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

PATENTS:
Pat.#5,546,980

NOTES:
1. FOR ALUMINUM OR STEEL VALVE HOUSING CONFIGURATIONS SEE PAGE 0-012.1
2. SOLENOIDS AVAILABLE WITH DIODES - CONSULT FACTORY.

ERVP-10—X—XX—X—X—XXX X

BASIC
SIZE
10 = 7/8"-14UNF

SEALS
N = BUNA "N"
V = VITON

REGULATED PRESSURE
15 = 50 TO 1500 PSI
30 = 50 TO 3000 PSI
50 = 50 TO 5000 PSI

TERMINALS
L = 18GA. 24" LEADS
T = SPADE TERM.
B = BOLT TERM.
G = DIN43650
W = WEATHER—PACK
D = DEUTSCH—D04—2P
M = METRI—PACK CONN.

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

ADJUSTMENT OPTIONS
M = MANUAL OVERRIDE

PORTS
CARTRIDGE ONLY
0 = G 1/4" BSPP
02BX = G 3/8" BSPP
06BX = SAE = #6
06TX = SAE = #8
08TX = "A" = ALUM. HOUSING
"S" = STEEL HOUSING

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

MANUAL OVERRIDE
(SCREW TYPE)

TYPE "L" COIL
SEE PAGE
10—001.2

AMPERAGE (AMPS) @ 24 VDC

AMPERAGE (AMPS) @ 12 VDC

Reference: 520-P-110320-EN-00/09.2015
### ELECTRO-HYDRAULIC, PROPORTIONAL, PRESSURE RELIEF VALVE.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>This unit is a electro–hydraulic, proportional, screw in cartridge style, pilot operated, sliding spool type, high pressure relief valve.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FEATURES AND BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous–duty, very low heat rise &amp; waterproof solenoid coil. Pressure in tank port (2) will add to the bias spring setting, and is limited to 2000 PSI. Interchangeable solenoid coils &amp; terminations options available. Hardened precision fitted spool &amp; 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. Industry common cavity.</td>
</tr>
</tbody>
</table>
## 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:** 25.0 GPM [95,0 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:** -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-1022 Buna "N"
- SKV-1022 Viton

**Installation:** No restrictions.

**Weight:** 1.95 lb [.88 kg] cartridge with coil only.

**Valve Cavity:** #C1020, See Page 0–012.0.