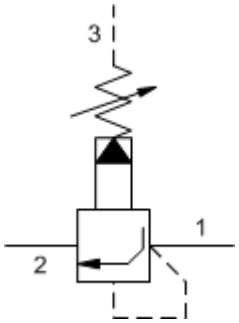
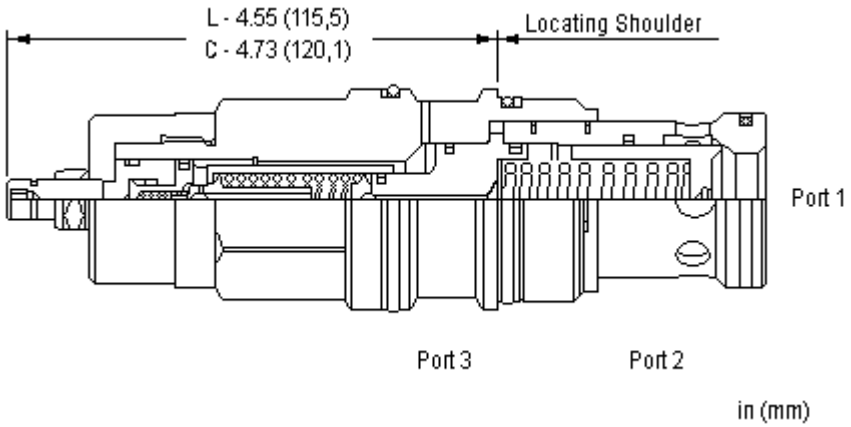
Anti-Shock, pilot-operated, balanced poppet sequence valve with drain to port 3

CAPACITY: 120 gpm / CAVITY: T-19A

sunhydraulics.com/model/SDJT





Pilot-operated, anti shock sequence cartridges limit maximum system pressure and also limit the rate of pressure rise. The valve opens and then ramps closed at a constant speed, independent of settings and flows. The adjust screw determines the maximum (relief) setting and the minimum (threshold) setting. The external drain makes the valve insensitive to pressure at port 2.

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	10 - 25 in^3/min.
Factory Pressure Settings Established at	4 gpm
Pressure Ramp Up Time	200 - 400 ms
Response Time - Typical	2 ms
Adjustment - No. of CW Turns from Min. to Max. setting	4.5
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.
Seal kit - Cartridge	Buna: 990-219-007
Seal kit - Cartridge	Viton: 990-219-006

OPTION SELECTION EXAMPLE: SDJTLANV

CONTROL	(L)
L	Standard Screw Adjustment
C	Concealed Manual Override

ADJUSTMENT RANGE	(A)
A	2000 - 3000 psi (140 - 210 bar), 2000 psi (140 bar) Standard Setting
C	4500 - 6000 psi (315 - 420 bar), 4500 psi (315 bar) Standard Setting
W	3000 - 4500 psi (210 - 315 bar), 3000 psi (210 bar) Standard Setting

SEAL MATERIAL	(N)
N	Buna-N
V	Viton

MATERIAL/COATING	
	Standard Material/Coating
/LH	Mild Steel, Zinc-Nickel

TECHNICAL FEATURES

- Pilot flow continues to increase as the pressure at port 1 (inlet), relative to the pressure at port 3 (drain), rises above the valve setting.
- Pressure at port 3 is directly additive to the valve setting at a 1:1 ratio and should not exceed 5000 psi (350 bar).
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits.
- Because the modulating occurs inside the cartridge, these valves are immune to most of the problems associated with cavitation, namely noise and manifold erosion.
- Valve is relatively insensitive to varying oil temperatures and oil borne contamination.
- Not suitable for use in load holding applications.
- When pressure at the inlet (port 1) exceeds the threshold setting, the valve opens to tank (port 2). The pilot section moves forward at a steady rate, increasing the setting by compressing the pilot spring. Maximum setting is achieved when the pilot section reaches a mechanical stop.
- The main stage orifice is protected against contamination.
- Not suitable for sequencing cylinders.
- Pressure settings are insensitive to back pressure at port 2.
- 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