



This is a normally open, balanced poppet, switching element. When pilot pressure is applied to port 3, the poppet remains open until the pilot pressure reaches the setting established by the integral pilot relief stage, at which point the poppet shifts to the closed position.

TECHNICAL DATA

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

Cavity	T-21A
Series	1
Capacity	15 gpm
Maximum Operating Pressure	5000 psi
Minimum Pilot Pressure Required to Shift Valve	400 psi
Control Pilot Flow	See Performance Data
Maximum Valve Leakage at 110 SUS (24 cSt)	10 drops/min.@5000 psi
Valve Hex Size	7/8 in.
Valve Installation Torque	30 - 35 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: 990-021-007
Seal kit - Cartridge	Polyurethane: 990-021-002
Seal kit - Cartridge	Viton: 990-021-006

OPTION SELECTION EXAMPLE: DODPLAN

CONTROL	(L)	ADJUSTMENT RANGE	(A)	SEAL MATERIAL	(N)
L	Standard Screw Adjustment	A	400 - 3000 psi (28 - 210 bar), 1000 psi (70 bar) Standard Setting	N	Buna-N
C	Tamper Resistant - Factory Set	B	400 - 1500 psi (28 - 105 bar), 1000 psi (70 bar) Standard Setting	V	Viton
K	Handknob	W	400 - 4500 psi (28 - 315 bar), 1000 psi (70 bar) Standard Setting		

TECHNICAL FEATURES

- Unique balanced construction provides predictable switching with 5000 psi (350 bar) at both port 1 and port 2. When the remote pressure signal at port 3 exceeds the internal valve setting, the valve shifts to the closed position.
- Any backpressure at the drain port is directly additive to the valve setting.
- Valve will return to the spring-biased open position when pilot pressure reaches approx. 85% of cracking value.
- These valves are hydraulically balanced between port 1 and port 2.
- Port 1 and port 2 are fully sealed from port 3 and port 4. Ports 3 and 4 are positively sealed.
- Leakage rate between port 1 and port 2 is very low, typically less than 10 drops/min. at 5000 psi (0,7 cc/min at 350 bar).
- All ports will accept 5000 psi (350 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

