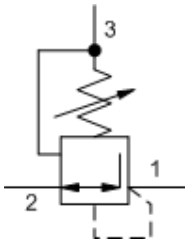
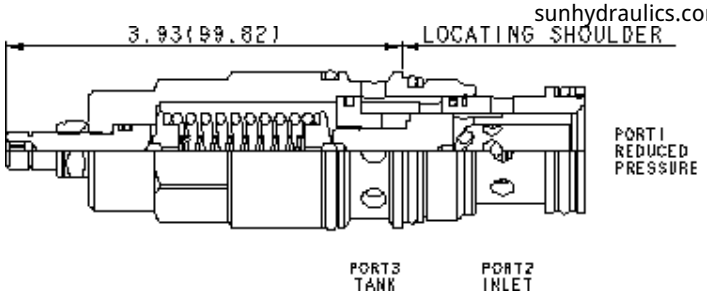
MODEL
PRHB

Direct-acting, pressure reducing/relieving valve
SERIES 3 / CAPACITY: 160 L/min. / CAVITY: T-17A

sunhydraulics.com/model/PRHB





CONFIGURATION

L	Control	Standard Screw Adjustment
E	Adjustment Range	100 - 400 psi (7 - 28 bar), 200 psi (14 bar) Standard Setting
N	Seal Material	Buna-N
(none)	Material/Coating	

Direct-acting, 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). 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	160 L/min.
Maximum Operating Pressure	350 bar
Factory Pressure Settings Established at	0.25 gpm
Maximum Valve Leakage at 110 SUS (24 cSt)	65 cc/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	EPDM: 990017014
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006
Model Weight	0.67 kg.

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CONFIGURATION OPTIONS

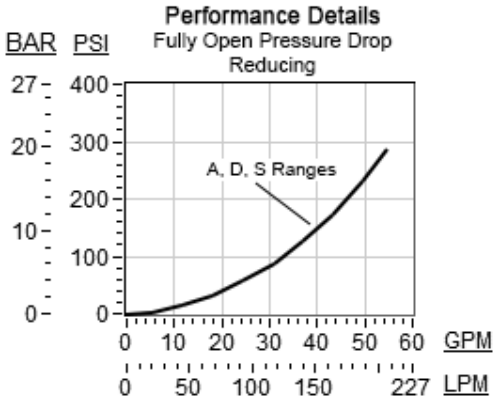
Model Code Example: PRHBArray

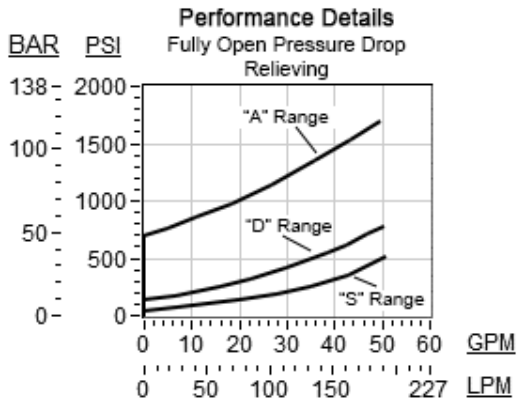
CONTROL (L)	ADJUSTMENT RANGE (E)	SEAL MATERIAL (N)	MATERIAL/COATING
L Standard Screw Adjustment	**E** 100 - 400 psi (7 - 28 bar), 200 psi (14 bar) Standard Setting	**N** Buna-N	Standard Material/Coating
C Tamper Resistant - Factory Set	**A** 750 - 3000 psi (50 - 210 bar), 1000 psi (70 bar) Standard Setting	**E** EPDM	**/AP** Stainless Steel, Passivated
K Handknob	**B** 300 - 1500 psi (20 - 105 bar), 500 psi (35 bar) Standard Setting	**V** Viton	**/LH** Mild Steel, Zinc-Nickel
	D 200 - 800 psi (14 - 55 bar), 400 psi (28 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		

TECHNICAL FEATURES

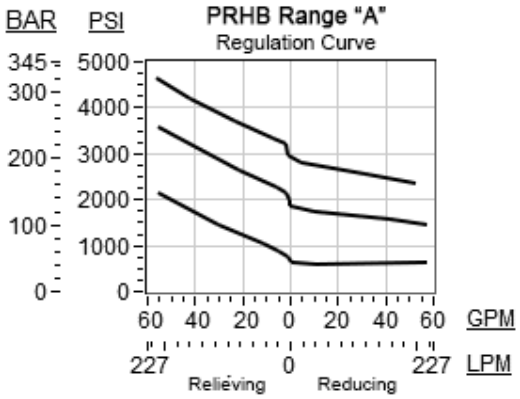
- Pressure at port 3 is directly additive to the valve setting at a 1:1 ratio and should not exceed 3000 psi (210 bar).
- Leakage specified in Technical Data is out of port 3 with a supply pressure of 2000 psi (140 bar) and the valve set at mid range. This leakage is directly proportional to pressure differential and inversely proportional to viscosity expressed in centistokes.
- Cartridges configured with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- 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.
- 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 acting concept provides highly reliable operation in contaminated systems, especially at dead headed conditions.
- Unlike pilot operated versions, direct acting valves exhibit a transitional step between reducing and relieving modes. This step equals 5% of the high end of the adjustment range, independent of the valve setting. Therefore, these valves may not be suitable for counterbalancing applications.
- Direct operated version offers superior dynamic response compared to equivalent pilot operated models.
- 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.

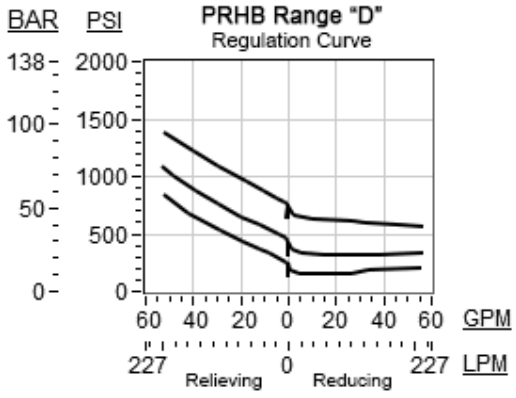
PERFORMANCE CURVES

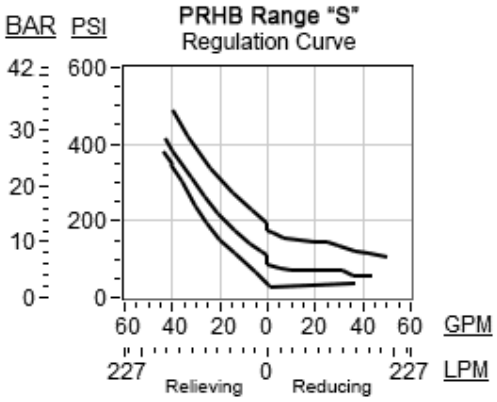




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