



Air-controlled, pilot-operated, balanced piston relief cartridges use compressed air over a diaphragm instead of an adjustable spring to control pressure setting. The air signal is supplied through a port in the hex-end of the cartridge. They 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. 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-18A
Series	4
Capacity	200 gpm
Maximum Operating Pressure	2000 psi
Pilot Ratio	20:1
Maximum Air Pressure	150 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	5 in <sup>3</sup> /min.@1000 psi
Response Time - Typical	10 ms
Valve Hex Size	1 5/8 in.
Valve Installation Torque	350 - 375 lbf ft
Model Weight	2.50 lb
Seal kit - Cartridge	Buna: 990-018-007
Seal kit - Cartridge	Polyurethane: 990-018-002
Seal kit - Cartridge	Viton: 990-018-006

## OPTION SELECTION EXAMPLE: RPKDBBNV

CONTROL

(B) OPERATING RANGE

(B) SEAL MATERIAL

(N)

**B** External 4-SAE Port

**B** 50 - 1500 psi (3,5 - 105 bar)

**N** Buna-N

V Viton

### TECHNICAL FEATURES

- All 2-port relief cartridges (except pilot reliefs) are physically and functionally interchangeable (same flow path, same cavity for a given frame size).
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits.
- Maximum air pressure should not exceed 150 psi (10 bar).
- 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

