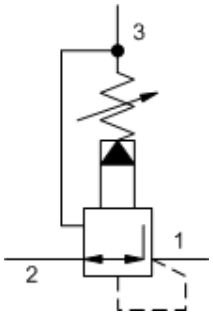
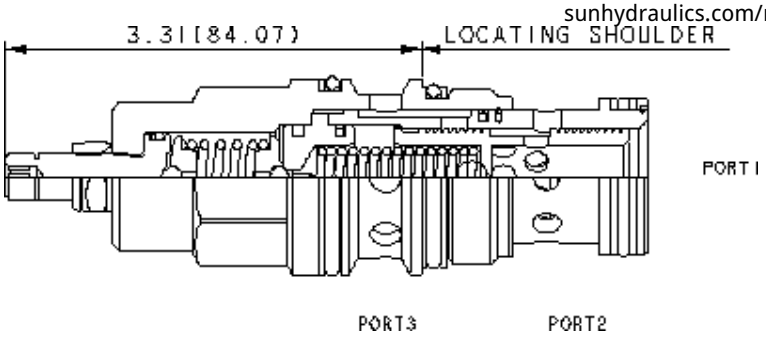
MODEL
PPHF

Pilot-operated, pressure reducing/relieving valve with drilled piston orifice

SERIES 3 / CAPACITY: 160 L/min. / CAVITY: T-17A

sunhydraulics.com/model/PPHF





Pilot-operated, pressure reducing/relieving valves reduce a high primary pressure at the inlet (port 2) to a constant reduced pressure at port 1, with a full-flow relief function from port 1 to tank (port 3).

CONFIGURATION

L	Control	Standard Screw Adjustment
B	Adjustment Range	50 - 1500 psi (3,5 - 105 bar), 200 psi (14 bar) Standard Setting
N	Seal Material	Buna-N

TECHNICAL DATA

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

Cavity	T-17A
Series	3
Capacity	160 L/min.
Maximum Operating Pressure	350 bar
Factory Pressure Settings Established at	blocked control port (dead headed)
Control Pilot Flow	0,25 - 0,33 L/min.
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	31,8 mm
Valve Installation Torque	203 - 217 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006
Model Weight	0.56 kg.

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CONFIGURATION OPTIONS

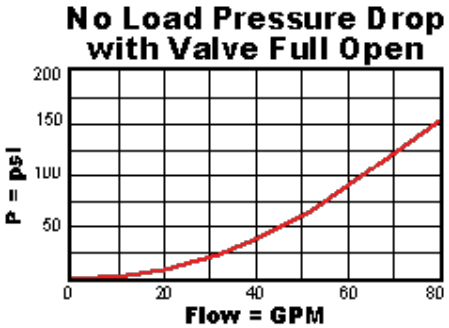
Model Code Example: PPHFArray

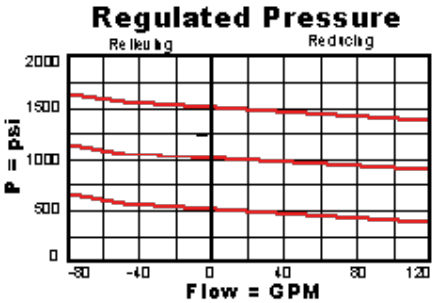
CONTROL (L)	ADJUSTMENT RANGE (B)	SEAL MATERIAL (N)
L Standard Screw Adjustment	**B** 50 - 1500 psi (3,5 - 105 bar), 200 psi (14 bar) Standard Setting	**N** Buna-N
C Tamper Resistant - Factory Set	**A** 100 - 3000 psi (7 - 210 bar), 200 psi (14 bar) Standard Setting	**V** Viton
K Handknob	**C** 150 - 6000 psi (10,5 - 420 bar), 200 psi (14 bar) Standard Setting	
Q Capped and Lockwired	**D** 25 - 800 psi (1,7 - 55 bar), 200 psi (14 bar) Standard Setting	
	E 25 - 400 psi (1,7 - 28 bar), 200 psi (14 bar) Standard Setting	
	H 30 - 3000 psi (2 - 210 bar), 200 psi (14 bar) Standard Setting	
	N 60 - 800 psi (4 - 55 bar), 200 psi (14 bar) Standard Setting	
	Q 60 - 400 psi (4 - 28 bar), 200 psi (14 bar) Standard Setting	
	W 150 - 4500 psi (10,5 - 315 bar), 200 psi (14 bar) Standard Setting	

TECHNICAL FEATURES

- These valves have the main stage orifice drilled into the piston rather than a staked-in orifice. This allows the valve to survive physically demanding applications.
- Maximum pressure at port 3 should be limited to 3000 psi (210 bar).
- Pressure at port 3 is directly additive to the valve setting at a 1:1 ratio and should not exceed 3000 psi (210 bar).
- Pilot operated reducing, reducing/relieving valves by nature are not fast acting valves. For superior dynamic response, consider direct acting valves.
- Recommended maximum inlet pressure is determined by the adjustment range. Ranges D, E, N, and Q are tested with a 2000 psi (140 bar) maximum differential between inlet and reduced pressure. Ranges A, B, and H are tested with a 3000 psi (210 bar) maximum differential between inlet and reduced pressure. Ranges C and W are tested with 5000 psi (350 bar) of inlet pressure.
- Pilot operated valves exhibit exceptionally flat pressure/flow characteristics, are very stable and have low hysteresis.
- Full reverse flow from reduced pressure (port 1) to inlet (port 2) may cause the main spool to close. If reverse free flow is required in the circuit, consider adding a separate check valve to the circuit.
- If pilot flow consumption is critical, consider using direct acting reducing/relieving valves.
- All three-port pressure reducing and reducing/relieving cartridges are physically interchangeable (i.e. same flow path, same cavity for a given frame size). When considering mounting configurations, it is sometimes recommended that a full capacity return line (port 3) be used with reducing/relieving cartridges.
- 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





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RELATED MODELS

- PPHF8 Pilot-operated, pressure reducing/relieving main stage with drilled piston orifice and integral T-8A control cavity

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