PRESSURE REDUCING/RELIEVING VALVE
PILOT OPERATED, SLIDING SPOOL

Pat.#5,546,980

FOR ADJUSTMENT CONTROL OPTIONS SEE PAGE 0-050.0

PRRS-10-X-X-X-XX

BASIC

SIZE
10 = 7/8"-14 UNF

SEALS
N = BUNA "N"
V = VITON

ADJUSTMENT
S = ADJUSTING SCREW
C = CAPPED
T = TAMPERPROOF
K = HANDKNOB
M = METAL HANDKNOB

FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-032.1

TORQUE:
Steel = 55/60 Ft-Lb. [74/81 Nm]
Aluminum = 35/40 Ft-Lb. [47/54 Nm]

PRESSURE DROP (ΔP)

L/M (28.5 cSt)

PRESSURE RANGE
06 = 50 TO 600 PSI
15 = 50 TO 1500 PSI
30 = 50 TO 3000 PSI
50 = 50 TO 5000 PSI

PORTS
0 = CARTRIDGE ONLY
02BX = G 1/4" BSPP
03BX = G 3/8" BSPP
06TX = SAE - #6
08TX = SAE - #8

"A" - ALUM. HOUSING
"S" - STEEL HOUSING

Reference: 520-P-050220-EN-00/09.2015
## DESCRIPTION

This unit is a PILOT OPERATED, SLIDING SPOOL, SCREW IN CARTRIDGE STYLE, HYDRAULIC PRESSURE REDUCING/RELIEVING VALVE, designated to act as a pressure-regulating device for secondary circuit.

## OPERATIONS

This valve will allow flow from port 2 to port 1 until pressure in port 1 exceeds the force of the spring bias then the spool will shift and block flow from port 2 to port 1 and maintain the same pressure as the force of the spring setting regardless of the pressure at port 2. In this mode, the valve will also relieve from port 1 to port 3, regulating pressure at port 1.

## FEATURES AND BENEFITS

- Leakproof screw adjustment.
- Pressure in tank port (3) will add to the bias spring setting, and is limited to 2000 PSI.
- Adjusting screw can not be backed out of the valve.
- Overset protection—pilot spring can not go solid.
- Hardened precision fitted spool & cage provides reliable, long life.
- A unique self aligning (floating) cage provides very low hysteresis and reliable operation.
- All external carbon steel parts are plated for longer life against the elements.
- Valve is available with screw, tamperproof, capped and handknob adjustments.
- All cartridge valves are 100% functionally tested.
- Industry common cavity.

## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Operating Pressure:</th>
<th>5,000 PSI [350 Bar]</th>
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<tbody>
<tr>
<td>Proof Pressure:</td>
<td>10,000 PSI [700 Bar]</td>
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<tr>
<td>Internal Leakage:</td>
<td>5 cu.in./min [.82 cc/m] @ 85% of crack pressure.</td>
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<td>Definition of Crack:</td>
<td>evident at 0.06 GPM [0.25 LPM]</td>
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<td>5000 PSI [350 Bar] = Steel - Unplated.</td>
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<tr>
<td>Operating Temperature:</td>
<td>-40° to +250° F. [-40° to +120° C.]</td>
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<td>Operating Media:</td>
<td>All general purpose hydraulic fluids such as MIL-H-5606, SAE-#10, SAE-#20, etc.</td>
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<td>Installation:</td>
<td>No restriction.</td>
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<td>Filtration:</td>
<td>25 microns or better.</td>
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<td>Seal Kit Number:</td>
<td>SKN-1031 for buna &quot;N&quot;. SKV-1031 for viton.</td>
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<tr>
<td>Weight:</td>
<td>0.42 lb [.19 kg] cartridge only.</td>
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<td>Valve Cavity:</td>
<td>#C1030, See Page 0-032.0.</td>
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