



The ventable relief-before-check cartridge is a CavitySaver™ (multi-function) valve incorporating a ventable, pilot-operated, balanced piston relief tee'd in before a check function. When the pressure at the inlet (port 2) reaches the relief valve setting, the valve starts to open to tank (port 3), throttling flow to regulate the pressure. The check valve flow is from the inlet (port 2) to the system port (port1). The valve includes a vent port (port 4) that connects between the main piston and pilot stage to provide for remote control by other pilot or 2-way valves.

These valves are accurate, have low pressure rise vs. flow, are smooth, quiet, and are moderately fast.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

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|--|----------------------------------|
| Factory Pressure Settings Established at | 4 gpm |
| Maximum Operating Pressure | 5000 psi |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 2 in ³ /min.@1000 psi |
| Check Cracking Pressure | 25 psi |
| Response Time - Typical | 10 ms |
| Adjustment - No. of CW Turns from Min. to Max. setting | 5 |
| Locknut Hex Size | 9/16 in. |
| Locknut Torque | 80 - 90 lbf in. |
| Seal kit - Cartridge | Buna: 990021007 |
| Seal kit - Cartridge | Polyurethane: 990021002 |
| Seal kit - Cartridge | Viton: 990021006 |

CONFIGURATION OPTIONS

Model Code Example: HVCALAN

| CONTROL | (L) ADJUSTMENT RANGE | (A) SEAL MATERIAL | (N) |
|---|--|-------------------|-----|
| L Standard Screw Adjustment | A 75 - 3000 psi (5 - 210 bar), 1000 psi (70 bar) Standard Setting | N Buna-N | |
| C Tamper Resistant - Factory Set | B 75 - 1500 psi (5 - 105 bar), 1000 psi (70 bar) Standard Setting | V Viton | |
| K Handknob | D 75 - 800 psi (5 - 55 bar), 400 psi (28 bar) Standard Setting | | |
| | W 75 - 4500 psi (5 - 315 bar), 1000 psi (70 bar) Standard Setting | | |