



## CONFIGURATION

|          |                  |                                                                     |
|----------|------------------|---------------------------------------------------------------------|
| <b>L</b> | Control          | Standard Screw Adjustment                                           |
| <b>A</b> | Adjustment Range | 100 - 3000 psi (7 - 210 bar),<br>1000 psi (70 bar) Standard Setting |
| <b>N</b> | Seal Material    | Buna-N                                                              |

Ventable, pilot-operated, balanced piston relief cartridges with external drain are normally closed pressure regulating valves. When the pressure at the inlet (port 1) reaches the valve setting, the valve starts to open to tank (port 2), throttling flow to regulate the pressure. They provide a vent port (port 3) that connects between the main piston and pilot stage to provide for remote control by other pilot or 2-way valves and a drain (port 4) that makes them insensitive to back pressure. These valves are accurate, have low pressure rise vs. flow, they are smooth and quiet, and are moderately fast.

## TECHNICAL DATA

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

|                                                        |                                  |
|--------------------------------------------------------|----------------------------------|
| Cavity                                                 | T-22A                            |
| Series                                                 | 2                                |
| Capacity                                               | 30 gpm                           |
| Maximum Operating Pressure                             | 5000 psi                         |
| Factory Pressure Settings Established at               | 4 gpm                            |
| Control Pilot Flow                                     | 10 - 15 in <sup>3</sup> /min.    |
| Maximum Valve Leakage at 110 SUS (24 cSt)              | 3 in <sup>3</sup> /min.@1000 psi |
| Response Time - Typical                                | 10 ms                            |
| Adjustment - No. of CW Turns from Min. to Max. setting | 5                                |
| Valve Hex Size                                         | 1 1/8 in.                        |
| Valve Installation Torque                              | 45 - 50 lbf ft                   |
| Adjustment Screw Internal Hex Size                     | 5/32 in.                         |
| Locknut Hex Size                                       | 9/16 in.                         |
| Locknut Torque                                         | 80 - 90 lbf in.                  |
| Seal kit - Cartridge                                   | Buna: 990022007                  |
| Seal kit - Cartridge                                   | Polyurethane: 990022002          |
| Seal kit - Cartridge                                   | Viton: 990022006                 |
| Model Weight                                           | 0.76 lb.                         |

CONFIGURATION OPTIONS

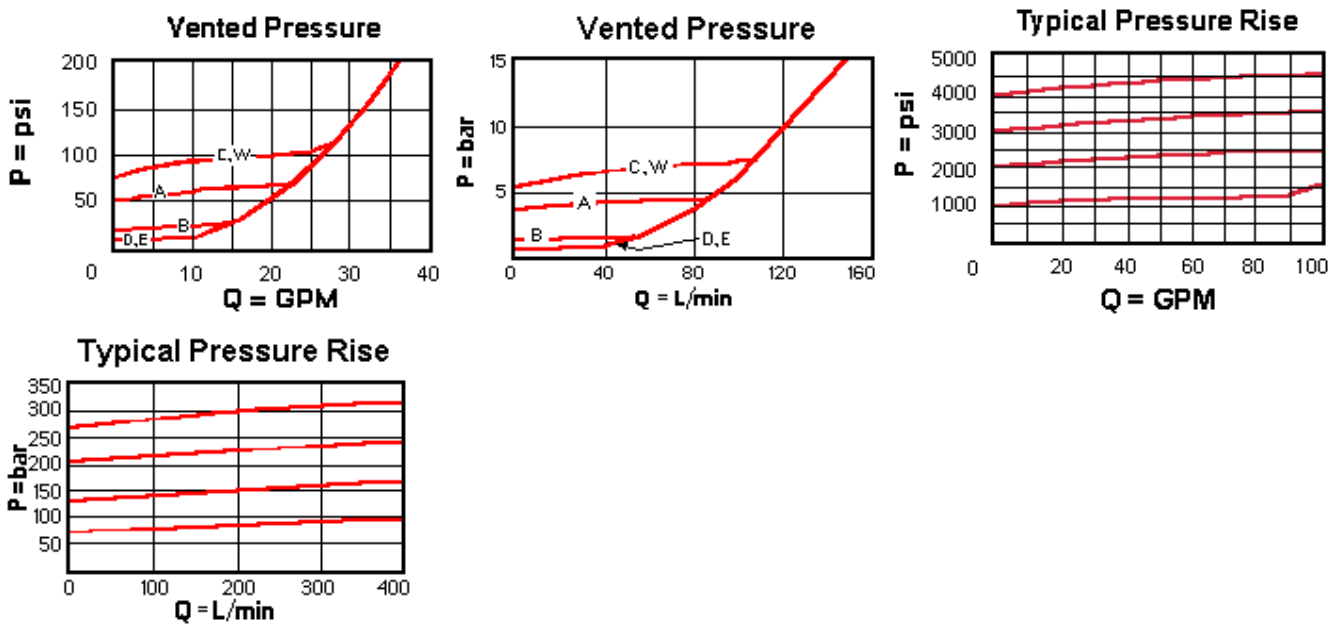
Model Code Example: RVEDLAN

| CONTROL                          | (L) ADJUSTMENT RANGE                                                     | (A) SEAL MATERIAL | (N) |
|----------------------------------|--------------------------------------------------------------------------|-------------------|-----|
| L Standard Screw Adjustment      | A 100 - 3000 psi (7 - 210 bar),<br>1000 psi (70 bar) Standard Setting    | N Buna-N          |     |
| C Tamper Resistant - Factory Set |                                                                          | E EPDM            |     |
| K Handknob                       |                                                                          | V Viton           |     |
| W Hex Wrench Adjustment          | B 50 - 1500 psi (3,5 - 105 bar),<br>1000 psi (70 bar) Standard Setting   |                   |     |
| Y Tri-Grip Handknob              | C 150 - 6000 psi (10,5 - 420 bar),<br>1000 psi (70 bar) Standard Setting |                   |     |
|                                  | D 25 - 800 psi (1,7 - 55 bar), 400<br>psi (28 bar) Standard Setting      |                   |     |
|                                  | E 25 - 400 psi (1,7 - 28 bar), 200<br>psi (14 bar) Standard Setting      |                   |     |
|                                  | W 150 - 4500 psi (10,5 - 315 bar),<br>1000 psi (70 bar) Standard Setting |                   |     |

TECHNICAL FEATURES

- Cartridges configured with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits. If used in cross port relief circuits, consider spool leakage.
- Main stage orifice is protected by a 150-micron stainless steel screen.
- Not suitable for use in load holding applications due to spool leakage.
- Pressure at port 4 is directly additive to the valve setting at a 1:1 ratio and should not exceed 5000 psi (350 bar).
- W and Y controls (where applicable) can be specified with or without a special setting. When no special setting is specified, the valve is adjustable throughout its full range using the W or Y control. When a special setting is specified, this setting represents the maximum setting of the valve.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

PERFORMANCE CURVES



## RELATED MODELS

- [RVED8](#) Ventable, pilot-operated, balanced piston relief main stage with integral T-8A control cavity and drain to port 4