



CONFIGURATION

X Control	Not Adjustable
E Minimum Control Pressure	75 psi (5 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-33A
Series	3
Capacity	60 gpm
Maximum Operating Pressure	5000 psi
Nominal Vent Flow	35 in ³ /min.
Valve Hex Size	1 1/4 in.
Valve Installation Torque	150 - 160 lbf ft
Seal kit - Cartridge	Buna: 990033007
Seal kit - Cartridge	Polyurethane: 990033002
Seal kit - Cartridge	Viton: 990033006
Model Weight	1.59 lb.

CONFIGURATION OPTIONS

Model Code Example: DSGXArray

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

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

