



Bypass/restrictive modulating elements, when combined with an external orifice, create a bypass/restrictive flow control. Input flow (port 3) is directed to the priority or control flow at port 2. Once the priority requirements are met, excess flow is bypassed out port 4. The after-orifice signal is connected to port 1. The before-orifice design allows both pressure and flow to be controlled on the priority side of the circuit regardless of pressure in the bypass circuit. These valves work equally well in either closed or open center systems. Their main use is to allow after-market accessories to be driven off the host machine's hydraulic system without adding an additional pump.

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

Cavity	T-33A
Series	3
Capacity	60 gpm
Maximum Operating Pressure	5000 psi
Valve Hex Size	1 1/4 in.
Valve Installation Torque	150 - 160 lbf ft
Model Weight	1.59 lb.
Seal kit - Cartridge	Buna: 990-033-007
Seal kit - Cartridge	EPDM: 990-033-014
Seal kit - Cartridge	Polyurethane: 990-033-002
Seal kit - Cartridge	Viton: 990-033-006

OPTION SELECTION EXAMPLE: LHHAXFN

CONTROL	(X)	DIFFERENTIAL PRESSURE	(F)	SEAL MATERIAL	(N)
X		F		N	
Not Adjustable		100 psi (7 bar)		Buna-N	
		E		E	
		75 psi (5 bar)		EPDM	
				V	
				Viton	

TECHNICAL FEATURES

- Bypass flow is not available until priority flow requirements are satisfied.
- Priority flow can be turned on or off with a pilot-sized, three-way solenoid valve on port 1.
- Bypass pressure at port 4 can be higher than pressure at control port 2.
- Cartridges with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- 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.