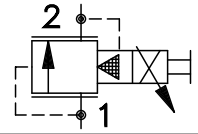


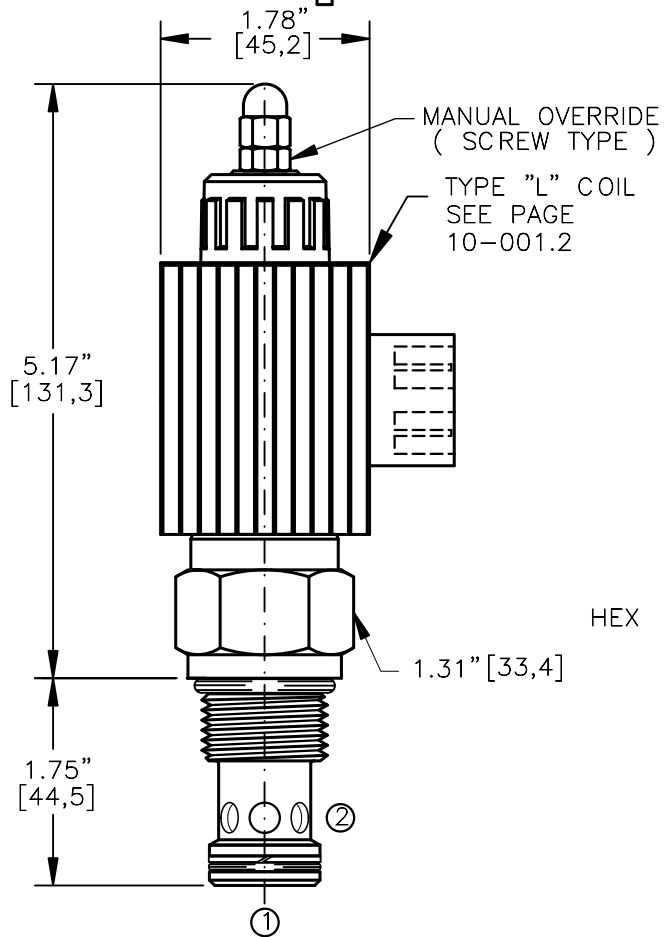
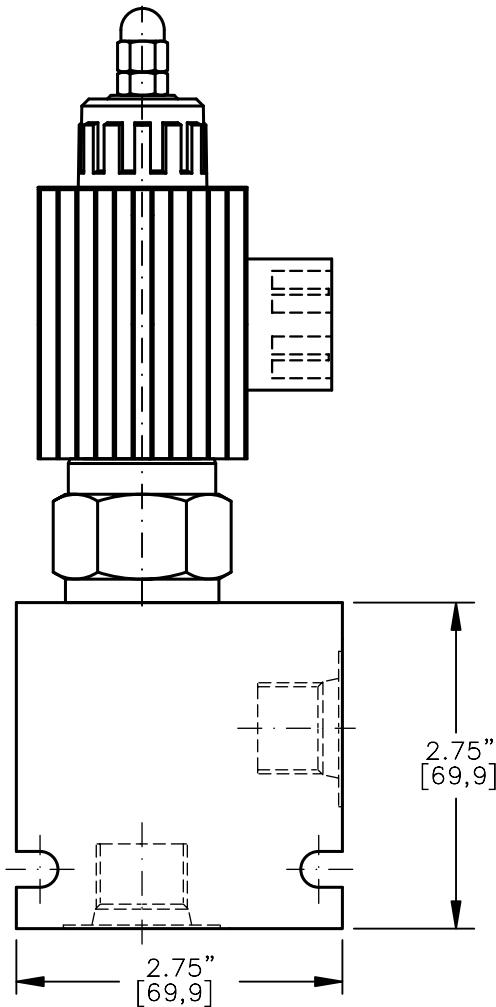
PROPORTIONAL PRESSURE RELIEF VALVE.  
PILOT OPERATED, SLIDING SPOOL TYPE.



Pat.#5,546,980

TORQUE:

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



NOTES:

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

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

BASIC

SIZE  
12 = 1.062"-12UNF

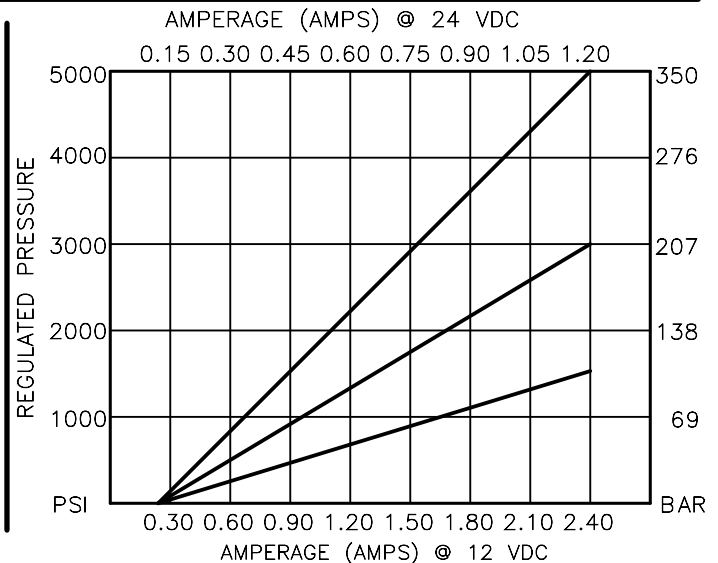
SEALS  
N = BUNA "N"  
V = VITON

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-DT04-2P  
M = METRI-PACK CONN.  
VOLTAGE AMPS  
12D = 12 VDC 3.00  
24D = 24 VDC 1.50

ADJUSTMENT OPTIONS  
M = MANUAL OVERRIDE

PORTS  
0 = CARTRIDGE  
4BX = G 1/2" BSPP  
6BX = G 3/4" BSPP  
10TX = SAE - #10  
12TX = SAE - #12  
"A" - ALUM. HOUSING  
"S" - STEEL HOUSING



## ELECTRO–HYDRAULIC, PROPORTIONAL, PRESSURE RELIEF VALVE.

### 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.

**ELECTRO-HYDRAULIC, PROPORTIONAL,  
PRESSURE RELIEF VALVE.**

**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: -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.

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[www.bucherhydraulics.com/commoncavity](http://www.bucherhydraulics.com/commoncavity)

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Data is provided for the purpose of product description only, and must not be construed as warranted characteristics in the legal sense.

The information does not relieve users from the duty of conducting their own evaluations and tests. Because the products are subject to continual improvement, we reserve the right to amend the product specifications contained in this catalogue.