAY	BROWN
HPRV - 14,000 PSI	3"	GRAY	FUCHSIA
HPRV - 14,500 PSI	3"	GRAY	IVORY
HPRV - 15,000 PSI	3"	GRAY	AQUA

^{*} +/- 8% when in service due to varying process conditions.

— The Superior —
High Pressure
 Relief Valve



How It Works

Pressure acting on a differential piston area puts an axial force on the pin.

At an exact set point, the pin buckles and the valve opens in milliseconds for immediate pressure relief.

Relieves pressure to prevent pump, hose and system damage on frac fluid systems - ideal for pulsating pressure.

ITEM NO.	DESCRIPTION	QTY
1	BODY	1
2	CAGE	1
3	PISTON	1
4	BUMPER PLATE	1
5	SLEEVE	1
6	BONNET	1
7	BUMPER	2
8	SEAL RETAINER	1
9	MAIN SEAL	1
10	MAIN SEAL BACKUP RING	1
11	LOCKWASHER [PISTON]	1
12	LOCKWASHER [BONNET/TOP PLATE]	16
13	PISTON BOLT	1
14	BACK-UP RING [PISTON]	1
15	O-RING [PISTON]	1
16	O-RING [CAGE]	2
17	O-RING [STEM]	2
18	SPACER	4
19	POST	4
20	TOP PLATE	1
21	HEX NUT [BONNET/TOP PLATE]	16
22	HOLDING NUT	1
23	HAMMER UNION NUT	1
24	HAMMER UNION SEAL	1
25	BONNET STUD	12
26	HAMMER UNION RETAINER SEGMENT	3
27	HAMMER UNION RETAINING RING	1
28	POCO PIN	1
29	LIFTING LUG	1
30	GREASE FITTING	1



Taylor Valve Technology
8300 S.W. 8th Street
Oklahoma City, Oklahoma 73128

TEL 405.787.0145

FAX 800.805.3401

WEB www.taylorvalve.com

EMAIL info@taylorvalve.com



Precise.

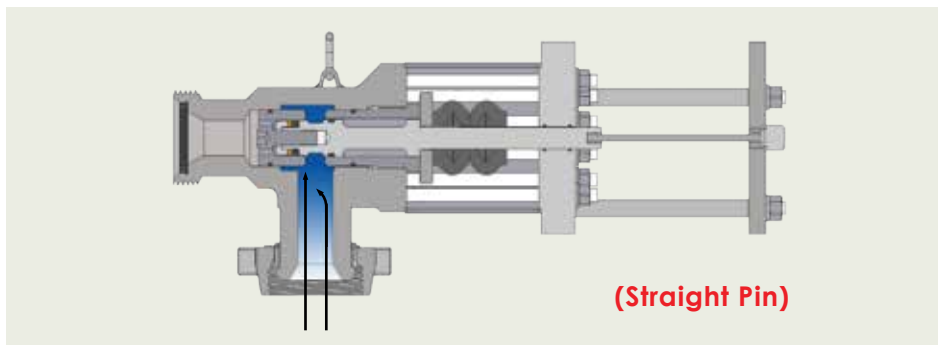
Quality.

Reliable.

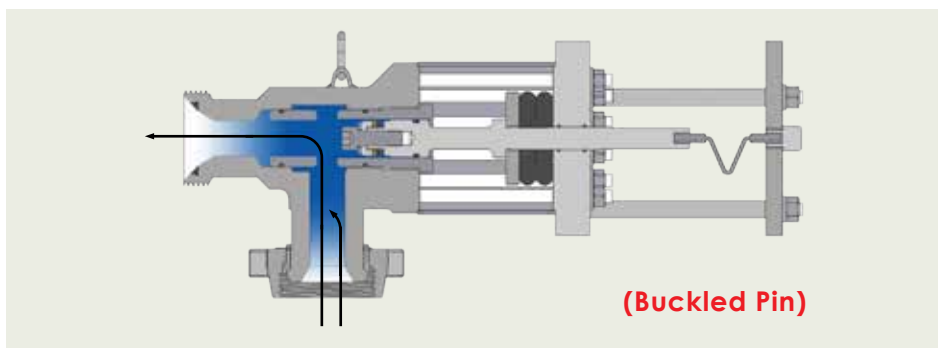
OPERATION

In the closed position, an elastomer seal contacts a machined, stainless-steel piston seat for a bubble-tight shut off. When the pin buckles, the piston moves fully open in milliseconds to a protected position to allow full flow pressure relief.

Closed



Open



STANDARD MATERIALS

Model HPRV: AISI 4130, Forged Body with stainless-steel trim. Other materials optional. *Fluid compatible seals.*

CONNECTIONS

Standard 1502H X 1502T connections available.

CERTIFICATIONS

Available with domestic offshore and international certifications and standards upon order request.

OPTIONS

1. STAINLESS-STEEL SAFETY CAGE
2. PIN CONTAINER
3. PROXIMITY SENSOR

