PROPORTIONAL PRESSURE RELIEF VALVE.
PILOT OPERATED, SLIDING SPOOL TYPE.

Pat.#5,546,980

REGULATED PRESSURE
10 = 0 - 1500 PSI
30 = 0 - 3000 PSI
50 = 0 - 5000 PSI

AMPERAGE (AMPS) @ 24 VDC
0.15 0.30 0.45 0.60 0.75 0.90 1.05 1.20

AMPERAGE (AMPS) @ 12 VDC
0.30 0.60 0.90 1.20 1.50 1.80 2.10 2.40

NOTES:
1. FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-013.1
2. SOLENOIDS AVAILABLE WITH DIODES - CONSULT FACTORY.

ERVP-12-X-XX-X-X-XXX X

TERMINALS
L = 18GA. 24" LEADS
T = SPADE TERM.
B = BOLT TERM.
G = DIN43650
W = WEATHER-PACK
D = DEUTSCH-DT04-2P
M = METRI-PACK CONN.

VOLTAGE AMPS
12D = 12 VDC 3.00
24D = 24 VDC 1.50

ADJUSTMENT OPTIONS
M = MANUAL OVERRIDE

PORTS
Q = CARTRIDGE
4BX = G 1/2" BSPP
6BX = G 3/4" BSPP
10TX = SAE - #10
12TX = SAE - #12

"A" = ALUM. HOUSING
"S" = STEEL HOUSING

TORQUE:
Steel = 70/75 Ft-Lb. [95/102 Nm]
Aluminum = 55/60 Ft-Lb. [74/81 Nm]

Reference: 520-P-110330-EN-00/09.2015
DESCRIPTION
This unit is a electro–hydraulic, proportional, screw in cartridge style, pilot operated, sliding spool type, high pressure relief valve.

OPERATIONS
When the coil is de–energized, this valve allows flow and pressure from port 1 to port 2 if pressure exceeds the spring bias (50 psi). When the coil is energized the armature moves a precision bias spring against the pilot orifice thus varying the pressure setting at port 1 proportional to the current input. When the current is increased to the coil the relief pressure will increase and when decreased it will decrease.

IN THE EVENT OF POWER FAILURE THE VALVE RELIEF PRESSURE SETTING AT PORT 1 WILL BE THE SPRING BIAS.

FEATURES AND BENEFITS
Continuous–duty, very low heat rise & waterproof solenoid coil. Pressure in tank port (2) will add to the bias spring setting, and is limited to 2000 PSI. Interchangeable solenoid coils & terminations options available. Hardened precision fitted spool & sleeve provides reliable, long life. A unique self aligning (floating) cage provides very low hysteresis and reliable operation. Very efficient wet – armature solenoid core tube construction. All external carbon steel parts are plated for longer life against the elements. All cartridge valves are 100% functionally tested.
### Specifications

**Operating Pressure:** 5000 PSI [350 Bar]

**Proof Pressure:** 10,000 PSI [700 Bar]

**Regulated Pressure:** 50 to 5000 PSI [3,5 to 345] See performance chart.

**Flow:** 60.0 GPM [227.0 L/M] nominal.

**Internal Pilot Flow:** 60 cu.in/min [1,0 l/m] @ 3000 PSI [210 Bar]

**Valve housings:**
- 2500 PSI [175 Bar] = Aluminum – Anodized.
- 5000 PSI [350 Bar] = Steel – Unplated.

**Operating Temperature:** 
- 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.

**Response:** The most efficient method to control this valve is with current control and a 50 Hz dither.

**Power Requirements:**
- 12 VDC, Operating current 0.2 to 2.4 AMPS.
- 24 VDC, Operating current 0.1 to 1.2 AMPS.

**Seal Kit:** SKN−1222 Buna "N"
- SKV−1222 Viton

**Installation:** No restrictions.

**Weight:** 2.25 lb [1,12 kg] cartridge with coil only.

**Valve Cavity:** #C1220, See Page 0−013.0.