



**CONFIGURATION**

<b>X</b> Control	-
<b>G</b> Flow Rate	Nominal 120 gpm @ 200 psi (14 bar) differential (480 L/min.)
<b>N</b> Seal Material	Buna-N
Coil	

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. Metered flow is from port 1 to port 2 with reverse free flow from port 2 to port 1.

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

Cavity	T-18A
Series	4
Capacity	114 gpm
Maximum Operating Pressure	5000 psi
Recommended dither frequency	140 Hz
Deadband, nominal (as a percentage of input)	25%
Maximum Valve Leakage at 110 SUS (24 cSt)	20 drops/min.@5000 psi
Valve Hex Size	1 5/8 in.
Valve Installation Torque	350 - 375 lbf ft
Model Weight	2.68 lb.
Seal and nut kit - Coil	Viton: 990-740-006
Seal kit - Cartridge	Buna: 990-018-007
Seal kit - Cartridge	Viton: 990-018-006

# OPTION SELECTION EXAMPLE: FPJPXGN

CONTROL	(X)	FLOW RATE	(G)	SEAL MATERIAL	(N)	COIL
X -		<b>G</b> Nominal 120 gpm @ 200 psi (14 bar) differential (480 L/min.) <b>B</b> Nominal 60 gpm @ 200 psi (14 bar) differential (240 L/min.) <b>D</b> Nominal 80 gpm @ 200 psi (14 bar) differential (320 L/min.)		<b>N</b> Buna-N <b>V</b> Viton		No coil

## TECHNICAL FEATURES

- Capable of operating with pressures up to 5000 psi (350 bar).
- Coils are interchangeable with Sun's other full flow, solenoid-operated valves and can be mounted on the tube in either direction.
- For optimum performance, an amplifier with current sensing and adjustable dither should be used. Dither should be adjustable between 100 - 250 Hz.
- Capacities rated at 200 psi (14 bar) differential and maximum rated coil current.
- Depending on circuit requirements, a reverse free flow check bypassing the compensator may be needed when using the FPHK with an external compensator.
- 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.
- Coils are interchangeable with Sun's other full flow, solenoid-operated valves.
- Depending on circuit requirements, a reverse free flow check bypassing the compensator may be needed when using the FPJP with an external compensator.

## PERFORMANCE CURVES

Example Circuit Using External Compensator



