

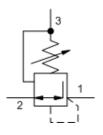


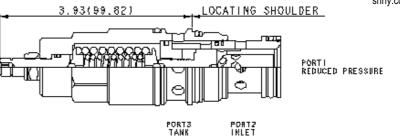
Direct-acting, pressure reducing/relieving valve

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



snhy.com/PRHB





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		Standard 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.	
Factory Pressure Settings Established at	0.25 gpm	
Maximum Operating Pressure	350 bar	
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	0.70 kg.	

CONFIGURATION OPTIONS

Model Code Example: PRHBLAN

- C Tamper Resistant Factory Set
- K Handknob

CONTROL

(L) ADJUSTMENT RANGE

(A) SEAL MATERIAL

V Viton

(N) MATERIAL/COATING

L Standard Screw Adjustment

	(70 bar) Standard Setting		
В	300 - 1500 psi (20 - 105 ba	ar), 50	0 psi
	(051 \ 01 1 10 11		

- (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

N Buna-N **E** EPDM

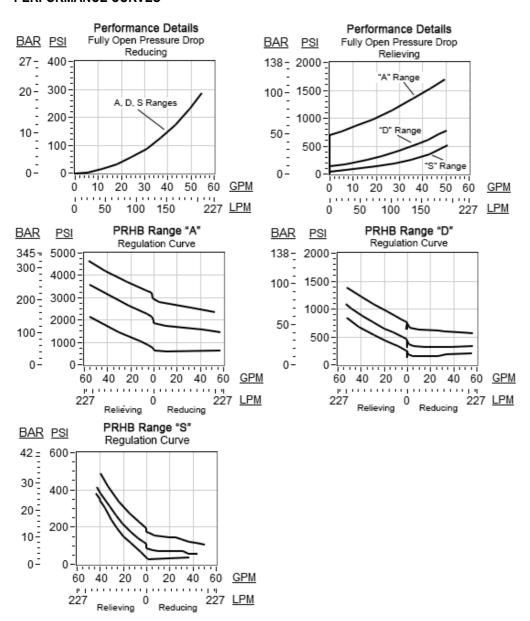
/AP Stainless Steel, Passivated
/LH Mild Steel, Zinc-Nickel

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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
- 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.
- 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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