









Ventable, pilot-operated, balanced piston relief cartridges 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. 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-19A
Series	4
Capacity	480 L/min.
Factory Pressure Settings Established at	15 L/min.
Maximum Operating Pressure	350 bar
Control Pilot Flow	0,25 - 0,33 L/min.
Response Time - Typical	10 ms
Maximum Valve Leakage at 110 SUS (24 cSt)	80 cc/min.@70 bar
Adjustment - No. of CW Turns from Min. to Max. Setting	5
Valve Hex Size	41,3 mm
Valve Installation Torque	474 - 508 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	EPDM: 990019014
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006
Model Weight	1.43 kg.

### **CONFIGURATION OPTIONS**

## Model Code Example: RVIALAN

CONTROL (L) ADJUSTMENT RANGE (A) SEAL MATERIAL (N) MATERIAL/COATING L Standard Screw Adjustment A 100 - 3000 psi (7 - 210 bar), 1000 psi N Buna-N Standard Material/Coating C Tamper Resistant - Factory Set (70 bar) Standard Setting **E** EPDM IAP Stainless Steel, Passivated **W** 150 - 4500 psi (10,5 - 315 bar), 1000 K Handknob **V** Viton psi (70 bar) Standard Setting **B** 50 - 1500 psi (3,5 - 105 bar), 1000 psi (70 bar) Standard Setting C 150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting **D** 25 - 800 psi (1,7 - 55 bar), 400 psi (28 bar) Standard Setting E 25 - 400 psi (1,7 - 28 bar), 200 psi (14 bar) Standard Setting N 60 - 800 psi (4 - 55 bar), 400 psi (28 bar) Standard Setting

### **TECHNICAL FEATURES**

- A remote pilot relief on port 3 (vent) will control the valve below its own setting.
- 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.
- Relief valve setting must always be higher than pilot valve setting.
- Not suitable for use in load holding applications due to spool leakage.
- Back pressure on the tank port (port 2) is directly additive to the valve setting at a 1:1 ratio.
- 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.
- 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

