PRPS-10

PRESSURE REDUCING VALVE
PILOT OPERATED, SLIDING SPOOL

Pat. #5,546,980

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

PRPS-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 ADJUSTMENT CONTROL OPTIONS SEE PAGE 0-050.0

Pressures Range
15 = 50 TO 1500 PSI
30 = 50 TO 3000 PSI
50 = 50 TO 5000 PSI

Pressure Drop (Δ P)

Pressure Drop (Δ P) vs GPM (135 SUS)

L/M (28.5 cSt)

Pressure Drop (Δ P) vs GPM (135 SUS)

FOR ADJUSTMENT CONTROL OPTIONS SEE PAGE 0-050.0

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

Reference: S20-P-050120-EN-00/09.2015
### DESCRIPTION
This unit is a PILOT OPERATED, SLIDING SPOOL, SCREW IN CARTRIDGE STYLE, HYDRAULIC PRESSURE REDUCING 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.

### 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
| OPERATING PRESSURE: 5,000 PSI [350 Bar] |
| PROOF PRESSURE: 10,000 PSI [700 Bar] |
| FLOW: 12.0 GPM [46 L/M] nominal. See performance chart. |
| INTERNAL LEAKAGE: 5 cu.in./min [.82 cc/rm] @ 85% of crack pressure. |
| DEFINITION OF CRACK: evident at 0.06 GPM [0.25 LPM] |
| 5000 PSI [350 Bar] = Steel – Unplated. |
| OPERATING TEMPERATURE: -40° to +250° F. [-40° to +120° C.] |
| OPERATING MEDIA: All general purpose hydraulic fluids such as MIL–H–5606, SAE–#10, SAE–#20, etc. |

### INSTALLATION
No restriction.

### FILTRATION
25 microns or better.

### SEAL KIT NUMBER
SKN–1031 for buna “N”.
SKV–1031 for viton.

### WEIGHT
0.42 lb [.19 kg] cartridge only.

### VALVE CAVITY
#C1030, See Page 0–032.0.