# DATA SHEET HIGH-PRESSURE RELIEF VALVE



Standard Model: 7190



#### **FEATURES**

- Functions as a secondary pressure relief valve to either an unloader or regulator for optimum system overpressure protection.
- By-passes unused flow when set relief pressure is reached to avoid excessive pressure on the pump.
- Lightweight, compact design conveniently mounts directly into the discharge line.

U.S. Measure	Metric Measure
0-6.5 gpm	0-25 lpm
400-5000 psi	28-345 bar
5500 psi	379 bar
140° F	60° C
3/8" BSP(F)	3/8" BSP(F)
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16.8 oz	0.47 kg
5.22 x 1.97 x 1.06"	132.5 x 50 x 27 mm
	0-6.5 gpm 400-5000 psi 5500 psi 140° F 3/8" BSP(F) 3/8" BSP(F) 3/8" BSP(F) 16.8 oz

# **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 from the relief valve 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.

#### **OPERATION**

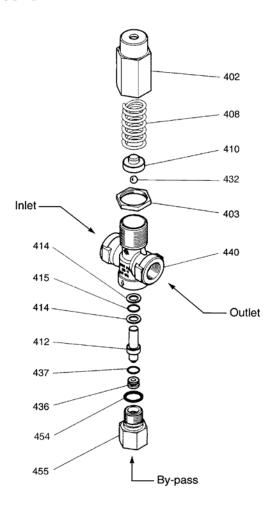
The hex adjustment cap is located at the top of the relief valve, the inlet and discharge ports are located on the sides and the by-pass port is located at the bottom. Using a 27mm wrench, the pressure setting may be increased by turning clockwise or decreased by turning counterclockwise.

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.

NOTE: The Relief Valve is a secondary safety device. It does not replace a pressure regulator or unloader.



# **EXPLODED VIEW**



# **PARTS LIST**

DESCRIPTION	P/N	MATL	QTY
Cap, Adjusting	33404	BB	1
Nut, Lock	33327	BB	1
Spring	33329	STZP	1
Retainer, Spring	33408	BB	1
Piston	33409	S	1
Backup-Ring, Piston	_	PTFE	2
O-Ring, Piston	_	NBR	1
Ball, Guide 1/4"	33825	SS	1
Seat	33383	S	1
O-Ring, Seat	_	FPM	1
Valve Body	_	BB	1
O-Ring, Fitting	_	NBR	1
Fitting, By-pass	33405	BB	1
Kit, O-Ring (Inclds: 414,415,437,454)	33435	NBR	1
	Cap, Adjusting Nut, Lock Spring Retainer, Spring Piston Backup-Ring, Piston O-Ring, Piston Ball, Guide 1/4" Seat O-Ring, Seat Valve Body O-Ring, Fitting Fitting, By-pass	Cap, Adjusting       33404         Nut, Lock       33327         Spring       33329         Retainer, Spring       33408         Piston       33409         Backup-Ring, Piston       —         O-Ring, Piston       —         Ball, Guide 1/4"       33825         Seat       33383         O-Ring, Seat       —         Valve Body       —         O-Ring, Fitting       —         Fitting, By-pass       33405	Cap, Adjusting       33404       BB         Nut, Lock       33327       BB         Spring       33329       STZP         Retainer, Spring       33408       BB         Piston       33409       S         Backup-Ring, Piston       —       PTFE         O-Ring, Piston       —       NBR         Ball, Guide 1/4"       33825       SS         Seat       33383       S         O-Ring, Seat       —       FPM         Valve Body       —       BB         O-Ring, Fitting       —       NBR         Fitting, By-pass       33405       BB

Italics are optional items. Material Codes (Not Part of Part No.): BB=Brass FPM=Fluorocarbon NBR=Medium Nitrile (Buna-N) PTFE=Pure Polytetrafluoroethylene S=304SS SS=316SS STZP=Steel/Zinc Plated

# **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.



# **ITERSE**

01013855 KvK RABONL2U BIC **BTW** NL002166811B01

Pijttersen B.V. Beneluxweg 33 9636 HV Zuidbroek Tel.: +31(0)50-8200963 **IBAN** NL24 RABO 0353 2970 97

The Pumps with Nine Lives