



This valve is a pilot-operated, normally closed, electro-proportional throttle with reverse free-flow check. Energizing the coil generates an opening force on the pilot stage which vents the main stage poppet to open proportionally, allowing flow from port 2 to 1. In the open condition, flow from 1 to 2 will cause the valve to auto-close and only pilot flow will pass from 1 to 2.

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

Maximum Operating Pressure	3000 psi
Hysteresis (with dither)	15%
Linearity (with dither)	3%
Repeatability (with dither)	3%
Recommended dither frequency	140 Hz
Check Cracking Pressure	100 psi
Deadband, nominal (as a percentage of input)	48%
Maximum Valve Leakage at 110 SUS (24 cSt)	0.004 in ³ /min. @3000 psi
Viscosity Range	35 - 2000 SUS
Response Time - Typical	50 ms
Switching Frequency	15,000 max. cycles/hr
Seal kit - Cartridge	Buna: 990-162-007
Seal kit - Cartridge	Viton: 990-162-006

- NOTES:**
- Please verify cartridge clearance requirements when choosing a Sun manifold. Different valve controls and coils require different clearances.
 - An additional 2.00 inches (50,8 mm) beyond the valve extension is needed for coil installation and removal.

CONFIGURATION OPTIONS

Model Code Example: FPBDXDN

CONTROL	(X)	FLOW RATE	(D)	SEAL MATERIAL	(N)	COIL *
X No Manual Override		D Nominal 5 gpm @ 200 psi (14 bar) differential (20 L/min.)		N Buna-N V Viton		No coil * Additional coil options are available