



CONFIGURATION

X	Control	Not Adjustable
H	Shifting Pressure	200 psi (14 bar)
N	Seal Material	Buna-N
(none) Material/Coating		

Low-side (hot oil) shuttle cartridges allow hot oil to be diverted from the low pressure side of a closed loop system. When both work ports (ports 2 and 4) are at equal pressures the valve is spring-centered to an all-ports-blocked position. When one of the work ports (port 2 or 4) sees a higher pressure the opposite work port is connected to the common port (port 3).

TECHNICAL DATA

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

Cavity	T-31A
Series	1
Capacity	10 gpm
Maximum Operating Pressure	5000 psi
Pilot Flow	23 in ³ /min.
Valve Hex Size	7/8 in.
Valve Installation Torque	30 - 35 lbf ft
Seal kit - Cartridge	Buna: 990031007
Seal kit - Cartridge	Polyurethane: 990031002
Seal kit - Cartridge	Viton: 990031006
Model Weight	0.37 lb.

CONFIGURATION OPTIONS

Model Code Example: DSCHXHN

CONTROL	(X)	SHIFTING PRESSURE	(H)	SEAL MATERIAL	(N)	MATERIAL/COATING
X Not Adjustable		H 200 psi (14 bar)		N Buna-N		Standard Material/Coating
		G 150 psi (10,5 bar)		V Viton		/LH Mild Steel, Zinc-Nickel

TECHNICAL FEATURES

- The spool incorporates a hydraulic stop that eliminates mechanical impact and therefore the potential for internal damage.
- The hydraulic stop results in a small pilot flow from the high side work port (port 2 or 4) to the common port (port 3).
- A unique feature due to the hydraulic stop is that the hot oil relief setting can be confirmed with the transmission in neutral.
- NOTE: Low shift values can potentially result in charge pump pressure alone inadvertently shifting the valve. Use care when selecting shift pressure.
- Although this valve goes into a 4-port cavity, the nose (port 1) is not used.
- 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

