



Ventable, pilot-operated, balanced-poppet 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	120 gpm
Maximum Operating Pressure	5000 psi
Control Pilot Flow	15 - 20 in ³ /min.
Factory Pressure Settings Established at	4 gpm
Maximum Valve Leakage at Reseat	10 drops/min.
Response Time - Typical	2 ms
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	1 5/8 in.
Valve Installation Torque	350 - 375 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Model Weight	3.10 lb
Seal kit - Cartridge	Buna: 990-219-007
Seal kit - Cartridge	Viton: 990-219-006

OPTION SELECTION EXAMPLE: RVISLANV

CONTROL	(L)	ADJUSTMENT RANGE	(A)	SEAL MATERIAL	(N)	MATERIAL/COATING
L Standard Screw Adjustment		A 100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting		N Buna-N		Standard Material/Coating
C Tamper Resistant - Factory Set		B 50 - 1500 psi (3,5 - 105 bar), 1000 psi (70 bar) Standard Setting		V Viton		/AP Stainless Steel, Passivated
		C 150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting				/LH Mild Steel, Zinc-Nickel
		Q 60 - 400 psi (4 - 28 bar), 200 psi (14 bar) Standard Setting				
		W 150 - 4500 psi (10,5 - 315 bar), 1000 psi (70 bar) Standard Setting				

TECHNICAL FEATURES

- Because the modulating occurs inside the cartridge, these valves are immune to most of the problems associated with cavitation, namely noise and manifold erosion.
- Suitable for use in load holding applications, providing that any valving on the vent port (port 3) is zero leak.
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits.
- A remote pilot relief on port 3 (vent) will control the valve below its own setting.
- Valve is relatively insensitive to varying oil temperatures and oil borne contamination.
- Main stage orifice is protected by a 150-micron stainless steel screen.
- Back pressure on the tank port (port 2) is directly additive to the valve setting at a 1:1 ratio.
- 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

