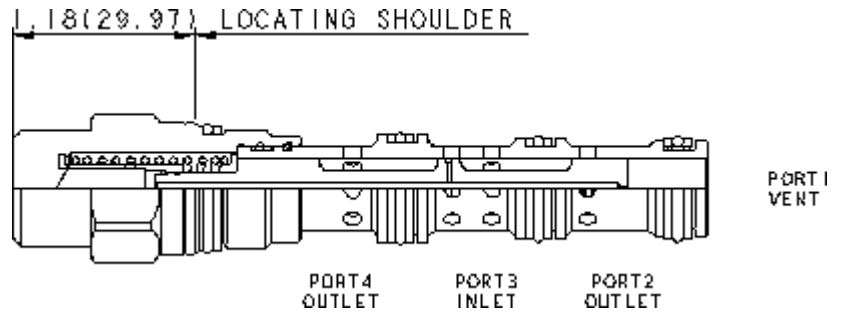


CONFIGURATION

X Control	Not Adjustable
C Minimum Control Pressure	30 psi (2 bar)
N Seal Material	Buna-N



This is a vent-to-shift, 2-position, diverter valve that is normally closed. When port 1 is vented, the pressure differential between port 3 and port 1 exceeds the spring force causing the valve to shift, thereby connecting port 3 with ports 2 and 4.

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

Cavity	T-31A
Series	1
Capacity	15 gpm
Maximum Operating Pressure	5000 psi
Nominal Vent Flow	23 in ³ /min.
Valve Hex Size	7/8 in.
Valve Installation Torque	30 - 35 lbf ft
Model Weight	0.36 lb.
Seal kit - Cartridge	Buna: 990-031-007
Seal kit - Cartridge	Polyurethane: 990-031-002
Seal kit - Cartridge	Viton: 990-031-006

OPTION SELECTION EXAMPLE: DSCXXCN

CONTROL	(X) MINIMUM CONTROL PRESSURE	(C) SEAL MATERIAL	(N)
X Not Adjustable	C 30 psi (2 bar) D 50 psi (3,5 bar) E 75 psi (5 bar)	N Buna-N V Viton	

TECHNICAL FEATURES

- This valve is not bistable; it is capable of modulating between the two positions shown.
- Vent flow out of port 1 is pressure compensated and is listed in Technical Data.
- There must be a pressure source at port 3, relative to port 1, to shift the valve.
- One application of this valve is to bypass divider/combiner valves in a limited-slip tractive circuit. Closed, the oil must go through the divider/combiner valves. Open, there is a large path around the divider/combiner valves for efficient high speed operation.
- One pilot valve may be used to vent multiple diverter valves if blocking checks are used at port 1 of each diverter. If blocking checks are not used there will be interaction between high and low pressure legs of the circuit.
- The vent-to-shift function is self cleaning and therefore insensitive to contamination.
- Hardened spool and sleeve provide consistent and low spool leakage rates and excellent wear characteristics.
- 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

