



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-33A
Series	3
Capacity	60 gpm
Maximum Operating Pressure	5000 psi
Nominal Vent Flow	35 in <sup>3</sup> /min.
Valve Hex Size	1 1/4 in.
Valve Installation Torque	150 - 160 lbf ft
Model Weight	1.55 lb.
Seal kit - Cartridge	Buna: 990-033-007
Seal kit - Cartridge	Polyurethane: 990-033-002
Seal kit - Cartridge	Viton: 990-033-006

# OPTION SELECTION EXAMPLE: DSGXXCN

CONTROL	(X) MINIMUM CONTROL PRESSURE	(C) SEAL MATERIAL	(N)
X Not Adjustable	C 30 psi (2 bar) D 50 psi (3,5 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

