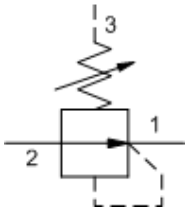
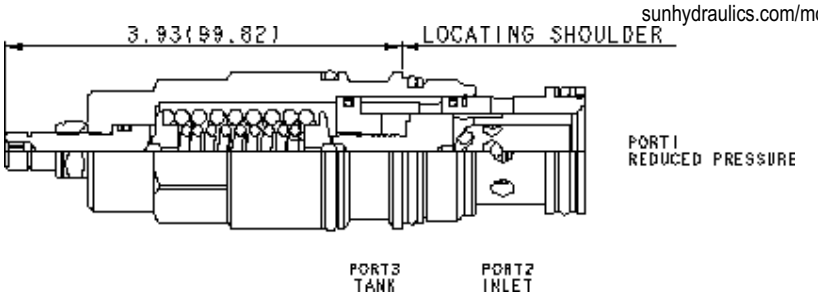
MODEL
PRHR

Direct-acting, pressure reducing valve
SERIES 3 / CAPACITY: 40 gpm / CAVITY: T-17A

sunhydraulics.com/model/PRHR





CONFIGURATION

L	Control	Standard Screw Adjustment
A	Adjustment Range	750 - 3000 psi (50 - 210 bar), 1000 psi (70 bar) Standard Setting
N	Seal Material	Buna-N
(none)	Material/Coating	

Direct-acting, pressure reducing valves reduce a high primary pressure at the inlet (port 2) to a constant reduced pressure at port 1. These valves incorporate a damped construction for stable operation allowing the use of high reduced pressure.

TECHNICAL DATA

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

Cavity	T-17A
Series	3
Capacity	40 gpm
Maximum Operating Pressure	5000 psi
Factory Pressure Settings Established at	0.25 gpm
Maximum Valve Leakage at 110 SUS (24 cSt)	4 in³/min.
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	1 1/4 in.
Valve Installation Torque	150 - 160 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006
Model Weight	1.56 lb.

CONFIGURATION OPTIONS

Model Code Example: PRHRLAN

CONTROL (L)

- **L** Standard Screw Adjustment
- **C** Tamper Resistant - Factory Set
- **K** Handknob

ADJUSTMENT RANGE (A)

- **A** 750 - 3000 psi (50 - 210 bar), 1000 psi (70 bar) Standard Setting
- **B** 300 - 1500 psi (20 - 105 bar), 500 psi (35 bar) Standard Setting
- **D** 200 - 800 psi (14 - 55 bar), 400 psi (28 bar) Standard Setting
- **E** 100 - 400 psi (7 - 28 bar), 200 psi (14 bar) Standard Setting
- **S** 50 - 200 psi (3,5 - 14 bar), 100 psi (7 bar) Standard Setting
- **W** 1100 - 4500 psi (76 - 315 bar), 1100 psi (76 bar) Standard Setting

SEAL MATERIAL (N)

- **N** Buna-N
- **E** EPDM
- **V** Viton

MATERIAL/COATING

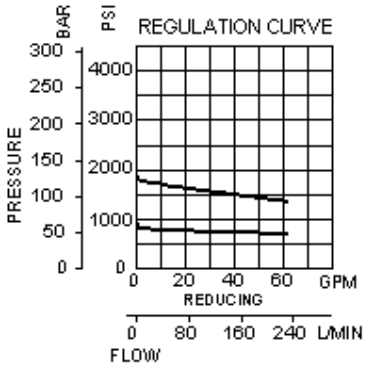
- Standard Material/Coating
- **/AP** Stainless Steel, Passivated
- **/LH** Mild Steel, Zinc-Nickel

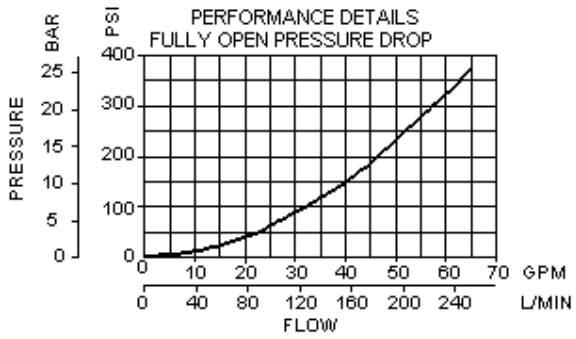
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TECHNICAL FEATURES

- Note: This valve has no relieving capability. It should not be used in a dead-headed application. If the reduced pressure side of the circuit has very low leakage the pressure may rise significantly. The pressure rise will vary from valve to valve.
- This type of valve, PR*R, is a good replacement for an LP*C as a normally open, restrictive compensating element if a higher pressure drop across an orifice is needed.
- 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.
- All spring ranges are tested for correct operation with 5000 psi (350 bar) inlet pressure.
- Suitable for accumulator circuits since the absence of pilot control flow results in reduced secondary circuit leakage.
- Direct operated version offers superior dynamic response compared to equivalent pilot operated models.
- Pressure at port 3 is directly additive to the valve setting at a 1:1 ratio and should not exceed 5000 psi (350 bar).
- Leakage specified in Technical Data is out of port 3 with a supply pressure of 2000 psi (140 bar) and the valve set at mid range. This leakage is directly proportional to pressure differential and inversely proportional to viscosity expressed in centistokes.
- 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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