

Direct-acting, pressure reducing valve

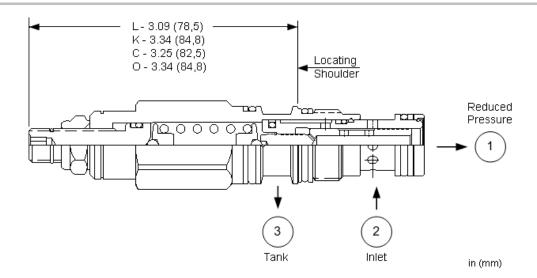
Capacity: 10 gpm (40 L/min.)

Model: PRDR

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

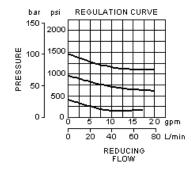
- Note: This valve has no relieving capability. It should not be used in a dead-headed application. If the reduced pressure side of the circuit has very low leakage the pressure may rise significantly. The pressure rise will vary from valve to valve.
- This type of valve, PR*R, is a good replacement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

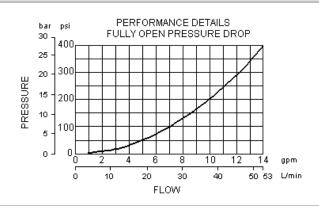
- Direct operated version offers superior dynamic response compared to equivalent pilot operated models.
- Pressure at port 3 is directly additive to the valve setting at a 1:1 ratio and should not exceed 5000 psi (350 bar).
- Leakage specified in Technical Data is out of port 3 with a supply pressure 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-11A	
Capacity	10 gpm	40 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)	2 in³/min.	30 cc/min.
Series (from Cavity)	Series 1	
Adjustment - Number of Clockwise Turns to Increase Setting	5	
Valve Hex Size	7/8 in.	22,2 mm
Valve Installation Torque	30 - 35 lbf ft	40 - 50 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: 990-011-007	
Seal Kits - Cartridge	Viton: 990-011-006	
Model Weight	0.43 lb.	0.20 kg.





PRDR-LAN

W 750 - 4500 psi (50 - 315 bar), 1000 psi (70 bar) Standard Setting

Control	Adjustment Range	Seal Material	Material/Coating Modifier
Standard Options	Standard Options	Standard Options	Preferred Options
C* Tamper Resistant - Factory Set K Handknob L Standard Screw Adjustment O Handknob with Panel Mount	A 500 - 3000 psi (35 - 210 bar), 700 psi (50 bar) Standard Setting B 50 - 1500 psi (3,5 - 105 bar), 200 psi (14 bar) Standard Setting 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 S 25 - 200 psi (1,7 - 14 bar), 200 psi (14 bar) Standard Setting	N Buna-N V Viton	No modifier (standard material with no special coating) Special Options /AP Stainless Steel, Passivated Control: C Control: L Our stainless product line is growing! If you are interested in a stainless option for this model which is not shown please contact Sun.

When the modifier is /AP, the control must be $\ensuremath{\mathrm{C}}$ or $\ensuremath{\mathrm{L}}$

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