

Direct-acting, pressure reducing valve

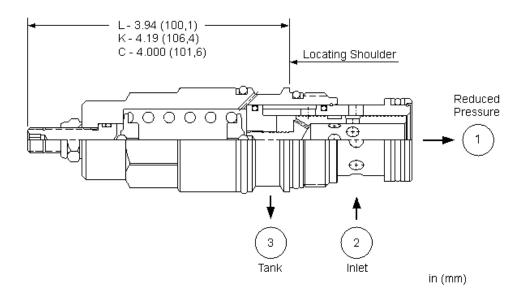
Capacity: 40 gpm (160 L/min.)

Model: PRHR

Product Description

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 Features

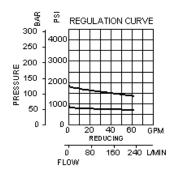
- Note: This valve has no relieving capability. It should not be used in a dead-headed application. If the reduced pressure side of the circuit has very low leakage the pressure may rise significantly. The pressure rise will vary from valve to valve.
- This type of valve, PR*R, is a good replacement 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.

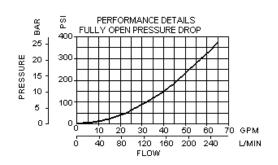
- Direct operated version offers superior dynamic response compared to equivalent pilot operated models.
- Pressure at port 3 is directly additive to the valve setting at a 1:1 ratio and should not exceed 5000 psi (350 bar).
- Leakage specified in Technical Data is out of port 3 with a supply pressure 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.

Technical Data

U.S. Units Metric Units

| Cavity | T-17A | | |
|--|--------------------|--------------|--|
| Capacity | 40 gpm | 160 L/min. | |
| Factory Pressure Settings Established at | 2 in³/min. | 30 cc/min. | |
| Maximum Operating Pressure | 5000 psi | 350 bar | |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 4 in³/min. | 65 cc/min. | |
| Series (from Cavity) | Series 3 | | |
| Adjustment - Number of Clockwise Turns to Increase Setting | 5 | | |
| Valve Hex Size | 1 1/4 in. | 31,8 mm | |
| Valve Installation Torque | 150 - 160 lbf ft | 200 - 215 Nm | |
| Adjustment Screw Internal Hex Size | 5/32 in. | 4 mm | |
| Adjustment Locknut/Cap Hex Size | 9/16 in. | 15 mm | |
| Adjustment Nut Torque | 80 - 90 lbf in. | 9 - 10 Nm | |
| Seal Kits - Cartridge | Buna: 990-017-007 | | |
| Seal Kits - Cartridge | Viton: 990-017-006 | | |
| Model Weight | 1.56 lb. | 0.71 kg. | |





PRHR-LAN

| Control | Adjustment Range | | Seal Material |
|--------------------------------------|--|------------------|-----------------|
| Standard Options | Standard Options | Standard Options | |
| C* Tamper Resistant - Factory Set | A 750 - 3000 psi (50 - 210 bar), 1000 psi (70 bar) Standard | N V | Buna-N Viton |

- K Handknob
- Standard Screw Adjustment
- 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
- S 50 200 psi (3,5 14 bar), 100 psi (7 bar) Standard Setting

^{*} Special Setting required, specify at time of order Customer specified setting stamped on hex.