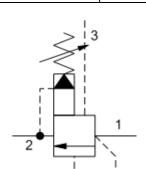
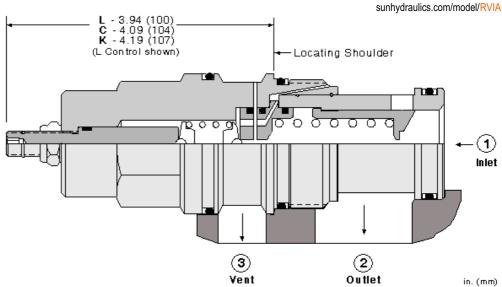
# Ventable, pilot-operated, balanced piston relief valve SERIES 4 / CAPACITY: 480 L/min. / CAVITY: T-19A





## **CONFIGURATION**

L	Control	Standard Screw Adjustment 150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting				
С	Adjustment Range					
N	Seal Material	Buna-N				
/AP Material/Coating		Stainless Steel, Passivated				



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.		
Maximum Valve Leakage at 110 SUS (24 cSt)	80 cc/min.@70 bar		
Response Time - Typical	10 ms		
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	1.44 kg.		

© 2020 Sun Hydraulics 1 of 2

#### **CONFIGURATION OPTIONS**

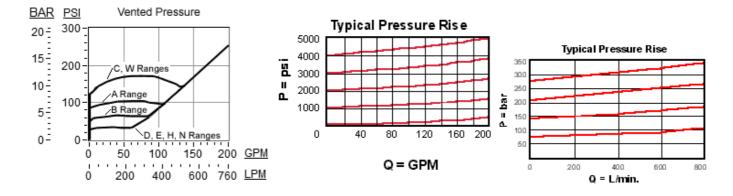
## Model Code Example: RVIALCN/AP

CONTROL	(L)	ADJUSTMENT RANGE	(C)	SEAL MATERIAL	(N)	MATERIAL/COATING	(/AP)
<ul><li>L Standard Screw Adjustment</li><li>C Tamper Resistant - Factory Set</li><li>K Handknob</li></ul>		C 150 - 6000 psi (10,5 - 420 bar), 100 psi (70 bar) Standard Setting  A 100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting  W 150 - 4500 psi (10,5 - 315 bar), 1000 psi (70 bar) Standard Setting  B 50 - 1500 psi (3,5 - 105 bar), 1000 (70 bar) Standard Setting  D 25 - 800 psi (1,7 - 55 bar), 400 psi bar) Standard Setting  E 25 - 400 psi (1,7 - 28 bar), 200 psi bar) Standard Setting  N 60 - 800 psi (4 - 55 bar), 400 psi (2 bar) Standard Setting	osi 00 psi (28 (14	N Buna-N E EPDM V Viton		/AP Stainless Steel, Passivated Standard Material/Coating /LH Mild Steel, Zinc-Nickel	

## **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



© 2020 Sun Hydraulics 2 of 2